National Capital Region
Transportation Planning Board

TPB TRAVEL FORECASTING SUBCOMMITTEE

HIGHLIGHTS OF THE MAY 20, 2022 MEETING

9:30 AM to 11:00 AM, Web conferencing ONLY, due to COVID-19 precautions. There was no on-site meeting.

MEETING ATTENDEES

MEMBERS, ALTERNATES, AND PARTICIPANTS

- Arun Akkinepally (Caliper)
- Jonathan Avner (Whitman, Requardt & Assoc.)
- Christine Sherman Baker (Arlington Co. DES)
- Kelvin Belcher (MDOT-SHA-TFAD)
- Richard Brockmyer (Fehr & Peters)
- Jim Bunch (Sabra & Associates)
- Kevin Chai (Fairfax Co. DOT)
- Cina Dabestani (VDOT)
- Yucong Du (Jacobs)
- Eric Graye (M-NCPPC, Montgomery Co.)
- Chetan Joshi (PTV Group)
- George Kandathil (Tri County Council-Southern Maryland)
- Jaesup Lee (M-NCPPC-Montgomery Co.)
- Li Li (Whitman, Requardt & Assoc.)

- Yuanjun Li (M-NCPPC, Montgomery Co.)
- Feng Liu (Cambridge Systematics)
- Krishna Patnam (AECOM)
- Mark Radovic (Gannet Fleming)
- Tim Padgett (Kimley-Horn & Assoc.)
- Binny Paul (PTV Group)
- Harun Rashid (NVTA)
- Andrew Rohne (RSG, Inc.)
- Elham Shayanfar (MDOT)
- Lisa Shemer (MDOT-SHA)
- Howard Slavin (Caliper)
- Aichong Sun (AECOM)
- Bill Thomas (Michael Baker International)
- Malcolm Watson (Fairfax County DOT)
- Jim Yang (M-NCPPC, Prince George's Co.)
- Yi Zhao (DDOT)

COG STAFF

- William Bacon
- Mackenzie Bosco
- Anant Choudhary
- Joe Davis
- Nazneen Ferdous
- Charlene Howard
- Martha Kile

- Sanghyeon Ko
- Nicole McCall
- Mark Moran
- Ray Ngo
- Wanda Owens
- Sergio Ritacco
- Meseret Seifu

- Kanti Srikanth
- Dusan Vuksan
- Feng Xie
- Zhuo Yang
- Yue Zhang

* All meeting participants attended the meeting remotely via WebEx.

This meeting of the Travel Forecasting Subcommittee (TFS) was chaired by Ms. Shemer.

1. INTRODUCTIONS AND APPROVAL OF MEETING HIGHLIGHTS FROM THE PREVIOUS MEETING

First, a roll call was conducted. Next, the highlights of the March 25, 2022 meeting of the TFS were approved.

2. AIR QUALITY CONFORMITY ANALYSIS AND PERFORMANCE ANALYSIS OF THE 2022 UPDATE OF VISUALIZE 2045, THE TPB'S LONG-RANGE TRANSPORTATION PLAN

Mr. Ritacco and Mr. Vuksan jointly briefed the committee with a slide presentation regarding the 2022 Update to Visualize 2045 Long-Range Transportation Plan performance. Mr. Ritacco focused on the plan elements and performance using the metrics such as vehicle miles traveled, vehicle-hours-of-delay, accessibility, and greenhouse gas (GHG) emissions. Mr. Vuksan discussed how the 2022 Update to Visualize 2045 meets the federal Air Quality Conformity (AQC) requirements for mobile source volatile organic compound (VOC) and nitrogen oxide (NOx) emissions.

Mr. Dabestani asked when Round 10.0 Cooperative Forecasts would first be used. Mr. Xie noted that draft Round 10.0 Cooperative Forecasts are expected to be approved in early 2023, while Mr. Vuksan noted that they would likely first be used in the 2024 Update to Visualize 2045.

Referring to slides 37 and 40, Mr. Kandathil asked what the 45-minute accessibility threshold was based on. Mr. Ritacco noted that the 45-minute shed is an approximation of average commute times. Mr. Kandathil recommended conducting a survey and establishing the demarcation point of time beyond which commuters would not be willing to commute to their jobs and possibly using that as a threshold instead.

Mr. Kandathil asked whether the mobile emissions forecasts incorporate improvements in vehicle technology (e.g., vehicle electrification). Mr. Vuksan noted that, on the one hand, assumptions regarding the percentage of electric vehicles in the regional fleet are conservative and do not change through time, though, on the other hand, the MOVES2014b model assumes vehicle technology improvements consistent with the relevant federal standards (MOVES2014b assumes the "Obama-era" standards: Final Rule for Model Year 2012 - 2016 Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards).

