

FY 2023



National Capital Region
Transportation Planning Board

Work Program Progress Report

July 2022

FY 2023

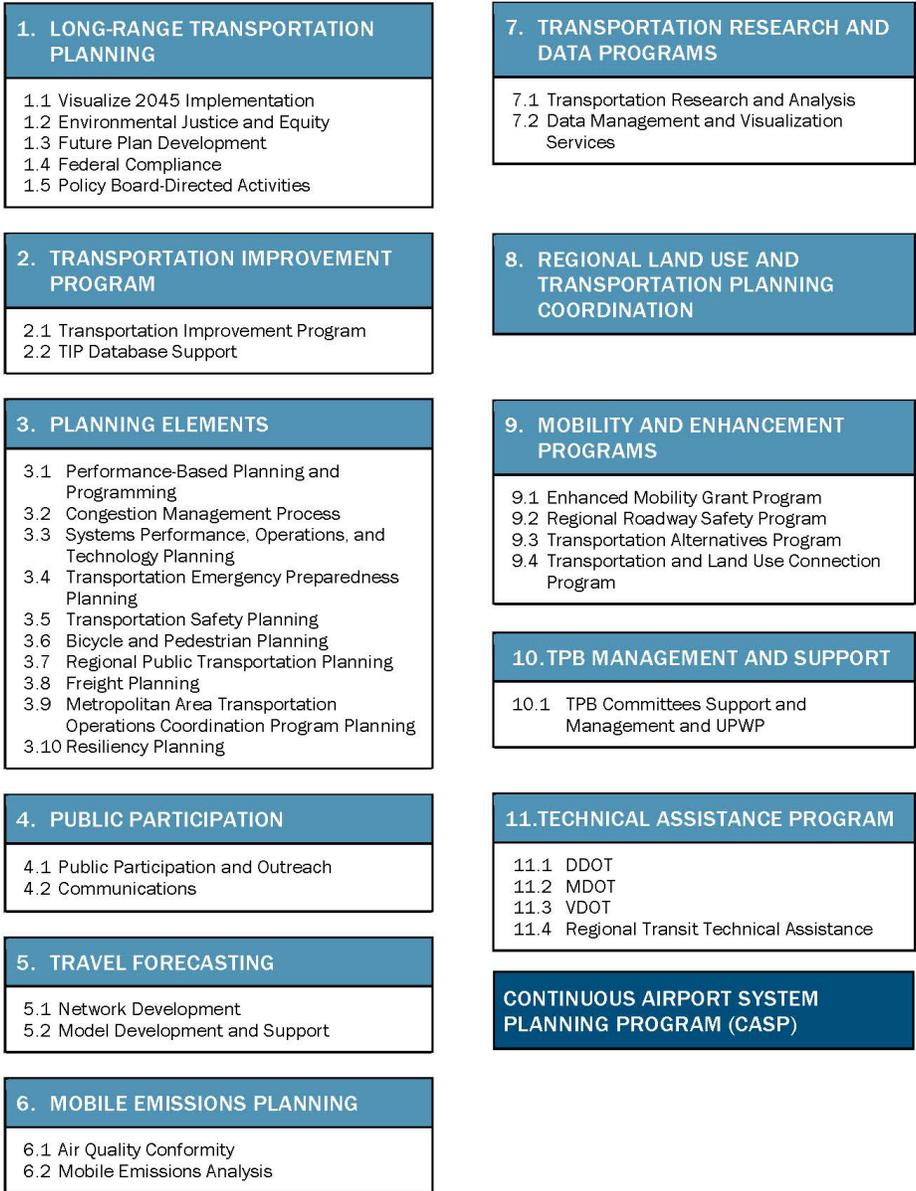
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The TPB approved its FY 2023 Unified Planning Work Program (UPWP) in March 2022. The TPB Work Program Progress Report provides a brief summary of each activity for the month of April. In addition, this report concludes with status updates reflecting 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	\$58,198	9%	35

1. LONG-RANGE TRANSPORTATION PLANNING

Task 1.1 – Visualize 2045 Implementation

Staff printed and mailed out the final plan and related materials (Executive Summary, Aspirational Initiatives Booklet, and infographics) to board members.

Task 1.2 – Environmental Justice and Equity

Staff began conducting analysis using the updated EEAs to examine environmental justice considerations/impacts of the Visualize 2045 update.

Task 1.3 – Future Plan Development

Staff refined scope of work options for preparing a financial analysis for the 2024 Plan update.

Staff prepared presentations for the STWG and the TPB Technical Committee related to the 2024 plan update.

Staff conducted numerous activities to prepare for the 2024 plan, including producing a detailed schedule, content for a synthesis of the TPB’s policy framework, a summary of scenario study findings for studies that the TPB and COG have conducted over the last 15 years, an approach and analysis to define “exempt projects” based on the TPB’s Resolution R19-2021.

1.4 – Federal Compliance

The federal partners approved the air quality conformity analysis for the Visualize 2045 update and the FY2023-FY-2026 Transportation Improvement Program on August 25, 2022.

1.5 – Policy Board-Directed Activities

Staff completed the activities associated with TPB Resolution R10-2019 which directed staff to conduct activities related to the implementation of three of the aspirational initiatives. There are no board-directed activities under this task at this time.

