FY 2022

National Capital Region Transportation Planning Board

Work Program Progress Report

November 2021
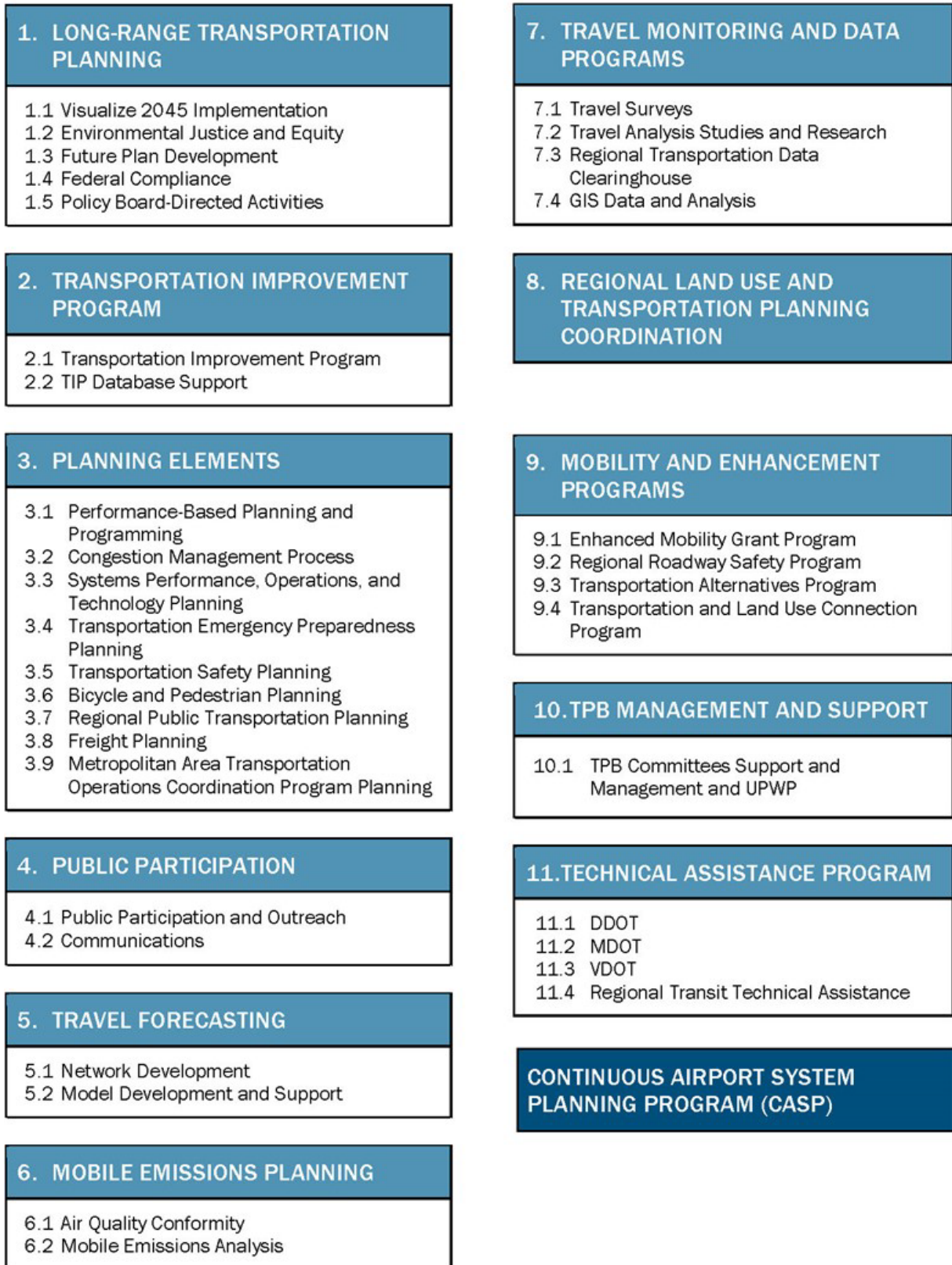
FY 2022

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 November. 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.

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Task 1	BUDGET	Billed this month	% Funds Expended	UPWP Page
LONG RANGE TRANSPORTATION PLANNING	$1,095,434	$87,786	37%	35

1. LONG-RANGE TRANSPORTATION PLANNING

Task 1.1 – Visualize 2045 Implementation

Staff that manages the long-range transportation plan activities worked with the public participation team to develop a draft report on the socially distant public engagement activity 'Aspiration to Implementation' that ended at the end of August 2021. This activity both implements the most recent plan and supports development of the plan update. Staff also continued 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 coordinated the public participation team on an approach to leverage the animated videos that were produced in FY 2021 to support awareness and implementation of the Aspirational Initiatives.

Task 1.2 – Environmental Justice and Equity

Staff continues 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.

Staff have been developing an outline and approach to produce an equity-focused paper or product to document equity considerations that can support regional transportation planning.

Staff continued to participate in COG-led equity training activities.

Task 1.3 – Future Plan Development

In November 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. Discussions include technical and financial inputs to Visualize 2045, and preparation for the comment period and its related materials, to the draft final LRTP content, communications, mapping and public participation.

In November, staff continued to develop the LRTP. Activities included producing and revising text for the Introduction and Chapters 1-8, producing a page-by-page storyboard to manage spacing of content in the plan (introduction, Chapter 7, Chapter 8) producing charts, graphs and other graphics for integration by the consultant design team. The staff held a series of meetings with the design firm to continue the layout the plan. Several chapters (1, 2, 3, 5) were laid out in October and revised in November, Chapter 6 was also largely produced in graphic design format in November. Staff reviewed and revised chapters working with SMEs and the consultants.

Staff also received drafts of the financial plan (appendix) and transit-focused appendix that summarizes transit strategic and transit development plans produced for transit systems in the TPB region. Staff initiated development of several appendices and coordinated to review content for the safety appendix and another that will document how the CMP influences and informs the LRTP. Staff finalized the TPB resiliency whitepaper and prepared it for publication. This effort document regional climate resiliency/stormwater planning and identify regional strategies for resiliency/stormwater management through transportation projects and program.