Mr. Rashid asked how the Air Quality Conformity Analysis of the 2022 Update to Visualize 2045 and the Climate Change Mitigation Study of 2021 (CCMS) are related. Mr. Vuksan reiterated that air quality conformity and GHG analyses are handled separately, but that the 2022 Update to Visualize 2045 Plan document will include a climate section that will be based on the findings from CCMS and the subsequent stakeholder survey. He added that, at the June 15, 2022 meeting, the TPB is scheduled to vote on adopting GHG reduction goals for the on-road transportation sector. Mr. Ritacco added that TPB staff sometimes work on parallel tracks that may be related, such as those that deal with federal requirements (AQC) and policy priorities (GHG).

3. COG/TPB GEN3 TRAVEL MODEL: STATUS REPORT

Mr. Rohne presented about the auxiliary models that would be part of MWCOG Generation 3 Model. These auxiliary models include trips that are not modeled as part of ActivitySim, including truck and commercial vehicles, internal-external and external-internal travel, through travel, visitors, airport passenger ground access trips, and a subset of school trips. These trips are in the process of being integrated into the MWCOG Gen3 Model.

Chat box question: How were the external station volumes implemented? Mr. Rhone stated that externals station volumes are an input to the model. The input file includes the number of vehicles by purpose and by direction.

Mr. Xie provided a status report on the Gen3 Model development regarding the proposed methodologies for school enrollment projections in the Gen3, Phase 2, Model. Mr. Xie started with some background information for this work effort and explained why COG/TPB staff decided to develop their own approach to projected school enrollment for the Gen3 modeling purposes. He then introduced the four-step approach proposed by the project team and walked the audience through each step of the methodologies. Mr. Xie concluded his presentation with the next steps for this work. COG/TPB staff is currently in the process of reviewing a Python script that they created to implement the proposed methodologies. The Python script will be used to develop 2045 school enrollment data, which will be included as part of the 2045 inputs that COG/TPB are preparing for Gen3 Model.

Ms. Yuanjun Li asked about the format in which the school enrollment data will be coded in the Gen3 Model. Mr. Xie responded that the projected school enrollment data, which basically include the TAZ-level enrollment information for Grades K-8 and Grades 9-12, will be attached to the zonal file.

4.   ROUNDTABLE DISCUSSION OF CURRENT MODELING EFFORTS AROUND THE REGION

In the chat window, Mr. Radovic noted that MDOT will be presenting some materials at the July TFS meeting highlighting recent efforts to integrate FHWA's long-distance passenger model in the Maryland Statewide Travel Model (MSTM).

Mr. Rashid noted that the Northern Virginia Transportation Authority (NVTA) had recently completed a scenario analysis for 2045, which included a scenario for post-pandemic effects, and offered that that information could be presented at a future TFS meeting. He plans to email Mr. Moran some information

5.   OTHER BUSINESS

5a. Snapshots of effects of COVID-19 on travel, available on COG website

Ms. Kile stated that the Covid Traffic Analysis through March is posted on the COG website.[1] Ms. Kile also noted that, since we are in the third year of the Covid-19 analysis, she had to change the percent change chart. She also noted that, in March, the region-wide traffic was down 8.9% from its 2019 levels. Also, the preliminary analysis for April is not yet complete. She noted that that traffic appears to be increasing, month to month, although it is not quite up to 2019 levels yet. In the DC core, between March and April, there was a big jump in traffic, reflecting more people returning to the office, at least for a few days a week.

5b. Planned guest presentations at upcoming TFS meetings

Mr. Moran provided an update on planned presentations from non-COG presenters at upcoming TFS meetings:

- July 22 TFS meeting: Recent updates to the Maryland Statewide Travel Model (MSTM).
- Sep. 23 TFS meeting: Long-range plan related scenario analyses, Northern Virginia Transportation Authority.

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[1] https://www.mwcog.org/documents/2022/05/10/covid-19-travel-monitoring-snapshot-covid19-featured-publications-traffic-monitoring/

- Nov. 18 TFS meeting: Recent updates to the Baltimore Metropolitan Council InSite Activity-Based Travel Model (Charles Baber)

Mr. Moran requested that people interested in making presentations to the TFS please contact him, so that he could schedule the presentation.

5c. Next meeting scheduled for Friday, July 22, 2022

6.   ADJOURN

The meeting adjourned at about 11:05 AM.