National Capital Region
Transportation Planning Board

Approved
As of 03/26/2021

TPB TRAVEL FORECASTING SUBCOMMITTEE

HIGHLIGHTS OF THE JANUARY 15, 2021 MEETING

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

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MEETING ATTENDEES

MEMBERS, ALTERNATES, AND PARTICIPANTS

- Jonathan Avner (Whitman, Requardt & Assoc.)
- Jim Bunch (Sabra & Associates)
- Michael Eichler (WMATA)
- Joel Freedman (RSG Inc)
- Eric Graye (M-NCPPC, Montgomery Co.)
- Kyeongsu Kim (Connetics Transportation Group)
- David Kline (Fairfax County DOT)
- Jaesup Lee (M-NCPPC, Montgomery Co.)
- Yuanjun Li (M-NCPPC, Montgomery Co.)
- Li Li (Whitman, Requardt & Assoc.)
- Feng Liu (Cambridge Systematics)
- Atabak Mardan (C&M Associates)
- Ron Milone
- Dale Neef (DNA Data Solutions)
- Srikanth Neelisetty (Transurban)
- Krishna Patnam (AECOM)
- Binny Paul (RSG Inc)
- Mark Radovic (Gannet Fleming)
- Harun Rashid (NVTA)
- Elham Shayanfar (MDOT)
- Lisa Shemer (MDOT-SHA)
- Jasmine Smith (MDOT)
- Malcolm Watson (Fairfax County DOT)

COG STAFF

- William Bacon
- Tim Canan
- Anant Choudhary
- Joe Davis
- Nazneen Ferdous
- Yu Gao
- Charlene Howard
- Ken Joh
- Martha Kile
- Sanghyeon Ko
- Arianna Koudounas
- James Li
- Nicole McCall
- Jessica Mirr
- Mark Moran
- Ray Ngo
- Jinchul (JC) Park
- Jane Posey
- Meseret Seifu
- Jackie Sellman
- Dusan Vuksan
- Feng Xie
- Yue Zhang

* All meeting participants attended the meeting remotely via WebEx.

This meeting of the Travel Forecasting Subcommittee (TFS) was chaired by Mr. Eichler.

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

First, a roll call was conducted. Next, the highlights of the November 20, 2020 meeting of the TFS were approved without changes.

2. 2017/2018 COG REGIONAL TRAVEL SURVEY

This item was presented by Dr. Joh, who spoke from a set of presentation slides. Dr. Joh provided an update on the 2017/2018 Regional Travel Survey (RTS), a once-in-a-decade household travel survey for the National Capital Region. As the culminating presentation on the findings from the RTS, Dr. Joh briefed the committee on the change in reported travel between 2007/08 and 2017/18, focusing on daily weekday trips, mode share of all trips, and commute trips, in addition to 2017/18 tabulations on trip length by mode and purpose. He also provided a summary of post-survey edits and consistency checks in addition to an overview of the RTS public file.

Mr. Patnam asked if any panel effect was observed from those who provided multiple-day travel diaries. Dr. Joh responded that the RTS was a one-day travel diary where each household recorded travel for a randomly assigned weekday. Therefore, it was not a panel survey since a household did not report travel for multiple days. Dr. Joh noted that in future surveys, collecting trip information for multiple days could enhance the data quality especially via a smartphone survey which can be easily collected over multiple days.

Ms. Yuanjun Li asked whether the observed decline in rail transit trips (e.g., slide 8) matched WMATA data. Dr. Joh responded that the RTS data were compared with WMATA ridership data when developing the RTS weights. The initial RTS estimates slightly overestimated Metrorail trips so an adjustment factor was applied based on weekday Metrorail ridership statistics from the 2016 Metrorail Passenger Survey.

Ms. Yuanjun Li also asked if “walk trips” include walk to transit, and whether the survey sample size was large enough for walk trips. Dr. Joh responded that for transit trips, access and egress trips by walking were captured in the survey. However, the “walk trip” tabulation includes only walk as a primary travel mode, which did not include walk to and from transit stations. He also stated that a modal hierarchy was applied to determine primary travel mode.

Mr. Milone asked how VMT has trended over the 2007/08 – 2017/18 period, and whether it trended downward as observed with household trip rates. Dr. Joh responded that VMT per capita has decreased during this period, which corresponds with the decline in trip rates.

3. COVID, CLIMATE, CHINA, CONNECTIVITY AND CONSOLIDATION: HOW 2020 CHANGED THE EVOLUTION OF AUTONOMOUS VEHICLES AND WHAT THAT MEANS FOR LOCAL GOVERNMENT PLANNING AND FINANCING OF CAV PROJECTS IN THE U.S.

