

FY 2023



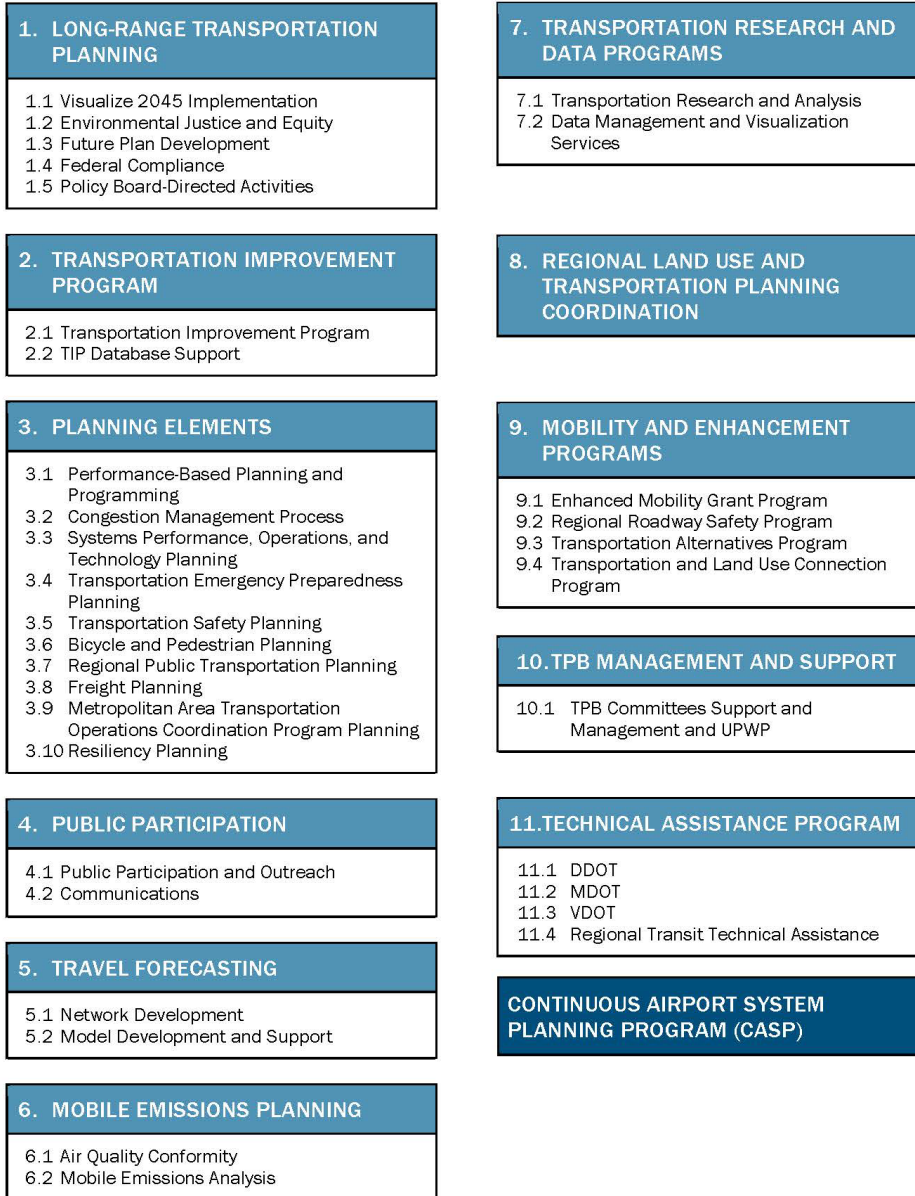
National Capital Region
Transportation Planning Board

Work Program Progress Report
NOVEMBER 2022
FY 2023

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The TPB approved its FY 2023 Unified Planning Work Program (UPWP) in March 2022. The TPB Work Program Progress Report summarizes each activity for November. 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.



Task 1	BUDGET	Billed this month	% Funds Expended	UPWP Page
LONG RANGE TRANSPORTATION PLANNING	\$1,122,781	\$58,505	27%	35

1. LONG-RANGE TRANSPORTATION PLANNING

1.1 - Visualize 2045 Implementation

Staff provided an overview of the Visualize 2045 Update to the Commuter Connections Subcommittee.

1.2 - Environmental Justice and Equity

Staff continued analysis of data to inform the environmental justice analysis and development of the presentation for the TPB and its technical committee. Staff initiated development of the Visualize 2045 Update Environmental Justice Report.

1.3 - Future Plan Development

Staff continued discussions related to the schedule for the LRTP update. Staff presented draft materials to support the technical inputs solicitation for the 2024 update to the TPB and its technical committee. Staff sent out working draft spreadsheets for agency review to support the zero-based budgeting approach to the 2024 update technical inputs solicitation.

1.4 - Federal Compliance

Staff received notice of the window for the federal certification review discussions with federal agencies (March 2023)

1.5 - Policy Board-Directed Activities

There has been no activity at this time.

	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRANSPORTATION IMPROVEMENT PROGRAM	\$428,463	\$32,901	38%	37

2. TRANSPORTATION IMPROVEMENT PROGRAM

2.1- Transportation Improvement Program (TIP)

At its meeting on November 4, 2022, the TPB Steering Committee approved two amendments to the FY 2023-2026 TIP. The first amendment was requested by DDOT to reprogram funds within five ongoing programs or project groupings and to add funding for three new ongoing programs or project groupings. The second amendment, requested by VDOT, reprogrammed funding for the Route 1 Widening (Fraley Blvd.) project, added funding for the Richmond Highway Corridor Improvements Phase 2 project, and for the #ITTF22 High-Speed Communications for Signals on VA Route 234.

2.2-TIP Database Support

Contractor Ecolnteractive 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 TPB staff and member agency users. Work under the standard contract included adding a button to access the Project Description report on the project form, the ability to add LRTP

and completion years to the Append Additional Columns” feature on several reports and updating the default report filters to run on the FY 2023-2026 TIP.

Under an expanded contract for professional services, EcoInteractive developed and refined customizations of the software platform, and performed other specialized tasks, including updates to the financial constraint reporting module, creating an alert notification for potential duplicate record entries at the time of record creation, and continued work on the Fund Change Detail report.