Staff updated the Visaulize2045.org website as needed to maintain a current site.

Staff coordinated with the public participation team to finalize and publish the Voices of the Region Focus Group Report and plan public comment and outreach activities for the LRTP for the spring of 2022.

1.4 – Federal Compliance

There were no activities 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 anti-racist and will advance equity all its work activities…" In response to the TPB July 2020 resolution, TPB staff have conducted activities to discuss how to incorporate these concepts materially. The TPB staff conducted internal workshops to discuss examples of staff activities and have shared recent examples of best practices for considering equity and anti-racism in our work. TPB staff continue to weave equity, as a foundational 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	$34,634	39%	37

2. TRANSPORTATION IMPROVEMENT PROGRAM

2.1 Transportation Improvement Program (TIP)

At its November 5 meeting the TPB Steering Committee approved an amendment to the FY 2021-2024 TIP to include TIP Action 21-35, as requested by VDOT. This action added two projects (the I-495 Express Lanes Northern Extension (NEXT) project and the I-495 NEXT – VDOT Oversight & Transportation Management Plan) and approximately $354 million to the TIP.

During the month of November, TPB staff processed administrative modifications for one project for DDOT and four projects for MDOT/SHA adding a total of approximately $5.2 million to the TIP. Staff also worked with several member agencies to clean up data in the Project InfoTrak system.

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. Under an expanded contract for professional services, EcoInteractive developed and refined further customizations of the software platform, including: enhancements to the on-the-fly customizable headers for several reports, a correction to the completion year displayed on TIP Project Overview reports, removal of unnecessary fields from the Amendment Summary report, completion of a new functionality that lets staff from state and District DOT member agencies to submit their STIP amendment approvals directly to federal partners rather than having TPB staff do it, and the development of a new Bike/Ped project listing report that contains all records from the Bike/Ped Plan data set as well as LRTP and TIP projects that are listed as Bike/Ped in the Primary Project Type field or whose Accommodations field is set to "Bicycle or Pedestrian Accommodations Included."

Task 3	BUDGET	Billed this month	% Funds Expended	UPWP Page
PLANNING ELEMENTS	$2,768,270	$181,684	30%	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 presented the annual Transit Safety targets to the Technical Committee and to the TPB, which approved a resolution adopting the targets. A final report and briefing materials were completed.

TPB staff worked on updates to highway asset performance data for pavement and bridge condition.

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

Staff presented a draft set of TPB Connected and Automated Vehicle (CAV) principles to the TPB at its November 17, 2021 meeting, beginning a review and comment period for board members; the CAV principles are eventually to be included in the Visualize 2045 plan document.

Staff participated in the 2021 Intelligent Transportation Society of Maryland annual meeting as well as in the 2021 Baltimore Region Traffic Incident Management Conference (both virtual).

3.4 Transportation Emergency Preparedness Planning

The November 10, 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 December 14, 2021 meeting of the Transportation Safety Subcommittee.

Staff held planning sessions on November 1 and 16, 2021 with the Transportation Safety Subcommittee Chair to identify topics and speakers for future Safety Subcommittee meetings.

Staff developed this year's proposed Regional Highway Safety Targets and developed materials on this topic for presentation to the TPB Technical Committee at their regularly scheduled December 3, 2021 meeting.

3.6 Bicycle and Pedestrian Planning

The November 16, 2021 meeting of the Bicycle and Pedestrian Subcommittee was organized and conducted. The agenda included a briefing on the revised regional Bike Ped Project Database and Summary Data and an overview of Ecotopia's proposal to use AI analysis of aerial photography to produce GIS layers of bicycle and pedestrian facilities, impervious surface, and other features. The nominee for the 2022 Chair of the Bicycle and Pedestrian Subcommittee was announced.

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

Staff corrected remaining incorrect/incomplete/duplicate project entries in the bike/ped project database which were identified after the completion of the bulk upload of project information from the jurisdictions.

Staff organized and conducted a Best Practices in Pedestrian Enforcement webinar on November 9, 2021. Twenty-five people attended, the majority of whom were police officers.

Staff briefed the Technical Committee (November 5) and the Community Advisory Committee (November 10) on the Fall 2021 Street Smart pedestrian and bicycle safety campaign.

3.7 Regional Public Transportation Planning

The Regional Public Transportation Subcommittee met in November. The agenda included a presentation on WMATA's update of Metrorail service standards and TPB briefings on FTA's Title VI Circular input request, preparations for the 2021 state of public transportation report, the schedule for the PBPP transit asset management targets and a review of the draft TPB principles for connected and automated vehicles (CAVs) and ongoing CAV activities.

Staff worked on transit elements for the 2022 version of the Visualize 2045 long range transportation plan and completed an initial draft of the appendix summarizing transit development plans across the region.

Staff attended the regular monthly NVTC MAC and WMATA JCC meetings.

3.8 Freight Planning

The November 18, 2021 meeting of the TPB Freight Subcommittee was organized and conducted. The agenda included an overview of right-sized loading, a presentation on planning for freight needs of urban development projects in Arlington County, and a review of freight considerations relating to the City Market and City Ridge developments in the District of Columbia.

Staff held a planning session on November 9 with the TPB Freight Subcommittee Chair to identify topics and speakers for future Freight Subcommittee meetings.

Staff continued work to develop an RFP for consultant assistance to update the Regional Freight Plan in FY 2022/2023.

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 third seasonal virtual meeting of the MATOC Severe Weather Coordination Working Group was organized and conducted on November 9, 2021, continuing coordination for the season's winter weather response.

A virtual meeting of the MATOC Operations Subcommittee was organized and conducted on November 18, to discuss operational, traffic, and transit ridership impacts of COVID-19, as well as coordination of operational issues for the upcoming Thanksgiving holiday period.

