



National Capital Region Transportation Planning Board

Work Program Progress Report MAY 2023 FY 2023

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS777 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 2023 Unified Planning Work Program (UPWP) in March 2022 and amended it in March 2023. The TPB Work Program Progress Report summarizes each activity for May. In addition, this report concludes with status updates reflecting timelines for all ongoing program plans and projects. Please reference the 2023 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
 - Services

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	\$1,032,781	\$83,585	69%	35

1. LONG-RANGE TRANSPORTATION PLANNING

Task 1.1 – Visualize 2045 Implementation

New staff reviewed the Visualize 2045 plan, past plans, and the 1994 plan to see what the issues and strategies were from 30 years ago. Staff reviewed the aspirational initiatives and the new synthesized policy framework and began considering how progress has been made on the various priority strategies to achieve TPB goals. Staff drafted a flow chart demonstrating when implementation occurs in TPB's planning and programming process.

Task 1.2 – Environmental Justice and Equity

Staff is in the process of reviewing the TPB's equity emphasis areas and the Justice 40 areas comparing their geography and definition criteria.

Task 1.3 – Future Plan Development

Staff created a flow chart to show the relationship between projects by timeframe in the plan and the financial plan, TIP, and Annual Obligation Report. Staff reviewed the structure of the 2045 plan to begin a framework for the 2050 plan. Staff began work to identify common transportation solutions utilized in the region to address transportation issues and to identify how TPB's performance measures align with goals.

Staff collected inputs from local jurisdictions and agencies for the Visualize 2050 financial analysis, answering questions. Work began on developing collated financial projections by state.

Task 1.4 – Federal Compliance

Staff is awaiting receipt of the federal certification review report expected in June.

Task 1.5 - Policy Board-Directed Activities

Staff reviewed TPB scenarios and scenario summary and how the project input process will capture members consideration of the scenarios. Staff worked on getting information from the current PIT to stakeholders for use in their review of project inputs for the Zero-Based Budgeting exercise.

	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRANSPORTATION IMPROVEMENT PROGRAM	\$428,463	\$15,622	78%	37

2. TRANSPORTATION IMPROVEMENT PROGRAM

2.1 – Transportation Improvement Program (TIP)

At its meeting on May 5, 2023, the TPB Steering Committee adopted one resolution approving an amendment to the FY 2023-2026 TIP as requested by VDOT. The amendment added a net total of \$91.3 million for nine transit projects and programs administered by VRE and three roadway projects for VDOT. The three roadway projects were included in the Air Quality Conformity Analysis of

the 2022 Update of Visualize 2045 and the FY 2023-2026 TIP while the VRE transit projects and programs are exempt from the air quality conformity requirement.

TPB staff also processed one Administrative Modifications for DDOT under TIP Action 23-18.

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 completed in May under the baseline maintenance and support contract included:

Task 3	BUDGET	Billed this month	% Funds Expended	UPWP Page
PLANNING ELEMENTS	\$2,639,123	\$165,844	66%	39

3. PLANNING ELEMENTS

3.1 Performance-Based Planning

Staff assisted with follow-ups from the federal certification review. Staff reviewed new federal proposals for transit safety performance measurement published in the Federal Register.

3.2 Congestion Management Process

Staff prepared and presented an overview of recent Congestion Management Process (CMP) activities at the May 5 TPB Technical Committee meeting, the May 11 TPB Community Advisory Committee meeting, and the May 17 TPB meeting, including the background of the CMP, highlights from the 2022 CMP Technical Report, and a recent twelve-year regional bottlenecks analysis. Planning began for a future Vehicle Probe Data Users Group work session for training member agency staff on the use of bottlenecks analysis tools.

3.3 Systems Performance, Operations, and Technology Planning

Staff prepared for future meetings of the Systems Performance, Operations, and Technology Subcommittee, as well as a future Traffic Incident Management work session.

3.4 Transportation Emergency Preparedness Planning

Staff prepared for future meetings of the Regional Emergency Support Function 1 (R-ESF 1) Transportation Emergency Preparedness Committee.

3.5 Transportation Safety Planning

TPB staff held planning sessions on May 9 and 23 with the Transportation Safety Subcommittee Chair to identify topics and speakers for future Safety Subcommittee meetings.

3.6 Bicycle and Pedestrian Planning

Staff organized and held a meeting of the Bicycle and Pedestrian Subcommittee on May 23. The Subcommittee was briefed on the process and status of the National Capital Trail Network update and the draft GIS map. The Subcommittee was also briefed Montgomery County's Pedestrian Master Plan, DDOT's program to make tactical safety improvements such as curb extensions permanent, and the results of Commuter Connections survey of last year's bike to work day participants.

Staff worked with the jurisdictions to get their final suggestions to the National Capital Trail Network submitted, and organized those submissions by needed action, location, PIT number, etc. for GIS staff.

Staff organized and led a COG bike ride with the Executive Director on the Metropolitan Branch Trail as part of Bike to Work week on May 18. Staff attended the first in-person working group meeting of the VDOT NOVA Bicycle/Pedestrian Network Study at VDOT/NOVA District on May 11, and the Baltimore Regional Safety Subcommittee remotely on May 25.

Staff served as a project monitor for two TLC projects, Independence Avenue and Montgomery County Street Lighting Design Guidelines. A draft Corridor Study for Independence Avenue and draft Street Lighting guidelines respectively were prepared and submitted by the project consultants to the clients for comment.

3.7 Regional Public Transportation Planning

The Regional Public Transportation Subcommittee did not meet in May. However, a field trip was organized on May 15 for regional staff to ride Virginia Railway Express and tour the Broad Run rail yard.

Staff connected a desk review of intercity bus and rail transit in the region, in preparation for presentation at the June Technical Committee and TPB meetings. Staff prepared letters of endorsement for local jurisdictions applying for federal grants.

Staff attended the monthly WMATA JCC and NVTC MAC meetings and the opening ceremony for the Potomac Yard rail station. An On-Call Planning task order request for proposal was issued to obtain consultant assistance on a study of transit funding across the nation.

3.8. Freight Planning

TPB staff held planning sessions on May 3 and 17 with the Freight Subcommittee Chair to identify topics and speakers for future Subcommittee meetings.

In coordination with staff, the consultant continued to revise the draft National Capital Region Freight Plan Update, including the addition of an analysis of freight impacts on equity emphasis areas and the transport of hazardous materials.

3.9 Metropolitan Area Transportation Operations Coordination Program Planning

The regularly scheduled May 25 MATOC Operations Subcommittee virtual meeting was organized and conducted, discussing communications, coordination, and Traffic Incident Management topics.

