# FY 2022



Work Program Progress Report February 2022 FY 2022

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS 777 NORTH CAPITOL STREET, N.E., SUITE 300 WASHINGTON, D.C. 20002-4239 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 February. 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)

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Task 1	BUDGET	Billed this month	% Funds Expended	UPWP Page
LONG RANGE TRANSPORTATION PLANNING	\$1,095,434	\$75,344	60%	35

#### 1. LONG-RANGE TRANSPORTATION PLANNING

# 1.1 - Visualize 2045 Implementation

In February 2022, the TPB staff conducted numerous small meetings and two working group LRTP coordination meetings, during which planning and coordination take place for a range of LRTP activities and materials.

Staff graphic design of the plan, development and finalization of the numerous plan appendices, and preparation for the comment period and its related materials, to the draft final LRTP content, communications, mapping and public participation. Staff continued work on tasks related to documenting the technical and financial inputs to Visualize 2045.

As of this time much of the draft plan and appendices are nearing completion, with the focus of plan development on the production, messaging for and documentation of the system performance analysis. Using the model-data and other data, the TPB staff had produced maps and charts in spreadsheets and a preliminary presentation. This was presented to TPB leadership in February. Following this meeting, the staff refined the presentation and content and messaging for delivery to the public, the TPB Technical Committee, and the board, as well as for inclusion in the plan. Staff began drafting the system performance analysis section. Staff also coordinated with the Air Quality Analysis team to draft text and prepare charts for inclusion in the plan.

Staff continued the development of a stand-alone Executive Summary for the plan, which will be finalized and made available after the plan is approved.

Staff updated the Visaulize 2045.org website as needed to maintain a current site.

In coordination with other TPB staff, the LRTP team began working with a consultant team to conduct a 4-part webinar series on resiliency planning for the TPB region.

# 1.4 - Federal Compliance

There was no activity this month.

# 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 antiracist 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 principal, through TPB's analyses, operations, procurement, programs, and priorities to ensure a more prosperous, accessible, livable, sustainable, and equitable future for all residents.

Task 2	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRANSPORTATION IMPROVEMENT PROGRAM	\$466,962	\$16,701	54%	37

# 2. TRANSPORTATION IMPROVEMENT PROGRAM

#### 2.1 Transportation Improvement Program (TIP)

At its February 4, 2022 meeting, the TPB Steering Committee approved two amendments to the FY 2021-2024 TIP requested by MDOT. The first amendment added about \$12 million for construction of the MD 337 at MD 218 and I-95/I-495 Northbound Exit BRAC Intersection Improvements project and almost \$10 million for preliminary engineering on the I-95/I-495 Interchange at Medical Center Drive Study. This study will look into replacing an existing interchange with a similar nearby interchange. If the results of the study recommend this configuration, then construction of the project would be exempted from the air quality conformity requirement. However if the study recommends an alternative that functions differently than the existing interchange, the project will need to be reviewed to determine if it needs to be included in the conformity analysis. If so, then the project will need to be submitted as an amendment to the plan in the next update cycle before it can be programmed for construction.

Also during the month of February, TPB staff worked with staff from member agencies to develop inputs to the FY 2023-2026 TIP.

# 2.2 TIP Database Support

Contractor EcoInteractive, continued to provide their Software as a Solution platform, customized and branded as the TPB's Project InfoTrak database application, as well as ongoing bug fixes and help desk support for staff and member agency users. Work done under regular maintenance hours included: Fixes to the Conformity Information report due to a bug and to the Project Overview report which was omitting projects that should have been included based on search criteria. Under an expanded contract for professional services, EcoInteractive developed and refined further customizations of the software platform, including: finalizing the data import of Policy Question responses, and enhancements to the project description reports.

Task 3	BUDGET	Billed this month	% Funds Expended	UPWP Page
PLANNING ELEMENTS	\$2,768,270	\$152,789	49%	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.

TPB staff briefed the Technical Committee and TPB on the regional PBPP transit asset management targets. Staff prepared briefing materials on updates to highway asset performance data for pavement and bridge condition and highway system travel time reliability performance.

# 3.2 Congestion Management Process

Staff continued Congestion Management Process (CMP) data compilation and analysis for upcoming Quarterly Reports. Development of the biennial 2022 CMP Technical Report continued, with a goal to complete by the end of FY 2022.

#### 3.3 Systems Performance, Operations, and Technology Planning

Planning continued for future meetings of the Systems Performance, Operations, and Technology Subcommittee, as well as regional information compilation on related agency/jurisdictional activities.

#### 3.4 Transportation Emergency Preparedness Planning

The February 9, 2022, a 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

The regularly scheduled February 8, 2022, meeting of the Transportation Safety Subcommittee was organized and conducted. The agenda included a briefing on MassDOT's systemic/risk-based network screening tool, an overview of Morgan State University research on distracted driving, and an update on the Regional Roadway Safety Program.

Staff held planning sessions on February 1 and February 23 with the Transportation Safety Subcommittee Chair to identify topics and speakers for future Safety Subcommittee meetings.

#### 3.6 Bicycle and Pedestrian Planning

Staff presented the draft Bicycle and Pedestrian Plan to the TPB Technical Committee on February 4, to the Community Advisory Committee on February 10, and to the Access for All Committee on February 11, and to the Regional Public Transportation Subcommittee on February 22.

Staff revised the Bicycle and Pedestrian Plan to reflect comments received from committee members, member jurisdictions, and the public, prepared a memo summarizing those changes, and posted it for the March 4 TPB Technical Committee mail out.

#### 3.7 Regional Public Transportation Planning

The Regional Public Transportation Subcommittee met in February. Agenda items included: a roundtable on agenda topics for 2022, an update on WMATA's on demand transit study, and an overview of the TPB draft 2022 bike and pedestrian plan.

Staff worked on the Visualize 2045 long range transportation plan. Staff prepared letters of endorsement for federal grant applications by member jurisdictions. Staff prepared a survey questionnaire on transit service and ridership during recovery from the pandemic.

Staff attended a WMATA JCC meeting and Bus Priority workshop, a meeting of the MATOC Transit Task Force, and two Greater Washington Partnership webinars on the Bus Transformation Project report.

# 3.8 Freight Planning

Staff, in consultation with the Freight Subcommittee Chair, developed the agenda and secured speakers for the regularly scheduled March 10, 2022, meeting of the TPB Freight Subcommittee.

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

Staff finalized a scope for consultant assistance to update the Regional Freight Plan in FY 2022/2023.

# 3.9 Metropolitan Area Transportation Operations Coordination Program Planning

The regularly scheduled virtual meeting of the MATOC Severe Weather Coordination Working Group was organized and conducted on February 8, 2022, continuing planning and coordination for the region's winter weather response.

A periodic MATOC Transit Task Force virtual meeting was organized and conducted on February 23, to discuss operational, traffic, and transit ridership and services, including impacts of COVID-19.

The regularly scheduled MATOC Transit Task Force virtual meeting was organized and conducted on February 24, to discuss regional operational and traffic issues, including impacts of COVID-19.

The February 25 monthly 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.

