FY 2022

National Capital Region
Transportation Planning Board

Work Program Progress Report

September 2021

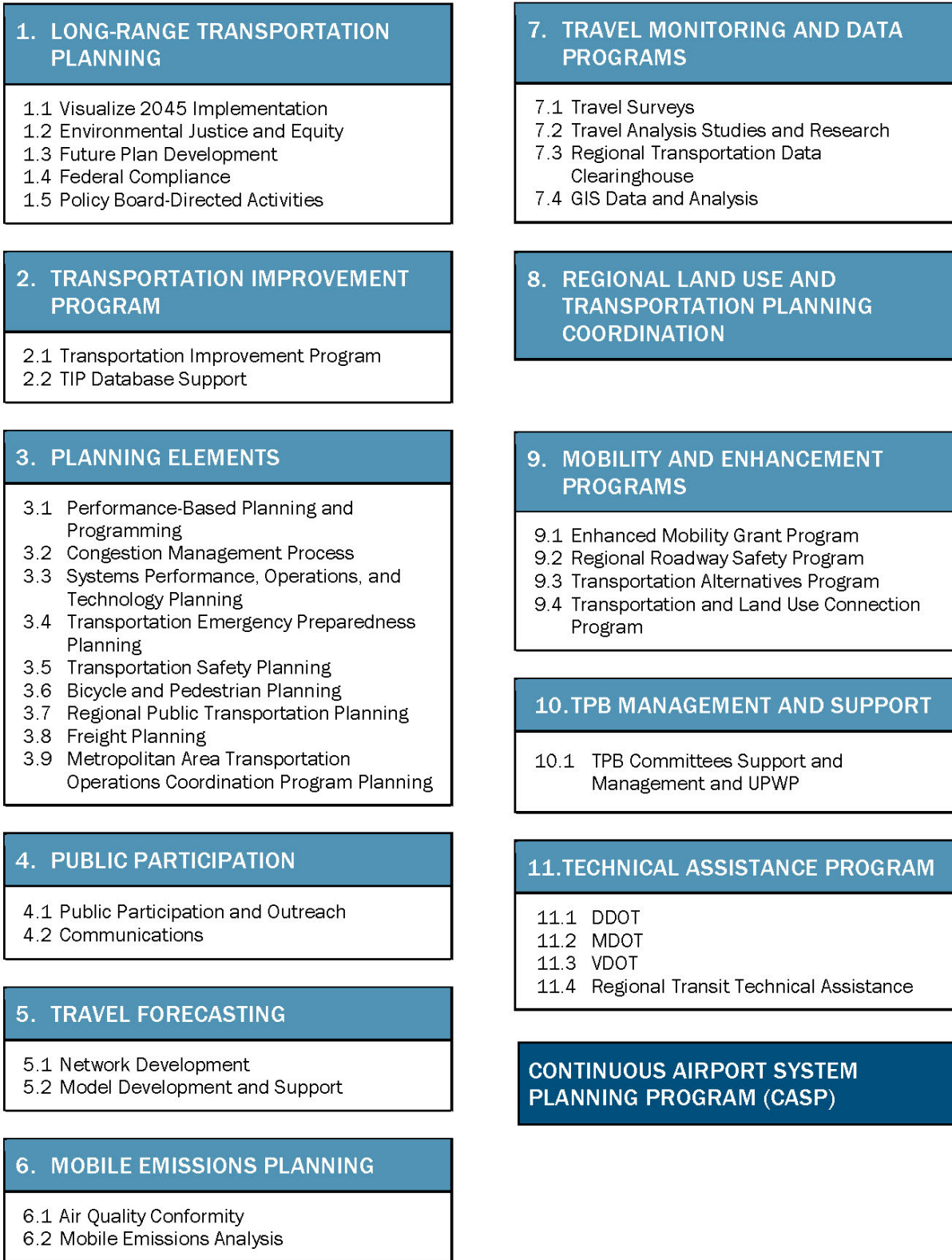FY 2022

The TPB approved its FY 2022 Unified Planning Work Program (UPWP) in March 2021. The TPB Work Program Progress Report provides a short summary of each activity for the month of September. In addition, this report concludes with status updates reflecting timelines for all ongoing program plans and projects. Please reference the 2022 UPWP for details concerning the approved budget, and work description for each task. The following graphic identifies all the activities in the UPWP.

1. LONG-RANGE TRANSPORTATION PLANNING

1.1 Visualize 2045 Implementation
1.2 Environmental Justice and Equity
1.3 Future Plan Development
1.4 Federal Compliance
1.5 Policy Board-Directed Activities

2. TRANSPORTATION IMPROVEMENT PROGRAM

2.1 Transportation Improvement Program
2.2 TIP Database Support

3. PLANNING ELEMENTS

3.1 Performance-Based Planning and Programming
3.2 Congestion Management Process
3.3 Systems Performance, Operations, and Technology Planning
3.4 Transportation Emergency Preparedness Planning
3.5 Transportation Safety Planning
3.6 Bicycle and Pedestrian Planning
3.7 Regional Public Transportation Planning
3.8 Freight Planning
3.9 Metropolitan Area Transportation Operations Coordination Program Planning

4. PUBLIC PARTICIPATION

4.1 Public Participation and Outreach
4.2 Communications

5. TRAVEL FORECASTING

5.1 Network Development
5.2 Model Development and Support

6. MOBILE EMISSIONS PLANNING

6.1 Air Quality Conformity
6.2 Mobile Emissions Analysis

7. TRAVEL MONITORING AND DATA PROGRAMS

7.1 Travel Surveys
7.2 Travel Analysis Studies and Research
7.3 Regional Transportation Data Clearinghouse
7.4 GIS Data and Analysis

8. REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION

9. MOBILITY AND ENHANCEMENT PROGRAMS

9.1 Enhanced Mobility Grant Program
9.2 Regional Roadway Safety Program
9.3 Transportation Alternatives Program
9.4 Transportation and Land Use Connection Program

10. TPB MANAGEMENT AND SUPPORT

10.1 TPB Committees Support and Management and UPWP

11. TECHNICAL ASSISTANCE PROGRAM

11.1 DDOT
11.2 MDOT
11.3 VDOT
11.4 Regional Transit Technical Assistance

CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM (CASP)

Task 1	BUDGET	Billed this month	% Funds Expended	UPWP Page
LONG RANGE TRANSPORTATION PLANNING	$1,095,434	$110,608	23%	35

1. LONG-RANGE TRANSPORTATION PLANNING

Task 1.1 – Visualize 2045 Implementation

Staff that manages long-range transportation plan activities worked with the public participation team to review and conduct qualitative analysis on the responses received to the socially distant public engagement activity 'Aspiration to Implementation' that ended at the end of August 2021. The TPB has received more than 420 comments from this social distant engagement event. The purpose of the Aspiration to Implementation activity was to reaffirm the importance and impact that the Aspirational Initiatives have in the region. Staff highlighted projects and places in the region that align with a specific Aspirational Initiative by placing near them a poster with a QR code that can be scanned to access an online form with a few questions. By highlighting physical examples of these projects, the TPB staff seeks to raise awareness of the TPB Aspirational Initiatives by allowing people to see how these concepts can be implemented and ask for about how these initiatives have been useful. This activity both implements the most recent plan and supports development of the plan update. Staff are also working with the public involvement and GIS team to produce a Storymap about the Voices of the Region outreach and what TPB learned from this outreach.

Staff revised long-term revenue and expenditure tables for the financial plan following board approval in July and project updates from sponsor agencies.

Task 1.2 – Environmental Justice and Equity

Staff is tracking the release of the new census data in order to update its Equity Emphasis Areas used to support the EJ analysis of the plan.

Task 1.3 – Future Plan Development

In September 2021, the TPB staff conducted topic specific as well as one working group LRTP coordination meetings, during which planning and coordination take place for a range of LRTP activities and materials, from technical and financial inputs, and preparation for the comment period and its related materials, to the LRTP outline and approach/content, communications, mapping and public participation.