The TPB has directed that “...the TPB itself and its staff commit that our work together will be anti-racist and will advance equity all its work activities...” In response to the TPB July 2020 resolution, TPB staff have conducted activities to discuss how to incorporate these concepts materially. The TPB staff conducted internal workshops to discuss examples of staff activities and have shared recent examples of best practices for considering equity and anti-racism in our work. TPB staff continue to weave equity, as a foundational principle, through TPB’s analyses, operations, procurement, programs, and priorities to ensure a more prosperous, accessible, livable, sustainable, and equitable future for all residents.

	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRANSPORTATION IMPROVEMENT PROGRAM	\$428,463	\$29,140	10%	37

2. TRANSPORTATION IMPROVEMENT PROGRAM

2.1- Transportation Improvement Program (TIP)

TPB staff finalized and published a schedule for alternating periods for administrative modifications and amendments to the FY 2023-2026 TIP. Staff opened the first TIP Action for amendments to be put before the TPB Steering Committee in September and provided guidance and assistance to DDOT, VDOT, and W in preparation for submitting those amendments.

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 performed under regular maintenance hours in July included: adding more existing fields to the list of additional columns that users can add to customize queries.

Under an expanded contract for professional services, EcoInteractive developed and refined customizations of the software platform, and performed other specialized tasks, including development of a report to be used for TIP amendments and modifications that compares funding from the most recently approved version of a project against the version proposed for amendment or modification and calculates the delta for each funding line item broken down by source, phase, and fiscal year. This report is essentially a table view of the Change Summary narrative column that is included on the Amendment Summary reports.

Task 3	BUDGET	Billed this month	% Funds Expended	UPWP Page
PLANNING ELEMENTS	\$3,064,119	\$124,390	8%	39

3. PLANNING ELEMENTS

3.1 Performance-Based Planning

Staff met with the state DOTs to finalize the Highway Asset and Highway Travel Reliability performance measures and draft regional targets. Substantial data review and comparison took place, especially with Virginia DOT. Staff drafted the two MPO CMAQ Performance Plans and distributed them to the state DOTs for comment. Briefing materials were prepared for the TPB Technical Committee.

Staff reviewed FHWA’s Greenhouse Gas performance measure Notice of Proposed Rulemaking (GHG NPRM) and developed technical comments. Staff met with state DOTs and attended multiple webinars and other events discussing the NPRM.

Staff attended a FHWA PBPP training session sponsored by VDOT.

3.2 Congestion Management Process

Staff began 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

Staff continued analyzing results of a questionnaire distributed to Systems Performance, Operations, and Technology Subcommittee member agency participants in late FY 2022, on transportation operations technology being deployed by member agencies, to help plan for future subcommittee discussions and activities.

Staff attended an August 4, 2022 Association of Metropolitan Planning Organizations webinar on emerging technologies, as well as an August 10 meeting of the MDOT Connected and Automated Vehicles Working Group.

3.4 Transportation Emergency Preparedness Planning

The August 10, 2022 meeting of the Transportation Emergency Preparedness Committee (R-ESF 1) was organized and conducted, discussing current regional transportation emergency preparedness issues. Information was shared with the Committee regarding Metropolitan Area Transportation Operations Coalition (MATOC) and transportation agency response actions due to COVID-19.

3.5 Transportation Safety Planning

Staff, in coordination with the Subcommittee Chair, organized and conducted the regularly scheduled August 9, 2022 meeting of the TPB Transportation Safety Subcommittee. The agenda included a briefing on the relationship between psychology and roadway safety, a briefing on Fairfax County's Richmond Highway/Route 1 Speed Limit study, and a briefing on the Infrastructure Investment and Jobs Act (IIJA) grant opportunities.

Staff held planning sessions on August 3 and 23 with the Transportation Safety Subcommittee Chair to identify topics and speakers for future Safety Subcommittee meetings.

3.6 Bicycle and Pedestrian Planning

Staff prepared for a September 2, 2022 briefing of the Access for All Advisory Committee regarding regional bicycle and pedestrian planning activities as well as the recently completed Bicycle and Pedestrian Plan for the National Capital Region. Staff attended an August 30 meeting of the Capital Trails Coalition Steering Committee.

3.7 Regional Public Transportation Planning

The Regional Public Transportation Subcommittee met in August. Agenda topics included: NVTC with a research activity update; Charles County on the Southern Maryland Rapid Transit (SMRT) project; and TPB updates on the 2022 PBPP transit safety targets, 2021 State of Public Transportation report, and the 2022 Bus Transit Equity analysis.

TPB staff prepared letters of endorsement for federal grant applications by member jurisdictions. Staff attended the monthly WMATA JCC meeting.

3.8. Freight Planning

Staff held planning sessions on August 10 and 24 with the TPB Freight Subcommittee Chair to identify topics and speakers for future Freight Subcommittee meetings.

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 began its review and analysis of relevant planning documents and data. Staff participated in a project update meeting with the consultant team on August 4.

3.9 Metropolitan Area Transportation Operations Coordination Program Planning

The regularly scheduled August 19, 2022 virtual meeting of the MATOC Steering Committee was organized and conducted, discussing communications, coordination, and Traffic Incident Management topics, as well as impacts of COVID-19.

The regularly scheduled MATOC Operations Subcommittee virtual meeting was organized and conducted on August 25, to discuss regional operational and traffic issues, including impacts of COVID-19, as well as preparations for upcoming Labor Day weekend travel.