3.10 Resiliency Planning

Staff continued to make progress on the Phase II Transportation Resiliency Study with the contractor, ICF. Major milestones in May 2023 for this project were finalizing the members of the working group, scheduling and hosting the first meeting alongside the consultant. The meeting was hybrid – with a small percentage of the working group joining the meeting in person at MWCOG offices along with the project manager from ICF. The working group provided valuable input for the initial approach to the project and results from Phase I of the vulnerability assessment portion of the study, and the input was received well and results adjusted accordingly. Staff presented on the Transportation Resiliency Planning Program and associated Phase II project progress to TPB Technical Committee and TPB Board in May.

Staff continued to review materials from prior TPB transportation planning and resiliency planning activities, as well as federal resources, training materials/videos and peer MPO resiliency planning activities to keep on top of state of the practice, including coordinating across teams on Electric Vehicle planning. Transportation Planner IV coordinated with other resiliency staff within COG to

ensure continuity of work across the region and organization. Staff also continued participation in the Prince William County Green Infrastructure project by attending the kick-off meeting with the client and advised on scope of work and potential procurement process. Staff also reviewed abstract submissions of potential poster and panel presentations for the Transportation Research Board's upcoming transportation resilience conference.

Task 4	BUDGET	Billed this month	% Funds Expended	UPWP Page
PUBLIC PARTICIPATION	\$913,276	\$55,432	62%	45

4. PUBLIC PARTICIPATION

4.1 Public Participation and Outreach

The May meeting of the 2023 - 2024 TPB Community Advisory Committee (CAC) was held on Thursday, May 11. The committee discussed their goals and expectations as a committee, TPB's Technical Assistance Programs, and the Congestion Management Process. The meeting was held in a hybrid format with an in-person session held at the COG office and virtual session on WebEx.

Staff continues to implement recommendations from the 2020 Public Participation Evaluation.

Staff continue to compile and share public comment from the Visualize 2050 Initial Project List Feedback Form which includes project-specific feedback on the Visualize 2045 project list for the Visualize 2050 Technical Inputs Solicitation. Staff continue to report public comments to the TPB's Technical Committee and TPB at their monthly meetings.

Staff participated in the Virginia Department of Transportation's SYIP Open House on May 1 to share information about the TPB and current public comment opportunity for Visualize 2050.

4.2 Communications

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

- 1. March 2023 TPB meeting recap: FY 2024 Work Programs and Environmental Justice analysis (May 10, 2023)
- 2. Gearing up: D.C. area Bike to Work Day 2023 just ahead (May 11, 2023)
- 3. TPB Better Bus Work Session encourages regional approach to improving bus service (May 11, 2023)
- 4. 2023 Enhanced Mobility Grantee Best Practices Forum highlights importance of partnerships (May 11, 2023)
- 5. April 2023 TPB meeting recap: TLC Program projects, Visualize 2050 schedule update (May 16, 2023)
- 6. TPB supports 8 D.C. area planning projects that promote roadway safety (May 17, 2023), Mid-Atlantic Regional Summit (May 17),

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

- 1. Transportation Land-Use Connections Program
- 2. Enhanced Mobility
- 3. Regional Roadway Safety Program
- 4. Transit Within Reach Program
- 5. Access for All Advisory Committee
- 6. Community Advisory Committee

Staff shared information about TPB activities via social media:

Twitter: Think Regionally Podcast (Retweet May 1), Annual NoVa Joint Transportation Meeting (May 2), Metro Better Bus Experience Lab (Quote tweet May 3), FHWA PROTECT funding (May 4), Coordinated Human Service Transportation Plan Comment Reminder (May 5), Metro Yellow Line Reopening (Retweet May 5), Bike to Work Day video (May 8), TPB Meeting Announcement (May 16), Virginial Railway Express operations tour (May 16), TPB Meeting Reminder (May 17), Regional Roadway Safety projects (May 17), Bike to Work Day almost here (May 18), Metro Potomac Yard opening (May 18), Bike To Work Day (Retweet May 19), COG Institute for Regional Excellence (Retweet May 24), VRE free Fridays (Retweet May 26), Virginia Passenger Railway Authority Northern Virginia Rail projects (Retweet May 30), (FTA National Public Transportation Safety Plan feedback (Retweet May 31). **Facebook:** Metro Better Bus Visionary Network (May 4), Virginia Railway Express Broad Run tour (May 16), Regional Roadway Safety Program projects (May 17), Transit Within Reach Program application period open (May 31)

Task 5	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL FORECASTING	\$2,682,641	\$166,372	76%	47

5. TRAVEL FORECASTING

5.1 Network Development

To be prepared for possible changes, staff continued development of documentation for an update to the bus fare matrix reflecting free fares in the District of Columbia for Metrobus riders. Staff continued development of a new base transit network, based on transit service in December 2022, for use in the upcoming air quality conformity (AQC) analysis of the 2025 update to the Long-Range Transportation Plan (LRTP). This work included review of downloaded and reformatted General Transit Feed Specification (GTFS) data. Staff also plan to develop a new base transit network in FY 2024 based on December 2023 service levels. In May, staff completed the second round of GTFS data matching of existing routes and began the addition of new routes and the removal of routes no longer in service.

Staff continued to work on an automated procedure in COGTools that will perform Quality Control/Quality Assurance (QC/QA) checks on the network files exported from the Unified Network Database. A prototype procedure was developed in December 2022 and was tested in January. In April, staff developed the second version of the QC/QA module of COGTools, with several improvements, and addressed feedback received during the testing. In May, staff completed a second round of testing and provided feedback for continued refinement of the function.

COG staff coordinated with RSG, the consultant developing the Gen3 Travel Demand Model, to modify the commuter rail fares in the Gen3 Model to reflect the discounted fares that are typically used by regular commuter rail patrons. At the beginning of the Gen3 Model development process, RSG had planned to include a Transit Pass Ownership Model to reflect commuter rail discounts. During the Gen3 Model Phase 2 development, however, RSG and COG decided not to include this Transit Pass Ownership Model due to lack of local transit pass ownership information in both the Regional Travel Survey (RTS) and recent transit on-board surveys (TOBS). As a result, the base-year commuter rail fares originally coded in the model did not reflect discounts commonly used by regular commuter rail riders.

Staff responded to an inquiry from a consultant working with the Maryland Department of Transportation.

Staff attended Gen3 Model training for COG staff held on May 3 and 4.

Staff started to use Git and GitHub to manage the COGTools source files. Staff conducted an internal training session on May 9. Staff then used Sublime Merge to synchronize the latest changes to the COGTools files with GitHub. Staff developed a workflow to manage future changes to the COGTools files using the version control software.

