FY 2024



Work Program Progress Report AUGUST 2023 FY 2024

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

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Task 1	BUDGET	Billed this month	% Funds Expended	UPWP Page
LONG RANGE TRANSPORTATION PLANNING	\$1,136,668	\$72,902	12%	41

1. LONG-RANGE TRANSPORTATION PLANNING

Task 1.1 - Visualize 2045 Implementation

Staff identified performance measures that TPB currently tracks and aligned them with the aspirational initiatives to see how each strategy's progress may be assessed. Staff considered what information may be interesting to share through further analysis of the measures. Staff met internally with relevant staff to further explore three of the aspirational initiatives (More Telework, Jobs/Housing Closer, Bike/Walk to Transit). Staff began reviewing the 2022 State of the Commute Report for related information and started a memo with findings.

Task 1.2 - Environmental Justice and Equity

No activities to report.

Task 1.3 - Future Plan Development

Staff completed its review of the current project input form and coordinated updates with EcoInteractive. Staff created draft outlines of the plan content and process documentation and reviewed the drafts internally in preparation for sharing them with the broader 2050 internal team. Staff reviewed the draft Freight Plan for content consideration in the 2050 plan. Staff prepared for and held the monthly internal 2050 team meeting.

Staff evaluated options for summarizing public comments to date on the projects in the 2045 plan under review for the 2050 plan. Staff identified a preferred tool for Phase 2 public engagement and began exploring the tool's capabilities. Staff met internally with Procurement and began working on the RFP for graphic design of the plan and website. Staff prepared a presentation on the initial financial analysis for Visualize 2050, in preparation for a briefing at the September Technical Committee meeting. Staff continued briefings to STWG and Technical Committee on public comments and project inputs.

1.4 - Federal Compliance

No activities to report.

1.5 - Policy Board-Directed Activities

No activities to report.

	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRANSPORTATION IMPROVEMENT PROGRAM	\$583,710	\$15,632	5%	43

2. TRANSPORTATION IMPROVEMENT PROGRAM

2.1 – Transportation Improvement Program (TIP)

In mid-August, TPB Staff concluded an extended open TIP Action for administrative modifications that was opened in July. A total of 12 ad-mods were approved for DDOT, VDOT, Montgomery County, PRTC, and WMATA.

2.2-TIP Database Support

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

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

- Updating the values for the "Improvement Type" in the Conformity Information section of the input form (Complete)
- Added PROTECT as a new funding source type (Complete)
- Updating new values in the Primary Project Type (In Progress)
- Updating values in Current Implementation Status (In Progress)
- Adding a link to the TIS Instructional Guide on the Project InfoTrak landing page dashboard (In Progress)
- Implementing logic for when mapping is required based on the key changing from Primary Project Type to System/Location fields (In Progress)
- Addition of Conformity records to projects that were carried over to 50-00 and 26-00 Adoptions with missing conformity data (In Progress)

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

- Programming text delimiters to separate field values in the narrative portion of the Conformity Information report (Complete)
- Changing the "Conformity?" Yes/No data field label to be "Regionally Significant", then eventually just hiding the field since the regionally significant field would need to be applied at the conformity record level rather than at the project level (Completed)
- Requiring projects in adoptions to have the mapping tab at least viewed and saved prior to submittal (Complete)
- Removing the mapping requirement for projects with Change Reason set to "Complete" or "Withdrawn" (Complete)
- Programming the addition of a cover page for reports that contains a description of any filters used to generate the report (deferred)

Task 3	BUDGET	Billed this month	% Funds Expended	UPWP Page
PLANNING ELEMENTS	\$3,905,138	\$166,753	8%	45

3. PLANNING ELEMENTS

3.1 Performance-Based Planning

Staff prepared to contact State DOTs and applicable transit agencies to request data for the Highway Safety and Transit Safety performance measures.

3.2 Congestion Management Process

Staff continued preparations for a future Vehicle Probe Data Users Group workshop on the Probe Data Analytics Suite Bottleneck Ranking Tool, and continued background research toward potential big data activities in Congestion Management in FY 2024.

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

3.3 Systems Performance, Operations, and Technology Planning

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

3.4 Transportation Emergency Preparedness Planning

Staff prepared for future meetings of the Transportation Emergency Preparedness Committee.

3.5 Transportation Safety Planning

TPB staff held a planning session on August 1 and 22 with the Transportation Safety Subcommittee Chair to identify topics and speakers for future Safety Subcommittee meetings. The regularly scheduled August Subcommittee meeting was postponed to September 7, 2023.

3.6. Bicycle and Pedestrian Planning

Staff responded to questions from GIS staff on locations of National Capital Trail Network projects, facility types, completion status, and possible duplicate or obsolete projects in the Project Infotrak (PIT) database, using information provided by the jurisdictions, including hand-drawn maps, as well as open source information such as Google maps. National Capital Trail Network projects were matched with their corresponding PIT ID's, Project Infotrak records were corrected, and new project records were created for projects split into multiple phases. Some questions had to be referred back to agency staff for clarification.

Deliverables - Updated National Capital Trail Network map: Work continued in August.

3.7 Regional Public Transportation Planning

The Regional Public Transportation Subcommittee (RPTS) did not meet in August.