3.10 Resiliency Planning

Staff continued to post a new TPB staff position for a resilience planner, seeking qualified candidates. Interviews to be scheduled for September.

Staff examined peer MPO activities that could be examples/ideas for implementing the various tasks of 3.10. Staff reviewed the Infrastructure Investment and Jobs Act language related to resiliency and considered the potential for conducting a Resiliency Investment Plan.

Task 4	BUDGET	Billed this month	% Funds Expended	UPWP Page
PUBLIC PARTICIPATION	\$913,276	\$43,001	9%	45

4. PUBLIC PARTICIPATION

4.1 Public Participation and Outreach

Staff developed the scope for an evaluation of public involvement activities, which will be conducted by a consultant in the fall. Based upon that scope, staff procured the services of ICF, the TPB’s on-call consultant, to conduct the evaluation. The study will begin in September. It will be timely because it will follow 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. Staff planned a special CAC meeting for September, which will host representatives from the state DOTs for informal discussions about the relationship between state and regional planning. Staff also began preparing for CAC recruitment, which will be conducted this fall.

4.2 Communications

The following story was featured in TPB News and in COG news releases:

- **Infrastructure Investment and Jobs Act provides new funding opportunities for the region**
August 1, 2022
- **July 2022 TPB meeting recap: Frederick County trail funding approved, Equity Emphasis Area updates**
August 1, 2022
- **Car Free Day 2022 Registration Opens: Take Your Foot off the Gas and Take the Pledge to go Car Free**
August 5, 2022

Staff is in the process of developing the following materials for distribution or posting on the COG website in September 2022:

- Welcome Guide and orientation booklet for new TPB members
- TPB News article on Regional Roadway Safety Program
- TPB News article on key takeaways from the 2022 State of the Commute Survey
- Web post on TPB Transportation Resiliency Webinar Series Resource Guide

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	\$144,047	10%	47

5.1 TRAVEL FORECASTING

5.1 Network Development

Network development staff provided files and information to other COG teams. This included preparation and transmittal of 2021 transit shapefiles to Planning Data and Research team members and information regarding the “regional significance” status of projects in the Project InfoTrak database.

Staff developed a new Station Management module in COGTools that enables users to update the station table in the network database through the GUI. Staff conducted the second test of the module on August 4. Based on the feedback from the testing, staff further improved the tool and finalized it on August 12. A draft memorandum that documents this work, now dated July 27, is still undergoing internal review.

In August, modeling staff detected the following network coding errors in the highway and transit networks used as input to the Gen2/Ver. 2.4 Model:

- On August 15, staff found a coding error in the 2025 and 2030 transit networks involving two BRT station nodes.
- On August 15, staff spotted a coding error in the stationed file. Specifically, the 15000-series nodes that should have appeared only in the Cube Public Transport (PT) networks were coded in the station files for the Ver. 2.4 Model, which still uses Cube TRNBUILD.
- On August 16, staff reported that some 15000 nodes also appear in the highway network, which is erroneous.

This network coding error, referred to as the 15000-series node error, resulted in the inability of automobiles represented in the travel model to access some park-and-ride (PNR) parking lots associated with some bus lines, which resulted in a reduction in the number of transit person trips on buses. This error was related to the new, Unified Network Database, which was developed in FY 21 and was first used in production work during FY 22. Network staff implemented fixes in the network database used for the latest Air Quality Conformity (AQC) analysis. Staff will apply the same fixes to the current active database. To minimize coding errors, staff started to develop an automated procedure in the COGTools that will perform QA/QC checks on the network files exported from the Unified Network Database. Staff began development of year-2021 and year-2045 networks to reflect removal of the 15000-series nodes, which should fix the loss of sections of bus service.

Staff continued with network review and clean-up in the network database. This included review of the Newington, Virginia area and update of the I-395 HOV-only ramp at Seminary Road to reflect its change to a High Occupancy Toll (HOT) ramp.

Staff worked on development of historic transit fare documentation to assist with production of travel model inputs for historic travel demand modeling such as would be needed when updating mobile emissions inventories for new motor vehicle emissions budgets in existing State Implementation Plans (SIPs) for complying with the federal Clean Air Act.

Staff implemented a fix to an issue related to the maximum 144-column limit in the transit line files. Staff is in the process of conducting the QC/QA modeling test of this fix.

Staff updated the drop-down menu for transit agencies in COGTools which will enable the user to add new transit agencies during a transit editing session. This work was started in June and completed in August. The new feature is available in the August 12 version of COGTools.

5.2 Model Development and Support

The Travel Forecasting Subcommittee (TFS) meets in odd-numbered months, so it did not meet in August. Staff prepared meeting highlights associated with the July 22 TFS meeting. Staff began developing the agenda for the September 23 TFS meeting.

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

In August, staff created loaded-link highway network shapefiles from the latest Version 2.4 Travel Model for all scenario years in preparation for future data requests.

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

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

No activity.

