

GEN 2 / VER. 2.3 MODEL UPDATES

Part 2 of 2 : Major Updates

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July 19, 2019

Agenda Item #2A:Gen2/Ver. 2.3 Model Updates



Ver. 2.3 Model: Latest validation work

- TPB staff performed a re-validation effort of the Version 2.3.75 model to 2014 conditions
 - Results were presented to the TFS on March 15, 2019
- Ver. 2.3.75 is the currently adopted travel model
- The travel model was also validated using 2010 data



2014 Model Validation Findings

- Model performance was found to be comparable to that found in the 2010 model validation effort and acceptable for regional planning
- Minor issues were identified:
 - Potomac River crossings under-estimated (by 7%)
 - Traffic on some screenlines near external count stations found to be substantially over-estimated.
 - Frederick County VMT over-estimated (by 12 %)
 - VA Commuter rail ridership under-estimated by 40%
 - Bus-only ridership over-estimated by 10%



Recent staff development activity: External trip gen./trip dist. refinements

- A process to refine external travel treatments has been implemented using observed cellular O-D data
- Refinements include:
 - Adjustment of external Ps & As at juris. level
 - Updated external trip F-Factors
 - Two Scripting updates:
 - Prepare_Ext_Auto_Ends.s
 - Trip_Distribution_External.s



Status of development activities

- External trip distribution refinements have been implemented
 - Results are under evaluation
- Staff plans to revisit the MC model calibration using updated mode choice targets
- Staff is aiming to combine the above two refinements



Acknowledgements

- Mark Moran, Ray Ngo, and Feng Xie, TPB staff members
- Ron Milone, Consultant



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