Staff prepared letters of endorsement for federal grant applications by member jurisdictions. Staff completed work on a draft of the 2022 State of Public Transportation Report, which was distributed to members of the RPTS. Highlights were incorporated into a presentation in preparation for a briefing at the September Technical Committee meeting.

Staff worked with on-call planning consultants on the study of local transit access to HCT stations. Staff conducted financial analysis as the region considers future funding for WMATA.

3.8. Freight Planning

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

TPB staff additionally updated the draft National Capital Region Freight Plan Update to incorporate comments received from the July Technical Committee and TPB meetings, in anticipation of the TPB's approval of the Plan in September.

3.9 Metropolitan Area Transportation Operations Coordination Program Planning

The regularly scheduled August 18 virtual meeting of the MATOC Steering Committee was organized and conducted, discussing communications, coordination, and Traffic Incident Management topics.

An in-person/hybrid meeting of the MATOC Operations Subcommittee was organized and conducted on August 24 at the I-66 Express Mobility Partners Offices in Manassas, Virginia, discussing regional roadway operations and traffic issues.

3.10 Resiliency Planning

In August 2023, significant strides were made towards advancing the Regional Transportation Resilience Improvement Plan (TRIP). Transportation resilience planner actively participated in the FHWA TRIP webinar, gaining valuable insights into the critical components of requirements for PROTECT program eligibility. Following this, a productive meeting was held with Sandra Jackson, FHWA representative, where the transportation resilience planner and staff outlined the TRIP framework and delineated the forthcoming steps for plan development. Additionally, a comprehensive review of the vulnerability assessment methodology for the TRIP was conducted, guaranteeing that our approach is both thorough and effective in identifying key areas for improvement. Data collection for TRIP has been diligently underway, with a keen focus on acquiring the necessary information to inform our planning process. Planning for the upcoming working group meeting (meeting #2) and Regional Transportation Resilience Forum was completed, including scheduling, sending invitations, and preparing meeting materials, ensuring broad participation from stakeholders. Staff also began the scheduling, marketing, and logistical planning for the Regional Transportation Resilience Forum, scheduled for October 3.

Internally, the team engaged in robust discussions regarding the integration of resiliency considerations into the Transportation Improvement Program (TIP).

Staff also had the privilege of meeting with resilience planners from the Baltimore and Chicago regions. These exchanges were invaluable in broadening our understanding of regional approaches to resilience and provided crucial perspectives for tailoring our own strategies. Looking ahead, we are also amid strategic planning for future projects under the TPB Transportation Resilience Planning Program, laying the foundation for continued progress in this area.

In addition to these key developments, the following milestones have been achieved:

- Attended the quarterly DC Silverjackets meeting, fostering essential networking and knowledge-sharing opportunities.
- Prepared presentation for the Potomac River Conference in September, where the transportation resilience planner will highlight COG/TPB regional climate adaptation initiatives, aiming to inspire broader engagement and collaboration in this critical endeavor.

Task 4	BUDGET	Billed this month	% Funds Expended	UPWP Page
PUBLIC PARTICIPATION	\$753,904	\$56,081	13%	53

4. PUBLIC PARTICIPATION

4.1 Public Participation and Outreach

The Access for All Advisory Committee did not meet in August. The Community Advisory Committee held an informal roundtable for members to exchange ideas on Thursday, August 10.

Staff continues to compile 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 began preparation of a public comment summary to provide to the TPB Technical Committee at their October meeting.

Staff concluded a public comment period for the National Capital Region Freight Plan on August 21, 2023.

Staff continues to plan for the TPB's Community Leadership Institute to be held in Winter 2024. Staff initiated an internal working group to brainstorm ideas for presentation and activity updates and held its first meeting on August 28.

4.2 Communications

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

- COG launches campaign to reduce air pollution from idling trucks and buses August 7, 2023
- Registration now open for Car Free Day 2023: Improve your commute, save money on gas and parking August 15, 2023
- Staff updated pages on the COG website related to transportation including: Enhanced Mobility, Freight, Transit Within Reach, Transportation Land-Use Connections Program, Transportation Improvement Program, Getting Involved & Public Comment, TPB Comment Form, Access for All Advisory Committee, and Community Advisory Committee

Staff shared information about TPB activities via social media:

Enhanced Mobility Program solicitation (8/1), Clean Air Partners Car Free Day (8/2), Metro bus stops and shelters (8/4), Electric vehicle adoption (8/3), Truck emissions (8/8), USDOT TOD pilot program (8/10), USDOT Project Delivery Center of Excellence (8/15), Car Free Day (8/10), DDOT Ultra High-Performance Concrete (8/25), FTA WMATA bus grant (8/30)

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

Developed a draft scope of work for Visualize 2050 website and graphic design updates.

Task 5	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL FORECASTING	\$3,442,357	\$143,943	10%	55

5. TRAVEL FORECASTING

5.1 Network Development

In support of the Gen3 Model calibration and validation effort, staff fixed the links on two regional screenlines (Screenlines #2 and #4) and some of their upstream/downstream links to account for street parking in the District of Columbia in the base-year highway network. Staff reviewed the updated network file and transmitted it to RSG for Gen3 Model development. Staff are in the process of reviewing and making necessary updates to other road links in DC (e.g., considering street parking and new sidewalk space since 2021) for the upcoming 2025 update of the LRTP.