Generation 3 Travel Model

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

- COG held one check-in meeting with RSG and BMG, the consultants on the Gen3 Model development project on August 18. The August 4 meeting was cancelled.
- COG staff met the RSG project manager on August 16 to provide feedback on the RSG performance of recent Gen3 Model work.
- Staff continued to work on the Gen3, Phase 1, Model received from RSG on January 8. Specifically,
 - Per suggestion from RSG, staff created 36 toll-related skim plots in ArcGIS to investigate the apparent toll insensitivity issue in the Gen3, Phase 1 Model. Staff conducted a highway path-trace analysis to further examine the results. Staff shared the plots and staff observations in writing with the consultant on August 16. Following the discussion at the August 18 check-in meeting, staff updated some of

- the plots and created additional skim plots for the investigation. Staff shared them with RSG for comments on August 29.
- RSG sent instructions on how to specify a different set of random seeds in the Gen3 Model in March. In August, staff conducted research on the proposed random seed syntax in Python and tested it in Gen3 Model test runs. Staff found that the proposed syntax did not work and reported the issue to RSG. RSG confirmed the issue on August 25 and communicated this omission to the developer.
 - Staff implemented an enhancement in the Gen3, Phase 1 Model to automatically extract the scenario name and create an empty outputs folder with the required file structure. Staff verified the update in a Gen3 Model test run. Staff will check this update into GitHub.
 - The Gen3 Model, Phase 2, development started in March. This month staff continued to work with RSG on the development of the Phase 2 Model. Specifically,
 - RSG completed the deployment of auxiliary travel models in the Phase 2 Model and documented this work in a draft memorandum. COG staff conducted review and provided feedback on August 16. RSG staff finalized the memo on August 18.
 - COG staff are tasked with estimating four component models. The work is now expected to be completed in September.
 - COG staff completed estimation work for the auto ownership model. RSG reviewed and approved the updated estimation results on August 4.
 - On August 15, RSG provided feedback on the preliminary results for the Mandatory Tour Frequency Model that were shared with RSG on July 29. RSG staff revisited the person type definitions and constraints in the estimation files and provided clarifications on August 25. RSG recommended next steps on August 28. RSG staff to update the setup and estimation files.
 - On August 15, staff reached out to RSG for assistance on revolving a technical issue estimating the Non-mandatory Tour Frequency Model. The estimation work is on hold until the technical issue can be resolved by the developer.
 - On August 18, staff reached out to RSG for assistance on revolving a technical issue found in the Coordinated Daily Activity Pattern (CDAP) Model estimation results. The estimation work is on hold until the technical issue can be resolved by the developer.
 - Following the implementation of the Cube Public Transport (PT) multi-routing algorithm in the Gen3 Model, staff discovered a hyperpath issue. Staff implemented a workaround and tested it in a Gen3 Model run. Staff documented the results and findings in a memo dated August 16. Staff shared the memo with RSG and Bentley for comments.
 - Staff had a meeting with Bentley staff on August 26 for further discussions. Staff transmitted modeling files to Bentley staff for further testing on the same day.
 - RSG staff provided feedback on August 28. RSG and COG staff agreed on the next steps. Per the RSG recommendation, COG staff subsequently revised the workaround implementation to remove the refactoring step and conducted a Gen3 Model run on August 29.

- Staff recommended a solution to a model issue associated with assigning the external commuter rail trip table in the Gen3 Model. Staff reached out to RSG and BMG for their input in July. RSG concurred with the recommended solution on August 8 and BMG concurred on August 10; Staff subsequently implemented the fix in the Gen3 Model.

Software support

Working with COG's Office of Information Technology (IT), TPB staff continued to maintain the software and hardware used to conduct travel demand forecasting and mobile emissions modeling. Hardware includes travel model servers (TMS) and mobile emissions model workstations (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 and work with IT staff to discuss moving more workstations and servers to the cloud.

Other activities

Staff serviced six data requests in August: Four were for the Version 2.4 Travel Model (2022 Update to Visualize 2045); One request was from Fairfax DOT; Two requests were from consultants working for DDOT on the SE/SW Freeway Bridge Rehabilitation project and general upkeep of regional travel patterns for the Dulles Greenway; and the fourth one was from an academic. Other requested data in August included Round 9.2 zonal land activity files and CUBE binary motorized person trip tables; vehicular TAZ-level origin-destination (O-D) trip interchange data for the years 2017, 2021, 2023, 2025, 2030, 2040 and 2045 from the Version 2.4 Travel Model (2022 Update to Visualize 2045).

Staff held a monthly check-in meeting with COG IT on August 19 to discuss issues regarding testing cloud computing for the DTP travel model and the MOVES model.

COG IT staff set up two cloud servers (TMSDEV01 & TMSDEV02) on C3HUB for modeling tests on August 4 per request from staff. Modeling staff conducted Gen3 Model test runs on tms8, TMSDEV01 and TMSDEV02 and shared the runtime metrics with COG IT on August 23 and 29. Staff also conducted test runs on a third cloud server with an AMD chip (as opposed to the Intel chips on TMSDEV01 and TMSDEV02) and found that the model runtime was worse.

Staff attended Staff Brown Bag: Lessons from Travel Behavior Surveys conducted during the Pandemic on August 23, 2022. On August 25, staff attended Staff Focus Group Meeting for Executive Director Recruitment.

Staff attended the ActivitySim Monthly Partners-Only Check-In meeting on June 16. Staff attended ActivitySim Consortium meetings regularly on Tuesdays and Thursdays. COG is one of 10 agencies that are part of the pooled funding consortium.