5.2 Model Development and Support

The Travel Forecasting Subcommittee (TFS) meets in odd-numbered months. Staff prepared for, ran, and attended the May 19 TFS meeting, which included the following topics:

- Leveraging different data sources for automated calibration of travel demand models in Agent software
- Planned updates to the COG/TPB production-use, aggregate, trip-based travel demand forecasting model, known as the Gen2/Ver. 2.4.6 Travel Model
- Status report on the COG/TPB developmental, disaggregate, activity-based travel demand forecasting model, known as the Gen3 Travel Model

Staff presented on the status of the Gen2/Ver. 2.4.6 Model. Staff plan to release this model as a production-use model this summer. Staff set up YouTube live streaming for the TFS meetings and used it for the first time at the May 19 meeting.

Generation 2/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 Update. Staff aim to prepare a transmittal package for the Gen2/Ver. 2.4.6 Travel Model by mid-July. In May, staff updated the model flowcharts, developed a draft for the model user's guide, and ran all the analysis years using the 2022 Update to Visualize 2045 inputs (with a fix to transit mode files that had file record lengths going beyond 144 columns) both on the on-premises servers and on the cloud servers (AWS). Staff are in the process of reviewing the model user's guide and preparing other accompanying documents.

In preparation for the 2025 LRTP Update, staff started to implement changes to model code/input files to accommodate the new horizon year of 2050 in the Ver. 2.4.6 Travel Model. In May, this work was on hold, due to resume after the Round 10 Cooperative Forecasts of land activity data become available.

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 and BMG staff attended the in-person Gen3 Travel Model Training conducted by RSG on May 3 and 4.
- COG held two check-in meetings with RSG and BMG, the consultants on the Gen3 Model development project on May 11 and 25.

- As the Gen3 Model, Phase 2, development started in March 2022, staff continued to work with RSG on the development of the Phase 2 Model. Specifically,
 - RSG/BMG staff continued to work on the calibration and validation of the Gen3, Phase 2, Model.
 - As part of the Phase 2 sensitivity testing, COG staff plan to conduct two additional tests related to Autonomous Vehicle (AV) and equity, respectively.
 - The AV test was put on hold in May as RSG is still implementing the proposed AV multipliers in the Gen3 Model.
 - For the equity test, staff are in the process of developing Python scripts that will be used to compute equity indicators such as a 45-minute job accessibility measure, for both target and control populations.
 - RSG finished the first draft of Gen3 Model User's Guide and sent it to COG for review on April 26; COG staff started to review this document in May and aim to finish the review by early June.
 - 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 is currently on hold.
 - COG staff continued to make enhancements and bugfixes to the Gen3 Model.
 Specifically, COG staff updated the VRE/MARC fare matrices in consideration of the discounts associated with transit pass ownership and removed unnecessary highway skimming processes in May.
 - Following up on the discussions at the May 25 Gen3 Model check-in meeting, staff investigated highway link count coverage on screenlines, as well as the highway skims and their units as used in 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 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.

In preparation for future modeling efforts, staff attended the Gen3 Model (activity-based model) training offered by RSG on May 3 and 4.

Other activities

Staff serviced two data requests in May: Both requests were for the Gen2/Ver. 2.4 Travel Model with revised transit networks. One request was from a consultant working for WMATA. The other request

was from Villanova University working to analyze potential impacts of carbon credits/incentives, flexible work schedule policies, human mobility, and airborne disease dynamics.

COG and WMATA staff had a meeting on May 1 on the regional coordination of transit on-board surveys.

Staff held a farewell party for Sanghyeon on May 4, who left for a data analyst position at the U.S. Department of Justice. Staff prepared a job description for the Transportation Engineer 2/3 position for Sanghyeon's replacement and posted the job position both internally and externally with the assistance of HR. The recruiting process is underway.

Staff had an informal discussion with the Planning Data and Research (PDR) Team staff regarding the possible frequency of future Household Travel Surveys on May 10. As a follow-up, staff reached out to the ActivitySim Consortium, which included this topic as a discussion item at the June 1 consortium meeting.

Staff participated in the "Cost Principles for Nonprofits and State and Local Governments" training on May 15.

Staff attended the ActivitySim Monthly Partners-Only Check-In Meeting on May 18. Staff attended ActivitySim Consortium meetings regularly on Tuesdays and Thursdays.

On May 26, staff met with Fehr & Peers staff regarding modeling work that they are performing for a major transit operator.

Staff attended the COG/DTP Telework Training on May 31.

Staff started to conduct daily modeling work on AWS cloud servers. Staff worked with IT to resolve issues encountered on the AWS servers. Specifically,

- Staff held a monthly check-in meeting with IT on May 26.
- Staff started to move older, less frequently used modeling data from primary storage to archival storage on the cloud to save storage costs.
- Staff continued the modeling tests on the AWS servers. Staff found that many recent random model crashes were specific to tmws04 and asked IT to rebuild this server.
- Staff conducted modeling tests on an on-premises Virtual Machine server (tms5-vm) with Cube 6.4.1 and Windows Server 2019.
- Staff continued to work with Bentley to investigate the issues associated with running the Gen2 Model on AWS servers.
- IT plan to keep on-premises servers tms6, tms7 and tms8 as backups and upgrade their operating system (O/S) to Windows Server 2019. In May, staff conducted a series of Gen2/Ver. 2.4 Model and Ver. 2.4.6 Model runs on tms6 after IT upgraded its O/S. Since the tests ran successfully, IT plans to upgrade the O/S on tms7 and tms8 as well.

Task 6	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILE EMISSIONS PLANNING	\$2,265,565	\$157,984	76%	51

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 2024-2025 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 development schedules for Maintenance or Attainment State Implementation Plans (SIPs) and new Motor Vehicle Emissions Budgets (MVEBs).

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 plans related to 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, e.g., that both are based on the current MOVES3 model. TPB staff finalized the on-road-sector documentation (an appendix in the updated 2008 Ozone Maintenance Plan report) and presented MOVES3 inventories with recommended MVEBs for the 2025 and 2030 forecast years for the plan to the Metropolitan Washington Air Quality Committee – Technical Advisory Committee (MWAQC-TAC, item #2). The recommended MVEBs included a 20% safety margin beyond the inventory levels, designed to account for any future uncertainties.

DEP staff also presented the draft, updated 2008 Ozone Maintenance Plan with new MVEBs to MWAQC (item #6). MWAQC approved the draft maintenance plan document and MVEBs for release for public comment. As part of an ongoing coordination with the U.S. EPA, DEP staff sent the draft document with the new MVEBs to the EPA for a preliminary review.