Staff completed development of a new base transit network, based on transit service in December 2022. This included the update of rail service for four time-of-day periods. In August, staff found some network coding errors (e.g., routes with zero for the headway or runtime and routes starting or ending at a non-stop node) in the database and fixed them. Staff exported the base year network files from the final database, ran travel demand models, and verified the reasonableness of the model results. Staff also drafted a memorandum that documents this work, which is currently under internal review. Staff also plan to develop a new base transit network in FY 2024 based on December 2023 service levels.

Staff began production of a user's guide for development of the base transit network, which will provide step-by-step instructions on how to mine transit route information from the General Transit Feed Specification (GTFS) files and use it to update existing transit route files.

Staff developed an automated procedure in COGTools that performs Quality Assurance/Quality Control (QA/QC) checks on the network files exported from the Unified Network Database. In August, staff addressed comments from internal testing and made final revisions to the procedure (including new QA/QC checks that report routes with zero values for headway and/or runtime and routes starting or ending at a non-stop node). Staff are working on a memorandum that documents this work.

5.2 Model Development and Support

The Travel Forecasting Subcommittee (TFS) meets in odd-numbered months, so the TFS did not meet in August. Staff prepared the meeting highlights for the July 21 TFS 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 (Visualize 2050). In August, staff distributed the transmittal package for the model in response to a series of data requests.

Staff installed Cube Version 6.5.1 on the travel model servers (tms and TMSDEV). Staff then tested Gen2/Ver. 2.4 Model and Gen2/Ver. 2.4.6 Model with the new Cube software. While the Gen2/Ver. 2.4.6 Model worked seamlessly with Cube 6.5.1, the Gen2/Ver. 2.4 Model test run failed due to the incompatibility between the outdated ArcPy transit walkshed process and newer Cube versions. Staff recommended keeping Cube 6.4.1 on at least one travel model server to run Gen2/Ver. 2.4 Model.

COG's Department of Community Planning and Services (DCPS) transmitted the zone-level Round 10 Cooperative Forecasts data (households, population, and employment) to COG's Planning Data and Research (PDR) Team, which conducted QC/QA and converted the data from COG Transportation Analysis Zones (TAZ) to TPB TAZ. COG's PDR Team transmitted the data to COG's Travel Forecasting and Emissions Analysis (TFEA) on August 28. TFEA staff started to process the data for travel demand modeling, which includes interpolating the data (from five-year increments to annual increments) and applying the jurisdiction-level employment definition factors to the zone-level data, to ensure that a consistent definition of employment is used throughout the modeled area.

In preparation for the 2025 LRTP, 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 August, this work was on hold and will be resumed after the Round 10 land use forecasts 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 held three check-in meetings with RSG and Baseline Mobility Group (BMG), the consultants on the Gen3 Model development project on August 1, 15, and 29.
- Staff continued to work with RSG on the development of the Gen3, Phase 2, Model.
 Specifically,
 - RSG and BMG staff continued to work on the calibration and validation of the Gen3, Phase 2, Model. RSG sent the latest model validation results dated August 19 to COG staff, seeking COG staff's approval to document them. COG staff reviewed the results and provided suggestions to further improve the model validation performance.
 - As part of the Phase 2 sensitivity testing, COG staff continued to work on two additional tests related to Autonomous Vehicles (AVs) and equity.
 - For the AV test, staff conducted the AV Ownership Model calibration to match the AV market share targets by income segment for 2045. Staff then conducted the 2045 model run for the Build scenario with the calibrated AV Ownership Model coefficient file. Staff generated model summaries that compared the Build scenario to the Baseline, which are currently under internal review.
 - For the equity test, staff conducted model runs for the 2018, 2045 No Build and 2045 Build scenarios and executed the summary scripts to compute the equity indicators for target/control populations in each scenario. Staff developed an automated procedure to create spreadsheet summary tables that compare the equity indicators between two scenarios and performed review on the results. Staff also transmitted the script files to BMG, which started to use them to generate the equity indictor summaries for the

sensitivity tests that BMG had conducted. Staff helped BMG troubleshoot the issue encountered when running these scripts.

- Per request from RSG, COG staff conducted a third review of the draft Gen3 Model User's Guide. COG staff also included the latest version ("vO8") of the model flowcharts in the user's guide. Once RSG finishes the Phase 2 model calibration and validation report, the user's guide will be finalized with a reference to the calibration and validation report.
- 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 investigated the discrepancy between the modeled mode share and that reported from the regional household travel survey. Staff found the cause of the discrepancy and communicated their findings to RSG and the PDR team. PDR staff concurred with the finding. RSG staff also provided feedback.
 - As part of the above investigation, staff created an R script and a Python script that generate the ABM statistics and highway assignment statistics for the TPB Planning Area. Staff performed a cross-check on the R script.
 - Staff ran the Estimation Data Bundle (EDB) generation process after RSG recently updated it. The test failed with a model crash. Staff reported the issue to RSG.

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.