Task 3	BUDGET	Billed this month	% Funds Expended	UPWP Page
PLANNING ELEMENTS	\$3,064,119	\$148,678	23%	39

3. PLANNING ELEMENTS

3.1 Performance-Based Planning

Staff briefed the TPB and the TPB Technical Committee on the draft targets developed for the Highway Safety and Transit Safety performance measures.

A TPB work session with state DOT safety representatives was held immediately prior to the November TPB meeting.

3.2 Congestion Management Process

Staff continued work on a multi-year bottlenecks analysis as a follow-up to the recently completed 2022 Congestion Management Process (CMP) Technical Report.

Staff continued CMP data compilation and analysis for upcoming Quarterly Reports.

3.3 Systems Performance, Operations, and Technology Planning

The November 3 meeting of the Systems Performance, Operations, and Technology Subcommittee (SPOTS) was organized and conducted. Topics discussed included three presentations by TPB staff: a briefing on the 2022 State of the Commute survey results, an overview of the impacts of the Covid-19 pandemic in the National Capital Region, and a regional twelve-year bottleneck analysis.

Staff participated in a November 18 meeting of the MDOT-State Highway Administration Connected and Automated Vehicles Working Group Policy Sub-Group. Staff participated in a November 30 meeting of the NVTC Transportation Technology Committee.

3.4 Transportation Emergency Preparedness Planning

Staff attended the annual NCR Winter Weather Conference on November 1, virtually hosted by COG DHSPS to help prepare the region for the upcoming winter season.

Staff participated in the November 3 Emergency Preparedness Council (EPC) Cyber Tabletop Exercise organized by COG DHSPS.

The November 9 meeting of the Transportation Emergency Preparedness Committee (RESF 1) was organized and conducted, discussing current regional transportation emergency preparedness issues. Topics discussed included a transportation cybersecurity discussion by WMATA and TSA, a regional transportation evacuation discussion, and points of contact for mutual aid requests.

Staff attended the November 29 Severe Weather workshop at the National Weather Service center in Stirling.

3.5 Transportation Safety Planning

Staff coordinated work on the draft PBPP highway safety targets. A TPB work session, held immediately prior to the November TPB meeting, was organized so that state DOT safety representatives could brief the board on safety trends and activities.

Staff attended the fall Street Smart kick-off event on November 17, held at the Eagle Academy in southeast DC.

3.6 Bicycle and Pedestrian Planning

A Bicycle and Pedestrian Subcommittee meeting was organized and held on November 15. Agenda topics included: NVRC on partnering to improve trail access and impacts in Northern Virginia, a 2022 Update on Vision Zero in DC, and a briefing on the Suitland Metro Bike and Pedestrian Access Study by Prince George's County.

3.7 Regional Public Transportation Planning

The Regional Public Transportation Subcommittee did not meet in November.

Staff arranged a briefing of the TPB and the TPB Technical Committee by WMATA staff on the Better Bus campaign and Bus Network Redesign effort.

Staff attended a WMATA Bus Network Redesign meeting, a regional Bus Leaders Committee meeting, the monthly WMATA JCC meeting and the Silver Line Phase Two opening ceremony. Staff attended a MATOC TTF meeting.

3.8. Freight Planning

The TPB Transportation Freight Subcommittee did not meet in November.

Staff attended the DC Truck Map kick-off meeting on November 14.

For the National Capital Region Freight Plan Update (the Plan), Staff continued to work with the consultant team to compile regional freight-related data. The consultant team continued its analysis of data provided by Staff and other sources. Staff participated in a project update meeting with the consultant team on November 10.

3.9 Metropolitan Area Transportation Operations Coordination Program Planning

The regularly scheduled November 17 virtual meeting of the MATOC Operations Subcommittee was organized and conducted, discussing preparations for Thanksgiving holiday travel period, the status of newly opened facilities, and an agency roundtable. Staff also participated in the November 17 meeting of the MATOC Information Systems Subcommittee.

The regularly scheduled November 18 virtual meeting of the MATOC Steering Committee was organized and conducted, discussing RITIS costs and technical updates, reports by other MATOC committees and subcommittees, and planning for a future TIM Regional Self-Assessment Event.

3.10 Resiliency Planning

The new Transportation Planner IV staff joined TPB as a resilience planner. Staff held internal discussions about options for implementing this item and reviewed materials from prior TPB transportation planning and resiliency planning activities.

Task 4	BUDGET	Billed this month	% Funds Expended	UPWP Page
PUBLIC PARTICIPATION	\$913,276	\$43,577	23%	45

4. PUBLIC PARTICIPATION

4.1 Public Participation and Outreach

Work was largely completed on an evaluation of the TPB’s public involvement activities. This study was conducted by the consulting firm Foursquare ITP, whose services were procured through ICF, the TPB’s on-call consultant. It is timely because it follows up on two years of outreach for the long-range plan update and it will precede the federal certification review of the TPB’s planning process, which is expected in early 2023. The study began in September. In October, the consultants conducted most of the study’s research. In November, the report was drafted and reviewed by TPB staff. The report will be finalized in December and presented to the TPB Technical Committee, the CAC, and the AFA.

The TPB Community Advisory Committee (CAC) met on November 10. The committee discussed the next update of the region's long range transportation plan, current recruitment for the next term of committee members, and the 2022 state of the commute survey.

Staff continued CAC recruitment. The application period was scheduled to be open between mid-October and December 5. Staff advertised the application widely through emails, TPB News and Facebook. The new CAC membership will be approved by the TPB in January. The new two-year term for the CAC will begin in February of 2023 and end in January of 2025.

A new staffer, Marcela Mareno, began work on November 21. Marcela will be responsible for public participation activities, including serving as the lead staffer for the CAC and the AFA.

4.2 Communications

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

- **October 2022 TPB meeting recap: highway systems targets, bus equity analysis, State of the Commute Survey**
November 7, 2022
- **Updated transit equity analysis highlights disparity in job access and bus service frequency**
November 7, 2022
- **TPB Community Advisory Committee accepting member applications for 2023-2024**
November 7, 2022
- **Region celebrates opening of Silver Line Extension**
November 16, 2022
- **Less daylight brings increase in crashes involving pedestrians**
November 17, 2022

Staff updated pages on the COG website related to transportation. Staff shared information about TPB activities via social media.

