

## TECHNICAL COMMITTEE

June 7, 2022  
9:32 to 10:19 A.M.

### MINUTES

The meeting was called to order at 9:32 A.M. by Mr. Joel Gallihue.

#### 1. APPROVAL OF MAY 2022 MINUTES

Mr. Gallihue asked for approval of the minutes from the May meeting of the Technical Committee. Mr. Dan Janousek moved to approve the minutes with Mr. Kwaku Duah seconding the motion. The minutes were unanimously approved.

#### 2. RECOMMENDED ACTION ON RESOLUTION #22-15

Mr. Charles Baber presented information on InSITE enhancements and 2019 validation. The 2019 validated InSITE model will be used in the 2023 to 2026 mobile source emission analysis, updated long-range transportation plan project evaluation and other regional corridor studies. The original InSITE model was estimated using the 2008 Household Travel Survey and validated to 2012.

The original InSITE model geography was modified to incorporate the recently developed 2020 Transportation Analysis Zone (TAZ) boundaries. BMC staff in cooperation with the Cooperative Forecasting Group adjusted, combined, and added TAZs based on 2020 Tiger Line File and 2020 Census PL 94-171 block population and household counts. The model geography was expanded to cover Queen Anne's County, Maryland as well as Adams and York Counties, Pennsylvania. The expanded model contains over 3,000 TAZs with a 2020 base year population of 6.4 million.

Cambridge Systematics, developer of InSITE, incorporated model enhancements in order to improve runtime. The Cambridge Systematics Activity-Based Model (ABM) software, TourCast was modified to adopt a multi-threaded approach to take advantage of multiple server cores and applying a 25% synthetic population sampling approach.

The Cambridge Systematics team analyzed and summarized the 2019 Maryland Household travel survey travel patterns, choices, and behavior. Survey summary statistics were used to adjust InSITE model component parameters. The calibrated InSITE model components capture the change in travel behavior observed between 2008 (model estimation year) and 2019 observed conditions.

The consultant team used other independent data sources to validate InSITE network travel. A Location-Based Services (LBS) data set was purchased in order to validate distribution patterns, time-of day, and trip lengths. Classified counts and On-Board Transit Survey was used to validate network loadings.

Mr. Gallihue requested a motion regarding Resolution #22-15. The motion to send Resolution #22-15 to the BRTB as presented was made by Mr. Duah and seconded by Mr. Janousek. A vote was taken on Resolution #22-15, with unanimous support from the members.

***[PowerPoint: InSITE Model Validation]***

**3. PRESENTATION: ANOTHER IN A SERIES ON THE MARYLAND TRAVEL SURVEY**

Mr. Robert Berger discussed results from the 2018-2019 Maryland Travel Survey (MTS), in particular a study of household travel and energy, which analyzed how several household (HH) characteristics relate to the amount of HH automobile travel. Mr. Berger also noted that, despite the presentation title, he was not able to determine the amount of energy used by various households, but was able to analyze and present some indirect measures of energy consumption, in particular daily HH miles.

Mr. Berger first compared households by the number of HH drivers. Not surprisingly, households with two drivers travel more than twice the distance of households with one driver. And households with three or more drivers travel more than twice the distance of households with two drivers.

Daily household miles, in rank order, by number of HH Drivers, is: one driver (6,150 miles), two drivers (14,787 miles), and three or more drivers (31,689 miles.)

Mr. Berger next compared households by the number of HH vehicles. Households with two vehicles travel more than twice the distance of households with one vehicle. And households with three or more vehicles travel more than one and a half times the distance of households with two vehicles. Daily household miles, in rank order, by number of HH vehicles, is: one vehicle (6,482 miles), two vehicles (15,666 miles), and three or more vehicles (24,604 miles).

Mr. Berger also compared households by number of HH workers. Households with one worker travel almost twice the distance of households with zero workers and households with two workers travel almost twice the distance of households with one worker. Households with three or more workers travel more than one and a half times the distance of households with two workers

Daily household miles, in rank order, by number of HH Workers, is: zero workers (5,112 miles), one worker (10,031 miles), two workers (19,790 miles), and three or more workers (31,225 miles).