Staff continued to develop the LRTP, including producing and revising text, producing a page-by-page storyboard to manage spacing of content in the plan, producing charts, graphs and other graphics for integration by the design team. The staff held a series of meetings with the design firm to begin layout the plan, finalize certain design elements, and begin drafting/reviewing designed chapters. Staff also provided and received updated chapters from the editorial review consultant.

Staff received updates and comments from the technical members on the draft TPB Resiliency study whitepaper and memorandum. This effort document regional climate resiliency/stormwater planning and identify regional strategies for resiliency/stormwater management through transportation projects and program. The TPB staff are now updating the document based on this review and intend to publish the whitepaper before the end of the calendar year.

1.4 – Federal Compliance

There are no activities at this time.

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.

Task 2	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRANSPORTATION IMPROVEMENT PROGRAM	$466,962	$35,985	20%	37

2. TRANSPORTATION IMPROVEMENT PROGRAM

2.1 Transportation Improvement Program (TIP)

At its meeting on September 10, the TPB Steering Committee approved one resolution amending the FY 2021-2024 TIP, at the request of DDOT. The amendment reprogrammed funding for nine existing projects and added 11 new projects. A total of $131 million was added to the District's portion of the TIP with this amendment, including $56 million in federal formula and District matching funds, and $75 million that was provided to the District through the American Rescue Plan Act of 2021 (ARPA).

During the month of September, staff processed administrative modifications for 36 projects requested by DDOT, and for one project as requested by MDOT/SHA.

2.2 TIP Database Support

Consultants, EcoInteractive provided use of their software as a service platform, customized and branded as Project InfoTrak for the TPB. Along with this service they provided ongoing help-desk support for the month of September. Additional work was done under a contract for Professional Services. In September, EcoInteractive developed project description reports to convey all data fields collected about TPB member agencies' projects.

Task 3	BUDGET	Billed this month	% Funds Expended	UPWP Page
PLANNING ELEMENTS	$2,768,270	$191,250	18%	39

3. PLANNING ELEMENTS

3.1 Performance-Based Planning

Staff worked on PBPP content for the 2022 version of the Visualize 2045 long range transportation plan and the FY 2023-2026 TIP. Staff collected annual Transit Safety target information from the transit agencies and prepared draft regional targets, a report, and briefing materials.

TPB staff attended the quarterly VDOT OIPI MPO meeting.

3.2 Congestion Management Process

Staff continued Congestion Management Process (CMP) data compilation and analysis for upcoming Quarterly Reports.

Staff continued analysis of traffic and transit impacts of the COVID-19 pandemic and precautions, including analysis of data for pre- and post-Labor Day holiday weekend periods, toward an upcoming presentation at the October TPB Technical Committee meeting.

Development of the biennial 2022 CMP Technical Report continued, with a goal to complete by the end of FY 2022. Staff presented at the September 21, 2021 Commuter Connections Subcommittee meeting, requesting feedback on Transportation Demand Management-related information for the report.

Preparations began for an October meeting of the Vehicle Probe Data Users Group, rescheduled from September due to schedule conflicts.

Staff participated in a two-day StreetLight data users summit, and a Regional Integrated Transportation Information System (RITIS) user group meeting.

3.3 Systems Performance, Operations, and Technology Planning

Building on late FY 2021 activities, staff continued development of a strawman set of TPB Connected and Automated Vehicle (CAV) principles toward TPB review and approval in fall 2021. The September 9, 2021 virtual meeting of the Systems Performance, Operations, and Technology Subcommittee was organized and conducted, focusing on discussing the revised draft set of CAV principles, as well as observations from analysis of traffic and transit impacts of the COVID-19 pandemic and precautions. The draft CAV principles were also presented and discussed at the September 10 TPB Technical Committee meeting and the September 24 TPB Access for All Advisory Committee meeting. Staff followed up on feedback from these committees.

Staff participated remotely in the Intelligent Transportation Society of the District of Columbia (ITS DC) Annual Meeting on September 23.

3.4 Transportation Emergency Preparedness Planning

The September 8, 2021 virtual 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 developed agenda items and secured speakers for the regularly scheduled October 12, 2021 meeting of the Transportation Safety Subcommittee.

Staff held planning sessions on September 14 and 23, 2021 with the Transportation Safety Subcommittee Chair to identify topics and speakers for future Safety Subcommittee meetings.

Staff requested written 5–7-page roadway safety updates from MDOT, VDOT, and DDOT safety officials for inclusion in the Director's Report for the October 20, 2021 Transportation Planning Board meeting.

Staff began collecting data needed for the development of this year's Regional Highway Safety Targets.

3.6 Bicycle and Pedestrian Planning

Staff continued work on the draft Bicycle and Pedestrian Plan for the National Capital Region.

Staff identified needed corrections to the bike/ped project database, some of which will require consultant support to update the Project Infotrak database program. Analysis of the final bike/ped project database is a key input to the Bicycle and Pedestrian Plan.

The September meeting of the Bicycle and Pedestrian Subcommittee was cancelled pending corrections to the bike/ped project database.

Staff provided an update on the upcoming Fall Street Smart campaign to the Baltimore Regional Safety Subcommittee at their September 23, 2021 meeting.

3.7 Regional Public Transportation Planning

The Regional Public Transportation Subcommittee met in September. The agenda included a roundtable on PBPP transit safety targets followed by a briefing on MetroNow's report card for the Bus Transformation Project. TPB staff reported on transit in the Visualize 2045 long range plan; upcoming briefings on the transit equity white paper, webmap, and a fare relief review memo; completion of the 2020 state of public transportation report; and an update on the regional High-Capacity Transit (HCT) map.

TPB staff briefed CEEPC on electric buses in the region. Staff responded to a media interview with ArlNow on bus lanes in the region. Staff completed briefing materials on bus transit service equity and on fare relief. Staff worked on transit elements for the 2022 version of the Visualize 2045 long range transportation plan, including a summary of transit development plans across the region.

Staff attended an automated transit bus demonstration by Robotic Research. Staff attended the monthly NVTC MAC and WMATA JCC meetings, a WMATA meeting regarding On Demand Transit, and three MATOC Transit Task Force calls to discuss post-Labor Day travel and transit service.

3.8 Freight Planning

The TPB Freight Subcommittee originally scheduled for September 16, 2021 was postponed until October 21, 2021.

Staff held a planning session on September 8 with the TPB Freight Subcommittee Chair to identify topics and speakers for future Freight Subcommittee meetings.

Resolution SR4-2022 designating Critical Urban Freight Corridors in Northern Virginia was adopted by the TPB Steering Committee on September 10, 2021.

Staff continued work to develop an RFP for consultant assistance to update the Regional Freight Plan in FY 2022.

3.9 Metropolitan Area Transportation Operations Coordination Program Planning

The Metropolitan Area Transportation Operations Coordination (MATOC) Program is an operational partnership of the region's major transportation agencies, funded outside the UPWP, but with certain planning support activities provided by TPB staff under this task.

The seasonal kickoff virtual meeting of the MATOC Severe Weather Coordination Working Group was organized and conducted on September 14, 2021, planning for the upcoming season's winter weather response coordination.

The regularly scheduled September 17 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.

A series of weekly MATOC Transit Task Force and/or MATOC Operations Subcommittee virtual meetings, which began on August 18, continued through September, to discuss operational, traffic, and transit ridership impacts of COVID-19, especially before and after Labor Day.

Task 4	BUDGET	Billed this month	% Funds Expended	UPWP Page
PUBLIC PARTICIPATION	$994,711	$67,262	17%	45

4. PUBLIC PARTICIPATION

4.1 Public Participation and Outreach

The TPB's Community Advisory Committee (CAC) met on September 16 for an online-only meeting. The meeting included briefings and discussions on the two new TPB technical assistance programs – the Regional Roadway Safety Program and the Transit Within Reach Program. The committee also discussed topics to explore in the future.