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 conduct meetings with the state departments of transportation to coordinate activities 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. TPB Staff briefed the Climate, Energy & Environment Policy Committee (CEEPC) on the CRP (item# 5).

Staff continued to participate in electric vehicle (EV) planning activities. DEP staff and TPB staff held internal planning meetings for the Regional Electric Vehicle Deployment (REVD) Working Group and the REVD Working Group meeting that took place in May. As a part of this meeting, TPB and DEP staff facilitated a breakout group discussion and presented an update on the scope of work (SOW) for the Regional Electric Vehicle Infrastructure Implementation Strategy, whose purpose will be to assess the infrastructure needs across the region to support the transition of light-duty vehicles from fossil fuel to electric power. Staff also drafted a briefing memo on REVD for inclusion in the Director's Report to the TPB.

TPB and DEP staff drafted joint comment letters from TPB, CEEPC, and MWAQC, for the EPA in support of two Notices of Proposed Rulemaking (NPRMs): 1) Greenhouse Gas Emissions Standards

for Heavy-Duty Vehicles – Phase 3, and 2) Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles. TPB staff announced the two NPRMs and plans to draft joint comment letters to the TPB Technical Committee (Other Business) and drafted a cover memo for draft joint comment letters for inclusion in the Director's Report to the TPB. The joint comment letters were approved by CEEPC (item #4) and MWAQC (item #6), with TPB action scheduled for the June TPB Steering Committee meeting.

As the version of MOVES that was last used in the air quality conformity analysis (MOVES2014b) cannot be used for air quality conformity analyses starting with January 2023, TPB staff continued to conduct MOVES model tests using the most recent model version (MOVES3.0.4) and evaluate the impacts of new software on both criteria pollutants and GHGs.

In support of emissions modeling activities, TPB staff attended the Multi-Jurisdictional Organization (MJO) MOVES Work Group webinar.

Task 7	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL MONITORING AND DATA PROGRAMS	\$2,199,5757	\$92,730	60%	53

7. TRAVEL MONITORING AND DATA PROGRAMS

7.1 Transportation Research and Analysis

- Staff continued to develop the approach for the next household travel survey. Staff held an internal meeting to discuss the frequency of conducting future household travel surveys. Staff also drafted slides for a presentation outlining recommendations.
- Staff revised the Vehicle Miles Traveled (VMT) geodatabase tables available to the Regional Transportation Data Clearinghouse (RTDC) to better mirror the data available in the updated Vehicle Miles Traveled (VMT) trends workbook. Staff updated the documentation that accompanies the geodatabase tables and the workbook.
- Staff continued to train an intern to convert summarized weekday transit ridership data to a SAS dataset for FY 2021.
- Staff met internally to discuss transit trip data collection and began an outward facing memo with recommendations for regional coordination.
- Staff participated in the recruiting and interview process for an intern and a Big Data Analyst.

Data Requests None

Meetings & Conferences

- COG/TPB staff participated in biweekly meetings with the Gen3 Model Development Team.
- Staff participated in the 2023 DDOT Innovation Expo and shared key highlights with other department members.

7.2 Data Management and Visualization Services

• Staff continued to review comments received from jurisdictional staff regarding updates to the National Capital Trail Network (NCTN) map and underlying database. Staff created an Excel workbook documenting the changes made and issues discovered while implementing identified changes to the NCTN spatial data. Staff continued to provide TPB's bicycle and

pedestrian planner with suggested edits and additional information about projects in the Project InfoTrak (PIT) database that impact the NCTN. This work is ongoing.

- Staff worked with the Planning Data and Research Program director on identifying specifications and possible data sources for developing a website for tracking grants opportunities under the Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA). Staff participated in meetings and reviewed products developed.
- Staff worked with the Planning Data and Research Program director to provide resources to Virginia Department of Transportation (VDOT) staff in support of adjusting urban area and MPO boundaries based on data from the 2020 Census.
- Staff provided resources to Plan Development and Coordination staff related to accessibility and 508 compliance in spatial data products to allow employees with disabilities and individuals with disabilities who are members of the public to have access to and use of information and data.
- Staff continued to support the Commuter Connections program by making corrections and adjustments (received from event sponsors and partner agencies) to the Bike to Work Day pit stop map.
- Staff continued to request average weekday transit ridership from regional transit providers and follow up with specific providers to request outstanding data from previous requests.
- Staff continued to perform administrative updates for TPB/COG's ArcGIS Online organizational account, including managing users, adding account access, and organizing content.
- Staff continued working with COG's Information Technology staff to refine specifications for new virtual machine (VM) hardware for TPB/COG's GIS servers. This work is ongoing.
- Staff continued discussions with TPB's GIS software vendor, Esri, to refine the planned GIS server software version upgrade that be done in conjunction with TPB's server migration described above. This work is ongoing.

Staff worked with COG's IT staff to provide resources to update ArcGIS Pro software for TPB/COG users.

GIS Committee/GDX Working Group

• Staff planned and participated in the March 21 GIS Committee/GDX Working Group virtual meeting. Highlights of the meeting included: a project update on the District of Columbia HSEMA Food and Water Resilience project and a presentation by Fairfax County on using a pretrained deep learning model from Esri for land cover classification on 2021 NAIP imagery.

Data Requests

- Staff responded to a request for data from Prince George's County regarding available Cooperative Forecast and transportation analysis zone (TAZ) data.
- Staff worked with Department of Environmental Programs (DEP) staff regarding data requested for DEP's electric vehicle project.

Meetings & Conferences

- Staff attended and presented a rough draft NCTN map at Bicycle and Pedestrian Subcommittee meeting held on May 23.
- Staff attended and participated in the Maryland State Geographic Information Committee (MSGIC) spring quarterly meeting on May 10.

- Staff attended an Innovation Expo at the District Department of Transportation (DDOT) headquarters on May 24.
- Staff participated in a meeting with Plan Development and Coordination staff regarding activity density mapping on May 8.
- 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	\$1,115,429	\$80,792	78%	57

8. REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION

8.1 Regional Land Use and Transportation Coordination

- Staff focused on compilation, review and presentation of the draft Round 10.0 Cooperative Forecasts
- Staff presented the draft jurisdictional Round 10.0 Cooperative Forecasts to the COG Board on May 10.
- Staff produced the April Regional Economic Monitoring System (REMS) report.
- Staff continued work on the draft 2022 Commercial Construction report, and the 2021 Baseline Employment memo.
- Staff began updating the employment definition adjustment factors.