Task 4	BUDGET	Billed this month	% Funds Expended	UPWP Page
PUBLIC PARTICIPATION	\$994,711	\$65,624	45%	45

#### **4. PUBLIC PARTICIPATION**

#### 4.1 Public Participation and Outreach

The Community Advisory Committee (CAC) to the TPB met on Thursday, February 10 for an online-only meeting. The committee was briefed on the recent TPB Resiliency Study and a draft of the 2022 update to the Bike and Pedestrian Plan. The committee also discussed priorities for the year.

Staff continued planning for public engagement activities related to the finalization of Visualize 2045. These activities will include a series of virtual open houses and a public comment period, as well as the federally required forum on the Transportation Improvement Program (TIP). The virtual open houses were scheduled for the evening of April 6 and noon on April 7. The TIP forum will be on April 14.

Staff continued work 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 February 11:

- 2021 Enhanced Mobility Solicitation
  - o TPB staff presented the 21 projects selected for funding under the 2021 Enhanced Mobility Solicitation and next steps for project implementation.
- 2022 Update of The Coordinated Human Service Transportation Plan for The National Capital Region
  - o TPB staff provided an overview of the plan and its connection to the Enhanced Mobility Program. In 2022, AFA will focus on providing input into the plan components in preparation for the 4-year update.
- TPB Change Mitigation Study Results
  - o TPB staff shared the goals and the key analysis steps of the study. Contractor ICF presented the four pathways for the ten scenarios used in the analysis, discussed the tools and models used, and shared the findings and key conclusions.
- Draft 2022 Update of The Bicycle and Pedestrian Plan for The National Capital Region

- o TPB staff provided an overview of the plan, its purpose, components, additions since the last update in 2015. Staff shared regional statistics on bike use and walking, best practices recommended for the region per input from TPB's Bicycle & Pedestrian Subcommittee, and the timeline for finalizing the plan and presenting it to the TPB for approval.
- o A discussion of the impacts of micromobility on people with disabilities followed.
- Other Business
  - o TPB staff shared plans to confirm membership for 2022 and collect some demographic information for COG/TPB's Title VI Plan in the process.

#### 4.2 Communications

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

COG grant and technical assistance programs help advance regional priorities

February 2, 2022

- TPB approves local Virginia bicycle and pedestrian projects for \$7.2M in federal funding February 16, 2022
- A recap of the February 2022 TPB meeting February 24, 2022
- Northern Virginia Transportation alternatives projects connect communities to the National Capital Trail Network
   February 24, 2022
- A closer look at transit asset management February 24, 2022

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.

Task 5	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL FORECASTING	\$3,298,337	\$171,819	46%	47

# **5.1 TRAVEL FORECASTING**

# 5.1 Network Development

For a sensitivity test, staff developed network files reflecting a scenario where only transit projects are built in the future. The network paired 2023 highway conditions with 2045 transit projects.

Staff provided the highway network database and 2018 transit network files to Montgomery County planning staff.

Staff updated the network database and the Public Transport (PT) export function of the COGTools network editing software to include additional attributes in the node and mode files that are required as part of the PT fare specifications. Staff conducted travel model runs to test the updated network files.

Staff has been working on a major update of the COGTools user's manual. In response to comments and suggestions received from the latest internal review, staff developed a new draft version of the user's manual, dated February 17, but this version is still undergoing internal review.

Staff is in the process of preparing tables, maps and charts for the Gen2/Ver. 2.4 Model highway and transit network report. Staff also started documenting the development of the unified network database as part of this report, aiming to develop the first draft by mid-March.

Staff investigated an issue related to the formatting of transit line files, text-based files which store transit route information used by the travel demand forecasting model. Specifically, each record or line in the file must be 144 columns or less. Staff will implement a fix either in the network database or in COGTools.

# 5.2 Model Development and Support

The Travel Forecasting Subcommittee (TFS) meets in odd-numbered months, so it did not meet in February. Nonetheless, staff prepared the meeting highlights from the January 28 TFS meeting.

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

Staff started to clean up and rerun the Gen2/Ver. 2.4 Travel Demand Model runs using the land use and transportation network inputs from the current air quality conformity analysis in preparation for the Gen2/Ver. 2.4 Model transmittal package, which is to be available for release after the 2022 Update of Visualize 2045 is approved by the TPB (likely June). Staff met on February 16 to coordinate within the team on the modeling assumptions for the transmittal package and the use of travel modeling server tms7 for the reruns.

# 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 software with TRANSIMS ModeChoice for the mode choice modeling of the TPB's Gen2 Travel Model. Staff tested the latest software, ModeChoice ver. 7.5.7, and shared the findings with AECOM, the developer of the software.

# Developmental, travel demand forecasting model: Generation 2/Ver. 2.4\_PT

Staff started to study the catalog files and documentation of Arlington County's new, tour-based travel model, which makes use of Public Transport (PT) software and was received by COG staff from Bentley Systems on January 27. Using this model as an example, staff plan to explore the feasibility of migrating from PT single pathing to PT multipathing in the Gen2/Ver.2.4\_PT Model and Gen3 Model.

Staff fixed a few issues found in the Ver. 2.4\_PT Model and conducted model runs to test the bugfixes. Examples included the summary of bus boardings in the LineSum control file, the Non-Transit (NT) leg generation for streetcar/BRT (Mode 10) stations and the zonehwy.net file.

# Developmental, travel demand forecasting model: Generation 3

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:

- Staff held two check-in meetings with RSG and BMG, the consultants on the Gen3 Model development project, on February 3 and 17.
- Staff provided review on a draft RSG report on Gen3, Phase 1, Model calibration/validation, dated February 1. Staff sent feedback to RSG on February 16.
- Staff continued to test the Gen3, Phase 1, Model received from RSG on January 8.
   Specifically,
  - Staff conducted a full base model run and found that the output was slightly different from the RSG base run output, which was also received on January 8. COG

- and RSG staff investigated the issue and found that the RSG base run was not a full run. Instead, it used the congested  $4^{th}$ -iteration skims from a previous run, which explained the discrepancy between the COG and RSG base run results.
- Subsequently, RSG conducted a full base model run with a model fix related to auto operating costs and compared it to the COG base run. The model results were slightly different due to the model fix. With the concurrence from RSG, given the small differences, staff decided to continue to use the January 8 model without this fix for the Phase 1 sensitivity testing.
- Staff failed to run Gen3 Model with memory chunk size training on travel model server #6 (tms6). COG and RSG staff investigated the issue and found that it was probably due to the resource requirement of chunking training. It appears that Gen3 Model with chunking training would not run on any computer with less than 128 GB of RAM (tms6 has only 32 GB of RAM). BMG is testing the Gen3 Model with chunking training on their server.
- With the assistance from COG's IT staff, DTP staff created a server instance on the cloud and conducted a chunk-size training test run using this virtual server. Staff plans to conduct more Gen3 Model test runs on the cloud.
- Staff tested the ABM Visualizer and found that it failed to run as part of the Gen3
   Model and it cannot be used to compare two model runs. RSG sent a revised setup
   on February 16. Staff made it partially run on the COG server on February 17.
- Using the Gen3, Phase 1, Model, staff conducted sensitivity testing following a plan laid out in August 2021. According to this plan, RSG would conduct two 2018 tests (Increased auto operating costs; and Increased telecommuting in DC) and COG would conduct one to three tests (Closure of a bridge; Doubled frequencies on high-capacity transit routes; and 50% increases in peak-period tolls). Specifically.
  - o COG staff prepared model inputs and conducted model runs for all three sensitivity tests.
  - Staff created model summaries comparing the baseline and alternative scenarios in the three sensitivity tests. Staff ran the ABM Visualizer and jurisdiction-to-jurisdiction trip flow summary procedures provided by RSG to summarize model results on the demand side; Staff also prepared summary programs (e.g., View-from-Space summary, volume difference plots, LineSum) for the Gen3 Model and executed them to compare model results on the supply side.
  - Staff documented the results and findings from the three sensitivity tests in sections of a draft report. The COG sections of the report are currently undergoing an internal review.
  - Staff also reviewed the RSG sections of the draft report which document the results and findings of the two sensitivity tests conducted by RSG.
- COG and RSG staff developed the scope of work for the Gen3 Model, Phase 2, development (Task Order 4). Specifically, staff reviewed different versions of the Task Order 4 proposals and budget proposals and provided feedback to RSG on February 3 and 22. The Task Order 4 proposal was finalized on February 23 and the Notice to Proceed (NTP) was issued on February 24.
- Enhancements and bug fixes related to Gen3 Model:
  - Staff applied the bugfix for Mode 10 NT leg generation that was recently implemented in the Ver. 2.4\_PT Model to the Gen3 Model and transmitted the updated script files to RSG.
  - On February 7, staff sent a request to RSG for a list of less important ActivitySim output files that can be moved to a temporary-files folder, which could be deleted later to save space.