Staff continuing working on a report summarizing a series of 11 focus groups conducted last winter with randomly selected residents about key transportation challenges facing the region. The findings and a final report on this research will be presented to the TPB in November of 2021.

Staff began analyzing and summarizing Phase II outreach for Visualize 2045, which provided open opportunities for public input. Phase I was invitation-only, focusing on public opinion research through quantitative research (opinion survey) and qualitative research (focus groups). The main activity for Phase II was the distribution of more than 40 posters and signs around the region that will display QR codes, which solicited input on the TPB's Aspirational Initiatives.

Staff began working on a GIS storymap to summarize all the outreach activities conducted for Visualize 2045 – the survey, focus groups, and open outreach through QR code posters.

A virtual AFA meeting was held on September 24:

Visualize 2045 Results from Focus Group Research & Update on Public Outreach
- o Staff shared the results of a series of focus groups that were conducted earlier this year to provide input for Visualize 2045
- o Staff shared the extent of the information collected and how it will be used for further analysis and products, including a Voices of the Region story map
- o A sampling of questions and responses on Equity, Safety, Climate Change, including specific quotes on issues such as bus stop and sidewalk safety, affordable housing accessible to transit, and telework as a solution to some concerns were discussed

Dissertation on Wheelchair Accessibility of TNCs
- o Dr. Mahtot Gebresselassie shared the findings from her dissertation "Wheelchair Users' Perspective on Transportation Hailed Through Uber and Lyft Apps."
- o The presentation included:
    - ▪ Methods; Participant recruitment/partners who distributed the survey (including AFA); Statistics on participants; Perceptions of service; Experience using service; Recommendations.

Draft TPB Principles on Connected and Autonomous Vehicles (CAV)
- o Staff shared background information on the TPB's role and work related to CAVs:
    - ▪ a white paper; discussions during four CAV webinars TPB hosted in 2020 and 2021; review of the context of Visualize 2045 and other existing TPB policy documents; review of AFA input provided in a survey and at the June 2, 2020 meeting
- o Staff introduced draft CAV Principles and invited AFA feedback

Other Business
- o Staff reminded AFA members of their role in the Human Service Transportation Coordinated Plan and the planned update in 2022

4.2 Communications

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

- A brief recap of the September 2021 TPB meeting
  September 28, 2021
- Regional Travel Survey (RTS) In-Depth Analysis
  September 28, 2021
- Officials fund three projects under new Transit Within Reach Program
  September 22, 2021
- Last Chance to Take the Pledge for Car Free Day
  September 17, 2021

Staff worked on an audit to comprehensively update pages on the COG website related to transportation. Staff also conducted monthly update activities for the website.

Recruitment began to replace the TPB's lead communications staff member who left COG in July.

Task 5	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL FORECASTING	$3,298,337	$223,998	18%	47

5. TRAVEL FORECASTING

5.1 Network Development

Staff completed development of highway and transit network files for the 2021 and 2023 forecast years for the air quality conformity analysis of the 2022 Update to Visualize 2045. Staff ran quality assurance checks and passed these files on for travel demand modeling. Staff exported and began review of a 2025 highway network and began coding a 2025 transit network for the conformity analysis.

Staff began development of a 2045 transit network for the Gen3 Model development effort. This work involves coding a transit network with four time-of-day periods (AM peak, midday, PM peak, and nighttime), which contrasts with the current practice of coding transit networks that reflect only two time-of-day periods (peak and off-peak). The new network will be used for Gen3 Model, Phase 1, sensitivity testing that is expected to begin in October.

In support of the ongoing air quality conformity analysis, staff is working on a few enhancements to the COGTools network editor to facilitate related network development activities. Specifically, staff instituted a bug fix associated with the batch update function of COGTools and worked on a few other enhancements.

Staff had an internal meeting on September 1 and a subsequent network development staff meeting on September 8 discussing issues and corresponding Quality Conformity/Quality Assurance (QC/QA) procedures for highway/transit network editing in COGTools.

Staff has been working on a major update of the COGTools User's Manual. Staff completed the second draft of the updated documentation in September, which is currently under internal review.

5.2 Model Development and Support

The Travel Forecasting Subcommittee (TFS) meets in odd-numbered months. Staff attended the September 24 TFS meeting and started preparing meeting highlights. The meeting covered the following topics:

- COG/TPB air passenger surveys: evaluation of methodology
- Integrating ActivitySim and dynamic traffic assignment (DTA) for a medium-sized city in Ohio
- Reweighting of the 2017-2018 COG/TPB Regional Travel Survey (RTS)/2018-2019 Maryland Travel Survey (MTS) data for development of the Gen3 Travel Model, Phase 1
- COG/TPB Gen3 Travel Model: Status report
- Roundtable discussion of current modeling efforts around the region
- Other Business
    - Snapshots of effects of COVID-19 on travel (available on COG website)
    - Big Data evaluation update
    - Upcoming guest presentations

Production-use, travel demand forecasting model: Generation 2/Ver. 2.3 and Ver. 2.4

Per an internal request, staff collected and prepared the year-2019 VMT breakdowns by jurisdiction and vehicle classification.

Leveraging the activity-based travel model (ABM) visualizer tool that consultants developed to visualize the modeling results from the Gen3 Model, staff explored the possibility of visualizing the modeling results from the Ver. 2.3/Ver. 2.4 Models in a similar fashion. Staff developed a prototype tool that visualizes the TPB Planning Area summaries for the Ver. 2.3/Ver. 2.4 Models and demonstrated it at an internal meeting on September 21.

Developmental, travel demand forecasting model: Generation 2/Ver. 2.3 and Ver. 2.4

Staff continued to explore the feasibility of replacing the outdated AEMS mode choice application software with the TRANSIMS ModeChoice mode choice application software in the TPB's Gen2 Travel Model. Staff tested ModeChoice Version 7.5.3 and shared the initial findings with AECOM on September 3. Based on COG feedback, AECOM subsequently improved the software and shared with staff the latest ModeChoice software (Version 7.5.7). Staff extensively tested the software and examined the mode choice modeling results and auto-calibration results. While finding the testing results largely satisfactory, staff also noted some issues with the software such as the compatibility with different versions of Cube software and the convergence of goodness-of-fit measures (e.g., root mean square error, RMSE) during the auto-calibration. Staff shared findings with AECOM on October 4. In the meantime, staff studied the TRANSIMS ModeChoice documentation and compared the functionalities of this software and AEMS. Staff is in the process of documenting comparison summaries.

Staff developed a Python script that can process the Cooperative Forecasts of land use data and prepare the land use inputs files for use with the travel demand model. Staff completed a memo, dated September 15, that documents this work. This Python script is expected to replace the existing, Cube-based land use data processing program during the next conformity cycle.

Developmental, travel demand forecasting model: Generation 2/Ver. 2.4 PT

No activity.

Developmental, travel demand forecasting model: Generation 3

Regarding the consultant-assisted project to develop the next-generation travel demand forecasting model, known as the Gen3 Model:

- Staff held three check-in meetings with RSG and BMG, the consultants on the Gen3 Model development project (September 2, 16, and 30).
- Staff presented at the September 24 TFS meeting on the reweighting of the merged 2017-2018 COG/TPB Regional Travel Survey (RTS) and 2018-2019 Maryland Travel Survey (MTS).
- Staff reviewed the final data development report that RSG created to document the processing of the RTS and Transit On-Board Survey (TOBS) data for the Gen3 Model, Phase 1, development. Staff provided feedback on the report and associated data files. After RSG addressed some of the COG comments, the data development report is now considered finalized.
- Following up on a discussion regarding the alternative ways to summarize transit assignment results in the Gen3 Model at the September 30 check-in meeting, staff transmitted LineSum software, documentation, and source code to RSG. The LineSum program has been used for transit summaries in the Gen2 Model.