Task 5	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL FORECASTING	\$3,364,641	\$240,583	26%	47

5. TRAVEL FORECASTING

5.1 Network Development

Network development staff completed updating networks to correct the 15000-series node range error which caused a reduction in the number of auto-access-to-bus trips in the travel demand model runs completed for the latest Air Quality Conformity (AQC) analysis. These networks are now available upon request.

Staff continued development of a new base transit network for use in the upcoming AQC analysis of the 2024 update to the Long-Range Transportation Plan (LRTP). This work included a review of bus and rail fares, and collection of bus route information that is not included in the General Transit Feed Specification (GTFS) data.

Staff developed a test, year-2023 network reflecting updated tolls on the Dulles Toll Road to run a sensitivity test to determine the likely traffic impact of the toll increase.

In anticipation of the need to develop a 2014 emissions inventory for State Implementation Plan (SIP) work, staff pulled 2014 transit files from an historic network database into the current network database and updated the bus routes to match the highway network in the current database.

Staff updated the current network database to reflect the now permanent closure of sections of Beach Dr. NW, Washington, D.C. Staff documented this update with a memo.

Staff responded to multiple information requests from Maryland Department of Transportation (MDOT) consultants.

Staff continued to work on an automated procedure in COGTools that will perform Quality Assurance/Quality Control (QA/QC) checks on the network files exported from the Unified Network Database. This procedure will likely include four sub-modules for highway network checks and seven sub-modules for transit network checks. Staff plan to release the prototype of this new module for internal testing in early December. Staff created a draft memorandum, dated September 8, that proposes a list of QA/QC checks to be performed in this procedure. Network staff reviewed the memo internally and met on November 22 to discuss it.

5.2 Model Development and Support

The Travel Forecasting Subcommittee (TFS) meets in odd-numbered months. Staff attended and presented at the November 18 TFS meeting and started preparing meeting highlights. The meeting mainly covered the following topics:

- Testing the TPB's travel model and mobile emissions model servers in the cloud
- Recent updates to the Baltimore Metropolitan Council InSITE activity-based travel model
- Evaluation of the 7-day panel survey of the 2017-2018 Regional Travel Survey
- COG/TPB Gen3 Travel Model: Status report

Staff also thanked the outgoing TFS chair for 2022 (Ms. Lisa Shemer, MDOT) and announced new chair for 2023 (Dr. Yi Zhao, DDOT).

There is no update on the processing of the 2019 Air Passenger Survey (APS), transmitted by COG's Planning Data and Research (PDR) Team, as the PDR staff are working to update the APS data files

based on staff's review. Staff plan to include the 2019 APS data, once quality assured, in the next release of the Ver. 2.4 Model and in the Gen3, Phase 2, Model prior to the Phase 2 model validation.

Updating of the MWCOG model development strategic plan, last updated in 2015, is currently on hold due to other work priorities.

Generation 2/Ver. 2.3 and Ver. 2.4 Travel Model

With the recent fixes in the network database, especially those related to the 15000-series nodes, staff re-generated network files and re-ran travel demand models for all the Air Quality Conformity (AQC) analysis years. Staff created a new model transmittal package for the Ver. 2.4 Travel Model, dated November 14, and started to send it out. Specifically, staff did the following in November:

- Updated the cover letter and transmittal memo (now dated November 14) for the transmittal package.
- Prepared standard model output folders so that the files could be considered "off the shelf," compiled standard model outputs in CUBE, and created GIS shapefiles for loaded-link highway networks as well as transit network files for data requests.
- Edited Cube scripts to prepare control totals of the final iteration (i4) person trip tables (*.MTT) and vehicles trip tables (*.VTT) for data requests.
- Updated related COG webpages.

Staff developed a watershed generation process in Python based on GeoPandas. Staff conducted test model runs with the GeoPandas process and compared the resulting region-level travel statistics to those with the original ArcPy-based process. Staff also conducted additional tests with different buffering resolutions. Staff successfully tested the GeoPandas process with Mambaforge and Miniconda, two replacement options for Anaconda, which would not be free to stakeholders with over 200 employees. Based on the testing, staff decided to replace the current ArcPy-based process with the new GeoPandas-based process in the next release of the Gen2/Ver. 2.4 Model. Documentation is underway.

Staff completed the testing of the TRANSIMS ModeChoice software (Ver. 7.5.7) in the Gen2/Ver. 2.4 Model and recommended its use in the next release of the Gen2/Ver. 2.4 Model, to replace the outdated AEMS software. Documenting the testing results is on hold due to other work priorities.

Staff compiled, analyzed, and documented the observed daily vehicles miles of travel (VMT) data extracted from state DOT HPMS reports for the year 2021. This data is used for both travel forecasting and emissions analysis activities. The memo that documents this data, dated November 21, was shared internally.

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

Staff made updates in the Gen2/Ver. 2.4 Model to clean up the transit skimming/assignment report files generated by the model. In November, staff applied the same changes to the Gen2/Ver. 2.4_PT Model and conducted a test run to verify that the changes are working properly.

Generation 3 Travel Model

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

- COG held two check-in meetings with RSG and BMG, the consultants on the Gen3 Model development project on November 10 and 22.

- Staff continued to work on the Gen3, Phase 1, Model received from RSG in January. Specifically,
 - RSG addressed the sensitivity issue in the time-of-day choice model that COG staff uncovered in a prior sensitivity test by making updates to the Gen3 Model code. COG staff downloaded the latest Gen3 Model on October 26 and tried to repeat the sensitivity test to verify RSG's fix. However, the model run failed due to a fatal error in ActivitySim. COG staff requested RSG to address the error.
- As the Gen3 Model, Phase 2, development started in March, staff continued to work with RSG on the development of the Phase 2 Model. Specifically,
 - COG staff completed the task of estimating three component models as part of the Phase 2 model development and worked on the documentation of the estimation work.
 - RSG staff transmitted the process that generated the final estimation data bundle (EDB) files used for the model estimation work. COG staff, however, failed to run the setup on the COG computer. COG staff requested RSG to upload all the files that are needed to run this process.
 - Staff continued to make enhancements and bug fixes to the Gen3 Model. Specifically,
 - Using the Gen3 Model flowcharts, staff developed a list of unused inputs/scripts files in the current Gen3 Model package. After RSG review, staff updated the Gen3 Model input files stored on Box and the Gen3 Model code on GitHub by removing the unused inputs/script files.
 - Staff created a program that summarizes the person trips from ActivitySim into OMX/Cube origin-destination trip matrices by purpose and mode. After an internal review, staff modified, improved, and tested the program.
 - RSG proposed an outline for the Gen3 Model User's Guide on November 23. Staff performed reviews and provided feedback on November 29.
- Staff successfully conducted a test run for ActivitySim's MWCOG prototype model and reported the result to WSP, a consultant working for the ActivitySim Consortium, which had been testing memory usage in the prototype models of three agencies.
- As the Box account for the Gen3 Model development project was running out of space, staff cleaned up the Box drive, archived some of the data files, and moved them to SharePoint.