Task 4	BUDGET	Billed this month	% Funds Expended	UPWP Page
PUBLIC PARTICIPATION	$994,711	$64,579	27%	45

4. PUBLIC PARTICIPATION

4.1 Public Participation and Outreach

The Community Advisory Committee (CAC) to the TPB met on Wednesday, November 10 for an online-only meeting. At the meeting the committee learned about the Street Smart campaign and the Voices of the Region Focus Groups. The committee also discussed climate change and brainstormed ideas for strengthening the relationship between the board and the CAC.

Staff finalized work 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 were presented to the TPB at its November meeting.

Staff continued analysis of 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 planning for the next session of the TPB's Community Leadership Institute (CLI), a three-day training program that helps local activists understand the connections between regional planning and local action. The next session, which will be held in March 2022, will be the 18th time that TPB staff have conducted the CLI since the program's inception in 2006.

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 November 12:

- Rides to Health (RTH)
    - o Mr. Matthew Mohebbi briefed the committee on the RTH pilot project, a partnership between ITCurves and TPB/COG, funded under the Federal Transit Administration's Innovative Coordinated Access and Mobility (ICAM) Pilot Program.
    - o RTH is developing and testing technology to improve transportation for End State Renal Disease dialysis patients through a platform which helps to coordinate stakeholders (Patient, Healthcare Facilities, Funding Agencies, Transportation Providers) and improve the transportation experience.
    - o Discussion and questions following the presentation included return on investment, use for other health issues, and the digital divide.
- Transportation-Land Use Connections Program (TLC) – Designing Streets For People With Vision Disabilities
    - o Mr. Matthew Johnson, Montgomery County Department of Transportation (MCDOT), briefed the committee on MCDOT's Planning and Designing Streets to be Safer and More Accessible for People with Vision Disabilities toolkit.
    - o The toolkit helps better engage people with vision disabilities in the planning and design process, identifies issues with current roadway and sidewalk designs, and recommends ways to make roads and sidewalks easier and safer to navigate.
    - o TPB staff shared basic information on the TLC technical assistance grant program that funded the project and will email the toolkit to AFA membership.
    - o TPB Climate Change Mitigation Study Of 2021

o   TPB staff presented on the history, progress, and next steps for the TPB Climate Change Mitigation Study of 2021

Other Business

o   Chair Aguirre shared information about TRB's blog series *Making Travel More Equitable for People with Disabilities*.
o   Chair Aguirre referenced an article on DC scooter policy, which now requires them to be locked and not left on sidewalks. AFA members voiced an interest in further discussion due to continued safety concerns.
o   TPB staff shared opportunity to apply for FTA's Innovative Coordinated Access and Mobility (ICAM) Pilot Program.
o   Projects recommended for funding under the 2021 Enhanced Mobility Solicitation will go before the TPB for approval on November 17.

4.2 Communications

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

- **A recap of the November TPB meeting**
  November 23, 2021
- **TPB approves grants for programs serving seniors and people with disabilities**
  November 23, 2021
- **Podcast: Strengthening our communities through connections to transit**
  November 18, 2021
- **Reduced daylight increases danger for pedestrians and bicyclists (**Street Smart Fall Event
  November 4, 2021
- **COG adopts new transit and equity planning principles for 2030, announces Housing Affordability Planning Program with Amazon**
  November 3, 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 was underway in November 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	$205,777	28%	47

5. TRAVEL FORECASTING

5.1 Network Development

In support of conducting the air quality conformity (AQC) analysis of the 2022 Update to Visualize 2045, staff completed development of highway and transit network files for the 2040 and 2045 forecast years. Staff also updated and re-exported the 2025 highway network to modify some toll group (TOLLGRP) variable values on the Express Lanes. Staff ran quality assurance checks and passed these files on for travel demand modeling.

In support of developing the TPB's next-generation, activity-based model – the Gen3 Model -- staff continued development of a 2045 transit network. The year-2045 transit routes are based on the

2020 Amendment to Visualize 2045, which was also used for the 2018 base network, which was provided to the consultant earlier. 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). Both the 2045 and 2018 networks will be used for Gen3 Model, Phase 1, sensitivity testing that is now expected to begin in December/January.

Staff began coding a 2017 transportation network for the purpose of providing an inventory of on-road, mobile emissions for State Implementation Plan (SIP) work associated with the 2015 Ozone National Ambient Air Quality Standards (NAAQS).

In support of the ongoing AQC analysis, staff instituted a series of enhancements to the COGTools network editing software to facilitate related network development activities. In November, staff implemented an enhancement to the tool such that all the selected highway links are kept in the edit window after updating any one of them. Staff also created a new module in COGTools to physically delete a link and all associated records in the database. Staff developed a draft memorandum that documents all the recent enhancements to the COGTools.

Staff has been working on a major update of the COGTools User's Manual. Based on the staff comments, staff prepared a revised draft, dated October 13, which is currently under internal reviews.

Staff is in the process of preparing tables and charts for the Gen2/Ver. 2.4 Model Highway and Transit Networks Report.

5.2 Model Development and Support

The Travel Forecasting Subcommittee (TFS) meets in odd-numbered months. Staff attended the November 19 TFS meeting and started preparing the meeting highlights. The meeting covered the following topics:

- Transitioning from a Trip-Based Travel Model to an Activity-Based Travel Model: Experiences of The Atlanta Regional Commission (ARC)
- COG/TPB Gen3 Travel Model: Status Report
- Development of an Average Annual Weekday Traffic Factor for 2020

The new chair for 2022 was also announced at the meeting: Lisa Shemer, MDOT SHA.

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

As part of the investigation related to the toll setting processes used for the Gen2/Ver. 2.4 Model, staff re-ran the Ver. 2.4 Travel Model for the year 2025 including the toll-setting process, summarized the end-to-end tolls by facility and compared the toll values to those from the Ver. 2.3.78 Model and from Ver. 2.4 Model for the 2022 Update of Visualize 2045.