Per request from the COG management, staff studied the documentation and developed two tables that compare the TPB's production-use Generation 2/Ver. 2.4 Model, Generation 3 Model, and the upcoming Arlington County Tour-based Travel Model. After an internal review, staff shared the two tables with RSG, the consultant on the Gen3 Model development project, and Bentley, the consultant on the Arlington Model development project, for comments.

Software support

Working with COG's Information Technology (IT) Department, 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, including the 2022 Update to Visualize 2045 air quality conformity analysis.

Other activities

Staff serviced three data requests: Two requests were from consultants working for DDOT and for the Maryland I-495 & I-270 Public-Private Partnership. One request was from VDOT. The requested data include the Ver. 2.4 Travel Model, loaded links highway network files for base years 2010, 2015, 2016, 2017, and 2019 from different Travel Model versions (Version 2.3.52, Version 2.3.57a, Version 2.3.66, Version 2.3.70, and Version 2.4), and Years 2006 to 2019 HPMS VMT data for Washington, D.C.

Staff attended ActivitySim Consortium meetings regularly on Tuesdays and Thursday. Staff attended an ActivitySim Partners Only meeting on September 14. Staff updated the ranking of the proposed tasks/features for the Phase 7 scoping of future ActivitySim development.

Staff attended a Purchase Order training on September 8. Staff attended training on advancing racial equity on September 27.

Task 6	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILE EMISSIONS PLANNING	$2,039,172	$186,834	21%	51

6. MOBILE EMISSIONS PLANNING

6.1 Air Quality Conformity

Staff continued to regularly attend coordination meetings related to scheduling tasks for the 2022 quadrennial update of the region's Long-Range Transportation Plan, Visualize 2045, including the air quality conformity analysis, system performance, and environmental justice analysis.

Using the data received from the three state air agencies, TPB staff continued to work with the Department of Environmental Programs (DEP) staff on development of MOVES2014b inputs for milestone years (2021, 2023, 2025, 2030, 2040, and 2045) for the air quality conformity analysis of the 2022 Update to Visualize 2045.

Using the 2021 networks developed by network development staff, TPB modelers began conducting the travel demand modeling analysis for the analysis year 2021.

In accordance with the TPB consultation procedures, staff forwarded to the consultation agencies and public advisory committees the September meeting agenda and a summary memo regarding the monthly TPB meeting and air quality conformity consultation elements.

6.2 Mobile Emissions Analysis

Staff continued to conduct activities related to the TPB Climate Change Mitigation Study of 2021 (CCMS). TPB staff continued to hold bimonthly meetings with the project consultant (ICF) regarding Phase II of the study, which will attempt to answer what it would take to reduce the on-road transportation-sector greenhouse gas emissions by 50% below 2005 levels by 2030 and by 80% below 2005 levels by 2050. In coordination with TPB staff, the project consultant finalized a report called "Task 4 Technical Memo: Scenarios and Associated Greenhouse Gas Reduction Actions," which contains findings of two top-down scenarios and recommendations for ten additional scenarios for analysis. The report and the accompanying presentations were shared with the TPB Technical Committee (item #6) and the TPB (item #10). The project consultant also drafted another technical memorandum called "Task 5 Technical Documentation: Selection of Modeling Tools and Analysis Approach: Scenarios and Associated Greenhouse Gas Reduction Actions," and provided it to TPB staff for review.

DEP and TPB staff continued to coordinate with state air agencies on plans related to development of Reasonable Further Progress (RFP) and Attainment State Implementation Plans (SIPs) to address requirements of the 2015 Ozone National Ambient Air Quality Standards (NAAQS). DEP staff continued to facilitate discussions with the Metropolitan Washington Air Quality Committee – Technical Advisory Committee (MWAQC-TAC), which was briefed on the recent developments impacting the SIP development. In addition, DEP staff held a Control Measures Workgroup, established as part of the SIP development for the 2015 Ozone NAAQS requirements. MWAQC-TAC was also provided with an update on the current ozone season, at which COG staff noted that eight ozone exceedances had been recorded by the middle of September, which could make it more challenging to attain the 2015 ozone NAAQS (item #2).

TPB and DEP staff continued to discuss the development of local inputs for the Alternate Vehicle and Fuel Technology (AVFT) file for use in MOVES runs for the conformity analysis and/or future SIPs.

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 response to an EPA proposal, TPB and DEP staff drafted a comment letter on behalf of MWAQC, Climate, Energy and Environment Policy Committee (CEEPC), and TPB regarding the "Revised 2023 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions Standards." TPB, MWAQC, and CEEPC support the proposed rulemaking, which is projected to result in GHG emissions reductions from the light-duty vehicles, and positive health and equity impacts. The TPB Steering Committee approved the comment letter, which was also included with the TPB materials (as a Steering Committee Action). CEEPC and MWAQC Executive committee also approved the letter at their respective meetings, while TPB Technical Committee was briefed on the topic (Other Business). Following all of the approvals, the signed letter, dated September 22, was submitted to the EPA.

TPB staff attended the CEEPC meeting to stay informed regarding the current climate issues. The meeting was largely focused on vehicle electrification.

Upon finalizing the 2020 vehicle registration/vehicle identification number (VIN) decoding process based on the datasets provided to COG/TPB by the three state air agencies, TPB staff reviewed and quality-assured the results. Key findings from the data were subsequently summarized and presented to the TPB Technical Committee (item #9). The decoded dataset will be used in the 2022 Update to Visualize 2045 air quality conformity analysis. In addition, to facilitate electric vehicle planning activities, TPB staff provided DEP staff with summaries of electric and hybrid vehicles based on the dataset.

TPB staff also continued to conduct MOVES model tests to further refine greenhouse gas emissions modeling estimates for future studies. Staff also continued to explore different ways to model criteria pollutant emissions to both maintain consistency with the recently released Version 2.4 Travel Demand Model and to introduce innovative new processes (e.g., machine learning).

Task 7	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL MONITORING AND DATA PROGRAMS	$2,141,001	$92,214	15%	53

7. TRAVEL MONITORING AND DATA PROGRAMS

7.1 Travel Surveys

Regional Travel Survey
Staff fielded RTS data requests from stakeholders.
Staff responded to questions on the results of the RTS regarding school trips to the ICF team in response to comments on CCMS scenarios.
Staff responded to questions on the results of the RTS regarding school trips to the ICF team in response to comments on CCMS scenarios.

Smartphone Panel Survey
Staff prepared the data files from the RTS Follow-On Smartphone Panel Survey (SPS) for post-survey data processing.
Staff held a meeting with The Lab @ DC to share insights and experience on using rMove (the smartphone app used in the RTS Follow-On Survey).

COVID-19 Literature Review
Staff continued to conduct a literature review of transportation surveys measuring the impacts to travel behavior from COVID-19 that inform regional transportation planning.
Staff participated in biweekly meetings with the Gen3 Model Development Team.
Staff provided comments on a presentation by the Gen3 Model Development Team to the TPB Travel Forecasting Subcommittee.

7.2 Traffic Analysis Studies, and Research

Transportation Impacts of the COVID-19 Pandemic

Staff continued to coordinate with other key organizational technical staff to prepare an examination of COVID-related regional impacts from a multisectoral perspective, including the transportation sector to better understand and describe the impacts to the region's transportation system from a broad context. Staff updated presentation slides with the latest information.

COVID-19 Travel Monitoring Snapshots

Staff processed and analyzed the June and July 2021 traffic data from the region's continuous counting stations and enplanement data from the region's major airports to include in a snapshot showing the travel monitoring impacts of the COVID-19 Pandemic in the National Capital Region. The snapshot was published on the COG website in September. Staff delivered an update on the snapshots to the Travel Forecasting Subcommittee.

Big Data Evaluation

Staff delivered an update on the project to the Travel Forecasting Subcommittee.