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 (MEMW) 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 also continued to monitor the storage space on various modeling servers to ensure that older files were being backed up and removed and that sufficient storage space was available for upcoming activities.

Finally, staff have continued to meet, conduct model tests, and work with IT staff to implement the migration of workstations and servers to the cloud. In support of these activities, staff briefed the Travel Forecasting Subcommittee (TFS) on the findings of testing of the TPB's travel models and MOVES models on Amazon Web Services (AWS) cloud servers (item #2).

Other activities

Staff serviced three data requests: Two requests were for the Gen2/Ver. 2.4 Travel Model with revised transit networks. One request was for loaded-link highway networks for the years 2017, 2021, 2023, 2025, 2030, 2040 and 2045 from the Gen2/Ver. 2.4 Travel Model with revised transit networks. These data requests were from consultants working for VDOT and Montgomery County.

Staff developed a memorandum, dated October 31, that explores strategies towards a regionally coordinated transit on-board survey. The memo was shared with the DTP management and COG's Planning Data and Research (PDR) Team in November. Staff met with PDR staff on November 28 to discuss the memo and next steps.

Staff worked with IT to move the travel demand modeling work from on-premises computers to computers in the cloud (AWS). Specifically,

- On November 14, staff submitted a request for IT to create six on-demand AWS servers with proposed specs and to schedule a data transfer from on-premises servers to the cloud via one or more AWS Snowball devices.
- Staff held a monthly check-in meeting with IT on November 18 to discuss the November 14 request.
- Staff presented at the November 18 TFS meeting on the findings from the testing of TPB's Travel Models and MOVES Models on AWS cloud servers.
- Staff worked with IT staff afterwards on the details to carry out this migration.
- Staff developed a nine-step testing procedure for conducting a travel demand model run on an on-demand AWS server through C3HUB and conducted a virtual training session on November 10. All the modelers in the team conducted modeling tests on two temporary cloud servers (TMSDEV01 and TMSDEV02).
- Staff went through the file folders on the network attached storage array (\\nas\TMSARCHIVE\MODELDEV) and moved the data request folder to one of the travel model servers (\\tms6) with the assistance of IT. Staff also created a shared spreadsheet proposing folders to be deleted from \\nas\TMSARCHIVE\MODELDEV.
- Staff created and tested a command line that can automatically shut down an on-demand cloud server at the end of a Gen2/Gen3 Model run.

Staff attended ActivitySim Consortium meetings regularly on Tuesdays and Thursdays.

Staff met with Professor Xuesong Zhou and his student at Arizona State University on Thursday, November 3 to discuss MWCOG's ActivitySim-based Gen3 Model and related dynamic traffic assignment (DTA) modeling.

Staff attended an online meeting of the New York Metropolitan Transportation Council (NYMTC) on November 17. NYMTC staff provided an overview of the updates to NYMTC's Travel Demand Model.

Staff attended ActivitySim Monthly Partners-Only Check-In Meeting on November 17.

Staff attended the AMPO Data Working Group Meeting on November 30.

Task 6	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILE EMISSIONS PLANNING	\$2,265,565	\$163,522	32%	51

6. MOBILE EMISSIONS PLANNING

6.1 Air Quality Conformity and Other Activities Associated with the Long-Range Transportation Plan

Following the TPB’s approval of the air quality conformity analysis of the 2022 Update to the Visualize 2045 Long-Range Transportation Plan (LRTP), staff continued to work on preparing additional documentation of findings and results. Namely, staff continued conducting the environmental justice analysis to assess the plan impacts on overburdened and underserved populations using the updated definitions of the Equity Emphasis Areas (EEAs).

Staff continued to attend coordination meetings related to scheduling tasks for the “interim” 2024 update of the region’s LRTP, including the air quality conformity analysis, system performance, and environmental justice analysis. This activity also included coordination of conformity timelines to synchronize with development schedules for Maintenance or Attainment State Implementation Plans (SIPs) and new Motor Vehicle Emissions Budgets (MVEBs), and a continuing review of documentation prepared by the Plan Development and Coordination Team.¹

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 plans related to development of the Attainment State Implementation Plan (SIP) and Maintenance Plan/Redesignation Request to address requirements of the 2015 Ozone National Ambient Air Quality Standards (NAAQS). Following the receipt of MOVES3 model inputs for 2017 from the state air agencies, TPB staff continued to conduct quality control review of the data and evaluate implications of using MOVES3 in the upcoming analyses. Based on the impacts of the MOVES3 model on emissions estimates, staff also outlined the need for new motor vehicle emissions budgets (MVEBs) associated with the 2008 Ozone Maintenance Plan. Staff coordinated with the EPA about possible steps needed to update those MVEBs (item #2 at MWAQC-TAC). Related to this, DEP staff developed and transmitted a letter to the EPA that requests that EPA allow the region to update only the on-road and non-road inventories for 2025 and 2030 in the 2008 Ozone Maintenance Plan when developing new MVEBs using EPA’s new emissions model, MOVES3 (item #2 at MWAQC-TAC). Staff also developed a template for the state air agencies that requests that EPA move forward expeditiously to provide a Clean Data Determination (CDD) for the region so that the region can move forward with a Maintenance Plan for the 2015 Ozone NAAQS, rather than an attainment plan (item #2 at MWAQC-TAC). Staff received MOVES model inputs from the state air agencies for 2025 and 2030 and began conducting quality control 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. TPB staff briefed

¹ “A Summary of the TPB and COG Scenario Study Findings: Informing Planning for the Metropolitan Washington Region,” Draft Report (National Capital Region Transportation Planning Board, Metropolitan Washington Council of Governments, November 9, 2022).

planners from the Baltimore Metropolitan Council on the climate change mitigation strategies that were adopted for implementation and for further exploration by the TPB.