Task 6	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILE EMISSIONS PLANNING	\$2,265,565	\$133,152	12%	51

6. MOBILE EMISSIONS PLANNING

6.1 Air Quality Conformity

The Federal Highway Administration and the Federal Transit Administration, after consulting with the U.S. Environmental Protection Agency (EPA), approved the air quality conformity analysis of the 2022 Update to Visualize 2045. Staff shared the approval letter with the state departments of transportation and with the Calvert St. Mary’s Metropolitan Planning Organization. Staff will also include it with “letters sent and received” for the TPB meeting in September.

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 also prepared a technical report that documents the major findings from the plan and air quality conformity analysis.

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

6.2 Mobile Emissions Analysis

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 MOVES3.0.3 model inputs from the state air agencies, DEP staff continued to conduct quality control review of the data and evaluate implications of using MOVES3.0.4 in the upcoming SIP analyses' 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. Specifically, TPB staff participated in a meeting with DEP staff and COG member jurisdictions where the main topic was review of the 2020 greenhouse gas inventory development methodologies.

TPB staff continued to follow regulatory developments related to air quality and climate change planning. Specifically, 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 attended webinars organized by the Federal Highway Administration and the Association of Metropolitan Planning Organizations and held a meeting with the state DOT representatives to learn more about their perspectives regarding the proposed rule.

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.

Task 7	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL MONITORING AND DATA PROGRAMS	\$2,609,577	\$115,527	10%	53

7. TRAVEL MONITORING AND DATA PROGRAMS

7.1 Transportation Research and Analysis

- Staff delivered an internal presentation on findings from a literature review examining surveys measuring the impacts of COVID-19 on transportation and travel behavior.
- Staff finalized the data analysis for the Pre-pandemic through June 2022 Covid Travel Monitoring Snapshot and posted the snapshot on the COG/TPB website.
- Staff researched the source of differences between the TPB-calculated percentages and the VDOT-calculated percentages in the 2019 and 2020 pavement condition summaries. Staff met with VDOT staff and their consultants to discuss the differences and resolved the issue. After verifying the lane mile calculation methods used by each state, staff began to update the statistical programs and the regional HPMS feature classes to be consistent with the lane mile calculation method used in each state.
- Staff answered questions from fellow TPB staff about the regional National Bridge Inventory (NBI) databases and measures.
- Staff conducted an analysis on accessibility to high-capacity transit within and outside of equity emphasis areas for 2023, 2045 build, and 2045 (no-build).
- Staff developed a list of agencies and contact persons to learn about their recent survey efforts to inform future COG/TPB survey planning efforts.
- Staff held a meeting with staff from the Puget Sound Regional Council to discuss best practices in survey methodology.
- Staff reviewed comments from RSG (consultant who conducted the SPS) on the memo for the RTS Follow-On Smartphone Panel Survey (SPS). Staff held a meeting with RSG staff to discuss the comments on the RTS SPS memo.
- Staff transmitted the cleaned historical Arlington County continuous active transportation counts for use in the RTDC. Staff drafted a memo comparing the pre-pandemic and pandemic era Arlington County trail usage by observed trail function (commuter versus recreational).
- Staff completed the FY 2020 transit ridership data development for inclusion in the RTDC. Staff shared the flowcharts showing how the data was summarized with fellow TPB staff.
- Staff generated air passenger originations by airport for APS 2019 and 2019 for the Regional Transportation Data Clearinghouse (RTDC).

Data Requests

- Staff fielded a RTS data request from a private firm working with MDOT.
- Staff fielded a RTS data request from Arlington County Commuter Services.

Meetings & Conferences

- Staff participated in biweekly meetings with the Gen3 Model Development Team.
- Staff participated in an internal meeting to discuss the Montgomery County Equity Focus Areas and COG Equity Emphasis Areas.
- Staff participated in an internal meeting to discuss developing a plan for future travel trends and monitoring work.

- Staff participated in a leadership meeting for the AMPO Data Working Group.

7.2 Data Management and Visualization Services

- Staff completed a dashboard application to show the required Performance Based Planning and Programming (PBPP) data related to bridge condition of structures on the National Highway System (NHS) from the National Bridge Inventory (NBI) in the TPB Planning Area.
- Staff refreshed the PBPP data related to bridge condition in the RTDC. Staff created two content items representing the current Bridge Condition for structures on the National Highway System (NHS) in the TPB Planning Area (spatial data) and historical bridge condition from the NBI for 2016-2020.
- Staff downloaded and processed new data from the Alternative Fuels Data Center (AFDC) for electric vehicle (EV) charger locations in the TPB region. Staff updated the Electric Vehicle content in the RTDC and added additional metadata for the item.
- Staff updated the aviation data available in the RTDC, Staff created two new content items representing the Washington-Baltimore Regional Air Passenger Survey (RAPS) Origination data by Airport Analysis Zone (AAZ) (spatial data) and historical enplanement data for 2000-2021 (tabular data).
- Staff received the FY 2020 Transit Ridership Data for transit providers in the TPB modeled area. The data are being processed and organized to be included in the RTDC.
- Staff created new static map data products (PDF and PNG graphics) of the 2022 Equity Emphasis Areas (EEA) for the COG and TPB member areas.
- Staff completed work to create an updated version of the National Capital Trail Network (NCTN) using features from the PIT database. Staff provided a summary of the project and a before-after comparison of features. This product will be used as the starting point spatial data of the forthcoming update of the NCTN.
- Staff assisted the Commuter Connections team with a technical setting on their interactive bicycle routing map application.