Finally, Mr. Berger compared households by the residential density. Mr. Berger noted that, in contrast to the other variables presented, the analysis of residential density included some surprising results. High density households travel slightly greater distances than mid-density

households, which, Mr. Berger noted, is counter-intuitive. Lower density households travel slightly greater distances than high density households. Very low density households travel somewhat greater distances than lower density households. Very high density households travel significantly greater distances than very low density households.

Mr. Berger concluded, although households in lower density, e.g. rural, areas generally travel greater distances than households in other areas, there are exceptions and the greatest distances are traveled by households in very high density areas, probably because they have more destinations that are closer and thus easier to reach. Daily household miles, in rank order, by residential density, is: mid-density (14,938 miles), high density (10,031 miles), lower density (19,790 miles), very low density (31,225 miles), and very high density (29,873 miles).

***[PowerPoint: Household Travel and Energy Use]***

#### **4. OTHER BUSINESS**

Mr. Janousek reported on the search for officers to lead the Technical Committee in FY 2023. Both the current chair and vice chair are completing a one-year term. Both are eligible and willing to serve a second one-year term. Mr. Janousek asked if there were any nominations from the floor. None were offered at the meeting. The vote will take place at the beginning of the July meeting.

Mr. Gallihue asked for a motion to close the TC meeting. Mr. Gallihue made a motion which Mr. Duah seconded. The business meeting adjourned at 10:07 A.M.

#### **CLOSED SESSION**

Mr. Gallihue asked for a motion to open a Closed Session of the Technical Committee in order to discuss two proposed RFPs. Mr. Duah made a motion to open the Closed Session and Mr. Janousek seconded the motion at 10:08 a.m.

**Vision for an Integrated Regional Bicycle Network:** Ms. Charlene Mingus discussed the tasks and deliverables for this effort. There was a question about the role of public involvement and elected officials. There was also a question on the deliverables. Ms. Mingus provided additional detail on those topics.

Technical committee members agreed with the project scope and agreed to move forward.

**Expanding Coverage for Electric Vehicle Charging Stations:** Ms. Nicole Hebert was prepared to present the work scope for this RFP, however due to the lateness of the meeting and the start of the Congestion Management Committee, it was postponed to the July meeting.

Mr. Gallihue asked for a motion to close the Closed Session of the TC. The members approved by consensus. The Closed Session ended at 10:19 a.m.

## **ATTENDANCE**

### ***Members***

Ken Choi – Maryland Department of Planning  
Jade Clayton – Maryland Transit Administration (MDOT MTA)  
David Cookson – Howard County Office of Transportation  
Angelica Daniel – Baltimore County Department of Public Works & Transportation  
Kwaku Duah – Annapolis Department of Transportation  
Joel Gallihue – Harford County Department of Planning  
Dan Janousek – Maryland Department of Transportation (MDOT)  
Mary Lane – Carroll County Department of Planning  
Lisa Minnick Sirota – Maryland State Highway Administration (MDOT SHA)  
Catherine Salarano – Maryland Department of the Environment  
Brian Ulrich – Anne Arundel County Office of Transportation (OOT)  
Graham Young – Baltimore City Department of Transportation

### ***Staff and Guests***

Regina Aris - Baltimore Metropolitan Council (BMC)  
Charles Baber - BMC  
Robert Berger - BMC  
Erin Bolton - BMC  
Cindy Burch - BMC  
Rochelle Carpenter – Toole Design  
Rebecca Deibel - BMC  
Monica Haines Benkhedda - BMC  
Don Halligan – BMC  
Nicole Hebert - BMC  
Victor Henry - BMC  
Zach Kaufman - BMC  
Shawn Kimberly - BMC  
Keith Kucharek - BMC  
Todd Lang – BMC  
Charlene Mingus - BMC  
Brian Ryder - BMC