Staff prepared to deliver a presentation on the project during the Association of Metropolitan Planning Organizations Annual Meeting.

RTS In-Depth Analysis Project

Staff collaborated with the COG Communications Office to develop an article highlighting this project.

Staff prepared for a presentation about the project to the TPB Technical Committee.

Transportation Data Dashboard

Staff continued to explore options for a transportation data dashboard.

Labor Day Analysis

Staff coordinated with the Systems Performance Planning Team to perform a Labor Day travel analysis to evaluate increased traffic volumes resulting from offices and schools reopening. Staff collected and processed traffic data from the region's continuous counting stations from the week surrounding Labor Day for 2019-2021. Staff supported the development of a PowerPoint to be delivered to the TPB Technical Committee in October.

Long Range Transportation Plan

In support of the Plan Development and Coordination Team, staff reviewed the draft Visualize 2045 Strategies chapter.

Board Retreat Follow-up

Staff supported the COG Executive Director with the development of presentations to share the outcome of the COG Board Retreat with TPB and the COG Board. Staff has helped with the development of resolutions to adopt regional and local mechanisms for optimizing land use around High-Capacity Transit Station Areas and Equity Emphasis Areas.

Staff reran an analysis of the share of regional growth within a half-mile of High-Capacity transit with group quarters population included.

<u>Data Requests and Other Activities</u>

Staff met with Volpe and the National Park Service to discuss data and modeling needs for a project studying the potential conclusion of the reversible lanes program on the Rock Creek and Potomac Parkway.

Staff met with the Community Planner with the Joint Base Anacostia-Bolling and shared information on resources for big data as well as traffic monitoring data.

Staff attended the following forums and webinars: (1) Census/Redfin Job Opportunity Tool, (2) Joint Tran-SET Webinar Series: Advancements in Pedestrian and Bicyclist Safety - AV and Bike/Ped, (3) FHWA Highway Information Seminar, (4) Brookings American leadership in advancing the sustainable development goals, (5) Census webinar on Cross County Community Patterns

Staff participated in a cross-team discussion about the StreetLight County-level VMT tool.

7.3 Regional Transportation Data Clearinghouse

Staff obtained the 2019 Highway Performance Monitoring System (HPMS) feature classes for the District of Columbia, Maryland, Virginia, and West Virginia from the FHWA hosting website. Staff synthesized the relevant data from the feature classes to perform pavement analysis for the NHS roadways in the TPB planning region and downloaded the data for analysis using SAS. In addition, staff downloaded the 2020 National Bridge Inventory for District of Columbia, Maryland, Virginia, and West Virginia. Staff updated and ran a series of SAS programs to process the pavement and bridge data and used the processed data to produce tables and charts for Performance Based Planning & Programming (PBPP) purposes.

Staff participated in a meeting with fellow TPB staff to discuss the usability of a county-level VMT estimation tool based on StreetLight data.

Staff identified a factoring error in the regional 2019 VMT table updated the table to address the issue.

Staff met with staff from the National Park Service (NPS) and the Volpe Center to discuss data availability for Rock Creek and Potomac Parkway and nearby roadways for NPS and Volpe to use as inputs to a study on terminating the rush-hour reversible lane program.

Staff participated in meetings and email exchanges with the Travel Forecasting and Emissions Analysis Program team and their contractor, RSG, to report on traffic data for Gen3 Model development.

7.4 GIS Data, and Analysis

Staff attended the September 8th meeting of the Maryland State Geographic Information Executive Committee (MSGIC).

Staff planned and participated in the September 21 GIS Committee/GDX Working Group virtual meeting. Agenda items included reports on the Food Distribution Mapping Initiative, CAD2GIS, and the status of NextGen 9-1-1 in addition to a brief roundtable on local communications assets mapping efforts.

Staff met with the Plan Development and Coordination team on September 9 to discuss status of the functionality of transit project mapping in the Project InfoTrak (PIT) project database.

Staff met with Plan Development and Coordination team on September 13 to begin the discussion on creating spatial data and associated products based on the 'Voices of the Region' conducted as part of the Visualize 2045 outreach activities.

Staff began the follow-up work identified after the COG Board Retreat to create an online resource for information and data on two of TPB's data-driven products, High Capacity Transit (HCT) station areas,

Equity Emphasis Areas (EEA). Staff regularly met with the Planning Data and Research Program Director to define the scope of the work and requirements. Staff developed an initial concept and design, based on the ArcGIS Hub solution. Staff developed several pages, web applications and other interactive content for a draft application that is still under active development.

Staff continued work on supporting the environmental consultation and mitigation requirement of Visualize 2045. Staff developed a draft web map of the data layers used for a Visualize 2045 Environmental Consultation and Mitigation web mapping application update. The product is still being reviewed by Plan Development and Coordination staff.

Staff continued to attend and participate in Visualize 2045 activities, hosted by the DTP Plan Development and Coordination Team.

Staff coordinated with COG's Information Technology (IT) staff to install ArcGIS software on staff workstations.

Task 8	BUDGET	Billed this month	% Funds Expended	UPWP Page
REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION	$1,190,179	$92,021	20%	57

8. REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION

8.1 Socioeconomic Forecasting

Review of initial draft Round 9.2 Cooperative Forecasts –

At the September Cooperative Forecasting and Data Subcommittee meeting (CFDS) DCPS staff presented a comparison of 2020 Census PL94 data compared to Cooperative Forecast estimates for 2020 population and households

DCPS staff also led a discussion of potential 2020 employment base sources and time periods and, after the CFDS meeting, began work on to outline a proposed Round 10 workplan.

Staff coordinated internally to begin to develop an outline and work plan for the next major round

COVID-related impacts to the economy

To assist with the COG-wide multi-sector analysis of COVID impacts, DCPS staff continued to update the PowerPoint presentation that documents the effects to date of COVID on the region's economy.

In addition, the September Planning Directors meeting was focused on Economic Recovery.

Also, during September, DCPS staff continued work an initial draft of a 2020 Census report highlighting demographic trends shown in the 2020 Census PL94-171 legislative redistricting data. Staff also began work on the 2021 Multi-family Housing report.

Housing Targets update

The September meeting of the Housing Directors Advisory Committee (HDAC) focused on a discussion of "Meeting the Region's Housing Needs in Smaller Municipalities" featuring Parag Agrawal, Director of Planning, Prince William County and Bill Lake, Director of Housing, Prince William County who noted that the County is working to support current and future housing options for all county residents, including examining the development of an Affordable Dwelling Unit Ordinance. In addition, COG staff briefed HDAC members on the proposed new "Housing Affordability Planning Program (HAPP)" awards which would offer competitive grants of up to $75,000 to help maintain or create affordable housing near transit.

Scenario Planning

Staff coordinated internally to post the Scenario Planning Organizational Awareness and Understanding memos and reports to the Regional Transportation Clearinghouse.

Staff prepared for a presentation on the project during the Association of Metropolitan Planning Organizations Annual Conference. Staff finalized a PowerPoint, talking points, and coordinated with AMPO.

Task 9	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILITY AND ENHANCEMENT PROGRAMS	$988,671	$34,465	8%	59

9. MOBILITY AND ENHANCEMENT PROGRAMS

9.1 Enhanced Mobility Grant Program

The application period for the 2021 Enhanced Mobility solicitation closed on September 1.

Staff reviewed applications for completeness, developed summaries, prepared spreadsheets, and recruited Selection Committee.

On September 29, a virtual Selection Committee meeting was held to develop recommendations for funding for the 2021 Enhanced Mobility solicitation.

Staff attended the Transportation Association of Maryland's annual conference on September 23 and co-presented on procurement with the Maryland Transportation Administration's 5310 Program Manager.

9.2 Regional Roadway Safety Program

TPB staff, in collaboration with member jurisdictions, developed a scope of work (SOW) for each of the five FY2021 Regional Roadway Safety Program projects approved by the TPB in July 2021.