#### 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. Finally, staff have continued to meet and work with IT staff to discuss moving more workstations and servers to the cloud, using a new web-based interface called C3HUB.

#### Other activities

Staff serviced seven data requests: Five requests were from consultants working on the FTA STOPS model development for Montgomery County DOT and working on the "Micro Mobility-Integrated Transit and Infrastructure for Efficiency" study for the National Renewable Energy Laboratory. One request was from the Town of Leesburg, Virginia and one was from an academic. The requested data include the Gen2/Version 2.4 Travel Model; daily volume plots (in PDF file format) for years 2019, 2040, and 2045 from the Version 2.3.75 Travel Model for Leesburg, Virginia; a shapefile representing zonal boundaries for the 3,722-TAZ area system; zone-to-zone highway skims and land activity data for years 2019, 2040, and 2045 from the Version 2.4 Travel Model; a mode choice model.

Per an internal request, staff collected and prepared year-2020 VMT fractions by jurisdiction and vehicle classification (Class 1- Class 13) data on February 17. Data will support the development of 2020 greenhouse gas (GHG) estimates from the on-road, transportation sector.

Staff updated Cube licenses on work computers per requests. Staff also re-installed Cube on one staff's computer. Per request from management, staff updated the COG data request webpage to include additional information in the subject line of the confirmation email.

Staff attended a Bentley Webinar on "Advancing travel demand models with Emme Agent" on February 15, 2022.

Staff attended ActivitySim Consortium meetings regularly on Tuesdays and Thursdays. Staff attended the ActivitySim Monthly Partners-Only Check-In meeting on February 17.

Staff attended a C3HUB introductory session on February 24. C3HUB will replace Remote Desktop Protocol (RDP) for COG teleworking. Staff attended Staff Learning Seminars - Equity Emphasis Areas, Session #1 of 3, on February 25.

Task 6	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILE EMISSIONS PLANNING	\$2,039,172	\$154,623	64%	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.

Upon finalizing the network development process, travel demand modeling, and emissions analysis, staff continued to conduct review and reasonableness checks of the results against the findings from previous analyses. Department of Environmental Programs (DEP) staff completed its review and conveyed approval of input and output files for various milestone years for the 2022 update to Visualize 2045 air quality conformity analysis.

Staff also continued to conduct performance analysis of the plan using the measures identified by the Plan Development and Coordination Team. Staff continued with development of the draft summary and full reports for the air quality conformity analysis.

Staff continued review of the Project InfoTrak (PIT) database to ensure that the air quality conformity records for the PIT projects match the final air quality conformity project input table as approved by the Transportation Planning Board (TPB) in the summer of 2021.

Staff reviewed the Congestion Mitigation Air Quality Public Access System (CMAQ PAS) to examine CMAQ projects submitted by the State DOTs for the purpose of reporting CMAQ emissions benefits for Performance Based Planning and Programming (PBPP) requirements. Staff also attended a Federal Highway Administration (FHWA) webinar on CMAQ as it relates to PBPP.

In response to an invitation by Dr. Ralph Buehler from the Virginia Polytechnic Institute and State University, TPB staff prepared and presented a lecture entitled, "Introduction to the COG/TPB Travel Forecasting Model." The guest lecture was presented to the graduate students enrolled in Transport Systems Planning.

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

#### 6.2 Mobile Emissions Analysis

Upon conclusion of the TPB Climate Change Mitigation Study of 2021 (CCMS), TPB staff developed, tested, and released a TPB member survey/questionnaire seeking input on various aspects of climate change planning, including potentially setting greenhouse gas (GHG) reduction goals for the transportation sector. TPB members have been asked to submit their responses to the survey by April 1. Prior to the survey release, draft versions of the survey and the accompanying memorandum were shared with the TPB Technical Committee (item #7) and the TPB (item #11).

DEP and 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). DEP staff continued to facilitate discussions with the Metropolitan Washington Air Quality Committee – Technical Advisory Committee (MWAQC-TAC). MWAQC-TAC (item #2) and MWAQC (item #4) were both briefed on the next steps related to the 2015 ozone NAAQS SIP planning.

TPB staff continued to work with DEP staff, member jurisdictions, and state air agencies to facilitate various aspects of air quality and climate change planning activities in the region. Specifically, TPB staff have been working closely with DEP staff on an update of regional greenhouse gas inventories and coordinating on the planning and technical processes. TPB staff and DEP staff also continued to assist local jurisdictions with climate change planning and responded to various requests for information/data requested by the District of Columbia, Arlington County, and the City of Falls Church.

TPB staff also continued to conduct MOVES model tests to further refine GHG 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 Gen2/Ver. 2.4 Travel Demand Model and to introduce innovative new processes (e.g., machine learning).

11

Task 7	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL MONITORING AND DATA PROGRAMS	\$2,141,001	\$97,871	37%	53

#### 7. TRAVEL MONITORING AND DATA PROGRAMS

#### 7.1 Travel Surveys

# Regional Travel Survey (RTS)

Staff fielded various data requests from stakeholders.

Staff responded to an inquiry about the availability of codebooks from previous COG/TPB household travel surveys.

Staff met with the City of Frederick transportation planner to discuss how the RTS data can be used to inform the City's bicycle and pedestrian mode share goals.

Staff responded to an inquiry about bicycle trips in the RTS.

Staff responded to an inquiry from the Baltimore Metropolitan Council about the RTS/Maryland Travel Survey data.

**Smartphone Panel Survey** 

No activity.

#### **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.

# **Other**

Staff provided input on and finalized the TPB Climate Change Mitigation Survey Goals and Strategies Questionnaire.

Staff participated in biweekly meetings with the Gen3 Model Development Team.

Staff held an internal debriefing to share insights and lessons learned from the 2022 Transportation Research Board (TRB) Annual Meeting.

