TPB'S PRODUCTION-USE TRAVEL DEMAND FORECASTING MODEL

Status report

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Background

- COG/TPB staff maintains at least two regional travel demand models
 - An adopted, production-use model
 - One or more developmental models
- Production-use travel
 - Updated on a regular (annual) basis
 - Used extensively by TPB member agencies
 - Becomes the adopted, production-use model implicitly by action of the TPB, e.g., approval of the air quality conformity (AQC) analysis
- Developmental models
 - Guided by the strategic plan for model improvement, developed in 2015 with consultant assistance



TPB's production-use travel model

- Current production-use model: Gen2/Ver. 2.3.75 (adopted 10/17/18)
- Travel model user's guide is updated on a regular (annual) basis
 - To be finalized by early December
- Model transmittal package for the production travel model
 - To be finalized by early December
 - Includes Ver. 2.3.75 model and its input files
 - Networks: 2019, 2021, 2025, 2030, 2040, and 2045
 - Land use: Round 9.1, TAZ-level, with CTPP-based employment adjustment
 - We have received four requests for model/inputs thus far



This year (Ver. 2.3.75) vs last year (2.3.70)

Model

- Removed the Metrorail transit constraint to/through the regional core for years 2020 and beyond (as per change in WMATA policy)
- Streamlined the way that HOT-lane facilities are modeled
 - By removing the need to conduct two runs of the travel model for each modeled year.
 - Also known as the HOV3+ Highway Skim Replacement (HSR) procedure.
- Added a check to ensure that there are no rail stations disconnected from the highway network

Inputs

- Updated the "exogenous trips" (e.g., through, external, misc., & airport passenger auto driver)
- Updated price escalation (CPI), based on 2017 data
- Updated transit fares (e.g., WMATA Tariff #37)
- Updated highway tolls on fixed-rate facilities (current to Mar. 2018)
- Land use forecasts: Round 9.1 (last year, Round 9.0)



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