Staff requested input from each pre-qualified Regional Roadway Safety Program contractor indicating their qualifications and level of interest in each FY2021 Regional Roadway Safety Program project.

Staff received and responded to two FY2022 Regional Roadway Safety Program abstracts submitted by member jurisdictions. The application period for member jurisdictions to submit applications for the FY2022 Regional Safety Program closes on October 12th.

9.3 Transportation Alternatives Set-Aside Program

Staff conducted follow-up activities related to the project selections in July and began to prepare for upcoming solicitations.

9.4 Transportation/Land-Use Connections (TLC) Program

Staff continued the consultant procurement process for the 11 new TLC projects approved by the TPB in April. This process began with a questionnaire sent to all 15 prequalified consultants to determine their level of interest in the new projects. The recipient jurisdictions were also polled to determine their level in the consultants based on the qualifications statements submitted earlier in the year. Based on this input, staff solicited consultant proposals for the new projects. For each project, a technical selection committee was assembled to review and score proposals. Winning consultants for each project were identified in September. The projects were scheduled to kick off in October.

Task 10	BUDGET	Billed this month	% Funds Expended	UPWP Page
TPB MANAGEMENT AND SUPPORT	$963,379	$58,539	17%	61

10. TPB MANAGEMENT AND SUPPORT

Transportation Planning Board Committee Support and Management

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

- Staff provides 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.
- Staff responds to requests from TPB members, federal agencies, Congressional offices, media and others for information or data of a general transportation nature.
- Staff meets with TPB Board members and participating agency staff to discuss current and emerging regional transportation planning issues.
- Staff participates in meetings of other agencies whose programs and activities relate to and impact the TPB work program.
- Staff coordinates TPB Planning Activities with Program Directors and provides day-to-day management of and allocation of staff and financial resources.
- Staff monitors all work program activities and expenditures.

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 Citizens 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 and 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 to all the Department's activities. Work activities the Director was involved in during the month of SEPT FY 2022 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 meeting with the Program Directors and project staffs 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.
- Metropolitan Washington Air Quality Committee

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

Other additional activities for the TPB Staff Director for the month of SEPT FY 2022 includes Telephone / Web Ex / Microsoft Teams Communications:

- COG's Census Work Briefing
- Amazon HAPP documents check-in
- Housing Directors Committee
- Prince George's County Climate Action Commission Meeting
- Amazon / COG Check-in @ HAPP
- COG and Connected DMV Discussion on Federal Grant
- IGA Partners Monthly Call
- COG DEI Professional Development for Advancing Racial Equity – Training
- Post-resolution tasks on HAPP – COG & Amazon
- REDS Equitable Development Theory of Change Workshop

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.

Staff prepares monthly UPWP progress reports for each of the state agencies administering planning funding and prepares all necessary federal grant applications submissions. Staff reviews 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	$1,576,979	$21,664	3%	63
District of Columbia	$274,756	$3,662	3%	63
Maryland	$483,305	$7,260	3%	65
Virginia	$436,679	$10,022	5%	68
Regional Transit	$382,238	$718	1%	71

11. TECHNICAL ASSISTANCE

11.1 District of Columbia

Program Development, Data Requests and Miscellaneous Services

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

Staff continued to work with DDOT staff to develop a scope of work for a project the DDOT Historic Data Standardization.

<u>Transportation / Land Use Connections Program</u>

As part of the Transportation/Land-Use Connections Program, one technical assistance projects in the District of Columbia is being partially funded through the District of Columbia Technical Assistance Program. See TLC item above for further details about the TLC Program.

<u>Climate Change Study</u>

A climate change study is primarily being funded by the UPWP Core program with supplemental funding from the District of Columbia, Maryland, and Virginia Technical Assistance Accounts. See references in the progress report above, for further details about this study.

11.2. Maryland

<u>Program Development, Data Requests, and Miscellaneous Services</u>

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

Staff coordinated with MDOT staff to arrange continued support for the Climate Change Study.

<u>Transportation / Land Use Connections Program</u>

As part of the Transportation/Land-Use Connections Program, four 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.

<u>Climate Change Study</u>

A climate change study is primarily being funded by the UPWP Core program with supplemental funding from the District of Columbia, Maryland, and Virginia Technical Assistance Accounts. See references in the progress report above, for further details about this study.

11.3. Virginia

<u>Program Development, Data Requests, and Miscellaneous Services</u>

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

<u>Travel Monitoring and Survey</u>

Non-Motorized/Active Transportation Counts

Staff reviewed and accepted the on-call traffic monitoring consultant's price quote for the Fall 2021 non-motorized count task order. Staff participated in the kick-off meeting for the fall counts and worked with the consultants and VDOT staff to ensure that counts were conducted at the optimal time. Staff worked with the consultant to address issues that arose during the counting period.

<u>I-66 & I-395 Mode Share Study</u>

Staff prepared slides to provide a high-level overview of the project for the field operations kick-off meeting. Staff participated in the kick-off meeting for VDOT I-66/I-395 mode share study. Subsequently, staff updated the template to include separate bus counts and followed-up with the contractor to finalize the counting locations and technology and to determine the contractor's progress.

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 the Virginia Technical Assistance Program. See TLC item above for further details about the TLC Program.

Climate Change Study

A climate change study is primarily being funded by the UPWP Core program with supplemental funding from the District of Columbia, Maryland, and Virginia Technical Assistance Accounts. See references in the progress report above, for further details about this study.

11.4. Regional Transit

Program Development

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

Transit Within Reach

Staff shared the FY 2022/23 project recommendations for the Transit Within Reach program with the TPB Technical Committee. Following the meeting, staff prepared a summary of the item.

Staff briefed the CAC on the program and funding recommendations.

Staff briefed the TPB on the program and secured approval of the funding recommendations for FY 2022/23.

Staff reviewed and provided comment on a press release highlighting the funding recommendations.

Staff provided background on the program to the COG Executive Office.

Staff participated in an interview with Prince George's Community TV about the program and funding recommendations.

Once approval of the three projects was obtained from the Board, Staff began to schedule internal kick-off meetings with the local jurisdictions who will receive technical assistance.

Staff continued to refine the draft scope of work for the projects recommended for FY 2022/23 funding.

Staff developed a submitted a proposal to highlight this project during the upcoming American Planning Association National Capital Area Chapter Conference.

High Capacity Transit Map

Staff briefed the TPB Technical Committee and the Regional Public Transportation Subcommittee on the status of the project.

Continuous Air System Planning Program Management

Staff prepared for and conducted the September 23, 2021 meeting of the TPB Aviation Technical Subcommittee. As part of this meeting, staff briefed the Subcommittee on staff recommendations for implementing findings from the air passenger survey response rate study, ground access forecasts, and the forthcoming Regional Air Cargo Element Update and the Ground Access Travel Time Study. In addition to its briefing to the Aviation Technical Subcommittee, staff also briefed the TPB Travel Forecasting Subcommittee on methodological changes to the next Washington-Baltimore Regional Air Passenger Survey (APS). Finally, staff met with the FAA grant officer to conduct a CASP program management review, including the status of open grants and deliverables.

Air Cargo Element Update

No activity.

Ground Access Travel Time Study

No Activity.

Ground Access Forecast and Element Update

Staff continued progress on preparing ground access forecasts using data from the 2017 Washington-Baltimore Regional Air Passenger Survey.