This item was presented by Mr. Neef from a set of presentation slides. Mr. Neef discussed how the fast evolution of technology will affect the transportation domain. From remote-working to how we view public transit, Covid-19 has significantly affected transportation globally. Fifth-generation standards for broadband cellular networks (5G) are likely to revolutionize connectivity even while climate change legislation in the EU and China has increased the pressure on auto manufacturers to move toward electric/autonomous vehicles, forcing the industry toward consolidation. The presentation discussed the changes that occurred in 2020 and the effect those changes had on

connected and autonomous vehicles, including the effect on funding and infrastructure responsibility for local governments. Following the presentation, there was a round of questions and answers.

4. COG/TPB GEN3 TRAVEL MODEL: STATUS REPORT

This item was presented by Mr. Paul and Ms. Posey, who both spoke from a set of presentation slides. First, Mr. Paul provided an update on status of Gen3 Model implementation. He focused on Phase 1 of the Gen3 Model development, whose goal is to develop a developmental activity-based travel model (ABM) that can be tested by TPB staff, in preparation for Phase 2 of the Gen3 Model, whose goal is a production-ready ABM in FY 2023. Regarding Phase 1, Mr. Paul reported that population synthesis was 85% complete, data development was 40% complete, and ActivitySim deployment was 10% complete. Mr. Paul then discussed the planned treatment of external-internal transit demand in the Gen3 Model. He described the transit services most affected by demand generated external to the region. He described the method to code external transit trips in the MARC, VRE, and Metrorail on-board surveys, and the proposed method to create trip tables from those trips. He then described network modifications required to assign those trips to the Gen3 Model networks. Finally, Mr. Paul provided a brief update on next steps for Phase 1 of the Gen3 Model development. Ms. Posey then discussed the development of transit networks for the Gen3 Model. Compared to the transit networks used for the existing Gen2/Ver. 2.3 Model, which have two time-of-day (TOD) periods (peak and off-peak), the proposal for the Gen3 Model is to have four TOD periods (AM, PM, midday, and evening/night). Similarly, whereas the Gen2 Model assigns transit trips in production-attraction (P-A) format, the plan for the Gen3 Model is to use origin-destination (O-D) format. Ms. Posey showed diurnal distributions of Metrorail and Metrobus ridership, and discussed the method to calculate average headways for each transit route for the two new time periods. Ms. Posey noted that the current schedule has COG delivering the revised base-year networks to RSG in spring 2021 and future-year networks in fall 2021.

5. TRANSPORTATION RESEARCH BOARD (TRB) 100TH ANNUAL MEETING

The 100th Annual Meeting of the Transportation Research Board (TRB) was conducted as a virtual event, due to COVID-19 precautions, over a series of dates throughout January. This roundtable discussion provided TFS members with the opportunity to discuss committee meetings or sessions attended. For example, Mr. Eichler discussed the new Transit Data Committee (AP090), noting that he is the current secretary of the committee. This committee is currently accepting new members.

6. ROUNDTABLE DISCUSSION OF CURRENT MODELING EFFORTS AROUND THE REGION

Due to time constraints, this item was postponed for a later meeting date.

7. OTHER BUSINESS

A. Monthly Snapshots of Effects of COVID-19 on Travel is now Available on COG Website

Ms. Kile informed the subcommittee that COG/TPB staff has developed the second in a series of snapshots to illustrate how the COVID-19 pandemic is impacting travel in the metropolitan Washington region. The snapshots include charts that show changes in roadway traffic and air passenger enplanements compared to 2019 levels. The intention is to update this report on a regular basis, adding additional travel modes as data become available. The snapshot is available on the COG website using this link https://www.mwcog.org/documents/2020/12/18/covid-19-travel-monitoring-snapshot-covid19-traffic-monitoring/. The next snapshot with data through December 2020 will be available in the coming weeks.

B. Multisector Impacts of COVID-19

Mr. Canan informed that the subcommittee that COG staff is collaborating on conducting an analysis of COVID-19 impacts on the region from a multi-sectoral perspective. This includes examining impacts from a health, economic, transportation, and environmental perspective. Mr. Canan reminded the subcommittee that Mr. Meese presented preliminary transportation impacts to the Subcommittee last fall, and that this multi-sectoral analysis incorporates and updates that previous transportation impacts analysis and adds additional analyses from other sectors.

C. Upcoming Guest Presenters at TFS Meetings in 2021

Mr. Moran discussed the planned guest presenters at upcoming TFS meetings in 2021. At the March 26 meeting, Bentley Systems is scheduled to make a presentation regarding the Bentley Cube Sugar Access accessibility tool. At the May 21 meeting, Cambridge Systematics is scheduled to present about using location-based services (LBS) data to prepare for COVID-19 transit operational and modeling support, highlighting work done for Los Angeles. At the July 16 meeting, Arlington Co. plans to return to give an update on their tour-based travel demand forecasting model. At the September 24 meeting, Prince George's Co. Planning Department plans to return to give an update on the modeling work being done at M-NCPPC. **At this point, no guest presenter has been identified for the November 19 TFS meeting. Interested parties can contact Mr. Moran** (mmoran@mwcog.org).

8. ADJOURN

The meeting adjourned at 11:55 A.M. The next meeting is scheduled for Friday, March 26, 2021 at 9:30 A.M.