GIS Committee/GDX Working Group

- Staff finalized the meeting summary from the July GIS Committee/GDX Working group meeting and began planning for the September 20 meeting.

Data Requests

- Staff assisted the Office of Communications (OC) with responding to an individual requesting map images/graphic of TPB members.
- Staff responded to a request from the City of Hyattsville planning staff regarding questions about the Equity Emphasis Areas (EEA) datasets available on the COG website and in the RTDC

Meetings & Conferences

- Staff attended and participated in the Towson University GIS (TUgis) conference on August 4 at Towson University.
- Staff attended the August 10 meeting of the Maryland State Geographic Information Committee (MSGIC) executive committee.
- Staff attended the August 23 meeting of the Regional Public Transportation Subcommittee (RPTS).
- Staff met with fellow Planning Data and Research staff on August 22 to discuss Travel trends/monitoring data needs, issues and products.
- 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	\$57,573	13%	57

8. REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION

8.1 Regional Land Use and Transportation Coordination

Planning for Round 10

- Staff conducted one-on-one meetings to discuss support for developing Round 10 Forecasts with local planners in Prince William County, Manassas, Fairfax County, Falls Church, and Montgomery County.
- Staff worked to develop presentations on the Round 10 Forecasting Model and the Round 10 process for, respectively, the Cooperative Forecasting Subcommittee and the TPB Technical Committee.

COVID Economic Impacts monitoring

- Staff continued to update the PowerPoint presentation that documents the effects to date of COVID on the region’s economy.

Scenario Planning

- Staff reviewed and participated in a meeting to discuss a proposal for future scenario planning work as well as a summary of scenario planning projects conducted by TPB in the past.
- Staff participated in the AMPO Socioeconomic Forecasting Working Group Coffee Chat.

Task 9	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILITY AND ENHANCEMENT PROGRAMS	\$1,082,497	\$13,395	3%	59

9. MOBILITY AND ENHANCEMENT PROGRAMS

9.1 Enhanced Mobility Grant Program

The hiring process is underway. The September 2 Access for All Committee meeting was planned.

9.2 Regional Roadway Safety Program

Staff distributed a questionnaire to pre-qualified consultants to gauge their interest in bidding on each of the FY 2023 projects. Staff reviewed and analyzed consultant questionnaire responses and issued Task Order Requests (TORs) to solicit consultant proposals for each project.

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 and TPB Staff negotiated a scope modification based on the consultant team’s assessment of “near miss” crash data

collected by Northern Virginia Families for Safe Streets. TPB Staff and the consultant began the process for executing a scope change modification that retains the original intent of the project while adjusting the work scope to accommodate available data.

- VA/MD (Arlington & Prince George’s Counties - Traffic Safety Gardens) – The consultant team prepared a draft guide outline for review by Arlington County and Prince George’s County staff. In addition, the consultant team continued to conduct research interviews and document findings from the interviews.
- VA (Fairfax County – Harrison Road Improvements) – No report.
- VA (City of Falls Church – South Washington Street Pedestrian Improvements) – The consultant delivered a draft existing conditions memorandum to City of Falls Church staff for review and comment and began work on a proposed project prioritization methodology. The City of Falls Church provided comments on the existing conditions analysis.
- VA (Prince William County – Graham Park Road Safety Improvements) – After receiving and reviewing count and crash data, the consultant team developed corridor-wide base plans and completed a preliminary conditions analysis for the corridor.

9.3 Transportation Alternatives Set-Aside Program

Staff conducted follow-up for the Maryland TA approvals in July. Staff also coordinated with DDOT on the TA solicitation for DC, which is expected to be launched the first week of September.

9.4 Transportation/Land-Use Connections (TLC) Program

Staff continued the consultant recruitment process for the 11 TLC projects selected for FY 2023. Consultant proposals were due on June 29 and in July Technical Selection Committees reviewed and scored the proposals. In August, staff conducted consensus meetings with four of the TSCs to reach a final determinations for the selections. By the end of August, all successful and unsuccessful proposers were notified and the task order development was underway. The projects are set to begin in September.

Task 10	BUDGET	Billed this month	% Funds Expended	UPWP Page
TPB MANAGEMENT AND SUPPORT	\$989,546	\$37,907	11%	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 **AUGUST FY 2023** include:

- 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.
- Participation in the STWG, TPB Technical Committee, TPB Steering Committee, TPB's Community Advisory Committee and the TPB Board meetings.
- Participation in the bi-weekly meetings of the State Safety Oversight/Metro Safety Commission (SSO/MSO) Policy Work Group meetings. This "tri-state" group is working to reconstitute the existing Metro Rail Safety Oversight Committee to comply with the requirement of the FAST Act.
- Metropolitan Washington Air Quality Committee

The Staff Director provided overall program management oversight of all the Department's activities.