Other activities

Staff serviced six data requests in August. All the requests were for the Gen2/Ver. 2.4.6 Travel Model and one of them also asked for loaded-link highway network shapefiles for the years 2017, 2021, 2023, 2025, 2030, 2040 and 2045 from the Ver. 2.4.6 Travel Model. One request was from a consultant working for VDOT to calculate traffic growth rates for the I-66 interchange at US 17 (Exit 28) improvement study. Two requests were from VDOT for VDOT's Artificial Intelligence-Based Decision Support System (AI-DSS) project, Smart Scale, and an update of the statewide greenhouse

gas (GHG) plan. One request was from a consultant working for VDOT's Northern Virginia District on the VDOT STARS study. One request was from a consultant working for the City of Alexandria, VDOT, Loudoun Co., and Fairfax Co. on transportation impact analysis research for various projects. One request was from a Senior Data Infrastructure Engineer, a local land use and mobility advocate, working on implementing short-, medium- and long-term simulations in travel demand forecasting, network supply, land use changes, economic policy changes and their respective interactions. Staff also responded to an inquiry from a consultant regarding the compatibility between the Gen2/Ver. 2.4.6 Travel Model and Cube 6.5.1.

Staff requested and obtained access to the complimentary Teralytics data. Staff started to explore the data.

Staff attended ActivitySim Partners-Only check-in meetings on August 17 and 31. Staff attended ActivitySim Consortium meetings regularly on Tuesdays and Thursdays.

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

 Per request from TFEA staff, IT moved the archival data from primary drives to archive drives on AWS File Gateway (FGW). Staff reviewed the information paper that IT prepared on the proposed archive drive setup on the cloud.

Staff worked with Bentley on an incorrect license expiry date displayed in Cube and Bentley Licensing Tool.

In August, staff made a job offer to an applicant for the Transportation Engineer II position. The applicant accepted the job offer.

Task 6	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILE EMISSIONS PLANNING	\$2,922,011	\$136,152	10%	59

6. MOBILE EMISSIONS PLANNING

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

Staff continued to attend coordination meetings related to scheduling tasks for the 2025 update of the region's LRTP (Visualize 2050), including the air quality conformity analysis, system performance, and environmental justice analysis. This activity also included coordination of air quality conformity timelines to synchronize with development schedules for Maintenance or Attainment State Implementation Plans (SIPs) and new Motor Vehicle Emissions Budgets (MVEBs).

Staff communicated with the Virginia Department of Transportation regarding whether specific projects are "regionally significant" for the purposes of air quality conformity.

6.2. Mobile Emissions Analysis, Including Activities Associated with Climate Change Planning

Staff from COG's Department of Environmental Programs (DEP) and COG's Department of Transportation Planning (TPB staff) continued to coordinate with state air agencies on the update of Motor Vehicle Emissions Budgets (MVEBs) associated with the 2008 Ozone Maintenance State Implementation Plan (SIP). This MVEB update is being conducted to ensure that the tools used to

develop future air quality conformity emissions estimates are consistent with the tools used to develop the MVEBs - i.e., that both are based on the current EPA MOVES3 model.

TPB staff continued to work with DEP staff, member jurisdictions, and state air agencies to facilitate various aspects of air quality and climate change planning activities in the region. Staff continued to coordinate planning activities with the state departments of transportation related to the Carbon Reduction Program (CRP). This program, recently established by the Bipartisan Infrastructure Law (BIL), provides funds for projects designed to reduce on-road transportation emissions. Specifically, staff prepared a presentation on New Federal Funding Programs for Carbon Reduction for the upcoming TPB Technical Committee meeting in September.

Staff continued to monitor developments related to the Climate Pollution Reduction Grants (CPRG) Program, established by the Inflation Reduction Act. This program provides an investment of \$5 billion to support efforts by states, municipalities, air pollution control agencies, and tribes to develop and implement strong, local greenhouse gas reduction strategies. Staff attended two EPA webinars related to the CPRG ("Programs, Tools, and Resources Used for Evaluation and Quantification of GHG Reduction Measures" on August 2 and "The Landscape of Measure-level GHG Quantification in Existing Climate Action Plans" on August 9).

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. TPB staff and ICF staff (project consultant) held a check-in meeting on the Regional Electric Vehicle Infrastructure Implementation (REVII) Strategy project and reviewed the Task 1 Draft Methodology Memorandum. In support of these activities, TPB staff provided vehicle population projections (from the MOVES model) and vehicle registration data summaries (from observed vehicle registration data) to the project consultant. In addition, staff prepared a presentation for the upcoming TPB Technical Committee Meeting in September on regional electric vehicle (EV) planning efforts, which will cover both the REVD Working Group and the REVII Strategy project.

In response to a request by the Volpe Transportation Center, staff began beta-testing of the Telework tool in the Congestion Management and Air Quality (CMAQ) Toolkit. The feedback to Volpe will be provided in September.

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 GHGs). Staff also continued to evaluate a draft version of the most recent developmental MOVES model, MOVES4, and will continue to monitor the model development activities related to the new tool.

Task 7	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL MONITORING AND DATA PROGRAMS	\$5,344,964	\$74,964	4%	63

7. TRAVEL MONITORING AND DATA PROGRAMS

7.1 Transportation Research and Analysis

Staff conducted internal coordination meetings to identify procedures for procuring passively-collected data products (Big Data) from large third party vendors. Using the results of the independent Big Data evaluation conducted in 2019-20, staff will pursue procuring Big Data products that meet half or more of TPB's program requirements defined in the evaluation.