TPB staff tested and reviewed the new Congestion Mitigation and Air Quality Improvement (CMAQ) Toolkit for estimating emissions benefits of highway and intermodal projects and documented the initial impressions in a memorandum. Staff attended a webinar about the toolkit hosted by the Federal Highway Administration (FHWA).

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

Task 7	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL MONITORING AND DATA PROGRAMS	\$2,609,577	\$116,927	25%	53

7. TRAVEL MONITORING AND DATA PROGRAMS

7.1 Transportation Research and Analysis

- COG/TPB staff conducted an internal discussion about regionally coordinated transit on-board surveys for the DC area.
- COG/TPB staff delivered a presentation on the Regional Travel Survey 7-Day Smartphone Panel Survey to the TPB Travel Forecasting Subcommittee on November 18. This presentation was accompanied by a memorandum.
- Staff began preparing a synthesis using the notes from a series of interviews conducted with staff at peer MPOs on the state of the practice of household travel surveys.
- Staff organized, moderated, and participated in the AMPO Data Working Group meeting on November 30 which focused on the state of the practice of household travel surveys.
- Staff finalized the analysis of traffic at the region’s continuous counting stations for September and October 2022 and posted the snapshot including highway data through October and enplanement data through August to the COG/TPB website. Staff provided the data from these snapshots to COG DEP staff. Staff gave a brief update on these snapshots at the November 18 Travel Forecasting subcommittee meeting. Staff began a preliminary analysis of weekday traffic on principal arterials to see how commuter traffic has changed since June.
- Staff finalized an analysis of 2021 and 2022 trail count data available through the BikeArlington Counter Dashboard and began to draft a memorandum detailing the findings.
- Staff presented the impacts of the COVID-19 pandemic in the National Capital Region at the November meeting of the Systems Performance, Operations, and Technology Subcommittee (SPOTs).
- Staff made updates to the latest data inventory spreadsheet.

Data Requests

- COG/TPB staff fielded a RTS data request from a student researcher at George Mason University.
- Staff provided background information to the TFEA team regarding Vehicle Miles Traveled (VMT) changes in Jefferson County WV as noted in the VMT trends spreadsheet.
- Staff provided data about existing conditions of the transportation system to the Director of Transportation for memo on past scenario planning activities.
- Staff developed a table with VMT per capita in support of the climate progress dashboard updates.

Meetings & Conferences

- COG/TPB staff participated in biweekly meetings with the Gen3 Model Development Team.
- Staff conducted an internal debrief following the 2022 Highway Information Seminar.
- Staff attended the AMPO Data Working Group leadership meeting and quarterly meeting.

7.2 Data Management and Visualization Services

- Staff completed a dashboard visualization application to show the required Performance Based Planning and Programming (PBPP) data related to pavement condition for roadways on the National Highway System (NHS) from the Highway Performance Monitoring System (HPMS) for the TPB Planning Area.
- Staff integrated the above-mentioned pavement application into an overall Highway Asset web mapping application that contains both PBPP highway asset products (bridge and pavement condition).
- Staff continued to work on updating the regional boundary spatial data layers on the G:\drive that are also used in TPB/COG's web maps and applications. The work is ongoing.
- Staff worked with fellow Planning Data and Research (PDR) staff to assemble available TAZ equivalency tables and related files and share on the G:\ drive.
- Staff assisted fellow DTP staff with reformatting and projecting spatial data.
- Staff obtained the 2045 station file from the 2022 update to Visualize 2045 from fellow DTP staff.
- Staff assisted Commuter Connections staff with troubleshooting issues related to publishing data through ArcGIS Server to ArcGIS Online (AGOL).
- Staff performed administrative updates for TPB/COG's ArcGIS Online organizational account, including managing users, adding account access, and organizing content.
- Staff continued working with Information Technology staff to obtain and install ArcGIS Pro software on DTP staff workstations and laptops. Staff also provided input regarding issues with staff accessing ArcGIS software.

GIS Committee/GDX Working Group

- Staff planned and participated in the November 15 GIS Committee/GDX Working Group virtual meeting. Highlights of the meeting included: a presentation on the USGS Approach and treatment of stormwater networks, a roundtable discussion of GIS Day 2022, and the regular status reports on the NCR/GDX and NextGen 9-1-1. In addition, the election was held for the CY 2023 GIS Committee leadership. Staff represented the GIS Committee at the November 17 CIO meeting.

Data Requests

- Staff responded to a request from COG’s Department of Environmental Program staff for a reference map that shows COG and its member jurisdictions in relation to overall National Capital area/east coast.

Meetings & Conferences

- Staff participated in a meeting with TPB’s project database consultant, EcoInteractive, on November 18 to review their new software platform.
- Staff attended and participated in the Maryland State Geographic Information Committee (MSGIC) executive meeting on November 9.
- Staff attended the November 8 meeting of the Cooperative Forecast and Data Subcommittee.
- 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	\$1,165,429	\$73,917	32%	57

8. REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION

8.1 Regional Land Use and Transportation Coordination

- Staff developed and presented a detailed assessment of the preliminary draft Round 10 forecasts at the regional level and presented the results to the Cooperative Forecasting Subcommittee and the Planning Directors Committee.
- Staff continued to update the PowerPoint presentation that documents the effects to date of COVID on the region’s economy.
- Staff continued to work with accounting to complete transmittal of the Housing Affordability Planning Program (HAPP) grant awards to recipients to further COG and TPB goals for increasing housing near high-capacity transit stations (HCTs).
- Staff executed the final HAPP Award with the City of Alexandria.
- Staff produced the November Regional Economic Monitoring System (REMS) report.
- Staff attended the AMPO Socioeconomic Forecasting Working Group Leadership Meeting.
- Staff participated in the American Planning Association’s Regional and Intergovernmental Planning Division executive leadership meeting.

Task 9	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILITY AND ENHANCEMENT PROGRAMS	\$1,082,497	\$17,276	11%	59

9. MOBILITY AND ENHANCEMENT PROGRAMS

9.1 Enhanced Mobility Grant Program

No activity.