# 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. Staff gave briefings on the COVID impacts to COG's National Capital Region Water Security Work Group and to the Montgomery Business Advisory Panel during the month of February.

#### **COVID-19 TRAVEL MONITORING SNAPSHOTS**

Staff prepared the data analysis for the Pre-pandemic through December 2021 COVID Travel Monitoring Snapshot, once it is finalized, the snapshot will be posted on the COG/TPB website. Staff participated in a call with fellow COG/TPB staff and a reporter from The Washington Post to discuss the highway traffic data used in the COVID Travel Monitoring Snapshot and their limitations.

# <u>Transportation Data Dashboard</u>

No activity.

#### **Equity and High-Capacity Transit Focus**

Building on the resolutions of the COG Board of Directors and the TPB to optimize High-Capacity Transit (HCT) and elevate Equity Emphasis Areas (EEAs) as planning tools, staff continued to develop maps and visualizations of the region's EEAs and HCT). Staff prepared revisions to previously completed memoranda on EEAs and HCTs originally used to support the COG Board leadership retreat. Staff also reviewed and confirmed estimates of population, employment, and households within a half-mile and mile of high-capacity transit stations. Staff conducted an internal "lunch and learn" demonstration of the EEA and HCT interactive tool to staff in all COG departments to help promote the use of EEAs and HCT in the organization's regional planning efforts.

#### Other Activities

Staff collaborated on a SAS best practices document to be shared with new staff and other users of SAS as a guide. In addition, staff met with fellow staff to explain the SAS auto log-saving function. Staff participated in a SAS migration planning discussion with COG IT staff.

Staff attended the second quarterly meeting of the National Park Service (NPS) Regional Trail Count Program stakeholders on February 24. Staff also participated in a meeting with NPS on February 28<sup>th</sup>.

Staff developed and reviewed language for the on-call planning services contract recompete.

Staff participated in a debriefing session after the TRB annual conference where staff shared their experiences and takeaways with TPB staff who did not attend the conference.

Staff participated in new leadership training for the AMPO Data Working Group.

# 7.3 Regional Transportation Data Clearinghouse

Staff finalized the 2020 HPMS data for the District, Maryland, Virginia, and West for input into the SAS programs that synthesize pavement data for the region and to create a 2020 HPMS layer for the TPB Modeled Region. In addition, staff downloaded the 2021 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 worked to produce HPMS layers for previous years with consistent data items and geographic footprints. In addition, staff worked to create linkable pavement rating tables for each year for the TPB planning region. This work is ongoing.

Staff continued to review the active transportation data currently available in the RTDC to develop recommendations for updating these data.

Staff attended the second quarterly meeting of the National Park Service (NPS) Regional Trail Count Program stakeholders on February 24.

Staff worked with fellow staff for identifying recent data received for weekday transit ridership from regional public transportation providers.

Staff updated the ArcGIS Online web map for Equity Emphasis Areas (EEA on the HCT-EEA resources page

Staff responded to a request from the City of Rockville regarding the availability of Equity Emphasis (EEA), Transit Access Focus Areas (TAFA) and COG Activity Centers data.

Staff participated in meetings and email exchanges with the Travel Forecasting and Emissions Analysis Program team and their contractor, RSG.

# 7.4 GIS Data, and Analysis

Staff worked with the leadership of the GIS Committee to begin to plan the March 15 GIS Committee/GDX Working Group virtual meeting.

Staff completed the first version of the data dashboard application for the TPB Bicycle and Pedestrian Plan for the National Capital Region.

Staff created updated static map products for the High Capacity Transit (HCT) and Equity Emphasis Areas (EEA) to include the COG adjunct member jurisdictions, at the request of the Office of Communications.

Staff responded to a request from the Office of Communications for a map of High-Capacity Transit (HCT) map without the National Capital Trail Network (NCTN) for Prince George's County.

Staff worked with fellow staff to update the version of the HCT-TAZ table available on the G Drive. Staff also replaced the geodatabase for High-Capacity Transit stations.

Staff continued to work with fellow DTP staff to reconcile transit projects in the Project InfoTrak (PIT) database against the current dataset managed in GIS.

Staff drafted a comprehensive response to the System Operations team regarding some questions related to the analysis performed on the projects in the Bicycle and Pedestrian Plan.

Staff responded to a question received from the City of Manassas regarding the statistics generated for the Bicycle and Pedestrian Plan regarding COG Regional Activity Centers and High Capacity Transit (HCT) stations.

Staff continued to work on the 'Voices of the Region' story map. Staff met with staff from the Plan Development & Coordination team throughout the month to discuss the project.

Staff began work on the major projects map for Visualize 2045. Staff met with staff rom the Plan Development & Coordination team to discuss the project and data needs and is currently awaiting an updated dataset upon which to complete the project.

Staff worked with Commuter Connections staff to update the Bike to Work Day (BTWD) web map with changes to pit stop locations. The map was operational in time for the March 1 start of registration for BTWD.

Staff assisted Department of Environmental Programs (DEP) staff with creating an online map showing the DC Water service area and the Equity Emphasis Areas layer.

Staff responded to an inquiry received via the COG website regarding the availability of a regional parcel dataset.

Staff performed updates to TPB/COG's SQL database connections in ArcGIS and SQL Management Studio as a result of the migration to said database to the cloud.

Staff continued to work with COG's Information Technology (IT) staff to identify implement changes to TPB/COG's GIS hardware and software environment.

Staff attended the February meeting of the Maryland State Geographic Information Committee (MSGIC) on February 8.

Staff attended a webinar on ArcGIS Hub training sponsored by MSGIC on February 3.

Task 8	BUDGET	Billed this month	% Funds Expended	UPWP Page
REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION	\$1,190,179	\$72,324	53%	57

#### 8. REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION

#### 8.1 Socioeconomic Forecasting

#### Planning for Round 10

DCPS staff continued work on the 2020 Census block to COG TAZ conversion and began distributing the appropriate files to individual Subcommittee members.

DCPS staff continued work on finalizing geo-coding of the DataAxle employment file and began sharing individual jurisdictional databases with Subcommittee members.

DCPS staff worked with DTP staff to revise a proposed list of tasks for potential consultant assistance in preparing the Round 10 Forecasts. The tasks include developing a 'range' of regional econometric benchmark forecasts; determining trends in future average household size; assessing changes in future office, retail, and industrial space use density, i.e., square feet of space needed per worker; and assessing potential post-COVID impacts to the timing and location of future housing.

The Planning Directors were briefed on the "Metropolitan Washington Planning Framework for 2030: Advancing Housing, Climate, Transportation and Equity Goals" by Executive Director Chuck Bean; a briefing from Angie Rodgers, Prince George's County Deputy Chief Administrative Officer for Economic Development on "Prince George's County Economic Development Platform", and a Committee member discussion of potential 2022 meeting themes, including: Accessory Dwelling Unit Programs and impediments to reaching our housing goals.

#### COVID-related impacts on the economy

DCPS staff continued to update the PowerPoint presentation that documents the effects to date of COVID on the region's economy. Recent data showed that the region has recovered a lower share than the national average of jobs that were initially lost at the onset of the Pandemic, and staff began to compile additional data on 'recovered' jobs in the COG region and peer MSAs. Data also continue to show that the Washington MSA has lower 'return to office rates' (as measured by security key card use) than the national average for the 10 largest MSAs.