Traffic Trends

Staff responded data requests including preparing shape files of jurisdictional boundaries for the TPB Planning and Modeled regions and providing guidance to several COG and TPB staff members on GIS data sources and availability.

Staff met internally and with US Park Service staff about COG/TPB's participation in the Regional Trail Count Program in August.

Data Requests

Staff responded to data requests

Meetings & Conferences

Staff met internally and with US Park Service staff about COG/TPB's participation in the Regional Trail Count Program in August.

7.2 Data Management and Visualization Services

Staff continued working with TPB's bicycle and pedestrian planner to implement edits and additional information about projects in the Project InfoTrak (PIT) database that pertain to the National Capital Trail Network (NCTN). This work is ongoing.

Staff continued working with the Planning Data and Research Program director to provide resources state DOT staff in support of adjusting urban area and MPO boundaries based on data from the 2020 Census.

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 onboarded a new GIS analyst who will support the Data Management and Visualization Services Program.

Data Requests

Staff responded to a request from COG Department of Environmental Programs (DEP) staff regarding the availability of a spatial dataset of COG's regional activity centers.

Meetings & Conferences

No committee meetings or conferences occurred during April.

Task 8	BUDGET	Billed this month	% Funds Expended	UPWP Page
REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION	\$1,211,231	\$52,567	11%	67

8. REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION

8.1 Regional Land Use and Transportation Coordination

COG staff completed compilation and review of the regional TAZ forecast data during July and transmitted the Round 10.0 Cooperative Forecasts TAZ file to TPB staff. TPB applied employment adjustment factors to the TAZ file and performed logic checks to ensure these data could be used in the regional travel demand model.

Staff attended regularly occurring internal meetings of the Gen3 model development process.

Task 9	BUDGET	Billed this month	% Funds Expended	UPWP Page
COMPLETE STREETS, MOBILITY AND ENHANCEMENT PROGRAMS	\$1,135,269	\$29,188	5%	69

9. COMPLETE STREETS, MOBILITY AND ENHANCEMENT PROGRAMS

9.1 Enhanced Mobility Grant Program

During the month of August, TPB staff conducted pre-application conferences for interested applicant for the 2023 Enhanced Mobility grant solicitation, and formally opened the solicitation period which runs from run from August 1st through September 30th, 2023). Activities included scheduling, organizing, and conducting pre-application conferences, finalizing application materials and resources, fielding questions and request from prospective applications, and conducting the marketing and communications campaign to inform stakeholders and the public of the upcoming solicitation.

9.2 Regional Roadway Safety Program.

TPB staff received consultant proposals for each of the FY 2024 Task Orders and coordinated with the relevant jurisdictional staff to review and score the proposals.

9.3 Transportation Alternatives Set-Aside Program

Staff met with VDOT to discuss and review their planned changes in the TAP program. Staff monitored follow-up with MDOT for the FY 2024 project selections, which the TPB approved in July.

9.4 Transportation/Land-Use Connections (TLC) Program

Staff continued the consultant recruitment process for the 10 TLC projects selected for FY 2024. Consultant proposals were due in July. Staff sent the proposals to the technical selection committees (TSCs) for each project at the beginning of August. For most projects, the TSC member scores determined the consultant selections, but for two projects, the TSC scores were too close, so staff convened consensus meetings to determine the final selections.

Task 10	BUDGET	Billed this month	% Funds Expended	UPWP Page
TPB MANAGEMENT AND SUPPORT	\$1,707,259	\$90,811	8%	71

10. TPB MANAGEMENT AND SUPPORT

Transportation Planning Board Committee Support and Management

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

- Provide administrative arrangements (such as preparation and distribution of meeting materials) and staff support for TPB and its various Committees, Sub-Committees, Task Forces and special TPB work groups meetings.
- Respond to requests from TPB members, federal agencies, Congressional offices, media and others for information or data of a general transportation nature
- Meet with TPB Board members and participating agency staff to discuss current and emerging regional transportation planning issues.
- Participate in meeting 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 all the Department's activities. Work activities the Director was involved in during the month of August 2023/ FY 2024 includes:

- Discussions, review, and finalization of the agenda topics for the TPB's Technical Committee, State Transportation Working Group (STWG) and Board meetings. This includes a meeting with the Program Directors and project staff to review the progress and briefing materials it 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 August 2023 / FY 2024 includes Telephone / Web Ex / Microsoft Teams Communications:

- Internal staff meeting @ WMATA Funding; visualize 2050 Key Items. CAO WMATA Workgroups; PL Allocation Funding Formula
- COG CAO Monthly Meeting
- Virtual Meeting with MD Commerce Secretary K. Anderson and COG-ED
- COG Office Space Assessment COG's Consultants
- TPB GHG Reporting
- CAO WMATA Working Group and Strategy Group
- Washington Post TPB Emissions Goals
- COG CAO's WMATA Cost Operational Funding Workgroup Meeting
- COG Metro Funding Strategy Group Meeting
- D.C. CFO @ COG WMATA work group
- Carbon Reduction Program Meeting
- Carbon Reduction Program Meeting / MDOT & TPB Staff
- Carbon Reduction Program Activities / VDOT
- Connected DMV Regional Equity & Growth Playbook
- Coalition for Smarter Growth Metro Funding

UPWP

The UPWP activities include: Supervise the preparation, negotiation, and approval of the annual work program and budget involving the State Transportation Agencies, the TPB Technical Committee, the TPB Steering Committee and the TPB.