PROGRESS ON PLAN PRODUCTS

Visualize 2045 Plan Update – (and associated analysis and appendices)

Updated Aspirational Initiatives Brochure showing examples/progress - June 2022

Equity Whitepaper (Considerations in Transportation) – June 2022

Resiliency Planning (in UPWP: Climate Change Resilience /Adaptation Study Phase 2)

- Publish Resiliency Phase 1 Whitepaper Nov-2021
- Phase 2: Conduct Ongoing Coordination with Members – Ongoing through June 2022 (anticipating webinar/peer exchange series)

Qualitative Research (Focus Groups) for Visualize 2045

- Presentation of findings and release of report: November 2021

Phase II Outreach for Visualize 2045

- Outreach is "live" (signs with QR codes posted throughout the region) – June-August 2021
- Analysis of input – August-October 2021
- Release of findings – November-December 2021

Voices of the Region Storymap for Visualize 2045 (Product development – September-December 2021; Product release – January 2022

Open Houses for Visualize 2045 (Spring 2022)

Community Leadership Institute (18th session) - Spring 2022

Coordinated Human Services Transportation Plan
- The current Coordinated Plan was adopted by the TPB in December 2018
- The next Enhanced Mobility Solicitation will occur from in summer 2023.
- The next update of the Coordinated Plan will occur in 2022

Transportation Data Dashboard
- Completed kickoff meeting
- Tools evaluation under way
- Draft dashboard presented to TPB Technical Committee at the July meeting

Travel Forecasting
- A series of highway and transit networks reflecting the latest LRTP (2022 Update to Visualize 2045) and TIP for input to the regional travel demand model.
  - 2022 Update to Visualize 2045: Transportation networks for 2021 and 2023 have been developed. 2025 network is in development.
  - Gen3 Travel Model: Transportation networks with four time-of-day periods have been developed for 2018 base year. 2045 network is in development.

- Maintenance, support for and development of currently adopted travel models, including inputs, application files, and documentation.
  - Travel Forecasting Subcommittee: Staff has conducted July and September meetings.
  - Staff is developing new ways to visualize model output.
  - Staff is attempting to migrate from an older mode choice application program to a newer program.
  - Staff responded to support requests regarding running the regional travel demand model and responded to two data requests in September (total of seven for FY 22).

- Continued development, with consultant assistance, of the TPB's next-generation travel demand forecasting model, known as the Gen3 Model, which will occur over a three-year period, from FY 2020 to FY 2023. A developmental model (Gen3, Phase 1) and associated technical documentation. This is a developmental travel model for testing by TPB staff, expected Dec. 2021. This model would precede the Gen3 Travel Model, Phase 2, which is expected to be a production-use travel model that could be used for regional planning work (expected Apr. 2023, i.e., FY 2023).
  - Staff continues to manage consultant, RSG, that is developing the Gen3 Model.
  - Staff reviewed and provided feedback on consultant deliverables.
  - Gen3 Model, Phase 1 (prototype model) has been estimated and calibration is underway.

Mobile Emissions Planning
- Air quality conformity analysis of the LRTP (2022 Update to Visualize 2045): Conduct runs of the travel model and mobile emissions model and prepare technical documentation.
  - Working to develop MOVES2014b inputs for milestone years (2021, 2023, 2025, 2030, 2040, and 2045) for the air quality conformity analysis.
  - Travel demand modeling for year 2021 is underway.

- TPB Climate Change Mitigation Study of 2021, with consultant assistance: Complete the study and prepare a report
  - Consultant (ICF) made presentations to TPB Technical Committee and TPB in September.
  - Consultant has written two memos (below). TPB staff provided review and comment on these.
    - ICF. TPB Climate Change Mitigation Study of 2021: Task 4 Technical Memo: Scenarios and Associated Greenhouse Gas Reduction Actions. National Capital Region Transportation Planning Board, Metropolitan Washington Council of Governments, August 25, 2021. https://www.mwcog.org/events/2021/09/10/tpb-technical-committee-tpb/.
    - ICF. TPB Climate Change Mitigation Study of 2021: Task 5 Technical Documentation: Selection of Modeling Tools and Analysis Approach. Draft. National Capital Region Transportation Planning Board, Metropolitan Washington Council of Governments, September 28, 2021.

- Technical activities, including preparation of mobile inventories and development of mobile budgets, and documentation related to the State Implementation Plans (SIPs) to meet the 2015 ozone NAAQS requirements.

- o DEP and TPB staff continued to coordinate with state air agencies on plans related to development of Reasonable Further Progress (RFP) and Attainment State Implementation Plans (SIPs) to address requirements of the 2015 Ozone National Ambient Air Quality Standards (NAAQS).
- o TPB and DEP staff continued to discuss the development of local inputs for the Alternate Vehicle and Fuel Technology (AVFT) file for use in MOVES runs for the conformity analysis and/or future SIPs.
- o TPB staff worked with DEP staff, member jurisdictions, and state air agencies to facilitate various aspects of air quality and climate change planning activities. Developed joint TPB, MWAQC, CEEPC comment letter to EPA:
  - ▪ Day, Robert, Deni Taveras, Charles Allen. Letter to Michael S. Regan and Administrator, U.S. Environmental Protection Agency. "Support for the Proposed Rule to Revise Existing National Greenhouse Gas Emissions Standards for Passenger Cars and Light Trucks through Model Year 2026; Docket ID No. EPA-HQ-OAR-2021-0208." September 22, 2021.
- o Upon finalizing the 2020 vehicle registration/vehicle identification number (VIN) decoding process based on the datasets provided to COG/TPB by the three state air agencies, TPB staff reviewed and quality-assured the results.
- o TPB staff also continued to conduct MOVES model tests to further refine greenhouse gas emissions modeling estimates for future studies.

Travel Surveys

- • Geographic-focused Surveys Workplan
  - o Work to begin in Winter/Spring 2022
- • 7-Day Panel-Evaluation of Effectiveness of Smartphone Data Collection Methodology (June 2022)
  - o Data analysis underway
- • COVID-19 Pandemic Travel Behavior Survey Literature Review (June 2022)
  - o Data collection underway

Travel Analysis Studies and Research

- • Transportation Data Dashboard (June 2022)
  - o Completed kickoff meeting
  - o Tools evaluation under way
  - o Draft dashboard presented to TPB Technical Committee at the July meeting
  - o Periodic briefings on dashboard enhancements
- • COVID-19 Pandemic Regional Travel Behavior (periodic updates)
  - o Periodic updates and presentations delivered
- • COVID-19 Travel Monitoring Snapshots (periodic updates)
  - o Snapshot published in July (May 2021 data), September (July 2021 Data)

Socioeconomic Forecasting

- • Baseline Employment Guidance (June 2022)
  - o Work to begin in Spring 2022
- • Travel Model Employment Definition Adjustment Factors (June 2022)
  - o Factors to be reviewed after next Baseline Employment Guidance update
- • Activity Centers and High-Capacity Transit Station Area Forecasts (June 2022)
  - o Work is under development.
- • Code Census Block Groups to TAZ (June 2022)
  - o Methodology under development
- • Census 2020 reports and presentations (ongoing)

- o Initial draft complete to highlight demographic trends shown in the 2020 Census PL94-171 legislative redistricting data
- Cooperative Forecasting Round 10 workplan (December 2021)
  - o Initial draft of workplan developed
- Multifamily Housing Report (June 2022)
  - o Report completed and under review by Office of Communications
- Commercial Construction Indicators Report (June 2022)
  - o Work to begin later this year

Planning Elements
- PBPP Targets (Updated) – Transit, Highway and Transit Assets – February 2022
- Congestion Management Process Technical Report – June 2022
- Connected and Automated Vehicles Principles – January 2022
- Roadway Safety Report – Updated – June 2022
- Regional Bicycle and Pedestrian Plan – Updated – January 2022
- National Capital Trail Network – Updated – June 2022
- State of Public Transportation – Annual Report – June 2022
- Regional Freight Plan – Updated – June 2022
- Regional Roadway Safety Program – Project Solicitation, Selection, and Execution – June 2022

CASP
- Ground Access Travel Time Update (June 2022)
  - o Work to commence later this year
- Ground Access Forecast Update (June 2022)
  - o Work to commence later this year

