National Capital Region
Transportation Planning Board

Approved
as of 07/18/25

TPB TRAVEL FORECASTING SUBCOMMITTEE

HIGHLIGHTS OF THE MAY 16, 2025 MEETING, 9:30 AM TO 12:00 AM

Meeting was held virtually via web conferencing software. There was no on-site meeting.

MEETING ATTENDEES

MEMBERS, ALTERNATES, AND PARTICIPANTS

- Jim Bunch (Mead & Hunt)
- Kevin Chai (Fairfax County)
- Xiao Cui (VDOT)
- Joel Freedman (RSG, Inc.)
- Adrita Islam (Fehr & Peers)
- Li Li (Whitman, Requardt & Assoc.)
- Jinjian Liang (C&M Associates, Inc.)
- Feng Liu (Cambridge Systematics)
- Meredith Milam (Fehr & Peers)
- Chaitanya Paleti (RK&K)
- Kelli Raboy (WMATA)
- Mark Radovic (Gannet Flemming)
- Harun Rashid (NVTA)
- Andrew Rohne (Caliper)
- Rana Shams (MDOT)
- Elham Shayanfar (MDOT)
- Steve Weller (Atlas Arteria)
- Jun Yang (M-NCPPC, Montgomery Co.)

COG STAFF

- Timothy Canan
- Anant Choudhary
- Robert d'Abadie
- Nazneen Ferdous
- Charlene Howard
- Kenneth (Ken) Joh
- Glenn Lang
- Jan Mou (James) Li
- Mark Moran
- Ian Newman
- Ray Ngo
- Wanda Owens
- Olga Perez
- Meseret Seifu
- Bahar Shahverdi
- Jessica Stork
- Dusan Vuksan
- Feng Xie
- Zhuo Yang

---

1. OPENING: MEETING ROLES, RULES, AND ROLL CALL OF PARTICIPANTS

Mark Moran opened the meeting by thanking the outgoing chair, Leanne Young, for her service to the subcommittee. Leanne served as the chair of the Travel Forecasting Subcommittee (TFS) for the first two meetings of the year (January and March), but she stepped down early due to a change in her role at WMATA. Mark then introduced the new chair of the TFS, Kelli Raboy, also from WMATA, who will be chairing the remainder of the 2025 meetings.

Mark then discussed the roles of the meeting participants (e.g., chair, host, technical host, note taker), meeting rules, and performed a roll call of participants. As noted above, this meeting of the TFS was chaired by Kelli.

2. APPROVAL OF MEETING HIGHLIGHTS FROM THE PREVIOUS MEETING

The highlights of the March 21, 2025 meeting of the TFS were approved without any changes.

3. COG/TPB GEN3 TRAVEL MODEL: STATUS REPORT FROM COG STAFF

This item was presented by Dr. Feng Xie, who spoke from a set of presentation slides. Feng provided a regular status report on COG/TPB's Gen3 Travel Model. He first provided an overview of the recent model updates that RSG implemented as part of the new model version (Gen3/Ver. 1.0.4), before talking about the model enhancements/bugfixes that COG staff recently implemented. In particular, Feng emphasized a bug COG staff found related to the transit subsidy model. He then provided a brief status update on model usability and sensitivity testing, which is part of the third development phase, and concluded his presentation of the next steps.

During Feng's presentation, Jim Bunch asked, via the chat window, if COG staff, in addition to studying the transit subsidy, will also explore how to predict employer paid parking. One of the Gen3 Model development consultants, Joel Freedman, answered his question in the chat, pointing out that there is a free parking eligibility model in the Gen3 Model, but it is relatively simplistic. Joel also commented that the bug related to the transit subsidy was insidious, as the model that predicts the share of the subsidy was being applied to everyone, instead of just individuals who were predicted to have the subsidy.