DCPS Director briefed Montgomery County Executive Marc Elrich's Business Advisory Panel on regional economic trends at their annual meeting on February 24.

#### **Housing Targets update**

DCPS staff worked with the Executive Office and Amazon staff to launch the new Housing Affordability Planning Program (HAPP) grants. Modeled after TLC and other DTP programs, HAPP will competitively award small grants of up to \$75,000 each for efforts to maintain or increase affordable housing in HCTs and EEAs. More than 20 abstracts for proposed applications were received by February 10 and staff responded to each by February 23.

# Visualize 2045 Performance Analysis

Staff met to discuss technical methods for a new performance measure, Population Weighted Density measure, which uses Cooperative Forecast data.

Task 9	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILITY AND ENHANCEMENT PROGRAMS	\$988,671	\$95,587	26%	59

#### 9. MOBILITY AND ENHANCEMENT PROGRAMS

# 9.1 Enhanced Mobility Grant Program

Staff began updating the Enhanced Mobility Program Management Plan, which was last approved by the Federal Transit Administration in 2016.

Staff attended a series of Federal Transit Administration webinars on compliance requirements for the Enhanced Mobility program, including procurement, Civil Rights, and Program Management.

# 9.2 Regional Roadway Safety Program

The application period for the FY 2023 round of Regional Roadway Safety Program (RRSP) projects opened on January 18. The deadline to submit applications is March 18 and the deadline to submit optional abstracts was February 11. Staff responded with feedback to each of the four abstracts submitted by member jurisdictions.

Each of the five FY 2021 RRSP projects is now underway with progress as described below:

- MD (Montgomery and Prince George's Counties -- MD 650 Safety Study) The consultant led two bi-weekly progress update meetings in February. The consultant collected relevant data (including crash data) for the study area and began efforts to plan and organize a virtual public meeting scheduled for March.
- MD (Prince George's County Roadway Safety Audits) The consultant began collecting relevant data on the Belcrest and Sherriff Road study segments and began planning and organizing site visits scheduled for March.
- MD (City of Laurel Roadway Safety Audit) In preparation for the road safety audit (RSA), City of Laurel staff and the consultant began efforts to identify members of the RSA Team. The consultant also developed a comprehensive RSA checklist based on FHWA RSA Guidelines for review and comment by City staff.
- VA (Arlington County School Zone Speed Camera Guidelines) Following the project kick-off, Arlington County staff and the consultant updated and verified the project schedule. The consultant also began gathering best practices and reviewing literature related to US automated traffic enforcement (ATE) programs, especially those with a focus on school zones.
- VA (Town of Herndon Herndon Parkway Complete Streets) The Town of Herndon staff and the consultant discussed project data needs and design constraints within the study area.
   The consultant also developed preliminary design concepts for a two-way cycle track for the Town's review and comment.

#### 9.3 Transportation Alternatives Set-Aside Program

At its February meeting, the TPB approved eight projects for funding as part of the FY 2023-24 round of Virginia TAP. These projects were selected from 24 applications that were reviewed and researched by staff. A selection panel met in January to identify the projects recommended for

funding. Throughout this process, staff coordinated extensively with VDOT staff and with the CTB district member for Northern Virginia.

# 9.4 Transportation/Land-Use Connections (TLC) Program

Work on all 11 TLC projects for FY 2022 was underway. See below:

- Discovery District Multi-Use Trail Transit Access Plan (College Park) Continued work on existing conditions and development of base map.
- Congress Heights Pedestrian Access Study (District of Columbia) The consultant presented a draft slide deck with their recommendations for the study area for review.
- Assessment of Microtransit (District of Columbia) The assessment of existing conditions was reviewed and revised.
- Active Transportation Plan near the Huntington Metrorail Stations (Fairfax County) Draft recommendations were submitted to the county for review.
- East End Transportation Study (Falls Church) The consultant reviewed data provided by the city and developed draft recommendations.
- East Street Redesign (Frederick County) The first public information meeting was held on Feb 28 to introduce the project, discuss project goals, and present existing conditions.
- Greenbelt Road Corridor Plan (Greenbelt) The project team hosted a public Visioning Meeting on February 10. City of Greenbelt staff and the consultant collected citizen comments about pedestrian and bicyclist needs in the corridor. The consultant will share preliminary recommendations at the City Council meeting on March 23.
- Connecticut Avenue Corridor Planning (Kensington Montgomery County) A stakeholders meeting was held on January 21<sup>st</sup>. Short-mid and long-term alternatives were discussed, as well as materials needed for public outreach. A public workshop will be held April 21 in the town armory. The project is on schedule.
- Cool-Street Design Guidelines and Standards (Montgomery County) There were some e-mail exchanges between consultant and Montgomery County. On March 9, the consultants sent interim deliverables for review. There has been regular contact between the project team and a meeting to answer questions was held on March 24 that I was not present for.
- The Anacostia Gateway/PG Connector Trail Design Project The contractor has updated the concept trail alignment and worked with M-NCPPC b to select a preferred alignment. The alignment was revised to adjust proposed slopes and confirm ADA compliance while trying to avoid the FEMA and county flood plains as much as possible. The contractor also met with M-NCPPC staff last week to discuss a potential new location for the bridge that might further decrease impacts to the park. After discussing this new option, the contractor will move forward with getting the survey for the finalized alignment.
- Innovation Park Shuttle Service Feasibility Study (Prince William County) The project team held a check-in conference call on February 10. The consultant delivered a presentation providing an overview of the project to the Prince William County Planning Commission on February 23.
- The application period for the FY 2023 round of TLC was open between December 17 and February 22. A total of 20 applications were received. Staff lined up a selection panel to develop recommendations for funding. The panel was scheduled to meet in March. In February, staff conducted research on the applications and began the process of conducting site visits.

Task 10	BUDGET	Billed this month	% Funds Expended	UPWP Page
TPB MANAGEMENT AND SUPPORT	\$963,379	\$33,220	40%	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 to all the Department's activities. Work activities the Director was involved in during the month of **FEB 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 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/MSC) 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 to all the Department's activities. Other additional activities for the TPB Staff Director for the month of FEB FY 2022:

- Telephone / Web Ex / Microsoft Teams Communications:
- COG's CAO and Board meetings

- COG's Legislative Initiatives @ WMATA Update meeting
- MWAQC meeting
- Planning Directors Technical Advisory Committee meeting
- COG-Staff Equity learning session
- GWP's Metro Now's Bus Transformation Project / Staff& Project Report
- Changes Maryland Air Quality Forecasting Process (MDE)
- City of Takoma Park Safety Study Discussions

#### **UPWP**

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

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

Task 11	BUDGET	Billed this month	% Funds Expended	UPWP Page
TECHNICAL ASSISTANCE	\$1,576,979	\$121,675	16%	63
District of Columbia	\$274,756	\$856	5%	63
Maryland	\$483,305	\$20,988	17%	65
Virginia	\$436,679	\$99,830	32%	68
Regional Transit	\$382,238	\$0	2%	71

#### 11. TECHNICAL ASSISTANCE

#### 11.1 District of Columbia

# Program Development, Data Requests and Miscellaneous Services

Staff coordinated and directed Michael Littman with Volpe to reach out to DDOT to request Technical Assistance to obtain travel demand model output for use in the Rock Creek and Potomac Parkway Reversible Lanes Study.