9.2 Regional Roadway Safety Program.

After executing Task Order contracts, consultants for each of the four (4) FY 2023 projects scheduled kick-off meetings with jurisdictional representatives and TPB staff.

Each of the five FY 2022 RRSP projects is currently underway with progress as described below:

- VA (City of Alexandria – Near Miss Tool) – The consultant submitted a re-designed draft final Near Miss Tool survey form to NOVAFSS staff for review and began revising the Near Miss data dashboard based on comments received from NOVAFSS staff.
- VA/MD (Arlington & Prince George’s Counties - Traffic Safety Gardens) – The consultant team continued to develop a preliminary draft of the report for Arlington and Prince George’s County staff to review.
- VA (Fairfax County – Harrison Road Improvements) – The consultant conducted an internal corridor design charette and developed preliminary corridor concepts, as well as a briefing memorandum.
- VA (City of Falls Church – South Washington Street Pedestrian Improvements) – The consultant submitted a draft report to City of Falls Church staff for review and comment. The consultant also began developing draft presentation summarizing its recommendations.
- VA (Prince William County – Graham Park Road Safety Improvements) – The consultant developed and refined four (4) design alternatives for the corridor, as well as preliminary concept plans, and presented them to Prince William County staff for review and comment.

9.3 Transportation Alternatives Set-Aside Program

Staff coordinated with DDOT on the review of TA Set-Aside applications for DC. The application period was launched in mid-September and closed on November 1. Staff did a review of the applications based on regional criteria. Members of a selection panel independently scored the applications. Staff convened the selection panel in two meetings, on November 17 and 28, and selected six projects to recommend for funding. The TPB was scheduled to vote to approve the projects in December.

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) - The project team coordinated with Alexandria City Public Schools and other City departments on data collection including the ACPS schedule, a new building site plan, results of recent travel/student transportation mode surveys, GIS information, fall 2022 enrollment data, and cluster analysis for sensitive information including school and home locations.

- Independence Avenue Corridor Study (DC) - The Independence Avenue Working Group met on November 3 and November 17.
- Delivery Microhub Feasibility Study (DC) – The consultant worked with DDOT to identify case study locations and begin research. The scope for the second phases of the study, which will be conducted after the TLC-funded portion is complete, was developed.
- New Design Road Bikeway Study (Frederick Co) - The county reviewed the draft report and the proposed typical sections. A stakeholder reviewing meeting is scheduled on Dec 7th.
- Olde Towne to Washington Grove Bicycles Connection (Gaithersburg) - The contractor has shared basemap of the study area and discussed some major roads and crossings that might be challenging. The City of Gaithersburg has shared relevant data sets with the contractor. A field trip was held on November 4 with the city transportation committee. The contractor plans to collect the vehicle, pedestrian, and bike data at select locations. The contract will develop high-level concepts for three alternatives and discuss them with the City.
- Active Transportation Study (Manassas Park) - The City of Manassas Park staff and consultant team conducted a site visit and field walk at different locations throughout the city on November 16. This included the Manassas Park VRE station. City staff and consultants started to develop a stakeholders group list to support and develop recommendations to inform and guide implementation for future active transportation improvements.
- Montgomery Co Streetlight Standards (Montgomery Co) - Consultant produced the kick-off meeting notes and a project schedule table.
- Commuter Garage First-/Last-Mile Study (Prince William Co) – At a meeting on November 18, the study team discussed progress made by consultant. The county also provided comments and some extra resources.
- Fleet & Monroe Streets Complete Streets Feasibility Study (Rockville) - The project team is going for the field visit for dimensions of lane widths and curb-to-curb width and queueing observations this week. They are also working on conceptual design and testing high-level design alternatives with the city.
- Takoma Park Metropolitan Branch Trail Upgrade (Takoma Park) - Background work was conducted for the existing conditions memo.
- New Ave Bikeway - District Connector (Takoma Park) - Work began on the 30% design task.

Staff continued preparations for the FY2024 TLC application period, which will be conducted between January and March 2023.

Task 10	BUDGET	Billed this month	% Funds Expended	UPWP Page
TPB MANAGEMENT AND SUPPORT	\$989,546	\$40,196	24%	61

10. TPB MANAGEMENT AND SUPPORT

Transportation Planning Board Committee Support and Management

Staff support was provided for the following committees and subcommittees:

- State Technical Working Group (STWG)
- TPB Technical Committee
- TPB Steering Committee

- MWCOG Board Meeting
- Transportation Planning Board (TPB)
- MATOC Steering Committee
- TPB Community Advisory Committee (CAC)
- TPB Access for All (AFA)
- Regional Public Transportation Subcommittee (RPTS)
- Bicycle & Pedestrian Subcommittee
- COG Planning Directors
- TPB Freight Subcommittees
- CAOs Monthly

Support activities from the administrative staff included: meeting logistics with meeting rooms and amenities, duplication and distribution of meeting materials, email/phone call follow-ups. Staff also worked on monitoring work program activities, providing administrative assistance to senior staff and monitoring to prepare financial reports. Administrative staff work on monthly financial administration and management activity includes review and finalization of monthly expense reports for all UPWP activities, development, and submission of monthly UPWP invoices and any follow up activity with the funding agencies.

The Staff Director provided overall program management oversight of all the Department's activities. Work activities the Director was involved in during the month of November FY 2023 include:

- CAO's Monthly Meeting
- System Performance, Operations Subcommittee
- Carbon Reduction Program Discussion – MDOT
- MWAQC Executive Committee
- *COG Board of Directors Meeting*
- Safety Work Session Agenda
- Update Meeting – K. Mattice
- Briefing – TPB Chair
- 2024 Plan Update – VDOT and WMATA
- UPWP Brainstorm – DTP Directors
- MD Legislative Tour for Delegates – with TPB Member Delegate Korman
- COG Board Meeting Outlook – Incoming Chair

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 Technical Committee, the Steering Committee and the TPB.
- Preparation of monthly UPWP progress reports for each of the state agencies administering planning funding and preparing all necessary federal grant applications submission.
- Review all monthly UPWP invoices going to each of the state agencies administering planning and funding.