4. COG/TPB GEN3 TRAVEL MODEL: STATUS REPORT FROM RSG

This item was presented by Joel Freedman, who spoke from a set of presentation slides. Joel gave an update on the latest calibration and validation results for the Gen3 Model. He first highlighted the issues that COG staff had identified that merited further attention from RSG. These included the model's under-estimation of household trip rates, the temporal distribution of travel, and single- versus multi-occupant trips. COG staff also recommended rolling back changes to the existing freight model. Joel then proceeded to show the results of the re-calibration effort. He demonstrated that the model now matches surveyed trip rates more closely, as well as the temporal and modal distribution of trips. Furthermore, he highlighted that estimated vehicle miles of travel (VMT) and transit boardings by mode from the Gen3 Model now closely match observed data. Joel concluded his presentation by mentioning that several bugs identified by COG staff have been addressed. There were no questions at the end of his presentation.

5. TPB TRAVEL MONITORING PROGRAM

Ian Newman presented on potential updates to, and enhancement of, the TPB's Travel Monitoring Program. He explained that this proposed program aims to consolidate various transportation and transportation-related data into an online platform for internal and external stakeholder utilization, which will be integrated with TPB's online resources, namely the TPB Resources Application Page (TRAP).[1] Ian further described that the program focuses on the tracking of key metrics across seven identified categories, for example safety, congestion management, and environmental considerations, such that trends and relative progress can be identified and compared against set targets. He proceeded to highlight how, to date, 94 metrics have been identified across these seven categories, which were sorted into minimum, ought-to-have, and wish-list metrics based on importance and

[1] TPB Resources Application Page (TRAP). 2025. https://trap-mwcog.hub.arcgis.com/

relevance to the program. Furthermore, he emphasized that the program will complement the existing Congestion Management Process (CMP) and help inform regional planning through ongoing input from stakeholders and subcommittees. Ian concluded his presentation by highlighting the program milestones, such as the establishment of a new travel monitoring subcommittee, in addition to the release of the comprehensive online platform.

After his presentation, Kelli asked if Ian had a sense, this early in the process, if the expected work would mostly be consolidating information that COG/TPB already has available or if much of this program's development will be collecting new information/data from member agencies. Ian responded that, at this stage, he estimates a ratio of 65/35 to 70/30 between in-house data versus data that would need to be collected from partner agencies and/or big data repositories. Harun Rashid continued by asking if the online repository will be delivered as an online dashboard or an ArcGIS online StoryMap. Ian responded that the end format of the tool had not been determined yet. However, he emphasized that the goal is to develop an online interactive and interoperable tool, as opposed to providing the data in a report. Harun followed up by requesting that COG/TPB should please let him know if there are any opportunities for collaboration and then asked if climate change mitigation-related metrics will also be considered as part of the program. Ian responded that they will be, as part of the environmental considerations category, and re-emphasized the comprehensive nature of the program and its metrics. As a side note, Mark mentioned that there used to be a Travel Monitoring Subcommittee at COG/TPB until 2005, before it was merged into the TFS. He further explained that Ian is proposing to branch the travel monitoring activities off from the TFS and into its own subcommittee. Ian confirmed this to be the case and mentioned that he looks forward to working with the TFS to help inform the program and proposed subcommittee as the program develops. Harun followed up by asking if an email or formal application would be necessary to be a member of the new subcommittee. Ian responded that this has not yet been considered, but asked Harun to please let him know if he has interest in serving on the subcommittee. Tim Canan mentioned that he will be consulting with the TPB Technical Committee to help identify potential members of the Travel Monitoring Subcommittee from each city, county, and transportation agency. Furthermore, he reinforced the notion that a mechanism will be established to engage in the subcommittee, whether as a member or as an observer. Ian then stated that the Travel Monitoring Program is strongly aligned with the mission of TFS and that he is looking forward to the input from the TFS to help inform and evolve the program. Mark closed this item by stating that COG/TPB does not often start a subcommittee, end a subcommittee, or merge subcommittees together, but one example of a new subcommittee is the recently established Regional Transportation Resilience Subcommittee.[2]