- Preparation of monthly UPWP progress reports for each of the state agencies administering planning funding and prepare all necessary federal grant applications submissions.
- Review all monthly UPWP invoices going to each of the state agencies administering planning funding.

Task 11	BUDGET	Billed this month	% Funds Expended	UPWP Page
TECHNICAL ASSISTANCE	\$2,215,511	\$4,214	1%	73
District of Columbia	\$330,930	\$0	0%	73
Maryland	\$707,967	\$0	0%	75
Virginia	\$664,437	\$4,214	2%	77
Regional Transit	\$512,177	\$O	0%	79

11. TECHNICAL ASSISTANCE

11.A District of Columbia

1. Program Development, Data Requests and Miscellaneous Services

No activity.

2. Regional Safety Program

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

3. Transportation / Land Use Connections Program

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

4. Other Tasks to Be Defined

No activity.

11.B Maryland

1. Program Development, Data Requests, and Miscellaneous Services

No activity.

2. Project Planning, Feasibility, and Special Studies

No activity.

3. Transportation / Land Use Connections Program

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

4. Regional Safety Program

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

5. Other Tasks to be defined

No activity.

11.C Virginia

1. Program Development, Data Requests, and Miscellaneous Services

No activity.

2. Travel Monitoring and Survey

Staff met with VDOT staff to discuss the fall 2023 active transportation counting locations. Staff drafted the task order for the fall 2023 counts, delivered it to the on-call travel monitoring contractor for a price quote, accepted the quote, and scheduled the kick-off meeting.

Staff attended a meeting with VDOT and ecoCounter staff and subsequent EcoVisio training to prepare for the Transform 66 (I-66 parallel trail) continuous counter QA/QC project.

3. Travel Demand Modeling

No activity.

4. Transportation / Land-Use Connections Program

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

5. Regional Safety Program

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

6. Other Tasks to be Defined

No activity.

11.D Regional Transit

1. Program Development, Data Requests, and Miscellaneous

No Activity.

2. Transit Within Reach

The application period for FY 2024-2025 closed on August 4, 2023. Six applications were received. Funding was available for three projects. In August, staff sent the applications to the members of a selection panel to individually evaluate and score them. Staff also provided an analysis of how the projects are aligned with regional goals and priorities. The panel met on August 30 and tentatively recommended three projects for funding. These recommendations were conditional upon follow-up questions for each of the tentative selections. At the beginning of September, staff planned to finalize the selections. The TPB is scheduled to approve the recommendations in October.

3. High-Capacity Transit Map

No activity.

4. Other Tasks to be Defined

No activity.

CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM

Program Management

- Staff reviewed and screened candidates for the open transportation data analyst position that will support the CASP program.
- Staff updated the monthly enplanement data.

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

- Staff continued to make updates to the sample draw process for the 2023 APS to distribute the sampled flights more evenly across field staff shifts.
- Staff conducted numerous coordination calls and meetings with airport partners and consultant staff to arrange logistics for the forthcoming 2023 Washington-Baltimore Regional Air Passenger Survey.

Air Cargo Element Update

No activity.

Ground Access Travel Time Study

No activity.

PROGRESS ON PLAN PRODUCTS

Task 4. Public Participation

4.1 Public Participation and Outreach

Staff continues to collect public comment via the Visualize 2050 Initial Project List Feedback Form, email, voicemail, and letter to share with state agencies on a bi-weekly basis at the TPB Board and TPB Technical Committee meetings. Staff began preparing an analysis of public comments received to date to present to the TPB's Technical Committee at their October meeting.

Task 5. Travel Forecasting

- 1. Staffing the TPB Travel Forecasting Subcommittee (TFS). In FY 24, as of now, the TFS has met on the following dates: 7/21/23.
- A series of highway and transit networks used by the regional travel demand forecasting model, together with technical documentation, for use in air quality conformity analyses, development of air quality state implementation plans (SIPs), scenario studies, and model development.
 - a. Completed development of a new base transit network, reflecting transit network service in December 2022. This included the update of rail service for four time-ofday periods. Staff began development of a user's guide regarding developing base transit networks.
 - b. Updates to networks files
 - i. Gen3 Model networks
 - 1. Staff updated the capacities of road links on two regional screenlines in DC (screenlines #2 and #4) to account for roadside parking in DC. This was done in the 2018 and 2045 networks.