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

# Regional Safety Program

As part of the Regional Safety Program, five 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.

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

As part of the Transportation/Land-Use Connections Program, the District of Columbia Technical Assistance Program is partially funding one technical assistance projecting the District of Columbia. 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.

#### 11.2. Maryland

#### Program Development, Data Requests, and Miscellaneous Services

Provided a status update and overview of the Technical Assistance Program during the State Technical Working Group meeting.

Staff submitted an update on the FY 2022 budget and plans to carry over funds to FY 2023.

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

# Transportation / Land Use Connections Program

As part of the Transportation/Land-Use Connections Program, four technical assistance projects in Maryland were fully or partially funded through the Maryland 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.

# Regional Safety Program

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

#### 11.3. Virginia

# Program Development, Data Requests, and Miscellaneous Services

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

#### <u>Travel Monitoring and Survey</u>

#### Active Transportation Counts

Staff continued to prepare the data for the Spring 2021 Active Transportation report. Staff met with VDOT staff to discuss possible improvements to the active transportation geodatabases used to display past counts. Staff worked with the consultant to address some issues with the Fall 2021 non-motorized count data.

# I-66 & I-395 Mode Share Study

Staff continued to conduct data analysis for the VDOT I-66/I-395 mode share study, this included completing the transit data summaries and preparing study memos and transmittal files.

# 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.

#### Transportation / Land-Use Connections Program

As part of the Transportation/Land-Use Connections (TLC) Program, three 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.

# Regional Safety Program

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

# 11.4 Regional Transit

#### **Program Development**

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

# Transit Within Reach

The jurisdictions, consultants, and staff liaisons participated in kick-off meetings for the projects.

For the Walter Johnson Shared-Use Path, staff collaborated with Montgomery County and the consultant to amend the scope and remove a section of the path influenced by a recent development application and increase the scope for the portion of the project that remains from 15 to 30 percent design.

# **High Capacity Transit Map**

No activity.

#### **CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM**

# Continuous Air System Planning Program Management

New staff member (transportation data analyst) continued with orientation by reviewing documents providing background and context for the Washington-Baltimore Air Passenger Survey (APS) and the CASP program.

Staff finalized a recruitment announcement for a planner for the CASP program and then worked with human resources to post it.

Staff delivered a briefing on the status of planning for the 2022 APS, upcoming activities, and the status of implementing survey improvement recommendations to the Aviation Technical Subcommittee on January 27. During the Subcommittee meeting, staff also reviewed the draft 5-year program of future grant-funded projects proposed to be undertaken as part of the CASP Program.

February FY 2022 21

Staff finalized the Airport Capital Improvement Plan (ACIP) for FY 2022-2026 and submitted it to the Federal Aviation Administration (FAA)

Staff provided updated tabulations on air passenger data for greenhouse gas inventories at the request of Department of Environmental Programs (DEP) staff.

#### Air Passenger Survey

Staff reviewed the documents providing background and context for the Washington-Baltimore Regional Air Passenger Survey (APS) and the CASP program.

Staff reviewed the flow chart documenting the data editing, factoring, and production of factored 2019 APS tables.

Staff reviewed the SAS programs developed for the 2019 APS in preparation for the 2022 APS

Staff investigated an anomaly in the 2019 APS air passenger mode of access originations from King George County, VA, In preparation for finalizing the 2019 geofindings report.

#### Air Cargo Element Update

No Activity.

**Ground Access Travel Time Study** 

No Activity.

Ground Access Forecast and Element Update

No Activity.

#### PROGRESS ON PLAN PRODUCTS

# Task 3. Planning Elements

Regional Highway Safety Targets

- Draft targets presented to the TPB in December 2021
- Final targets adopted by the TPB in January 2022

Regional Bicycle and Pedestrian Plan Update

Plan to be adopted by the TPB in May 2022.

# Task 5. Travel Forecasting

- A series of highway and transit networks reflecting the latest LRTP and TIP for input to the regional travel demand model.
  - 2022 Update to Visualize 2045: Transportation networks have been developed for 2021, 2023, 2025, 2030, 2040, and 2045.
  - SIP work associated with the 2015 Ozone NAAQS: Transportation networks have been developed for 2017 and 2020.
  - o Gen3 Travel Model: Transportation networks with four time-of-day periods have been developed for 2018 base year and the 2045 out year.
- Maintenance, support for and development of currently adopted travel models, including inputs, application files, and documentation.

- o Travel Forecasting Subcommittee: Staff has conducted meetings in July, September, November, and January.
- Staff is working 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. In February, staff serviced six data requests (total of 24 for FY 22).
- Continued development, with consultant assistance, of the TPB's next-generation travel demand forecasting model, which will be an activity-based model (ABM), known as the Gen3 Model, which will occur over a three-and-a-half-year period, from FY 2020 to FY 2024.
  - Gen3, Phase 1 Model: A developmental model and associated technical documentation. This developmental travel model, which is designed for testing by TPB staff, is currently expected in late Feb. 2022 (FY 22).
    - Staff continues to manage consultant (RSG) developing the Gen3 Model.
    - Staff reviewed and provided feedback on consultant deliverables.
    - Gen3, Phase 1 Model has been estimated, calibrated, validated and delivered to COG staff for testing purposes. Documentation is in progress.
  - o Gen3, Phase 2 Model: Expected to be a production-use travel model that could be used for regional planning work. Model is expected in summer 2023 (i.e., late FY 23 or early FY 24). Work is being conducted under Task Order 4.

# Task 6. 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.
  - o Travel demand modeling runs completed for 2021, 2023, 2025, 2030, 2040, and 2045.
  - Mobile emissions modeling MOVES2014b model runs conducted for 2021, 2023, 2025, 2030, 2040, and 2045.
- TPB Climate Change Mitigation Study of 2021 (CCMS). This study spans two fiscal years: FY 21 and FY 22.
  - o COG/TPB staff presentations, FY 22
    - Morrow, Erin. "TPB Climate Change Mitigation Study of 2021 Overview and Update." presented at the October meeting of the National Capital Region Transportation Planning Board's Community Advisory Committee, held at the Metropolitan Washington Council of Governments, October 14, 2021.
    - Morrow, Erin. "TPB Climate Change Mitigation Study of 2021 Overview and Update." presented at the November meeting of the National Capital Region Transportation Planning Board's Access for All Advisory Committee, held at the Metropolitan Washington Council of Governments, November 12, 2021.
    - Srikanth, Kanti. "TPB Climate Change Mitigation Study of 2021: Final Report Update." Presented at the January meeting of the Technical Committee of the National Capital Region Transportation Planning Board, held at the Metropolitan Washington Council of Governments, January 7, 2022.
  - o Consultant presentations, FY 22
    - Grant, Michael. "TPB Climate Change Mitigation Study of 2021 Scenario Development." presented at the September meeting of the Technical Committee of the National Capital Region Transportation Planning Board, held at the Metropolitan Washington Council of Governments, September 10, 2021.
    - Grant, Michael. "TPB Climate Change Mitigation Study of 2021 Scenario Development." presented at the September meeting of the National Capital