Other additional activities for the TPB Staff Director for the month of **AUGUST FY 2023**

Telephone / Web Ex / Microsoft Teams Communications:

- WMATA Financial Plan for LRTP / Internal Discussion Interim Plan Update – Fed. Req. / FHWA
- Post – Pandemic Pivot Debrief / Internal Discussions
- TPB & 2024 Plan Update Conformity / Internal Discussions
- EJ and the DOE Hydrogen Hub Bid
- Samuel Sneed & Staff / Abbe Arundel County
- PBPP Greenhouse Gas Emissions Measure NPRM / Internal Discussions
- CPG – IRE – Regional Economic Development Project Update
- TPB UPWP Funding – FTA / DDOT
- FY24 Member Dues / COG-CFO
- Planning Team Leadership / Executive Director Recruitment
- Montgomery County Equity Focus Areas – Internal Discussion
- SIP Planning Activities / Internal Discussions
- Travel Behavior Surveys during Pandemic / Staff Brown Bag
- Interview / Virginia Mercury
- IJJA's Carbon Reduction Program – MPO Consultation / BRTB

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 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	\$2,915	1%	63
District of Columbia	\$329,633	\$0	0%	63
Maryland	\$492,970	\$895	0%	65
Virginia	\$384,846	\$1,508	2%	68
Regional Transit	\$407,288	\$511	0%	71

11. TECHNICAL ASSISTANCE

11.1 District of Columbia

1. Program Development, Data Requests and Miscellaneous Services

Staff provided support with development of task orders for the Transportation/Land Use Connections projects in the District of Columbia.

2. Regional Safety Program

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

3. Transportation / Land Use Connections Program

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.

11.2 Maryland

1. Program Development, Data Requests, and Miscellaneous Services

Staff provided support with development of task orders for the Transportation/Land Use Connections projects in Maryland.

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 Safety Program

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

5. Other Tasks to be defined

No activity.

11.3 Virginia

1. Program Development, Data Requests, and Miscellaneous Services

Staff continued to refine a proposal for Active Transportation Data Assurance Program for VDOT 66 Parallel Trail Eco-Counters with VDOT. Staff participated in a meeting with VDOT and Eco-Counter staff to better understand maintenance requirements as well as data access for the new counters. Staff also coordinated with the traffic monitoring program contractor to confirm availability of potential services for this program.

Staff provided support with development of task orders for the Transportation/Land Use Connections projects in Virginia.

2. Travel Monitoring and Survey

Staff received a response to the request for task order from the Consultant for the fall 2022 active transportation counts. Staff worked with VDOT staff to modify the number of counting locations to fit within the budget and reissued the modified task order. Staff planned and participated in the kickoff meeting with VDOT and consultant staff to plan for the fall 2022 active transportation counts.

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 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

Three Transit Within Reach projects are currently underway.

3. High-Capacity Transit Map

No activity.

4. Other Tasks to be Defined

No activity.

CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM

Program Management

- COG/TPB staff updated the monthly enplanement workbook for May.
- COG/TPB staff conducted a kick-off meeting for the 2022 APS.

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

- Staff obtained sample flight data from MWWA.
- Staff submitted applications for the badging process at BWI, DCA, and IAD.
- Staff distributed the APS survey instruments from 2019 to MAA and MWWA staff and requested input for the 2022/23 questions.

Air Cargo Element Update

No Activity.

Ground Access Travel Time Study

No Activity.

Ground Access Forecast and Element Update

- COG/TPB staff completed the Ground Access Forecast Update (GAFU) technical report.

PROGRESS ON PLAN PRODUCTS

Task 1: Long-Range Transportation Planning

Environmental Justice analysis – Staff have updated the EEAs and have begun the EJ analysis.

Task 4. Public Participation

Evaluation of Public Participation Activities

- September: The evaluation kicks off
- Late September/October: Research will be conducted
- November: Report drafted
- December: Report shared with TPB Technical Committee, Community Advisory, and Access for All committees

Task 5. Travel Forecasting

1. Staffing the TPB Travel Forecasting Subcommittee (TFS)
 - a. One of six annual meetings has been held.
 - b. Dates of meetings held in FY 23: July 22, 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 coding error in some highway and transit networks. Staff began development of year-2021 and year-2045 networks to reflect removal of the network coding error.
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.
 - b. Gen3, Phase 1 Travel Model
 - i. Updates summary scripts and investigated the model's apparent insensitivity to changes in tolls.
 - 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.
 - d. Webpages: Updated webpages in July 2022 to reflect updates to travel models.
 - e. Travel model-related data requests: Staff responded to six requests in July 2022 and six in August 2022, for a total of 12 data requests for the fiscal year.
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. 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.
2. Keep abreast of federal requirements related to air quality conformity determinations and the EPA's Motor Vehicle Emission Simulator (MOVES) software.
 - a. Staff conducting 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 (NOx).
 - a. TPB staff continued to coordinate with COG DEP staff and state air agencies on plans related to development of the Attainment SIP and Maintenance Plan / Redesignation Request to address requirements of the 2015 Ozone NAAQS.
4. Coordinate with MWAQC and its subcommittees to support development of new motor vehicle emissions budgets (MVEBs), if needed, to address requirements of 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.