Task 9	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILITY AND ENHANCEMENT PROGRAMS	\$1,082,497	\$77,195	59%	59

9. MOBILITY AND ENHANCEMENT PROGRAMS

During the month of May, staff concluded the public comment period for the draft 2023 Update to the Humans Service Transportation Coordinated Plan on May 13, 2023. Four comments were received and adequately addressed in the updated plan. Staff presented the final draft of the Coordinated Plan to the Transportation Planning Board. The Board unanimously approved the update which is available here: <u>https://www.mwcog.org/documents/2018/12/19/update-to-the-coordinated-human-service-transportation-plan-for-the-national-capital-region-access-to-jobs-afa-enhanced-mobility/</u>.

With the Coordinated Plan document finalized, staff has turned its attention to planning and preparing for the 2023 Enhanced Mobility grant solicitation expected to begin in Summer of 2023. Activities include project management, planning pre-application conference meetings for interested applicants, and finalizing the solicitation application and requirements.

9.2 Regional Roadway Safety Program.

Staff presented the Regional Roadway Safety Program Selection Panel's FY 2024 project recommendations for the TPB's consideration at its May 17 meeting. All eight projects were approved by the Board.

Each of the four FY 2023 projects is currently underway with progress as follows.

- VA (City of Alexandria Duke Street Safety Improvements) The consultant developed and delivered to County staff for review an existing conditions memorandum and conceptual design plans.
- MD (Maryland National Capital Park and Planning Commission/M-NCPPC Walker Mill Road Improvements) The consultant and M-NCPPC staff finalized proposed countermeasure practices for the corridor. The consultant began to develop the draft report.
- MD (Prince George's County Pedestrian Road Safety Audits) The consultant developed and delivered to County staff for review a draft memorandum summarizing findings from the road safety audit.
- MD (City of Rockville Beall Avenue Feasibility Study) The consultant participated with City staff in a public meeting regarding the design concepts for the corridor, conducted multimodal operations analyses for the design concepts, and began to develop a draft report.

9.3 Transportation Alternatives Set-Aside Program

The application period for the next round of the Maryland Transportation Alternatives Program closed on May 15. MDOT received eight applications for the Washington metropolitan region, which were forwarded to TPB staff for review. In preparation for the review period, TPB staff lined up a review panel and scheduled two meetings for the panel in June. Staff began a review of the applications, including an analysis of how they serve key regional goals.

9.4 Transportation/Land-Use Connections (TLC) Program

Work on all 11 TLC projects for FY 2023 was underway. See below:

- Safe Routes to School Walk Audits Phase 2 (Alexandria) A walk audit was held in April for Alexandria City High School. The contractor and City of Alexandria held a check-in call on May 17.
- Independence Avenue Corridor Study (DC) Independence Avenue Draft Final Report was distributed for comments on June 1. This project is on schedule.
- Delivery Microhub Feasibility Study (DC) The consultant team finalized documentation on site selection criteria and stakeholder interviews. The final report was drafted.
- New Design Road Bikeway Study (Frederick Co) The project was completed in February.
- Olde Towne to Washington Grove Bicycles Connection (Gaithersburg) The contractor has prepared a final report and will present it on June 12 to the Mayor and City Council.
- Active Transportation Study (Manassas Park) The consultant made revisions to project maps based on feedback from meeting with the City of Manassas Park City Manager. City staff will schedule briefings with the Manassas Park Planning Commission and the City Council starting in June. City staff will be coordinating the delivery of project materials to the VDOT NOVA District Bike/Ped Study Team.

- Montgomery Co Streetlight Standards (Montgomery Co) Montgomery County provided comments on the draft final Streetlight Design Guide. Project is on schedule.
- Commuter Garage First-/Last-Mile Study (Prince William Co) Monthly meeting was held where consultant provided updates, recommended improvements, and next steps. During the meeting, the consultant went over the second Technical Memorandum that was sent out on May 2. Comments back to the consultant were due on May 17.
- Fleet & Monroe Streets Complete Streets Feasibility Study (Rockville) The Consultant alongside City staff gathered public input on the designs. The Consultant filtered the public input and incorporated them into the final designs along with City staff comments. The Consultant provided the City with two final design options. The City will now choose the final design from the two design options provided.
- Takoma Park Metropolitan Branch Trail Upgrade (Takoma Park) The contractor continued work on the design report.
- New Ave Bikeway District Connector (Takoma Park) The contractor submitted the design report on May 26.

Staff began the consultant selection for the 10 new projects for FY 2024 that were approved by the TPB in April. Staff sent a questionnaire to the list of pre-qualified TLC consultants to gauge their interest in submitting proposals. Staff also held individual meetings with each project recipient to inform them about the consultant selection process and other activities related to getting started.

Task 10	BUDGET	Billed this month	% Funds Expended	UPWP Page
TPB MANAGEMENT AND SUPPORT	\$989,546	\$36,854	51%	61

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 provided overall program management oversight of all the Department's activities. Work activities the Director participated in during the month of MAY FY 2023 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 a meeting with the Program Directors and project staff to review the progress and briefing material 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 MAY FY 2023 includes Telephone / Web Ex / Microsoft Teams Communications:

- Chief Administrative Officers Committee (monthly)
- EPA Mid Atlantic Summit Presentation on EEAs Internal review
- 2020 Census Data based MPO Boundary Updates Discuss with MDOT & BRTB
- COG Board Meeting
- Title VI Next Steps
- Meet MD Transportation Secretary w/TPB Chair / MDOT Headquarters
- Board de-brief D. Koenig / FTA
- VDOT CRP funding
- VDRPT and D.C. Outreach / WMATA
- Staff Telework Training

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.

TPB Work Program Progress Report MAY FY 2023

Task 11	BUDGET	Billed this month	% Funds Expended	UPWP Page
TECHNICAL ASSISTANCE	\$1,249,736	\$141,679	43%	63
District of Columbia	\$279,633	\$23,777	18%	63
Maryland	\$442,970	\$85,462	47%	65
Virginia	\$334,844	\$31,499	44%	68
Regional Transit	\$192,266	\$940	70%	71

11. TECHNICAL ASSISTANCE

11.A District of Columbia

1. Program Development, Data Requests and Miscellaneous Services

Staff attended the monthly State Technical Working Group/Technical Committee/Steering Committee/TPB meeting cycle.

Staff participated in a meeting with DDOT to review the overall Technical Assistance program.

2. Regional Roadway Safety Program

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

3. Transportation / Land Use Connections Program

As part of the Transportation/Land-Use Connections Program (TLC), a technical assistance project was partially funded by the District of Columbia Technical Assistance Program. See TLC item above for further details about this program.

4. Other Tasks to Be Defined

No activity.