Staff updated the Select Link Analysis (SLA) application to be consistent with the Gen2/Ver. 2.4 Model. Staff tested the new application and documented it in a draft memorandum.

Using the Gen2/Ver. 2.4 Model and model inputs for the 2022 Update of Visualize 2045, staff conducted a scenario analysis that explored the impacts of hypothetical bus free and transit free policies for the region. Staff plan to document the findings for internal reference.

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 mode choice modeling in the TPB's Gen2 Travel Model. After testing the latest ModeChoice Version 7.5.7 software and sharing the findings with AECOM (the developer of TRANSIMS ModeChoice), staff continued to work with AECOM staff to troubleshoot issues with running the software on different computer platforms.

Staff continued to work on a Python script that staff created to process the Cooperative Forecasts of land use data and prepare the land use input files for use with the travel demand models. After including Quality Assurance/Quality Conformity checks in the script, staff went on to optimize the efficiency of the Python code through vectorization. This Python script is expected to replace the existing, Cube-based land use data processing program for the next air quality 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 one check-in meeting with RSG and BMG, the consultants on the Gen3 Model development project (November 10).
- Staff met with RSG staff on November 16 to discuss project administration issues. COG and RSG agreed to make a three-month, no-cost extension of the Gen3 Model, Phase 1, development deadline.
- Staff continued to investigate the random forest model that RSG used to impute part-time work status for the Gen3 Model development, since part-time work status was not a variable used in the 2017-2018 COG/TPB Regional Travel Survey (RTS). After discussing several issues noted by COG staff, COG and RSG agreed to rerun the Survey Processing Application (SPA) and data imputation processes in Phase 2.
- Staff provided review of the draft model estimation report for Gen3 Model, Phase 1, developed by RSG.
- Staff provided to RSG/BMG the HPMS-based VMT by jurisdiction data for 2018 as well as additional scripts and summary tables from the 2018 validation of the Gen2/Ver. 2.4 Model in support of the Gen3 Model, Phase 1 validation.
- Staff provided clarification on the bus boarding counts from the Regional Transportation Data Clearinghouse (RTDC) data. The RTDC data has been used for developing model calibration/validation targets.

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 two data requests: One request was from a consultant working with the group that is developing traffic and revenue forecasts for the Traffic Relief Plan. The other request was from an academic. The requested data include loaded-link highway network files for years 2017, 2019, 2021, 2025, 2030, 2040, and 2045 from the Gen2/Ver. 2.4 Travel Model and a shapefile representing zonal boundaries for the 3,722-TAZ area system.

Staff attended the second of three COG racial equity training sessions, in early November.

Staff attended the Northern Virginia Transportation Authority (NVTA) model working group meeting on November 4. Staff also discussed with NVTA staff the NVTA model development activities on November 8 and provided additional comments in writing.

Staff attended the Cooperative Forecasting and Data Subcommittee (CFDS) meeting on November 9.

Staff attended ActivitySim Consortium meetings regularly on Tuesdays and Thursdays. Staff also attended one ActivitySim Consortium partners-only meeting on November 18.

Staff attended two internal meetings with the group working on the 2020 Census geography (Census Blocks) and TPB TAZs on November 2 and 23.

Staff provided comments on MetroNow's draft/embargoed Bus Transformation Project (BTP) 2021 Progress Report on November 30.

Task 6	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILE EMISSIONS PLANNING	$2,039,172	$191,126	37%	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 networks developed by staff, TPB modelers completed travel demand modeling and emissions modeling for analysis years 2030, 2040, and 2045. Staff also conducted review and reasonableness checks of the model results against the findings from previous analyses.

Staff continued with planning activities for the next 2024 "Interim" Long-Range Transportation Plan update, including discussion of work tasks and schedule.

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 5 Technical Documentation: Selection of Modeling Tools and Analysis Approach," which documents the tools and methodology that are being used for the study. The project consultant also completed analysis of the ten bottom-up scenarios and three top-down scenarios using the methodology and tools outlined in the Task 5 memorandum, and TPB staff reviewed the findings. TPB staff also presented an overview of the CCMS to the Access for All Advisory Committee (item #4) on November 12.

COG's Department of Environmental Programs (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). MWAQC-TAC was briefed, on November 9, on the next steps related to the 2015 ozone NAAQS SIP

planning (item #3). MWAQC-TAC (item #2) was also provided with an analysis of the 2020 ozone NAAQS exceedance days in the metropolitan Washington region. MWAQC was also briefed on impacts of air pollution transport from upwind areas to metropolitan Washington, and a potential comment letter was discussed (item #4).

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 both to maintain consistency with the recently released Gen2/Version.

Task 7	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL MONITORING AND DATA PROGRAMS	$2,141,001	$102,230	23%	53

7. TRAVEL MONITORING AND DATA PROGRAMS

7.1 Travel Surveys

Regional Travel Survey

Staff fielded RTS data requests from stakeholders.

Staff delivered a briefing on the RTS In-Depth Analysis to the TPB Technical Committee in November. Staff responded to a regional stakeholder's question about the RTS In-Depth Analysis presentation to the TPB Technical Committee.

COG/TPB staff responded to follow-up 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.

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 reviewed and provided comments on the draft questionnaire for the 2022 State of the Commute Survey.

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 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.

RTS In-Depth Analysis Project
Staff delivered the second of four presentations to the TPB Technical Committee on the project. The project used RTS data items to answer questions from regional stakeholders. Staff also prepared a description of the item for the meeting summary.

Transportation Data Dashboard
Staff continued to explore options for a transportation data dashboard.

Equity and High-Capacity Transit focus
Building on the work to support the COG Board at its annual retreat in July, staff continued to develop maps and visualizations of the region's Equity Emphasis Areas (EEAs) and High-Capacity Transit (HCT). These materials were instrumental in supporting COG Board and TPB resolutions that were considered and adopted in October to optimize HCT station areas to promote development of transit-oriented communities and elevate the use of EEAs in the region to incorporate equity into the work of COG and TPB.