6. TPB RESOURCES APPLICATIONS PAGE (TRAP)

This item was presented by Charlene Howard, who gave a live presentation and shared the web page "TPB Resources and Applications Page" (TRAP)[3] with the subcommittee. She first provided a brief overview of the purpose of creating this resource. She then proceeded to describe some of the types of geospatial and visualization projects that COG's Planning Data Resources (PDR) team produces and explained how the TRAP provides a way to share these resources with a greater audience than the original product intended. She continued by highlighting the basic difference between the TRAP and the Regional Transportation Data Clearinghouse (RTDC).[4] She then gave a brief demonstration of the TRAP page and showed some examples of the content available. Examples of TRAP content shown include the TPB Intercity Travel Survey project page, Highway Asset Performance Measures dashboard,

[2] COG/TPB Regional Transportation Resilience Subcommittee. 2025. https://www.mwcog.org/committees/rtrs/
[3] TPB Resources Application Page (TRAP). 2025. https://trap-mwcog.hub.arcgis.com/
[4] COG/TPB Regional Transportation Data Clearinghouse (RTDH). 2025. https://rtdc-mwcog.opendata.arcgis.com/

and the National Household Travel Survey (NHTS) Origin-Destination Report visualization. She also emphasized the fact that the TRAP page is a dynamic product with new content regularly added and encouraged the subcommittee to submit comments and feedback on the contents of the TRAP. She concluded the demonstration by sharing a glimpse of the WMATA rail ridership dashboard, which is under development. She received no questions, however Kelli remarked that this, as well as Ian's previous presentation, highlighted how COG/TPB is working to make information more accessible.

7. ROUNDTABLE DISCUSSION OF CURRENT MODELING EFFORTS AROUND THE REGION

Kelli opened the discussion by giving an update on a project from WMATA that recently concluded. She explained that WMATA worked with Cambridge Systematics, Inc. to create a medium- and long-term ridership forecast from annual forecasts of Metrorail and Metrobus ridership and growth rates from the COG/TPB Travel Model. Harun asked a question about what kind of tool was developed to then derive the forecasts. Kelli suggested that this question should be directed to the consultants, however, she noted that the general process consisted of generating data inputs using the COG/TPB Travel Model and an Excel spreadsheet.

Jim Bunch continued the discussion by talking about an ongoing project for the Southern Maryland Rapid Transit Study,[5] where Jim's firm, Mead & Hunt, are building a Federal Transit Administration Simplified Trips-on-Project Software (FTA STOPS) model for the region.[6] He further explained that a secondary component of this project is to integrate the output of the STOPS model and use it as the mode choice model of the COG/TPB Travel Model. Jim proceeded to note that this exploratory study is based on work performed for a regional travel model in Orlando, Florida, and that the results would hopefully be produced later this summer. Jim concluded his announcement by asking any individuals with experience developing STOPS models to reach out to him.

Harun first clarified that the STOPS model is an FTA supported model and then asked Jim whether the primary objective of their implementation is to support a grant application. Jim confirmed that that was their primary objective but placed emphasis on the fact that the development of the STOPS model serves a dual purpose. Jim clarified that, due to pre-COVID conditions, the current COG/TPB production-use travel model significantly overestimates transit ridership in Southern Maryland, and having access to both STOPS and regional travel model data would be beneficial. Harun then followed up with a second question, asking if the approach developed will have any relation to the Transit Boardings Estimation and Simulation Tool (TBEST) developed by the Florida Department of Transportation (FDOT).[7] Jim answered by specifying that the FTA requires a model accepted by the FTA, as well as multimodal forecasting capabilities, which TBEST did not provide. However, he noted that they do use TBEST for other applications.