- c. COGTools software and geodatabase
 - i. Staff developed an automated procedure in COGTools that performs Quality Assurance/Quality Control (QA/QC) checks on the network files exported from the Unified Network Database. The new procedure is being updated, based on staff feedback, and documented.
- 3. Development, maintenance, support, and improvement of the COG/TPB regional travel demand forecasting methods, including both the production-use and developmental travel models, and associated documentation.
 - a. Gen2/Ver. 2.4 Travel Model
 - Staff developed the Gen2/Ver. 2.4.6 Travel Model, which is to be used for the upcoming 2025 LRTP. Staff prepared a transmittal package for the model in July.
 - ii. COG's Travel Forecasting and Emissions Analysis (TFEA) staff started to process the Round 10, TAZ-level Cooperative Forecast socio-economic data for travel demand modeling, which includes interpolating the data (from fiveyear increments to annual increments) and applying the jurisdiction-level employment definition factors to the zone-level data, to ensure that a consistent definition of employment is used throughout the modeled area.
 - b. Gen3, Phase 1 Travel Model: Completed in FY 23.
 - c. Gen3, Phase 2 Travel Model
 - i. Sensitivity tests
 - 1. Test of autonomous vehicle (AV) model: COG staff conducted a model run for the 2045 baseline scenario, set up the calibration process, and adjusted the AV targets by income segment.
 - 2. Equity analysis: Staff conducted model runs for the 2018, 2045 No Build, and 2045 Build scenarios. Staff started to generate the equity indicator summary tables for the three scenarios.
 - ii. COG staff developed a Python based view-from-space (VFS) summary script.
 - iii. Per request from RSG, COG staff conducted a re-review of the draft Gen3 Model User's Guide and provided feedback in July.
 - d. 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. Modeling staff attended the regular Tuesday and Thursday ActivitySim Consortium meetings. The consortium includes 11 public-sector agencies, including MPOs and DOTs.

Task 6. Mobile Emissions Planning

- Activities related to conducting regional air quality conformity analyses, such as conducting runs of the travel model and mobile emissions model and preparing technical documentation.
 - a. Staff continued to attend coordination meetings related to scheduling tasks for the 2025 update of the region's LRTP (Visualize 2050), including the air quality conformity analysis, system performance, and environmental justice analysis.
 - b. Staff communicated with VDOT regarding whether specific projects are "regionally significant" for the purposes of air quality conformity.
- 2. Keep abreast of federal requirements related to air quality conformity determinations and the EPA's Motor Vehicle Emission Simulator (MOVES) software.

- a. Staff attended a MOVES4 webinar hosted by the EPA in July.
- b. Staff continued to conduct test runs of both MOVES3 and MOVES4 and continued to monitor model development activities related to the MOVES model.
- 3. Support development of an Attainment/Maintenance State Implementation Plans (SIPs) regarding the 2008 and 2015 ozone National Ambient Air Quality Standards (NAAQS), including developing inventories of on-road mobile emissions for volatile organic compounds (VOC) and nitrogen oxides (NOx).
- 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 continued to attend coordination meetings, including MWAQC and MWAQC-TAC.
- 5. Climate Change Planning: Provide support for efforts to mitigate climate change due to the on-road transportation sector.
 - a. Staff continued to coordinate planning activities with the state departments of transportation related to the Carbon Reduction Program (CRP). This program, recently established by the Bipartisan Infrastructure Law (BIL), provides funds for projects designed to reduce on-road transportation emissions.
 - b. 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. TPB staff and ICF staff (project consultant) presented an overview of the Regional Electric Vehicle Infrastructure Implementation (REVII) Strategy project at the July REVD meeting.
 - c. Staff attended two EPA webinars related to the CPRG ("Programs, Tools, and Resources Used for Evaluation and Quantification of GHG Reduction Measures" on August 2 and "The Landscape of Measure-level GHG Quantification in Existing Climate Action Plans" on August 9).
- 6. Air-quality-related data requests: This fiscal year, staff have responded to three air-quality-related data requests.

CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM

- Conduct and Process 2023 Washington-Baltimore Regional Air Passenger Survey
- Air Cargo Element Update
- Ground Access Travel Time Study