Staff participated in a meeting to provide input in preparation for the recompete of the on-call planning contract.

7.3 Regional Transportation Data Clearinghouse

Staff presented the daily to weekday factor developed using 2020 data from region's continuous traffic to the Travel Forecasting Subcommittee on November 19.

Staff added two document links to the RTDC - Northern Virginia Park and Ride Assessment Study and Scenario Planning Organizational Awareness and Understanding.

Staff requested Excel tables of previous Cooperative Forecast Rounds 8.0a and 8.1 from Department of Community Planning and Services (DCPS) staff. Staff also received a geodatabase for Round 9.2 of the Cooperative Forecast. These materials will be used to create revised content offering in the RTDC.

Staff responded to a request from Systems Performance staff to provide an updated description of the RTDC to be included in the 2022 Congestion Management Process (CMP) Technical Report.

Staff used the 2019 pavement and 2020 bridge data that they had previously processed to produce and refine state and county tables and charts for Performance Based Planning & Programming (PBPP) purposes. Staff noticed that one NHS facility was missing from the 2019 HPMS file hosted by FHWA, staff reran the programs and updated the charts substituting 2018 data for that one facility. The resulting tables and charts were shared the Systems Performance and Planning team to use in their PBPP work.

Staff worked with staff from VDOT and WVDOT to research some large year-to-year changes in jurisdiction-level daily vehicle miles traveled (VMT) reported by the state DOTs.

Staff requested and received the 2019 and 2020 hourly traffic counts from VDOT. Staff will process the data for inclusion in the RTDC.

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 planned and participated in the November 16 GIS Committee/GDX Working Group virtual meeting. Highlights of the meeting included: status reports on the NCR-GDX and NextGen 9-1-1,

introduction of a project to support food and water resources in the event of a disaster, and GIS Day plans. In addition, the GIS Committee selected the Committee leadership for 2022.

Staff attended a meeting on November 16, hosted by US Department of Transportation (DOT) and National Park Service (NPS) staff regarding the proposed regional trail count program.

Staff attended and participated in a meeting on November 19 regarding TPB's upcoming re-compete contract for on-call planning consultant services.

Staff attended and presented at the November Bicycle and Pedestrian Subcommittee meeting held on November 16. Staff gave a status report on the project database and answered questions from committee members.

Staff completed draft ArcGIS Hub pages created for High Capacity Transit (HCT) station areas, Equity Emphasis Areas (EEA) as part of the ongoing work to highlight these two TPB products. This project continues to evolve—staff met with staff from COG's Office of Communication on November 9 to discuss the pages and to create a plan to ensure continuity with COG's promotion of utilizing HCT and EEA as key regional planning principles.

Staff met with staff from the Plan Development and Coordination on November 19. Staff responded to comments on the draft web maps of the data layers used for a Visualize 2045 Environmental Consultation and Mitigation web mapping application update and implemented requested changes. The final draft map application is undergoing finalization.

Staff met with Plan Development and Coordination team on November 3 to discuss the support needed with mapping and data visualization for Visualize 2045.

Staff had a check-in meeting with Plan Development and Coordination staff to continue the discussion and the plan for creating spatial data and associated products based on the 'Voices of the Region' conducted as part of the Visualize 2045 outreach activities.

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

Staff completed work on reconciling the projects in TPB's Project InfoTrak database for bicycle and pedestrian projects. Staff provided materials to fellow staff that identified outstanding issues to be addressed. Staff met with fellow staff.

Staff met to discuss the project to apportion 2020 Census blocks to transportation analysis zones (TAZs).

Staff continues to work with COG's Information Technology (IT) staff to identify issues related to software and hardware upgrades for resources administered by the Planning Data and Research (PDR) team.

Staff met with consultants to DC HSEMA (Dewberry) on November 12 to discuss GIS data sharing efforts and the COG/TPB GIS program and its potential role in a regional project to build capabilities that will support the food and water supply in the event of a natural disaster.

Task 8	BUDGET	Billed this month	% Funds Expended	UPWP Page
REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION	$1,190,179	$89,427	32%	57

8. REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION

8.1 Socioeconomic Forecasting

Proposed Draft Workplan for Round 10

DCPS staff presented a proposed draft Round 10 workplan to the Planning Directors Technical Advisory Committee (PDTAC). The Workplan calls for completing significant tasks during FY 2022 and significant work to complete draft Round 10 during FY 2023.

2020 Census Release and Analysis

DCPS staff presented findings from "Our Changing Region", the first report highlighting demographic trends shown in the 2020 Census PL94-171 legislative redistricting data, to the COG Board of Directors on November 10.

DCPS staff continued work to develop a first approach at 2020 Census Blocks (and data) conversion/allocation into TPB TAZs. When completed, the data will be shared with members for use as Round 10 population and housing 2020 base.

COVID-related impacts to the economy

DCPS staff continued to update the PowerPoint presentation that documents the effects to date of COVID on the region's economy. Staff began to compile additional data on 'recovered' jobs in the COG region and peer MSAs.

At the November 19 PDTAC meeting, DCPS staff presented findings from the multi-family housing construction report.

Multi-family Housing Report

DCPS staff completed and released the multi-family housing report.

Housing Targets update

At their November 17 meeting, the Housing Directors Advisory Committee focused on efforts to prevent evictions in DC. DCPS Housing staff also continued efforts to plan for the new Housing Affordability Planning Program (HAPP) program.

Task 9	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILITY AND ENHANCEMENT PROGRAMS	$988,671	$18,782	12%	59

9. MOBILITY AND ENHANCEMENT PROGRAMS

9.1 Enhanced Mobility Grant Program

On November 5, staff presented to the TPB's Technical Committee on the types of applications received under the 2021 Enhanced Mobility solicitation.