11.B Maryland

1. Program Development, Data Requests, and Miscellaneous Services

Staff attended the monthly State Technical Working Group/Technical Committee/Steering Committee/TPB meeting cycle.

Staff participated in an internal meeting to provide guidance on scopes of work for 30 percent design projects and provided recommendations for the Regional Roadway Safety Program and Transportation / Land Use Connections Program.

2. Project Planning, Feasibility, and Special Studies

No activity.

3. Transportation / Land Use Connections Program

As part of the Transportation/Land-Use Connections Program (TLC), technical assistance projects in Maryland were fully or partially funded through the Maryland Technical Assistance Program. See TLC item above for further details about the program.

4. Regional Roadway Safety Program

As part of the Regional Roadway Safety Program, technical assistance projects were partially funded under the Maryland Technical Assistance Program. See Regional Roadway 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

Staff attended the monthly State Technical Working Group/Technical Committee/Steering Committee/TPB meeting cycle.

Staff participated in an internal meeting to provide guidance on scopes of work for 30 percent design projects and provided recommendations for the Regional Roadway Safety Program and Transportation / Land Use Connections Program.

Staff continued updating resources to support the I-66 and I-395 Mode Share Studies scheduled for FY 2024.

2. Travel Monitoring and Survey

Active Transportation Counts

Staff finalized the analysis of the fall 2022 active transportation counts and worked to prepare the draft report.

Staff scheduled and participated in the kickoff meeting with VDOT staff and the consultant for the spring 2023 active transportation counts. Staff verified with the consultant the exact counting locations and facilities during and after the meeting.

The consultant conducted spring active transportation counts at twelve locations in northern Virginia.

Staff reviewed the I-66/I-395 Mode Share Study work plan.

3. Travel Demand Modeling

No activity.

4. Transportation / Land-Use Connections Program

As part of the Transportation/Land-Use Connections (TLC) Program, technical assistance projects in Virginia were fully or partially funded under the Virginia Technical Assistance Program. See TLC Program section of this progress report for more details.

5. Regional Roadway Safety Program

As part of the Regional Roadway Safety Program, technical assistance projects were partially funded under the Virginia Technical Assistance Program. See Regional Roadway 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>

Staff attended the monthly State Technical Working Group/Technical Committee/Steering Committee/TPB meeting cycle.

2. Transit Within Reach

The application period for FY 2024-2025 opened on May 26, 2023, and will close on August 4, 2023. Applicants may submit an optional abstract by June 23, 2023.

3. High-Capacity Transit Map

No activity.

4. Other Tasks to be Defined

No activity.

CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM

Program Management

- Staff initiated the close out the 2019 and supplemental 2020 FAA grants. Staff also supported FAA with a request for certifications.
- Staff prepared for and convened the May Aviation Technical Subcommittee meeting. Staff also prepared highlights from the March Aviation Technical Subcommittee meeting.
- Staff updated the monthly enplanement data.
- Staff began recruiting for a Planning Program Specialist to support the Continuous Airport System Planning Program. Staff reviewed applications and selected candidates to be interviewed.

Conduct and Process 2022/23 Baltimore-Washington Regional Air Passenger Survey (APS), Phase 1

- COG/TPB staff made updates to the sample draw process for the 2023 APS to distribute the sampled flights more evenly across field staff shifts.
- COG/TPB staff reviewed the raw data from the 2023 APS pretest responses and conducted a review of the data file and variables for data quality and consistency.
- COG/TPB staff met with ICF staff to discuss the pretest observations and findings on May 4.
- COG/TPB staff delivered a briefing on the 2023 APS focusing on lessons learned from the pretest to the Aviation Technical Subcommittee on May 23.

Air Cargo Element Update

• No activity

Ground Access Travel Time Study

- Staff continued working on the Ground Access Travel Time (GATT) study and prepared summaries of tabulations and figures.
- Staff provided an update on the Ground Access Travel Time (GATT) study to the Aviation Technical Subcommittee on May 23.

PROGRESS ON PLAN PRODUCTS

Task 4. Public Participation

1. Staff continues to compile and report public comments received on the Initial Visualize 2050 Feedback Form and through email, phone and by mail at the TPB Technical Committee meetings and TPB Board meetings.

Task 5. Travel Forecasting

- 1. Staffing the TPB Travel Forecasting Subcommittee (TFS). In FY 23, the TFS met six times, on the following dates: 7/22/22, 9/23/22, 11/18/22, 1/27/23, 3/24/23, and 5/19/23.
- 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. COGTools software and geodatabase
 - i. Added features: Staff developed a new Station Management module. Staff made updates to the transit agency drop-down menu.
 - ii. Bug fixes: Implemented a fix so that records in the transit line files do not extend past the 144-column limit.
 - iii. Staff developed an automated procedure in COGTools that will perform QA/QC checks on transportation network files exported from the Unified Network Database.
 - b. Detected network coding error, known as the 15000-series node error, which blocked some park-and-ride (PNR) and kiss-and-ride (KNR) access to some bus nodes. Staff has corrected all the transit networks used in the air quality conformity (AQC) analysis. Based on tests, the error does <u>not</u> have a material effect on the AQC analysis. Nonetheless, staff has re-run all the model years and has prepared an updated transmittal package, dated November 14, that includes the model and model inputs (networks and land use data).
 - c. Began development of a new base transit network, based on transit network service in December 2022.
- 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 created loaded-link highway network shapefiles from the latest Ver. 2.4 Travel Model for all scenario years in preparation for future data requests.
 - Staff completed testing the TRANSIMS ModeChoice software (Ver. 7.5.7) in the Gen2/Ver. 2.4 Model. The new software will be part of the Gen2/Ver. 2.4.6 Travel Model and replaces the outdated AEMS software.
 - iii. Staff developed a transit walkshed generation process in Python based on GeoPandas. The new software will be part of the Gen2/Ver. 2.4.6 Travel Model and replaces the earlier ArcGIS process.
 - iv. In preparation for the upcoming 2024 LRTP (Visualize 2050), staff implemented changes to model code/input files to accommodate the new horizon year of 2050.
 - v. Staff created a new version of the production-use travel model with six updates, including the processes used for mode choice and for generating transit walksheds. The new model is called Gen2/Ver. 2.4.6.
 - b. Gen3, Phase 1 Travel Model

- i. Staff updated summary scripts and investigated the model's apparent insensitivity to changes in tolls. RSG addressed the time-of-day insensitivity issue.
- ii. Staff implemented an enhancement in the model to automatically extract the scenario name and create an empty outputs folder with the required file structure.
- iii. Staff developed a "mini" version of the Gen3, Phase 1, Model for functionality tests. The "mini" version has a much smaller footprint on the servers in terms of runtime and storage space used.
- c. Gen3, Phase 2 Travel Model
 - i. Updated auxiliary travel models. Estimated auto ownership model. Proposed changes to transit path building to deal with a hyper-path problem.
 - ii. COG staff estimated three component models as part of the Phase 2 model development.
 - iii. COG staff conducted two sensitivity tests:
 - 1. Increasing the AM travel time and travel cost skims by 20%.
 - 2. Removing one lane on all road segments with two or more lanes in the AM peak period.
- d. Webpages: Updated webpages in July and November 2022 to reflect updates to travel models.
- e. Travel model-related data requests: This fiscal year, staff have responded to 34 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.
 - Staff attended and presented at the Association of Metropolitan Planning Organizations (AMPO) Annual Conference, Oct. 25-28, 2022, in Minneapolis, Minnesota.
 - c. Staff attended the 2023 Annual Meeting of the Transportation Research Board (TRB), held in Washington, D.C., from January 8-12, 2023.