FY 2022 TRANSPORTATION PLANNING BOARD
COG/TPB BUDGET EXPENDITURE SUMMARY
September 2021

	DC, MD and VA FTA, FHWA and LOCAL BUDGET TOTAL	FUNDS EXPENDED	BILLED THIS MONTH	% FUNDS EXPENDED
1. Long-Range Transportation Planning				
Long - Range Transportation Planning	1,095,435.13	252,085.33	110,608.06	23%
Subtotal	**1,095,435.13**	**252,085.33**	**110,608.06**	**23%**
2. Transportation Improvement Program				
Transportation Improvement Program	266,963.20	54,841.74	22,683.64	21%
TIP Database Support	200,000.00	39,906	13,302	20%
Subtotal	**466,963.20**	**94,747.74**	**35,985.64**	**20%**
3. Planning Elements				
Congestion Management Process	434,253.21	92,548.87	37,628.49	21%
Systems Performance, Ops & Tech Planning	632,941.76	105,482.99	41,191.17	17%
Transportation Emergency Preparedness Planning	128,257.20	13,234.88	5,277.54	10%
Transportation Safety Planning	311,703.59	57,803.8	19,714.2	19%
Bicycle & Pedestrian Planning	168,032.40	35,750.73	13,904.72	21%
Regional Public Transportation Planning	391,160.06	54,614.68	20,781.24	14%
Freight Planning	318,664.86	52,611.08	18,288.38	17%
Metropolitan Area Transportation Operation Coord Program Planning	170,787.19	34,020.29	12,679.21	20%
Performance-Based Planning & Programming	212,468.43	64,016.06	21,785.77	30%
Subtotal	**2,768,268.70**	**510,083.38**	**191,250.72**	**18%**
4. Public Participation				
Public Participation	994,710.64	166,468.36	67,262.56	17%
Subtotal	**994,710.64**	**166,468.36**	**67,262.56**	**17%**
5. Travel Forecasting				
Software Support	226,785.46	31,822.64	13,389.16	14%
Network Development	1,012,945.63	238,607.42	92,211.84	24%
Model Development	2,058,605.72	327,771	118,397.34	16%
Subtotal	**3,298,336.81**	**598,201.06**	**223,998.34**	**18%**
6. Mobile Emissions Planning				
Air Quality Conformity	937,930.14	216,663.4	96,739.64	23%
Mobile Emissions Analysis	1,101,241.77	205,504.75	90,094.6	19%
Subtotal	**2,039,171.91**	**422,168.15**	**186,834.24**	**21%**
7. Travel Monitoring and Data Programs				
Regional Travel Survey	326,936.32	65,093.51	20,920.21	20%
Traffic Analysis & Research	841,214.05	40,783.69	9,041.47	5%
Regional Transportation Data Clearinghouse	324,078.11	48,937.33	15,500.24	15%
GIS Analysis	648,770.77	170,314.51	46,752.82	26%
Subtotal	**2,140,999.25**	**325,129.04**	**92,214.74**	**15%**
8. Planning Scenarios and Socioeconomic Forecasting				
Socioeconomic Forecasting	1,190,180.11	239,238.19	92,021.23	20%
Subtotal	**1,190,180.11**	**239,238.19**	**92,021.23**	**20%**
9. Mobility and Enhancement Programs				
Transportation and Land Use Connections Program	412,200.72	34,590.71	13,748.65	8%
Enhanced Mobility Grant Program	98,545.26	26,456.89	11,280.49	27%
Transportation Alternatives Set-Aside Programs	38,158.07	8,010.4	3,250.63	21%
Other Tasks to be defined 9.5	439,766.10	9,592.49	6,185.45	2%
Subtotal	**988,670.15**	**78,650.49**	**34,465.22**	**8%**
10. TPB Support and Management				
TPB Support and Management	963,378.33	160,908.32	58,539.76	17%
Subtotal	**963,378.33**	**160,908.32**	**58,539.76**	**17%**
Core Program	**15,946,114.23**	**2,847,680.06**	**1,093,180.51**	**18%**
A. District of Columbia Technical Assistance	274,755.81	8,979.81	3,662.81	3%
Program Development & Misc.				
B. Maryland Technical Assistance	483,303.48	16,476.26	7,260.34	3%
Program Development & Misc.				
C. Virginia Technical Assistance	436,679.71	21,380.55	10,022.72	5%
Program Development & Misc.				
D. Public Transit Technical Assistance	382,237.46	4,058.4	718.21	1%
Program Development & Misc.	**1,576,976.46**	**50,895.02**	**21,664.08**	**3%**
TPB Grand Total	**17,523,090.69**	**2,898,575.08**	**1,114,844.59**	**17%**

FY 2022 TRANSPORTATION PLANNING BOARD
FINANCIAL STATUS OF TECHNICAL ASSISTANCE
September 2021
SUPPLEMENT 1

	TOTAL AUTHORIZED BUDGET	TOTAL EXPEDITURES	FTA/STA/LOCAL AUTORIZED BUDGET	FTA EXPENDITURES	PL FUNDS/LOCAL AUTORIZED BUDGET	FHWA EXPENDITURES
A. DC Technical Assistant						
Climate Chg Mit Study -DC	7,460.00	7,460.30	53.07	53.07	7,406.93	7,407.23
Program Development & Misc	10,999.68	1,519.51	78.25	10.81	10,921.43	1,508.70
Regional Safety PGM-DC	30,000.00	0.00	213.41	0.00	29,786.59	0.00
Big Data Study-DC	196,296.13	0.00	1,396.40	0.00	194,899.73	0.00
TLC-DC	30,000.00	0.00	213.41	0.00	29,786.59	0.00
Subtotal	**274,755.81**	**8,979.81**	**1,954.54**	**63.88**	**272,801.27**	**8,915.93**
B. MD Technical Assistant						
Feasibility/Special Studies	14,921.00	14,920.60	106.14	106.14	14,814.86	14,814.46
MARC - VRE Runthrough - MD	24,998.00	0.00	177.83	0.00	24,820.17	0.00
Program Development & Misc	15,000.22	1,555.66	106.71	11.07	14,893.51	1,544.59
Planning Studies	35,000.00	0.00	248.98	0.00	34,751.02	0.00
Training, Misc and Tech Support	133,384.26	0.00	948.86	0.00	132,435.40	0.00
Transportation Performance Measures	260,000.00	0.00	1,849.57	0.00	258,150.43	0.00
Subtotal	**483,303.48**	**16,476.26**	**3,438.09**	**117.21**	**479,865.39**	**16,359.05**
C. VA Technical Assistant						
Big Data Study-VA	14,921.00	14,920.60	106.14	106.14	14,814.86	14,814.46
MARC - VRE Runthrough - VA	10,000.15	1,289.98	71.14	9.18	9,929.01	1,280.80
Program Development & Misc	35,000.00	0.00	248.98	0.00	34,751.02	0.00
TBD	6,359.64	0.00	45.24	0.00	6,314.40	0.00
Transportation/Land Use Connection Program	80,320.00	0.00	571.37	0.00	79,748.63	0.00
Travel Demand Modeling	85,079.43	0.00	605.23	0.00	84,474.20	0.00
Travel Monitoring	204,999.49	5,169.97	1,458.31	36.78	203,541.18	5,133.19
Subtotal	**436,679.71**	**21,380.55**	**3,106.42**	**152.10**	**433,573.29**	**21,228.45**
D. WMATA						
Pgm Development & Misc	5,000.07	4,058.40	5,000.07	4,058.40	0.00	0.00
Program Development & Misc	56,630.00	0.00	56,630.00	0.00	0.00	0.00
TBD	70,607.39	0.00	70,607.39	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	**382,237.46**	**4,058.40**	**382,237.46**	**4,058.40**	**0.00**	**0.00**
Grand Total	**1,576,976.46**	**50,895.02**	**390,736.51**	**4,391.58**	**1,186,239.95**	**46,503.44**