On November 9, staff participated virtually in the National Center on Mobility Management session at the Community Transportation Association of America's annual conference.

On November 17, staff presented on the projects recommended for funding under the 2021 Enhanced Mobility solicitation and obtained TPB approval and update of the TIP to include the projects.

On November 23, staff was interviewed by the Washington Post about the projects selected for funding under the 2021 Enhanced Mobility solicitation.

9.2 Regional Roadway Safety Program

Staff received proposals from the pre-qualified Regional Roadway Safety Program consultants for the FY2021 Regional Roadway Safety Program projects and identified Technical Selection Committee members to score each one.

The Selection Panel met on November 30, 2021 and reached a consensus as to which of the six FY 2022 Regional Roadway Safety Program applications will be recommended to the TPB for funding. Staff developed materials on this topic for presentation to the TPB Technical Committee at their regularly scheduled December 3, 2021 meeting.

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 finalized the consultant procurement process for the 11 new TLC projects approved by the TPB in April. All task orders were signed with consultants and kickoff meetings for all the projects occurred before the end of the month. See below:

- Discovery District Multi-Use Trail Transit Access Plan (College Park) - Consultants conducted field inspection of project study area, and began documenting existing conditions (e.g. ROW, existing trails, planned trails, etc.) in a CAD base map.
- Congress Heights Pedestrian Access Study (District of Columbia) - The project team conducted a walking tour of the study area with community members and held in-person pop-up events to provide information about the project and obtain feedback on current conditions for pedestrians.
- Assessment of Microtransit (District of Columbia) - The project team continued bi-weekly check ins on 11/8 and 11/29. Project timeline and major milestone were reviewed, dates for stakeholder interviews / public outreach (across January and February) clarified, and updates on the status of data requests were given.
- Active Transportation Plan near the Huntington Metrorail Stations (Fairfax County) – Field work commenced in November.

- East End Transportation Study (Falls Church) – The consultant made a request from city staff for relevant information and data for this project. City staff is hoping to have the data ready for the consultant by the end of December 2021.
- East Street Redesign (Frederick County) - Visited the site on November 12, 2021 and the contractor prepared the site visit notes. The contractor is collecting data to support existing condition analysis.
- Greenbelt Road Corridor Plan (Greenbelt) -- The City of Greenbelt, project consultant, and TPB Staff prepared for and held a Technical kick-off meeting on December 9, 2021 to collect feedback and input from stakeholders on the proposed project approach.
- Connecticut Avenue Corridor Planning (Kensington – Montgomery County) – Field work was conducted in November.
- Cool-Street Design Guidelines and Standards (Montgomery County) – Consultant scheduled update meeting for November 19. The November meeting consisted of an overview of the scope and showcase of the consultant team's Miro Board and its organization. The meeting closed with local climate study findings.
- The Anacostia Gateway/PG Connector Trail Design Project team did a field walk with Prince George's County DPW&T staff on 11/14 to walk the trail alignments and discuss options and alternatives. The team has also put in to receive the utility records for the area and have been looking at the potential environmental impacts.
- Innovation Park Shuttle Service Feasibility Study (Prince William County) - Progress conference calls were held with the consultant and county staff on November 4 and 18. Consultant is conducting an Existing Conditions and Market Analysis which will summarize existing conditions/planning context in the Innovation Park region, and provide a market analysis showing current and future market conditions for public transit.

Recruitment was underway to hire an intern to work on the TLC program.

Preparations were underway to launch the application period for the FY 2023 round of TLC projects, which was scheduled to open on December 17.

Task 10	BUDGET	Billed this month	% Funds Expended	UPWP Page
TPB MANAGEMENT AND SUPPORT	$963,379	$56,743	27%	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 staffs 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 **NOV 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.
- 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 NOV FY 2022:

Telephone / Web Ex / Microsoft Teams Communications:

- COG Board 2020 Census Briefing COG Staff
- DMV Regional Equity and Growth Playbook Connected DMV
- Major Metros Roundtable NVR (2 events)
- Race 2 Equity Report COG Mgmt.
- Tree Canopy Next Steps COG Staff
- COG DEI Professional Development for Advancing Racial Equity Training
- Return to Office Discussion COG Mgmt.
- Gare Project & COG Racial Equity Report Potential Synergy COG Mgmt.
- NVTC MAC
- TPB Climate Change Mitigation Study Team
- IGA Partners Monthly Call US OST (IIJA)
- Climate Change Mitigation Study Team
- Native Peoples of the Chesapeake Region Training
- MIRR Group Infrastructure Briefing

UPWP

The UPWP activities include:

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.

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

Task 11	BUDGET	Billed this month	% Funds Expended	UPWP Page
TECHNICAL ASSISTANCE	$1,576,979	$2,744	4%	63
District of Columbia	$274,756	$1,027	4%	63
Maryland	$483,305	$1,158	4%	65
Virginia	$436,679	$457	5%	68
Regional Transit	$382,238	$130	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 the DDOT Historic Data Standardization. Staff evaluated a request from DDOT to expand the scope to include support from their data contractor; staff coordinated internally to learn more requirements for sole source contracts and determine the feasibility of including this support.

Transportation / Land Use Connections Program

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

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

Staff met with a traffic consultant to MD SHA to explore opportunities for DDOT, VDOT, and MD SHA to share common data for use in HPMS traffic data preparation.

Traffic Relief Plan (TRP) Project Development Activities

Staff continued to monitor project development activities for MDOT projects related to the Traffic Relief Plan. In response to a request by the I-495 & I-270 Managed Lanes Study team, staff reviewed the proposed toll-setting process for the project and provided feedback to the team.

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.

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.

After VDOT posted the Northern Virginia Park and Ride Assessment online, staff announced the resource during the TPB Technical Committee meeting and asked the COG Communications staff to include it in an upcoming TPB News.

Travel Monitoring and Survey

Non-Motorized/Active Transportation Counts

Staff received the count files and video links from the consultant from the fall 2021 non-motorized data collection that was completed in September. Staff began the process to review and verify the counts.