Task 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 finalized documentation regarding the air quality conformity analysis of the 2022 Update to Visualize 2045.
 - b. Staff provided information from the regional travel demand forecasting model to the environmental justice analysis conducted on the LRTP.
- 2. Keep abreast of federal requirements related to air quality conformity determinations and the EPA's Motor Vehicle Emission Simulator (MOVES) software.
 - a. Staff have conducted tests of EPA's new mobile emissions modeling software, MOVES3. Based on these findings, technical staff from the metropolitan Washington region agreed that, for the time being, MOVES3.0.4, rather than MOVES3.1, would be used in the upcoming SIP and air quality conformity modeling (and this is acceptable since MOVES3.1 is considered a minor model update).
 - b. After reviewing EPA's new heavy-duty truck final rule entitled "Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards," which was published on December 20, 2022, staff summarized the rule in a memo which was shared with the TPB as part of the director's report.
- 3. Support development of an Attainment/Maintenance State Implementation Plans (SIPs) regarding both 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).

- a. TPB staff continued to coordinate with COG DEP staff and state air agencies on plans related to development of the Attainment SIP and Maintenance Plan/Redesignation Request to address requirements of the 2015 Ozone NAAQS.
- 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.
 - a. Staff has prepared new/updated Motor Vehicle Emissions Budgets (MVEBs) associated with developing a 2008 Ozone Maintenance Plan and shared these with COG DEP staff in March 2023.
- 5. Climate Change Planning: Provide support for efforts to mitigate climate change due to the on-road transportation sector.
 - a. July 27, 2022: TPB staff briefed the Climate, Energy and Environment Policy Committee (CEEPC) on the TPB Climate Goals and Strategies adopted by the board in June 2022.
 - b. Staff continued to assess the potential impacts of the recently released Notice of Proposed Rulemaking (NPRM) for the Performance-Based Planning and Programming (PBPP) Greenhouse Gas performance measure and target setting. Staff has prepared a draft comment letter in September, which should be finalized in October.
 - c. In September 2022, staff worked with the three state DOTs to learn more about their plans related to the National Electric Vehicle Infrastructure (NEVI) Formula Program, established by the Bipartisan Infrastructure Law (BIL). State DOT representatives briefed the TPB Technical Committee in October on their NEVI plans.
 - d. TPB staff tested and reviewed the new Congestion Mitigation and Air Quality (CMAQ) Toolkit for estimating emissions benefits of highway and intermodal projects.
 - e. COG DEP staff and TPB staff held internal planning meetings for the Regional Electric Vehicle Deployment (REVD) Working Group.
 - f. In May, TPB and DEP staff drafted joint comment letters from TPB, CEEPC, and MWAQC, for the EPA in support of two Notices of Proposed Rulemaking (NPRMs): 1) Greenhouse Gas Emissions Standards for Heavy-Duty Vehicles – Phase 3, and 2) Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles. The comment letters should be approved by the TPB in June and will then be submitted to the docket.
- 6. Air-quality-related data requests: This fiscal year, staff have responded to 12 air-quality-related data requests.

Task 7. Travel Monitoring and Data Programs

7.1 Transportation Research and Analysis

- Presentations, Visualizations, and information reports
 - Ongoing
- Workplan, survey data files, and documentation for travel surveys
 - Ongoing
 - Workplan for State of the Practice of Household Travel Surveys complete
 - Interviews with subject matter experts at other agencies complete
 - Memo with lesson learned during interviews completed.
 - Memo reviewed with internal stakeholders.
 - Presentation for external stakeholders developed and delivered
 - Interviews with FHWA and state DOTs about NHTS NextGen completed

- Initial presentation with recommendations for future survey drafted.
- Technical support
 - Ongoing

7.2 Data Management and Visualization Services

- Travel monitoring datasets to support PBPP and Gen3 modeling requirements

 Ongoing
- Travel trends and dashboard and visualizations
 - o Workplan under development
- Technical reports/memoranda
 - Ongoing
 - Presentations
 - o Ongoing

Task 8. Regional Land Use and Transportation Planning Coordination

8.1 Regional Land Use and Transportation Planning Coordination

- Updated Cooperative Forecasting land activity forecasts and documentation.
 - Preliminary Round 10 Local Forecasts at the jurisdiction level complete
 - Preliminary Round 10 Reconciliation complete
 - Local TAZ level forecasts are under development.
 - \circ $\,$ Draft regional Round 10.0 Cooperative Forecasts presented to the COG Board $\,$
- Analysis of Activity Center and High-Capacity Transit Station area historic trends and forecasts
 - o Under development
- Presentations, visualizations, and information reports
 - o Ongoing
- Technical support
 - Ongoing
- Annual Baseline Employment Guidance
 - Draft completed

CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM

- Conduct and process 2022 Regional Air Passenger Survey, Phase 1
 - Project underway
- Air Cargo Element Update
 - Work to commence later in year.

