

BALTIMORE METROPOLITAN PLANNING ORGANIZATION

**BALTIMORE REGIONAL TRANSPORTATION BOARD
RESOLUTION #22-15**

**APPROVAL OF VALIDATION OF THE
BALTIMORE REGION TRAVEL DEMAND MODEL - INSITE**

WHEREAS, the Baltimore Regional Transportation Board is the designated Metropolitan Planning Organization for the Baltimore region, encompassing the Baltimore Urbanized Area, and includes official representatives of the cities of Annapolis and Baltimore, the counties of Anne Arundel, Baltimore, Carroll, Harford, Howard, and Queen Anne's as well as representatives of the Maryland Department of Transportation, the Maryland Department of the Environment, the Maryland Department of Planning, the Maryland Transit Administration, and Annapolis Transit; and

WHEREAS, the Transportation Planning Division of the Baltimore Metropolitan Council, which serves as staff to the Metropolitan Planning Organization, has revised its computerized modeling process for simulating transportation demand and submitted its Baltimore Region Travel Demand Model to the Technical Committee of the Metropolitan Planning Organization; and

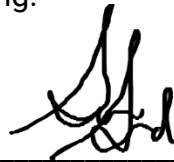
WHEREAS, the Technical Committee has reviewed the technical process of the Baltimore Region Travel Demand Model for base year 2019 as developed through the FY 2019 to 2022 Unified Planning Work Programs; and

NOW, THEREFORE, BE IT RESOLVED, that the Baltimore Regional Transportation Board approves the technical process in performing the Baltimore Region Travel Demand Model for the base year 2019 and recommends its use in analyzing and evaluating transportation demand in a multitude of Unified Planning Work Program tasks, including air quality Conformity Determinations, Transportation Improvement Programs and Long-range Regional Transportation Plans.

I HEREBY CERTIFY that the Baltimore Regional Transportation Board as the Metropolitan Planning Organization for the Baltimore region approved the aforementioned resolution at its June 28, 2022 meeting.

6-28-22

Date



Sam Snead, Chairperson
Baltimore Regional Transportation Board

InSITE 2019 Calibration and Validation

- Geography model coverage area expansion – Adding all of Queen Anne’s County and Adams and York Counties, Pennsylvania
- 2020 Census/Transportation Analysis Zone (TAZ) geography incorporation
- InSITE model run time enhancements – InSITE model component multithreaded software and population sampling
- InSITE model parameter calibration to reflect the 2019 Maryland Household Travel Survey observed travel behaviors, choices, and parameters
- Revised Freight Modeling System expanded to new geography coverage and updated base year model inputs
- InSITE model 2019 validation using Location-based Services (LBS) data, classified traffic counts, On-Board Transit Survey, and MDOT MTA Automatic Passenger Count (APC) data
 - Location-based Services
 - Tours – total, length, distribution, and time-of-day
 - Classified traffic counts
 - Volume/VMT by – Jurisdiction, facility type, area type, and screen lines
 - On-Board Transit Survey
 - Total linked and unlinked trips and transfer rates
 - Automatic Passenger Count
 - Route level ridership