I-66 & I-395 Mode Share Study

Staff followed-up with the on-call traffic monitoring consultant to determine the progress on the VDOT I-66/I-395 mode share study.

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 received task order proposals for each project from these elected consultants and distributed them to the members of the Technical Selection Committees

Technical Selection Committee members evaluated the proposals. The Contracts and Procurement Office reviewed and scored the DBE portion of the proposals.

High Capacity Transit Map

No activity.

CONTINUOUS AIR SYSTEM PLANNING PROGRAM MANAGEMENT

Staff completed the recruitment process and selected a transportation data analyst position that will be tasked with supporting the CASP program.

Air Passenger Survey

COG/TPB staff reviewed and discussed staff recommendations for methodological changes to the next Washington-Baltimore Regional Air Passenger Survey (APS).

COG/TPB staff prepared a memo describing each recommendation and provided scenarios for each, along with an estimated budget/cost for each option.

COG/TPB delivered a briefing to the Aviation Technical Subcommittee on November 18 discussing the memo described above.

COG/TPB staff delivered a presentation recommending methodological changes to the next Washington-Baltimore Regional Air Passenger Survey (APS).

Air Cargo Element Update

No Activity.

Ground Access Travel Time Study

No Activity.

Ground Access Forecast and Element Update

Staff prepared and submitted a memo containing the ground access forecasts and ground access element update using data from the 2017 Washington-Baltimore Regional Air Passenger Survey to the Aviation Technical Subcommittee at the November meeting.

PROGRESS ON PLAN PRODUCTS

Phase II Outreach for Visualize 2045
- Release of findings – Winter 2022

Voices of the Region Storymap for Visualize 2045

- Product development – September 2021 - February 2022

Product release – Winter 2022

Open Houses for Visualize 2045

- April 2022

Community Leadership Institute (18th session)

- March 2022

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.

Transportation Data Dashboard

Travel Forecasting

- A series of highway and transit networks reflecting the latest LRTP and TIP for input to the regional travel demand model.
  o 2022 Update to Visualize 2045: Transportation networks have been developed for 2021, 2023, 2025, 2030, 2040, and 2045. Work is underway on the 2045 network and a 2017 network for SIP work.
  o SIP work associated with the 2015 Ozone NAAQS: Staff began coding a 2017 network.
  o 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.
  o Travel Forecasting Subcommittee: Staff has conducted meetings in July, September, and November.
  o Staff is attempting to migrate from an older mode choice application program to a newer program.
  o Staff responded to support requests regarding running the regional travel demand model and serviced two data requests in November (total of 15 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-year period, from FY 2020 to FY 2023.
  o 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 and calibration is underway.

  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).

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: Completed for 2021, 2023, 2025, 2030, 2040, and 2045.
  - o 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. https://www.mwcog.org/events/2021/10/14/community-advisory-committee/.
    - ▪ 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. https://www.mwcog.org/events/2021/11/12/access-for-all-advisory-committee-afa/.
  - 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. https://www.mwcog.org/events/2021/09/10/tpb-technical-committee-tpb/.
    - ▪ 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. https://www.mwcog.org/events/2021/09/22/transportation-planning-board-tpb/.
  - 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. https://www.mwcog.org/events/2021/7/21/transportation-planning-board/.
    - ▪ COG website: "TPB Climate Change Mitigation Study of 2021." Metropolitan Washington Council of Governments, July 15, 2021. https://www.mwcog.org/documents/2021/07/15/tpb-climate-change-mitigation-study-of-2021-climate-change-greenhouse-gas-scenario-planning/.
    - ▪ 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. https://www.mwcog.org/events/2021/7/9/tpb-technical-committee/.
  - 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. National Capital Region Transportation Planning Board, Metropolitan Washington Council of Governments, November 5, 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.
- 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.
  - o 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. https://www.mwcog.org/events/2021/9/22/climate-energy-and-environment-policy-committee/.
  - o 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.
- 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 MWAQC-TAC. 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)
  - o Developed memorandum: Morrow, Erin. "Transportation and Climate Initiative (TCI): Model Rule, Summary of Public Input, and Additional Draft Documents Released." July 15, 2021.

https://www.mwcog.org/file.aspx?&A=pWJUzO2psFXTCLsxM58TL3oPkHiOMrhDBiH56IR7HfA%3d

Travel Surveys

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

Travel Analysis Studies and Research

- Transportation Data Dashboard (June 2022)
  - Under development
- COVID-19 Pandemic Regional Travel Behavior (periodic updates)
  - 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)
  - Future snapshots anticipated and under development

Socioeconomic Forecasting

- Baseline Employment Guidance (June 2022)
  - Work to begin in Spring 2022
- Travel Model Employment Definition Adjustment Factors (June 2022)
  - Factors to be reviewed after next Baseline Employment Guidance update
- Activity Centers and High-Capacity Transit Station Area Forecasts (June 2022)
  - Under development.
- Code Census Block Groups to TAZ (June 2022)
  - Under development
- Census 2020 reports and presentations (ongoing)
  - 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)
  - Complete
- Multifamily Housing Report (June 2022)
  - Complete
- Commercial Construction Indicators Report (June 2022)
  - Work to begin later in fiscal year

Planning Elements

Develop Regional Highway Safety Targets

- Draft targets to be presented in December 2021
- Final targets to be adopted in January 2022

Regional Bicycle and Pedestrian Plan Update

- Plan updated March 2022

Develop Regional Freight Plan Update

- Freight Plan Updated FY 2023

Continuous Airport System Planning Program
- Ground Access Travel Time Update (June 2022)
  - Work to commence later this year
- Ground Access Forecast Update (June 2022)
  - Work to commence later this year