FY 2023 TRANSPORTATION PLANNING BOARD COG/TPB BUDGET EXPENDITURE SUMMARY May 2023

Ν	lay 2023		0	
	DC, MD and VA		BILLED	
	FTA, FHWA and LOCAL	FUNDS	THIS	% FUNDS
	BUDGET TOTAL	EXPENDED	MONTH	EXPENDED
1. Long-Range Transportation Planning				
Long - Range Transportation Planning	1,032,781.45	710,608.18	83,585.53	69%
Subtotal	1,032,781.45	710,608.18	83,585.53	69%
2. Transportation Improvement Program				
Transportation Improvement Program	228,463.67	178,911.74	15,622.16	78%
TIP Database Support	200,000.00	156,149.64	0	78%
Subtotal	428,463.67	335,061.38	15,622.16	78%
3. Planning Elements	270 020 54	005 007 07	22 425 52	700/
Congestion Management Process	379,830.51	265,827.27	33,135.52	70%
Systems Performance, Ops & Tech Planning	348,494.22	310,430.7	17,036.6	89%
Transportation Emergency Preparedness Planning	142,103.03	110,432.49	10,482.12	78%
Transportation Safety Planning	328,165.29	120,591.72	12,643.36	37%
Bicycle & Pedestrian Planning	183,504.17	117,421.25	14,778.29	64%
Regional Public Transportation Planning	295,752.48	223,361.52	21,820.69	76%
Freight Planning	347,269.30	220,912.46	22,728.12	64%
Metropolitan Area Transportation Operation Coord Program Planning	168,057.12	151,686.77	13,208.03	90%
Performance-Based Planning & Programming	233,762.32	138,999.62	7,396.12	59%
Resilience Planning	212,185.11	94,483.84	12,615.2	45%
Subtotal	2,639,123.55	1,754,147.64	165,844.05	66%
4. Public Participation				
Public Participation	913,276.45	569,259.32	55,432.17	62%
Subtotal	913,276.45	569,259.32	55,432.17	62%
5. Travel Forecasting				
Network Development	1,047,672.55	792,439.81	79,890.51	76%
Model Development	1,634,968.86	1,231,052.7	86,481.98	75%
Subtotal	2,682,641.41	2,023,492.51	166,372.49	75%
6. Mobile Emissions Planning				
Air Quality Conformity	965,194.31	780,291.18	73,969.44	81%
Mobile Emissions Analysis	1,300,371.68	945,378.33	84,014.65	73%
Subtotal	2,265,565.99	1,725,669.51	157,984.09	76%
7. Travel Monitoring and Data Programs				
Research & Analysis	1,418,540.44	795,886.04	65,394.2	56%
Data Visualization & Management	781,035.17	524,402.71	27,335.88	67%
Subtotal	2,199,575.61	1,320,288.75	92,730.08	60%
8. Planning Scenarios and Socioeconomic Forecasting			· ·	
Socioeconomic Forecasting	1,115,429.24	872,558.61	80,792.13	78%
Subtotal	1,115,429.24	872,558.61	80,792.13	78%
9. Mobility and Enhancement Programs	, ., .,			
Transportation and Land Use Connections Program	578,940.58	349,002.95	52,338.24	60%
Enhanced Mobility Grant Program	92,739.74	41,937.97	3,098.77	45%
Transportation Alternatives Set-Aside Programs	35,916.83	19,008.14	1,894.6	53%
Other Tasks to be defined 9.5	374,899.11	225,871.11	19,864.22	60%
Subtotal	1,082,496.26	635,820.17	77,195.83	59%
10. TPB Support and Management	1,002,430.20	033,020.17	11,135.05	3370
TPB Support and Management	989,546.94	505,162	36,854.76	51%
Subtotal	989,546.94	505,162	36,854.76	51%
Core Program A. District of Columbia Technical Assistance	15,348,900.57	10,452,068.07	932,413.29	68%
Program Development & Misc.	279,633.49	49,184.68	23,777.5	18%
B. Maryland Technical Assistance	210,000.40	43,104.00	20,111.0	1070
Program Development & Misc.	442,970.52	210,326.24	85,462.72	47%
C. Virginia Technical Assistance	442,510.32	210,020.24	00,402.72	4170
Program Development & Misc.	334,844.64	147,591.32	31,499.21	44%
D. Public Transit Technical Assistance	554,044.04	JU 1.32	51,433.21	44 %
Program Development & Misc.	192,288.25	134,326.49	940.19	70%
Technical Assistance	1,249,736.90	541,428.73	141,679.62	43%

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

		SUPPLEM	IENT 1			
	TOTAL		FTA/STA/LOCAL		PL FUNDS/LOCAL	
	AUTHORIZED	TOTAL	AUTORIZED	FTA	AUTORIZED	FHWA
	BUDGET	EXPEDITURES	BUDGET	EXPENDITURES	BUDGET	EXPENDITURES
A. DC Technical Assistant						
Program Development, Data Requests, & Misc	14,999.99	9,254.73	1,325.02	817.52	13,674.97	8,437.21
Regional Roadway Safety Program	30,000.00	28,797.20	2,650.05	2,543.80	27,349.95	26,253.40
Transportation/Land Use Connections Program	30,000.00	11,132.75	2,650.05	983.41	27,349.95	10,149.34
TBD	204,633.50	0.00	18,076.29	0.00	186,557.21	0.00
Subtotal	279,633.49	49,184.68	24,701.41	4,344.73	254,932.08	44,839.95
B. MD Technical Assistant						
Feasibility/Speacial Studies	24,999.99	0.00	2,208.37	0.00	22,791.62	0.00
Program Development & Misc	14,999.99	9,077.02	1,325.02	801.82	13,674.97	8,275.20
Planning Studies	35,000.00	26,600.00	3,091.72	2,349.71	31,908.28	24,250.29
TBD	107,970.54	0.00	9,537.57	0.00	98,432.97	0.00
Transportation Performance Measures	260,000.00	174,649.22	22,967.09	15,427.63	237,032.91	159,221.59
Subtotal	442,970.52	210,326.24	39,129.78	18,579.16	403,840.74	191,747.08
C. VA Technical Assistant						
Program Development & Misc	14,999.99	9,397.44	1,325.02	830.12	13,674.97	8,567.32
MARC - VRE Runthrough - VA	35,000.00	26,600.00	3,091.72	2,349.71	31,908.28	24,250.29
ТВD	19,844.21	0.00	1,752.94	0.00	18,091.27	0.00
Transportation/Land Use Connection Program	80,000.00	47,664.80	7,066.80	4,210.47	72,933.20	43,454.33
Travel Demand Modeling	84,999.95	0.00	7,508.47	0.00	77,491.48	0.00
Travel Monitoring	100,000.49	63,929.08	8,833.54	5,647.17	91,166.95	58,281.91
Subtotal	334,844.64	147,591.32	29,578.49	13,037.47	305,266.15	134,553.85
D. WMATA						
Program Development & Misc	14,999.99	12,326.49	14,999.99	12,326.49	0.00	0.00
TBD	52,288.26	0.00	52,288.26	0.00	0.00	0.00
Transit Within Reach Soli	125,000.00	122,000.00	125,000.00	122,000.00	0.00	0.00
Subtotal	192,288.25	134,326.49	192,288.25	134,326.49	0.00	0.00
Grand Total	1,249,736.90	541,428.73	285,697.93	170,287.85	964,038.97	371,140.88