Harun continued the roundtable discussion by mentioning that the Northern Virginia Transportation Authority (NVTA) was at the very end of the Northern Virginia Bus Rapid Transit (BRT) Action Plan. He proceeded to explain that, as part of that action plan, they developed an enhanced version of the COG/TPB production-use model for Northern Virginia. The NVTA model includes Dynamic Traffic Assignment (DTA). Furthermore, moving forward NVTA plans to develop a STOPS model for the NVTA region.

After Harun's update, Mark asked both him and Jim about the use of STOPS on a regional scale, as the model is typically used for corridor studies. Jim clarified that, though that is the case, external data

[5] Southern Maryland Rapid Transit: https://smrtmaryland.com/
[6] STOPS – FTA's Simplified Trips-on-Project Software. https://www.transit.dot.gov/funding/grant-programs/capital-investments/stops
[7] Transit Boardings Estimation and Simulation Tool. https://tbest.org/

will be brought in, and, for smaller regions, they typically bring in the whole region into the model. However, he emphasized that, though feasible, the data requirement becomes very burdensome at larger scales, as detailed operation, stop-, and route-level data for all agencies and routes in the region is required. Harun followed up by asking Jim whether it would be feasible to develop a regional level STOPS model for Northern Virginia. Jim stated that it is, as that is what Montgomery County did and they are currently doing for Southern Maryland. Jim then highlighted that, around the United States, regional level STOPS models have been developed, and that, for small regions, the development of a transit survey that captures all details is not as onerous. Dusan Vuksan asked if the primary intention of STOPS was still to evaluate high-capacity fixed guideway projects. Jim explained that that was still the case, though STOPS has been applied for other modes as well, and that these applications produced reliable results.

8. NEXT MEETING AND OTHER BUSINESS

Mark first explained that the next TFS meeting would be held on Friday, July 18. 2025. Dr. Ken Joh gave a brief update on the next Regional Travel Survey (RTS). Ken first explained that this will be the first post-pandemic RTS and proceeded to highlight how this survey will include state-of-the-practice data collection methods, such as smartphone apps and passive methods. Ken then explained that, to produce robust and representative results, a sample of roughly 8,000 households in the modelled TPB region will be surveyed, as well as 2,000 harder-to-reach households. He concluded his announcement by stating that a Request for Proposals (RFP) will be sent out by the end of this month.

Mark announced the following regarding the upcoming TFS meetings:

- July 18, 2025
  - COG/TPB Gen3 Travel Model: Status report from COG/TPB staff (Feng Xie)
  - Briefing on upcoming TPB survey activities during FY 2026 (Ken Joh)
  - Review of Travel Demand Models Across California for Caltrans Projects Analysis (Adrita Islam, Senior Transportation Planner, Fehr & Peers)
- Sep. 19, 2025: **COG/TPB staff plan to cancel this meeting** due to a schedule conflict with the 2025 AMPO Annual Conference, Sep. 15-19, 2025, in Providence, Rhode Island.[8]
- Nov. 21, 2025
  - COG/TPB Gen3 Travel Model: Status report from COG/TPB staff (Feng Xie)
  - 2025 Long-Range Transportation Plan, Visualize 2050: Results from the performance analysis of the plan (Sergio Ritacco)
  - Thanks to the outgoing chair of the TFS and announcement of new chair for CY 2026 (Mark Moran)

9. Adjourn

The meeting was adjourned at about 11:15 AM.

Attribution: This meeting summary was developed using a variety of sources, including notes from participants, a recording of the meeting, presentation slides, and a meeting summary generated by artificial intelligence (AI), via Webex and ChatGPT. Any sections of the meeting summary based on AI-

[8] AMPO Annual Conference, 2025. https://ampo.org/news-events/ampo-annual-conference/2025-ampo-annual-conference/

generated content were reviewed and edited for accuracy by humans. The primary authors of the meeting summary were the meeting presenters, Glenn Lang, and Mark Moran.