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

Augu	ST 2023 DC, MD and VA		BILLED	
	FTA, FHWA and LOCAL	FUNDS	THIS	% FUNDS
	BUDGET TOTAL	EXPENDED	MONTH	EXPENDED
Long-Range Transportation Planning				
Long - Range Transportation Planning	1,136,668.51	141,882.47	72,902.97	12%
Subtotal	1,136,668.51	141,882.47	72,902.97	12%
2. Transportation Improvement Program				
Transportation Improvement Program	353,708.82	30,480.33	15,632.02	9%
TIP Database Support	230,000.00	0	0	0%
Subtotal	583,708.82	30,480.33	15,632.02	5%
3. Planning Elements				
Congestion Management Process	833,870.74	62,811.77	34,132.84	8%
Systems Performance, Ops & Tech Planning	430,355.33	42,426.79	23,245.73	10%
Transportation Emergency Preparedness Planning	139,196.00	18,996.77	10,084.13	14%
Transportation Safety Planning	407,497.86	14,111.7	7,077.93	3%
Bicycle & Pedestrian Planning	198,851.96	22,399.54	7,743.61	11%
Regional Public Transportation Planning	573,566.35	46,587.84	27,014.4	8%
Freight Planning	396,491.66	27,552.38	9,057.74	7%
Metropolitan Area Transportation Operation Coord Program Planning	171,139.72	13,105.48	7,338.23	8%
Performance-Based Planning & Programming	216,047.96	16,569.09	9,139.23	8%
Resilience Planning	538,120.51	53,307.88	31,919.4	10%
Subtotal	3,905,138.09	317,869.24	166,753.24	8%
4. Public Participation				
Public Participation	753,904.21	101,656.63	56,081.91	13%
Subtotal	753,904.21	101,656.63	56,081.91	13%
5. Travel Forecasting				
Network Development	1,173,454.94	148,440.42	74,974.22	13%
Model Development	2,268,902.50	180,442.16	68,969.38	8%
Subtotal	3,442,357.44	328,882.58	143,943.6	10%
6. Mobile Emissions Planning	3 75		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Air Quality Conformity	1,221,950.95	122,673.81	57,502.15	10%
Mobile Emissions Analysis	1,700,061.94	158,225.84	78,650.82	9%
Subtotal	2,922,012.89	280,899.65	136,152.97	10%
7. Travel Monitoring and Data Programs	_,,,,		,	
Research & Analysis	4,458,336.48	104,772.59	51,977.44	2%
Data Visualization & Management	886,626.84	107,418.75	22,986.74	12%
Subtotal	5,344,963.32	212,191.34	74,964.18	4%
Planning Scenarios and Socioeconomic Forecasting	0,044,000.02	212,101104	14,004.10	470
Socioeconomic Forecasting	1,211,231.11	130,335.19	52,567.48	11%
Subtotal	1,211,231.11	130,335.19	52,567.48	11%
Complete Street Mobility and Enhancement Programs	1,211,201.11	100,000.10	02,001.40	1170
Transportation and Land Use Connections Program	622,450.01	35,186.31	16,051.55	6%
Enhanced Mobility Grant Program	97,904.69	12,572.76	7,076.61	13%
Transportation Alternatives Set-Aside Programs	37,912.20	9,561.8	4,754.12	25%
Regional Roadway Safety Program	377,004.84	2,830.67	1,306.47	1%
Subtotal	1,135,271.74	60,151.54	29,188.75	5%
10. TPB Support and Management				
TPB Support and Management	1,707,259.82	128,995.82	90,811	8%
Subtotal	1,707,259.82	128,995.82	90,811	8%
Core Program	22,142,515.95	1,733,344.79	838,998.12	8%
A. DC Technical Assistant				
Program Development & Misc.	330,931.43	0	0	0%
B. Maryland Technical Assistance				
Program Development & Misc.	707,968.41	0	0	0%
C. Virginia Technical Assistance				
Program Development & Misc.	664,436.05	10,565.61	4,214.64	2%
D. Public Transit Technical Assistance				
Program Development & Misc.	512,176.17	0	0	0%
Technical Assistance	2,215,512.06	10,565.61	4,214.64	0%
TPB Grand Total	24,358,028.01	1,743,910.4	843,212.76	7%

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

	TOTAL	JOFFLEN	FTA/STA/LOCAL		PL FUNDS/LOCAL	
	AUTHORIZED	TOTAL	AUTORIZED	FTA	AUTORIZED	FHWA
	BUDGET	EXPEDITURES	BUDGET	EXPENDITURES	BUDGET	EXPENDITURES
A. District of Columbia Technical Assistance						
Program Development, Data Requests, & Misc	14,999.52	0.00	442.54	0.00	14,556.98	0.00
Regional Roadway Safety Program	30,000.00	0.00	885.11	0.00	29,114.89	0.00
Transportation/Land Use Connections Program	0.00	0.00	0.00	0.00	0.00	0.00
TBD	285,931.91	0.00	8,436.08	0.00	277,495.83	0.00
Subtotal	330,931.43	0.00	9,763.74	0.00	321,167.69	0.00
B. Maryland Technical Assistance						
Feasibility/Speacial Studies	25,001.54	0.00	737.64	0.00	24,263.90	0.00
Program Development & Misc	14,999.52	0.00	442.54	0.00	14,556.98	0.00
Planning Studies	185,000.00	0.00	5,458.20	0.00	179,541.80	0.00
TBD	172,967.35	0.00	5,103.19	0.00	167,864.16	0.00
Transportation Performance Measures	310,000.00	0.00	9,146.18	0.00	300,853.82	0.00
Subtotal	707,968.41	0.00	20,887.76	0.00	687,080.65	0.00
C. Virginia Technical Assistance						
Program Development & Misc	14,999.52	0.00	442.54	0.00	14,556.98	0.00
MARC - VRE Runthrough - VA	185,000.00	0.00	5,458.20	0.00	179,541.80	0.00
TBD	39,436.96	0.00	1,163.54	0.00	38,273.42	0.00
Transportation/Land Use Connection Program	185,000.00	0.00	5,458.20	0.00	179,541.80	0.00
Travel Demand Modeling	14,999.52	0.00	442.54	0.00	14,556.98	0.00
Travel Monitoring	225,000.05	10,565.61	6,638.36	311.73	218,361.69	10,253.88
Subtotal	664,436.05	10,565.61	19,603.39	311.73	644,832.66	10,253.88
D. Public Transportation Technical Assistance						
Program Development & Misc	14,999.52	0.00	14,999.52	0.00	0.00	0.00
Regional HCT Graphic/Map	90,000.00	0.00	90,000.00	0.00	0.00	0.00
TBD	157,176.65	0.00	157,176.65	0.00	0.00	0.00
Transit Within Reach Solicitation	250,000.00	0.00	250,000.00	0.00	0.00	0.00
Subtotal	512,176.17	0.00	512,176.17	0.00	0.00	0.00
Grand Total	2,215,512.06	10,565.61	562,431.06	311.73	1,653,081.00	10,253.88