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 for Survey drafted and under review
- 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
 - 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 to commence later in 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
August 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	104,838.89	58,198.96	9%
Subtotal	1,122,781.45	104,838.89	58,198.96	9%
2. Transportation Improvement Program				
Transportation Improvement Program	228,463.67	26,854.95	11,790.68	12%
TIP Database Support	200,000.00	17,349.96	17,349.96	9%
Subtotal	428,463.67	44,204.91	29,140.64	10%
3. Planning Elements				
Congestion Management Process	464,830.51	43,247.32	22,932.43	9%
Systems Performance, Ops & Tech Planning	491,115.22	64,544.19	30,488.7	13%
Transportation Emergency Preparedness Planning	142,103.03	19,379.82	9,862.25	14%
Transportation Safety Planning	328,165.29	19,494.5	9,321.43	6%
Bicycle & Pedestrian Planning	183,504.17	14,173.51	2,956.44	8%
Regional Public Transportation Planning	420,752.48	24,714.69	15,087.08	6%
Freight Planning	319,649.73	22,169.73	11,483.21	7%
Metropolitan Area Transportation Operation Coord Program Planning	168,057.12	20,070.99	8,564.87	12%
Performance-Based Planning & Programming	233,757.32	21,399.33	13,693.84	9%
Resilience Planning	312,185.11	0	0	0%
Subtotal	3,064,119.98	249,194.08	124,390.25	8%
4. Public Participation				
Public Participation	913,276.45	83,958.52	43,001.47	9%
Subtotal	913,276.45	83,958.52	43,001.47	9%
5. Travel Forecasting				
Network Development	1,047,672.55	129,224.61	64,755.6	12%
Model Development	2,316,968.86	191,859.09	79,291.56	8%
Subtotal	3,364,641.41	321,083.7	144,047.16	10%
6. Mobile Emissions Planning				
Air Quality Conformity	965,194.31	112,066.88	54,075.05	12%
Mobile Emissions Analysis	1,300,371.68	150,057.2	79,077.27	12%
Subtotal	2,265,565.99	262,124.08	133,152.32	12%
7. Travel Monitoring and Data Programs				
Regional Travel Survey	1,582,114.53	126,966.65	66,104.97	8%
Traffic Analysis & Research	1,027,463.28	86,229.73	44,635.47	8%
Regional Transportation Data Clearinghouse	0.00	5,723.01	4,787.23	0%
GIS Analysis	0.00	43,206.28	0	0%
Subtotal	2,609,577.81	262,125.67	115,527.67	10%
8. Planning Scenarios and Socioeconomic Forecasting				
Socioeconomic Forecasting	1,165,429.24	146,138.52	57,573.85	13%
Subtotal	1,165,429.24	146,138.52	57,573.85	13%
9. Mobility and Enhancement Programs				
Transportation and Land Use Connections Program	578,941.89	15,250.47	6,974.61	3%
Enhanced Mobility Grant Program	92,739.74	6,068.2	3,021.1	7%
Transportation Alternatives Set-Aside Programs	35,916.83	3,430.73	1,916.6	10%
Other Tasks to be defined 9.5	374,899.11	3,390.08	1,483.02	1%
Subtotal	1,082,497.57	28,139.48	13,395.33	3%
10. TPB Support and Management				
TPB Support and Management	989,546.94	105,299.35	37,907.99	11%
Subtotal	989,546.94	105,299.35	37,907.99	11%
Core Program	17,005,900.51	1,607,107.2	756,335.64	9%
A. District of Columbia Technical Assistance				
Program Development & Misc.	329,633.45	0	0	0%
B. Maryland Technical Assistance				
Program Development & Misc.	492,970.49	2,374.15	895.39	0%
C. Virginia Technical Assistance				
Program Development & Misc.	384,846.81	7,342.08	1,508.71	2%
D. Public Transit Technical Assistance				
Program Development & Misc.	407,288.25	1,559.12	511.65	0%
Technical Assistance	1,614,739.00	11,275.35	2,915.75	1%
TPB Grand Total	18,620,639.51	1,618,382.55	759,251.39	9%

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

	TOTAL		FTA/STA/LOCAL		PL FUNDS/LOCAL	
	AUTHORIZED	TOTAL	AUTORIZED	FTA	AUTORIZED	FHWA
	BUDGET	EXPEDITURES	BUDGET	EXPENDITURES	BUDGET	EXPENDITURES
A. DC Technical Assistant						
Program Development & Misc	14,999.99	0.00	1,681.64	0.00	13,318.35	0.00
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	0.00	36,955.00	0.00	292,678.45	0.00
B. MD Technical Assistant						
Feasibility/Special Studi	24,999.99	0.00	4,347.42	0.00	20,652.57	0.00
Pgm Development & Misc	14,999.99	2,374.15	2,608.45	412.86	12,391.54	1,961.29
Regional Safety PGM-MD	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	2,374.15	85,726.00	412.86	407,244.49	1,961.29
C. VA Technical Assistant						
Pgm Development & Misc	14,999.99	2,157.35	2,713.12	390.21	12,286.87	1,767.14
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	0.00	14,469.97	0.00	65,530.03	0.00
Travel Demand Modeling	84,999.95	0.00	15,374.33	0.00	69,625.62	0.00
Travel Monitoring	100,000.49	5,184.73	18,087.55	937.79	81,912.94	4,246.94
Subtotal	384,846.81	7,342.08	69,609.00	1,328.00	315,237.81	6,014.08
D. WMATA						
Program Development & Misc	14,999.99	1,559.12	14,999.99	1,559.12	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	0.00	250,000.00	0.00	0.00	0.00
Subtotal	407,288.25	1,559.12	407,288.25	1,559.12	0.00	0.00
Grand Total	1,614,739.00	11,275.35	599,578.25	3,299.97	1,015,160.75	7,975.38