- Region Transportation Planning Board, held at the Metropolitan Washington Council of Governments, September 22, 2021.
- Grant, Michael, Kanti Srikanth, and Mark S. Moran. "TPB Climate Change Mitigation Study of 2021 - Report Findings." presented at the December meeting of the Technical Committee of the National Capital Region Transportation Planning Board, held at the Metropolitan Washington Council of Governments, December 3, 2021.
- "TPB Climate Change Mitigation Study of 2021: Report Findings." presented at the December meeting of the National Capital Region Transportation Planning Board's Community Advisory Committee, held at the Metropolitan Washington Council of Governments, December 9, 2021.
- "TPB Climate Change Mitigation Study of 2021: Report Findings." presented at the December Work Session of the National Capital Region Transportation Planning Board, held at the Metropolitan Washington Council of Governments, December 13, 2021.
- Grant, Michael, and Mark S. Moran. "TPB Climate Change Mitigation Study of 2021: Report Findings." presented at the December meeting of the National Capital Region Transportation Planning Board, held at the Metropolitan Washington Council of Governments, December 15, 2021.
- Grant, Michael, and Mark S. Moran. "TPB Climate Change Mitigation Study of 2021: Report Findings." Presented at the January meeting of the COG Climate, Energy and Environment Policy Committee, held at the Metropolitan Washington Council of Governments, January 26, 2022.
- Grant, Michael, and Mark S. Moran. "TPB Climate Change Mitigation Study of 2021: Report Findings." presented at the February meeting of the National Capital Region Transportation Planning Board's Access for All Advisory Committee, held at the Metropolitan Washington Council of Governments, February 11, 2022.
- o COG/TPB staff documents, FY 22
  - Moran, Mark S. Memorandum to National Capital Region Transportation Planning Board. "TPB Climate Change Mitigation Study of 2021: Release of Literature Review with Executive Summary (Item #5, Steering Committee and Director Report)." Memorandum, July 15, 2021.
  - COG website: "TPB Climate Change Mitigation Study of 2021." Metropolitan Washington Council of Governments, July 15, 2021.
     <a href="https://www.mwcog.org/documents/2021/07/15/tpb-climate-change-mitigation-study-of-2021-climate-change-greenhouse-gas-scenario-planning/">https://www.mwcog.org/documents/2021/07/15/tpb-climate-change-mitigation-study-of-2021-climate-change-greenhouse-gas-scenario-planning/</a>.
  - TPB staff. Memorandum to TPB Community Advisory Committee. "TPB Community Advisory Committee Questions and TPB Staff Responses Regarding the October 14, 2021 TPB Staff Presentation on the TPB Climate Change Mitigation Study." Memorandum, November 9, 2021.
- o Consultant documents, FY 22
  - ICF. TPB Climate Change Mitigation Study of 2021: A Review of Climate Action Plans and Literature on Transportation Greenhouse Gas Emissions Reduction Strategies and Their Effectiveness. National Capital Region Transportation Planning Board, Metropolitan Washington Council of Governments, July 8, 2021.
  - 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.

- ICF. TPB Climate Change Mitigation Study of 2021: Task 5 Technical Documentation: Selection of Modeling Tools and Analysis Approach. National Capital Region Transportation Planning Board, Metropolitan Washington Council of Governments, November 5, 2021.
- ICF, Fehr & Peers, and Gallop Corporation. TPB Climate Change Mitigation Study of 2021: Scenario Analysis Findings. Draft Report. National Capital Region Transportation Planning Board, Metropolitan Washington Council of Governments, December 9, 2021.
- TPB Climate Change Mitigation Study of 2021: Technical Appendix.
   Draft Report. National Capital Region Transportation Planning Board,
   Metropolitan Washington Council of Governments, December 17, 2021.
- ICF, Fehr & Peers, and Gallop Corporation. "TPB Climate Change Mitigation Study of 2021: Scenario Analysis Findings." Final Report. National Capital Region Transportation Planning Board, Metropolitan Washington Council of Governments, January 7, 2022.
- ——. "TPB Climate Change Mitigation Study of 2021: Technical Appendix."
   National Capital Region Transportation Planning Board, Metropolitan
   Washington Council of Governments, January 7, 2022.
- Other climate change planning activities
  - Srikanth, Kanathur (Kanti). Memorandum to National Capital Region Transportation Planning Board. "Process to Solicit Member Input on Climate Change Mitigation Goals and Strategies and Incorporate TPB Action in the 2022 Update to Visualize 2045." Memorandum, February 10, 2022.
  - National Capital Region Transportation Planning Board. Climate Change Mitigation Goals and Strategies Questionnaire. Interview by TPB staff, February 28, 2022.
- 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.
- 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).
- 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 letter: Day, Robert, Metropolitan Washington Air Quality Committee (MWAQC), Deni Taveras, Climate, Energy and Environment Policy Committee (CEEPC), Charles Allen, National Capital Region Transportation Planning Board (TPB). 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." Letter, September 22, 2021.
  - Developed joint letter: Day, Robert, Metropolitan Washington Air Quality Committee (MWAQC), Deni Taveras, Climate, Energy and Environment Policy Committee (CEEPC), Charles Allen, National Capital Region Transportation Planning Board (TPB). Letter to Steven Cliff and National Highway Traffic Safety Administration. "Support for the Proposed Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks; Docket ID No. NHTSA-2021-0053." Letter, October 18, 2021.
  - Morrow, Erin, and Dusan Vuksan. Memorandum to National Capital Region
     Transportation Planning Board. "Revised 2023 and Later Model Year Light-Duty

Vehicle Greenhouse Gas Emissions Standards: Final Rule." Memorandum, January 12, 2022.

- 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 summarized and presented key findings to the TPB Technical Committee and MWAQCTAC. TPB staff also transmitted the decoded dataset to the three state air agencies.
- TPB staff also continued to conduct MOVES model tests to further refine greenhouse gas emissions modeling estimates for future studies.
- Transportation and Climate Initiative (TCI)

Developed memorandum: Morrow, Erin. "Transportation and Climate Initiative (TCI): Model Rule, Summary of Public Input, and Additional Draft Documents Released." July 15, 2021.

#### **Travel Surveys**

- Geographic-focused Surveys Workplan
  - o Work to begin in 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 Under development
- COVID-19 Pandemic Regional Travel Behavior (periodic updates)
  - o Periodic updates and presentations delivered and to be delivered throughout performance period.
- COVID-19 Travel Monitoring Snapshots (periodic updates)
  - Snapshots published in July (May 2021 data), September (July 2021 data), October (August and September data), and January (October and November data)
  - o Future snapshots anticipated and under development

#### Task 8. Regional Land Use and Transportation Planning Coordination

#### 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 Under development.
- Code Census Block Groups to TAZ (June 2022)
  - o Under development
- Census 2020 reports and presentations (ongoing)
  - o Initial draft and presentation complete to highlight demographic trends shown in the 2020 Census PL94-171 legislative redistricting data
- Cooperative Forecasting Round 10 workplan (December 2021)

- o Complete
- Multifamily Housing Report (June 2022)
  - o Complete
- Commercial Construction Indicators Report (June 2022)
  - o Work to begin later in fiscal year

# CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM

- 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

# Coordinated Human Services Transportation Plan

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

# FY 2022 TRANSPORTATION PLANNING BOARD COG/TPB BUDGET EXPENDITURE SUMMARY February 2022

	bruary 2022			
	DC, MD and VA		BILLED	
	FTA, FHWA and LOCAL	FUNDS	THIS	% FUNDS
	BUDGET TOTAL	EXPENDED	MONTH	EXPENDED
Long-Range Transportation Planning				
Long - Range Transportation Planning	1,095,435.13	662,561.32	75,344.65	60%
Subtotal	1,095,435.13	662,561.32	75,344.65	60%
2. Performance-Based Plannin				
Transportation Improvement Program	266,963.20	147,266.37	16,701.18	55%
TIP Database Support	200,000.00	104,817	0	52%
Subtotal	466,963.20	252,083.37	16,701.18	54%
3. Planning Elements				
Congestion Management Process	434,253.21	237,477.92	26,371.15	55%
Systems Performance, Ops & Tech Planning	632,941.76	260,141.55	26,095.41	41%
Transportation Emergency Preparedness Planning	128,257.20	60,959.21	8,514.87	48%
Transportation Safety Planning	311,703.59	151,470.97	17,435.17	49%
Bicycle & Pedestrian Planning	168,032.40	108,493.34	15,557.12	65%
Regional Public Transportation Planning	391,160.06	140,045.99	12,800.54	36%
Freight Planning	318,664.86	139,881.54	16,755.29	44%
Metropolitan Area Transportation Operation Coord Program Planning	170,787.19	96,581.51	11,633.87	57%
Performance-Based Planning & Programming	212,468.43	161,391.07	17,626.06	76%
Subtotal	2,768,268.70	1,356,443.1	152,789.48	49%
4. Public Participation				
Public Participation	994,710.64	450,221.69	65,624.56	45%
Subtotal	994,710.64	450,221.69	65,624.56	45%
5. Travel Forecasting				
Software Support	226,785.46	104,725.91	11,073.47	46%
Network Development	1,012,945.63	586,844.71	74,850	58%
Model Development	2,058,605.72	833,326.99	85,895.54	40%
Subtotal	3,298,336.81	1,524,897.61	171,819.01	46%
6. Mobile Emissions Planning	1			
Air Quality Conformity	922,930.14	590,442.01	71,269.72	64%
Mobile Emissions Analysis	1,116,241.77	711,822.05	83,353.36	64%
Subtotal	2,039,171.91	1,302,264.06	154,623.08	64%
7. Travel Monitoring and Data Programs	77	,,		
Regional Travel Survey	326,936.32	162,946.83	20,914.76	50%
Traffic Analysis & Research	841,214.05	123,844.91	15,556.71	15%
Regional Transportation Data Clearinghouse	324,078.11	134,646.01	15,440.71	42%
GIS Analysis	648,770.77	364,655.7	45,959.77	56%
Subtotal	2,140,999.25	786,093.45	97,871.95	37%
Planning Scenarios and Socioeconomic Forecasting	2,110,000.20	100,000.10	01,011100	0.70
Socioeconomic Forecasting	1,190,180.11	626.163.01	72,324.61	53%
Subtotal	1,190,180.11	626,163.01	72,324.61	53%
9. Mobility and Enhancement Programs	1,100,100111	323,13333	12,021101	
Transportation and Land Use Connections Program	412,200.72	146,451.23	83,065.08	36%
Enhanced Mobility Grant Program	98,545.26	62,130.46	6,975.88	63%
Transportation Alternatives Set-Aside Programs	38,158.07	17,466.56	1,989.34	46%
Other Tasks to be defined 9.5	439,766.10	26,322.47	3,557.31	6%
Subtotal	988,670.15	252,370.72	95,587.61	26%
10. TPB Support and Management				
TPB Support and Management	963,378.33	386,649.15	33,220.22	40%
Subtotal	963,378.33	386,649.15	33,220.22	40%
Core Program	15,946,114.23	7,599,747.48	935,906.35	48%
A. District of Columbia Technical Assistance				
Program Development & Misc.	274,755.81	13,349.32	856.18	5%
B. Maryland Technical Assistance				
Program Development & Misc.	483,303.48	83,393.86	20,988.63	17%
C. Virginia Technical Assistance				
Program Development & Misc.	436,679.71	141,716.34	99,830.31	32%
D. Public Transit Technical Assistance	,	,		- "
Program Development & Misc.	382,237.46	6,351.02	0	2%
g Dorotopinott o moot	002,207.40	5,001.02	٥	
Technical Assistance	1,576,976.46	244,810.54	121,675.12	16%

#### FY 2022 TRANSPORTATION PLANNING BOARD FINANCIAL STATUS OF TECHNICAL ASSISTANCE February 2022 SUPPLEMENT 1

SUPPLEMENT						
	TOTAL		FTA/STA/LOCAL		PL FUNDS/LOCAL	
	AUTHORIZED	TOTAL	AUTORIZED	FTA	AUTORIZED	FHWA
	BUDGET	EXPEDITURES	BUDGET	EXPENDITURES	BUDGET	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	5,889.02	78.25	41.89	10,921.43	5,847.13
Regional Safety PGM-DC	30,000.00	0.00	213.41	0.00	29,786.59	0.00
TBD	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	13,349.32	1,954.54	94.96	272,801.27	13,254.36
B. MD Technical Assistant						
Climate Chg Mit Study -MD	14,921.00	14,920.60	106.14	106.14	14,814.86	14,814.46
Feasibility/Special Studies	24,998.00	0.00	177.83	0.00	24,820.17	0.00
Pgm Development & Misc	15,000.22	6,522.16	106.71	46.40	14,893.51	6,475.76
Regional Safety PGM-MD	35,000.00	0.00	248.98	0.00	34,751.02	0.00
TBD	133,384.26	61,951.10	948.86	440.70	132,435.40	61,510.40
TLC-MD	260,000.00	0.00	1,849.57	0.00	258,150.43	0.00
Subtotal	483,303.48	83,393.86	3,438.09	593.24	479,865.39	82,800.62
C. VA Technical Assistant						
Big Data Study-VA	14,921.00	14,920.60	106.14	106.14	14,814.86	14,814.46
Pgm Development & Misc	10,000.15	4,439.39	71.14	31.58	9,929.01	4,407.81
Regional Safety PGM-VA	35,000.00	0.00	248.98	0.00	34,751.02	0.00
TBD	6,359.64	1,000.00	45.24	7.11	6,314.40	992.89
Transportation/Land Use Connection Program	80,320.00	22,000.00	571.37	156.50	79,748.63	21,843.50
Travel Demand Modeling	85,079.43	0.00	605.23	0.00	84,474.20	0.00
Travel Monitoring	204,999.49	99,356.35	1,458.31	706.79	203,541.18	98,649.56
Subtotal	436,679.71	141,716.34	3,106.42	1,008.13	433,573.29	140,708.21
D. WMATA						
Pgm Development & Misc	5,000.07	6,351.02	5,000.07	6,351.02	0.00	0.00
Regional HCT Graphic/Map	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	6,351.02	382,237.46	6,351.02	0.00	0.00
Grand Total	1,576,976.46	244,810.54	390,736.51	8,047.36	1,186,239.95	236,763.18