	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	400,575.2	87,786.27	37%
Subtotal	**1,095,435.13**	**400,575.2**	**87,786.27**	**37%**
2. Transportation Improvement Program				
Transportation Improvement Program	266,963.20	92,610.23	21,332.98	35%
TIP Database Support	200,000.00	91,515	13,302	46%
Subtotal	**466,963.20**	**184,125.23**	**34,634.98**	**39%**
3. Planning Elements				
Congestion Management Process	434,253.21	143,861.14	30,219.53	33%
Systems Performance, Ops & Tech Planning	632,941.76	158,872.67	33,263.07	25%
Transportation Emergency Preparedness Planning	128,257.20	29,305.09	10,562.36	23%
Transportation Safety Planning	311,703.59	95,470.69	20,415.33	31%
Bicycle & Pedestrian Planning	168,032.40	64,196.89	16,162.51	38%
Regional Public Transportation Planning	391,160.06	90,417.37	18,583.03	23%
Freight Planning	318,664.86	86,632.66	19,377.95	27%
Metropolitan Area Transportation Operation Coord Program Planning	170,787.19	55,250.08	10,830.76	32%
Performance-Based Planning & Programming	212,468.43	103,620.15	22,269.95	49%
Subtotal	**2,768,268.70**	**827,626.74**	**181,684.49**	**30%**
4. Public Participation				
Public Participation	994,710.64	273,102.73	64,579.2	27%
Subtotal	**994,710.64**	**273,102.73**	**64,579.2**	**27%**
5. Travel Forecasting				
Software Support	226,785.46	50,636.81	10,751.57	22%
Network Development	1,012,945.63	371,648.62	80,935.12	37%
Model Development	2,058,605.72	504,431.22	114,090.81	25%
Subtotal	**3,298,336.81**	**926,716.65**	**205,777.5**	**28%**
6. Mobile Emissions Planning				
Air Quality Conformity	922,930.14	362,437.91	87,701.79	39%
Mobile Emissions Analysis	1,116,241.77	396,787.53	103,424.82	36%
Subtotal	**2,039,171.91**	**759,225.44**	**191,126.61**	**37%**
7. Travel Monitoring and Data Programs				
Regional Travel Survey	326,936.32	101,085.91	20,638.7	31%
Traffic Analysis & Research	841,214.05	57,031.89	9,283.19	7%
Regional Transportation Data Clearinghouse	324,078.11	84,220.36	20,345.82	26%
GIS Analysis	648,770.77	255,290.02	51,962.4	39%
Subtotal	**2,140,999.25**	**497,628.18**	**102,230.11**	**23%**
8. Planning Scenarios and Socioeconomic Forecasting				
Socioeconomic Forecasting	1,190,180.11	382,476.49	89,427.97	32%
Subtotal	**1,190,180.11**	**382,476.49**	**89,427.97**	**32%**
9. Mobility and Enhancement Programs				
Transportation and Land Use Connections Program	412,200.72	50,275.94	5,101.21	12%
Enhanced Mobility Grant Program	98,545.26	40,729	8,633.68	41%
Transportation Alternatives Set-Aside Programs	38,158.07	12,087.33	1,410.64	32%
Reg Roadway Safety PgmAM	439,766.10	15,414.23	3,637.27	4%
Subtotal	**988,670.15**	**118,506.5**	**18,782.8**	**12%**
10. TPB Support and Management				
TPB Support and Management	963,378.33	255,706.25	56,743.86	27%
Subtotal	**963,378.33**	**255,706.25**	**56,743.86**	**27%**
Core Program	**15,946,114.23**	**4,625,689.41**	**1,032,773.79**	**29%**
A. District of Columbia Technical Assistance				
Program Development & Misc.	274,755.81	10,334.17	1,027.9	4%
B. Maryland Technical Assistance				
Program Development & Misc.	483,303.48	18,157.07	1,158.47	4%
C. Virginia Technical Assistance				
Program Development & Misc.	436,679.71	23,141.56	457.05	5%
D. Public Transit Technical Assistance				
Program Development & Misc.	382,237.46	5,168.34	130.58	1%
Technical Assistance	**1,576,976.46**	**56,801.14**	**2,774**	**4%**
TPB Grand Total	**17,523,090.69**	**4,682,490.55**	**1,035,547.79**	**27%**

	TOTAL AUTHORIZED BUDGET	TOTAL EXPEDITURES	FTA/STA/LOCAL AUTORIZED BUDGET	FTA EXPENDITURES	PL FUNDS/LOCAL AUTORIZED BUDGET	FHWA EXPENDITURES
A. District of Columbia Technical Assistance						
Climate Chg Mit Study -DC	7,460.00	7,460.30	53.07	53.07	7,406.93	7,407.23
Pgm Development & Misc	10,999.68	2,873.87	78.25	20.44	10,921.43	2,853.43
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**	**10,334.17**	**1,954.54**	**73.51**	**272,801.27**	**10,260.66**
B. Maryland Technical Assistance						
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	3,236.47	106.71	23.02	14,893.51	3,213.45
Regional Safety PGM-MD	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
TLC-MD	260,000.00	0.00	1,849.57	0.00	258,150.43	0.00
Subtotal	**483,303.48**	**18,157.07**	**3,438.09**	**129.16**	**479,865.39**	**18,027.91**
C. Virginia Technical Assistance						
Climate Chg Mit Study-VA	14,921.00	14,920.60	106.14	106.14	14,814.86	14,814.46
Pgm Development & Misc	10,000.15	2,008.20	71.14	14.29	9,929.01	1,993.91
Regional Safety PGM-VA	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	6,212.76	1,458.31	44.20	203,541.18	6,168.56
Subtotal	**436,679.71**	**23,141.56**	**3,106.42**	**164.62**	**433,573.29**	**22,976.94**
D. WMATA						
Pgm Development & Misc	5,000.07	5,168.34	5,000.07	5,168.34	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**	**5,168.34**	**382,237.46**	**5,168.34**	**0.00**	**0.00**
Grand Total	**1,576,976.46**	**56,801.14**	**390,736.51**	**5,535.64**	**1,186,239.95**	**51,265.50**