FSUTMS Validation Guidance

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Model Advancement Committee

Model Validation Guidelines


Guidance Document

- Presents validation guidelines based on:
  - FHWA Model Validation Manual
  - NCHRP Report 716
  - 2008 FSUTMS Validation Guidance
  - Validation results of models in Florida and elsewhere
- Not a rewrite of the comprehensive 2008 document
  - But some guidelines from the 2008 report are updated

Report Outline


- Validation process overview
  - Considerations and Best Practices
  - Types of Validation Checks
  - Use of Targets and Guidelines
  - Development of a Model Validation Plan
  - Validation of Model Input Data
- Demand component validation
  - Trip generation
  - Trip distribution
  - Mode choice
  - Time of day
  - Activity based model components
- Highway and transit assignment validation
- Temporal validation and sensitivity testing

Report


- Focused on methods
- Summary of checks for each component
- Numeric guidelines presented where appropriate
  - Not pass/fail tests
- Sensitivity testing procedures

Actions Taken by MAC/MTF

- MAC recommended that the full Model Task Force approve the guidelines
- Full Model Task Force approved the guidelines at the February 2022 meeting

Further Revisions


- Received comments from a few people
  - Corrected some typos and clarified some wording – CHANGES MADE
  - Additional information requested on a few items – CHANGES MADE
  - A few additional items to check – nothing major, can resolve with Central Office
  - Some comments better addressed in other contexts (e.g., FSUTMS NextGen)
- Version distributed with agenda for this meeting includes the changes that have been made in response to first two bullets above

Additional Revisions


- As discussed at the MTF meeting, this is a living document
- Further comments and suggestions welcome
- FSUTMS NextGen process may identify further revisions
- It is worth tracking experience in validating FSUTMS models and new research to continue to improve this report