Task 11	BUDGET	Billed this month	% Funds Expended	UPWP Page
TECHNICAL ASSISTANCE	\$1,614,739	\$6,813	4%	63
District of Columbia	\$329,633	\$1,141	1%	63
Maryland	\$492,970	\$671	1%	65
Virginia	\$384,846	\$4,329	5%	68
Regional Transit	\$407,288	\$671	9%	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 coordinated with DDOT on a request for model output data.

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 the 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, a technical assistance project was partially funded by the District of Columbia Technical Assistance Program. See TLC item above for further details about the TLC 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.

2. Project Planning, Feasibility, and Special Studies

No activity.

3. Transportation / Land Use Connections Program

As part of the Transportation/Land-Use Connections Program, 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 TLC 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 the 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 received a request from NVTC to repeat the I-66 and I-395 Mode Share in 2023. Staff reached out to VDOT to confirm support for the activity.

2. Travel Monitoring and Survey

Active Transportation Counts

Staff finalized the analysis of the spring 2022 active transportation counts and compared them with bike and pedestrian counts taken in the same locations in 2014. Staff began to prepare the report detailing these counts and analyses.

Staff worked with the consultant to obtain the count files and videos from the active transportation counts conducted in the fall of 2022 and began to review the counts and videos.

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 the Regional Roadway Safety program section of this progress report for more details.

4. Other Tasks to be Defined

No activity

11.D Regional Transit

1. Program Development, Data Requests, and Miscellaneous

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

Staff prepared presentation slides in support of a coordination agenda item during the December Regional Public Transit Subcommittee meeting.

2. Transit Within Reach

Three projects are currently underway. Staff approved invoices submitted by two of the consultants.

Staff prepared a description of the Transit Within Reach program's project selection process and criteria.

3. High-Capacity Transit Map

No activity.

4. Other Tasks to be Defined

No activity.

CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM

Program Management

- Staff prepared and finalized highlights from the September Aviation Technical Subcommittee.
- Staff updated the enplanement spreadsheet maintained for the CASP program with the latest reports from MDOT and MWAA.
- Staff advertised the CASP Planner position and distributed it to professional networks, associations, and universities with programs in airport management and planning.
- Staff prepared for and convened the November meeting of the Aviation Technical Subcommittee.
- Staff held an internal planning discussion to prepare the next Airport Capital Improvement Program (ACIP), which identifies future projects and funding amounts supported by FAA Airport Improvement Program funds.

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

- Staff drafted and transmitted a task order request and scope of work for the 2023 APS to the on-call consultant (ICF).
- Staff developed a sampling plan and conducted a sample draw of flights for the 2023 Regional Air Passenger Survey (APS) based on the latest OAG data. The 2023 APS sampling plan and sampling strata were developed from criteria such as airline type, geographic region, share of leisure/hospitality sector by metro regions.
- Staff delivered a presentation on the 2023 APS Sampling Plan to the Aviation Technical Subcommittee on November 17.

Air Cargo Element Update

No Activity.

Ground Access Travel Time Study

- Staff met to discuss next steps and began preparing a project schedule for completing the study.

Ground Access Forecast and Element Update

- Staff continued to investigate the shift between auto-driver and auto-passenger trips between the 2011 and 2019 APS data based on a request from the Travel Forecasting and Emissions Analysis (TFEA) team

Ground Access Forecast and Element Update

- Progress on Plan Products

PROGRESS ON PLAN PRODUCTS

Task 5. Travel Forecasting

1. Staffing the TPB Travel Forecasting Subcommittee (TFS)
 - a. Three of the six annual meetings have been held.
 - b. Dates of meetings held in FY 23: July 22, 2022; September 23, 2022; November 18, 2022.
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.
 - 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 not 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).
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.
 - ii. Staff completed testing the TRANSIMS ModeChoice software (Ver. 7.5.7) in the Ver. 2.4 Model and recommended its use in the next release of the Ver. 2.4 Model, in place of the outdated AEMS software.
 - 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.
 - 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 completed the task of estimating three component models as part of the Phase 2 model development.
 - 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 16 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. Staff attended and presented at the Association of Metropolitan Planning Organizations (AMPO) Annual Conference, Oct. 25-28, 2022, in Minneapolis, Minnesota.

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 finalizing 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.
3. Support development of an Attainment/Maintenance State Implementation Plans (SIPs) regarding 2015 ozone National Ambient Air Quality Standards (NAAQS), including developing inventories of on-road mobile emissions for volatile organic compounds (VOC) and nitrogen oxides (NO_x).
 - 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.
 - b. Staff is preparing new/updated Motor Vehicle Emissions Budgets (MVEBs) associated with developing a 2008 Ozone Maintenance Plan.
4. Coordinate with MWAQC and its subcommittees to support development of new motor vehicle emissions budgets (MVEBs), if needed, to address requirements of 2015 ozone NAAQS.
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.
6. Air-quality-related data requests: This fiscal year, staff have responded to four 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 underway
- 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
 - Workplan under development
- Technical reports/memoranda
 - Ongoing
- Presentations
 - 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 completed
 - Preliminary Round 10 Reconciliation completed
 - Local TAZ level forecasts are under development
- Analysis of Activity Center and High-Capacity Transit Station area historic trends and forecasts
 - Under development
- Presentations, visualizations, and information reports
 - Ongoing
- Technical support
 - Ongoing
- Annual Baseline Employment Guidance
 - Work commences later in the fiscal year.
 -

CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM

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

FY 2023 TRANSPORTATION PLANNING BOARD
COG/TPB BUDGET EXPENDITURE SUMMARY
November 2022

	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	1,122,781.45	300,517.47	58,505.76	27%
Subtotal	1,122,781.45	300,517.47	58,505.76	27%
2. Performance-Based Plannin				
Transportation Improvement Program	228,463.67	74,330.91	15,551.55	33%
TIP Database Support	200,000.00	86,749.8	17,349.96	43%
Subtotal	428,463.67	161,080.71	32,901.51	38%
3. Planning Elements				
Congestion Management Process	464,830.51	114,063.49	23,258.71	25%
Systems Performance, Ops & Tech Planning	491,115.22	148,647.81	24,379.52	30%
Transportation Emergency Preparedness Planning	142,103.03	42,677.42	9,823.57	30%
Transportation Safety Planning	328,165.29	52,866.51	12,100.31	16%
Bicycle & Pedestrian Planning	183,504.17	51,752.27	14,126.4	28%
Regional Public Transportation Planning	420,752.48	75,182.41	21,444.67	18%
Freight Planning	319,649.73	87,793.11	9,031.04	27%
Metropolitan Area Transportation Operation Coord Program Planning	168,057.12	59,368.33	12,225.57	35%
Performance-Based Planning & Programming	233,757.32	63,761.02	13,555.5	27%
Resilience Planning	312,185.11	8,733.58	8,733.58	3%
Subtotal	3,064,119.98	704,845.95	148,678.87	23%
4. Public Participation				
Public Participation	913,276.45	209,500.63	43,577.54	23%
Subtotal	913,276.45	209,500.63	43,577.54	23%
5. Travel Forecasting				
Network Development	1,047,672.55	331,071.77	71,406.44	32%
Model Development	2,316,968.86	538,185.14	169,177.16	23%
Subtotal	3,364,641.41	869,256.91	240,583.6	26%
6. Mobile Emissions Planning				
Air Quality Conformity	965,194.31	319,094.01	75,023.83	33%
Mobile Emissions Analysis	1,300,371.68	410,123.52	88,498.61	32%
Subtotal	2,265,565.99	729,217.53	163,522.44	32%
7. Travel Monitoring and Data Programs				
Research & Analysis	1,582,114.53	357,943.32	72,099.8	23%
Data Visualization & Management	1,027,463.28	230,394.89	32,353.55	22%
TBD	0.00	10,771.25	0	0%
TBD	0.00	60,402.89	12,473.67	0%
Subtotal	2,609,577.81	659,512.35	116,927.02	25%
8. Planning Scenarios and Socioeconomic Forecasting				
Socioeconomic Forecasting	1,165,429.24	372,944.87	73,917.7	32%
Subtotal	1,165,429.24	372,944.87	73,917.7	32%
9. Mobility and Enhancement Programs				
Transportation and Land Use Connections Program	578,940.58	45,221.29	10,331.04	8%
Enhanced Mobility Grant Program	92,739.74	16,885.44	3,671.27	18%
Transportation Alternatives Set-Aside Programs	35,916.83	7,746.55	1,838.04	22%
Other Tasks to be defined 9.5	374,899.11	52,221.04	1,436.19	14%
Subtotal	1,082,496.26	122,074.32	17,276.54	11%
10. TPB Support and Management				
TPB Support and Management	989,546.94	233,405.75	40,196.38	24%
Subtotal	989,546.94	233,405.75	40,196.38	24%
Core Program	17,005,899.20	4,362,356.49	936,087.36	26%
A. District of Columbia Technical Assistance				
Program Development & Misc.	329,633.45	2,740.58	1,141.63	1%
B. Maryland Technical Assistance				
Program Development & Misc.	492,970.49	3,704.5	671.57	1%
C. Virginia Technical Assistance				
Program Development & Misc.	384,846.81	17,402.37	4,329.03	5%
D. Public Transit Technical Assistance				
Program Development & Misc.	407,288.25	37,292.41	671.57	9%
Technical Assistance	1,614,739.00	61,139.86	6,813.8	4%
TPB Grand Total	18,620,638.20	4,423,496.35	942,901.16	24%

FY 2023 TRANSPORTATION PLANNING BOARD
 FINANCIAL STATUS OF TECHNICAL ASSISTANCE
 November 2022
 SUPPLEMENT 1

	TOTAL		FTA/STA/LOCAL		PL FUNDS/LOCAL	
	AUTHORIZED	TOTAL	AUTORIZED	FTA	AUTORIZED	FHWA
	BUDGET	EXPEDITURES	BUDGET	EXPEDITURES	BUDGET	EXPEDITURES
A. DC Technical Assistant						
Program Development & Misc	14,999.99	2,740.58	1,681.64	307.24	13,318.35	2,433.34
Regional Safety PGM-DC	30,000.00	0.00	3,363.28	0.00	26,636.72	0.00
TBD	254,633.46	0.00	28,546.80	0.00	226,086.66	0.00
TBD	30,000.00	0.00	3,363.28	0.00	26,636.72	0.00
Subtotal	329,633.45	2,740.58	36,955.00	307.24	292,678.45	2,433.34
B. MD Technical Assistant						
Feasibility/Special Studiues	24,999.99	0.00	4,347.42	0.00	20,652.57	0.00
Program Development & Misc	14,999.99	3,704.50	2,608.45	644.20	12,391.54	3,060.30
Planning Studies	35,000.00	0.00	6,086.39	0.00	28,913.61	0.00
TBD	157,970.51	0.00	27,470.57	0.00	130,499.94	0.00
Transportation Performance Measures	260,000.00	0.00	45,213.17	0.00	214,786.83	0.00
Subtotal	492,970.49	3,704.50	85,726.00	644.20	407,244.49	3,060.30
C. VA Technical Assistant						
Program Development & Misc	14,999.99	3,756.31	2,713.12	679.42	12,286.87	3,076.89
MARC - VRE Runthrough - VA	35,000.00	0.00	6,330.61	0.00	28,669.39	0.00
TBD	69,846.38	0.00	12,633.43	0.00	57,212.95	0.00
Transportation/Land Use Connection Program	80,000.00	1,320.53	14,469.97	238.85	65,530.03	1,081.68
Travel Demand Modeling	84,999.95	0.00	15,374.33	0.00	69,625.62	0.00
Travel Monitoring	100,000.49	12,325.53	18,087.55	2,229.37	81,912.94	10,096.16
Subtotal	384,846.81	17,402.37	69,609.00	3,147.65	315,237.81	14,254.72
D. WMATA						
Program Development & Misc	14,999.99	3,292.41	14,999.99	3,292.41	0.00	0.00
Regional HCT Graphic/Map	90,000.00	0.00	90,000.00	0.00	0.00	0.00
TBD	52,288.26	0.00	52,288.26	0.00	0.00	0.00
Transit Within Reach Soli	250,000.00	34,000.00	250,000.00	34,000.00	0.00	0.00
Subtotal	407,288.25	37,292.41	407,288.25	37,292.41	0.00	0.00
Grand Total	1,614,739.00	61,139.86	599,578.25	41,391.50	1,015,160.75	19,748.36