Comprehensive Planning Forecasting Process

June 9, 2016

TAC Planning

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Local Forecasting Requirements

- Socio-Economic Data
- Traffic Volumes on Principal and A-minor Arterials

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Forecast Coordination

- Consistency with
  - TPP Current Revenue Scenario
  - County plans
  - Adjacent city plans
- Consistency in
  - Inputs
  - Outputs
  - Not necessarily methods

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Forecasting Options

No one single approach to travel forecasting set of procedures is correct for all applications or contexts

Options:

- Twin Cities Regional Travel Demand Forecast Model
- Locally Developed Model
- Trend Analysis

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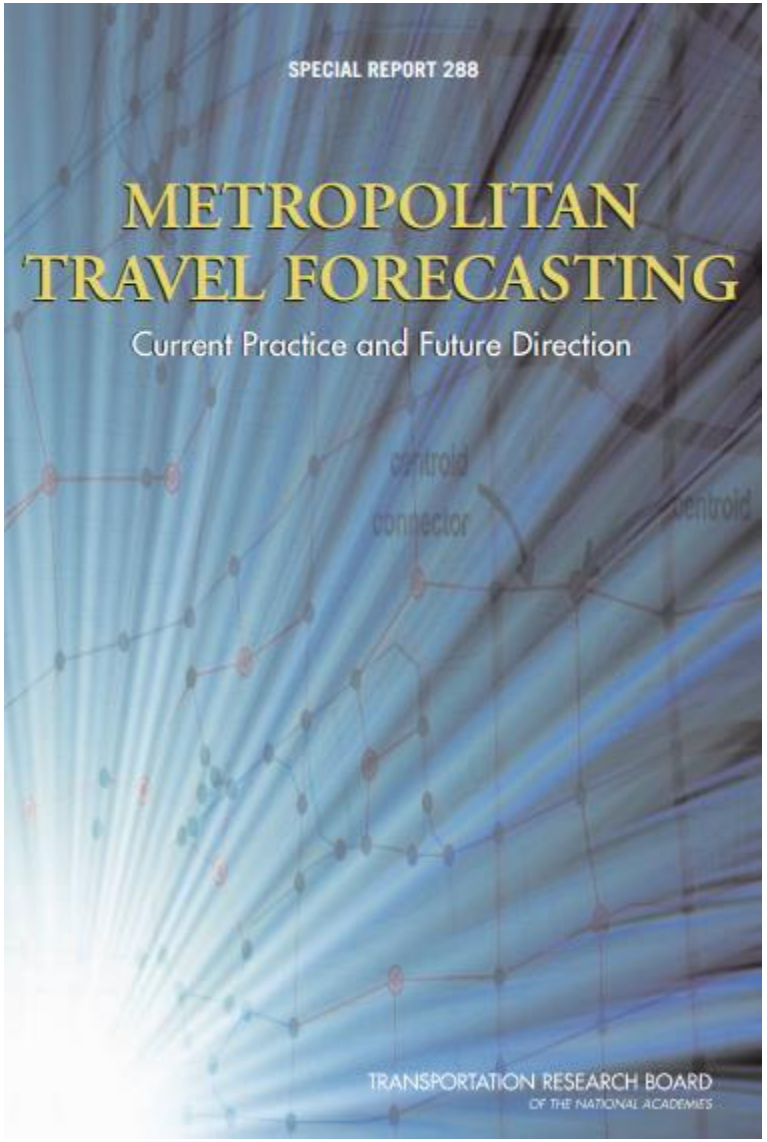

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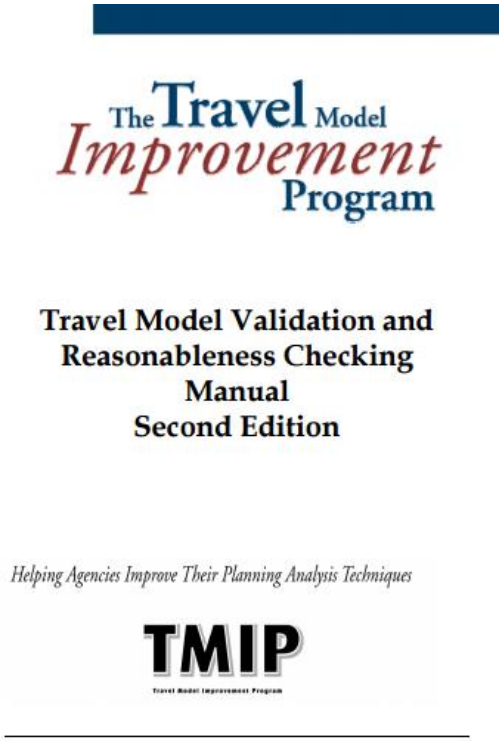
Validation

- Application of developed/calibrated models, comparison against observed data, sensitivity testing



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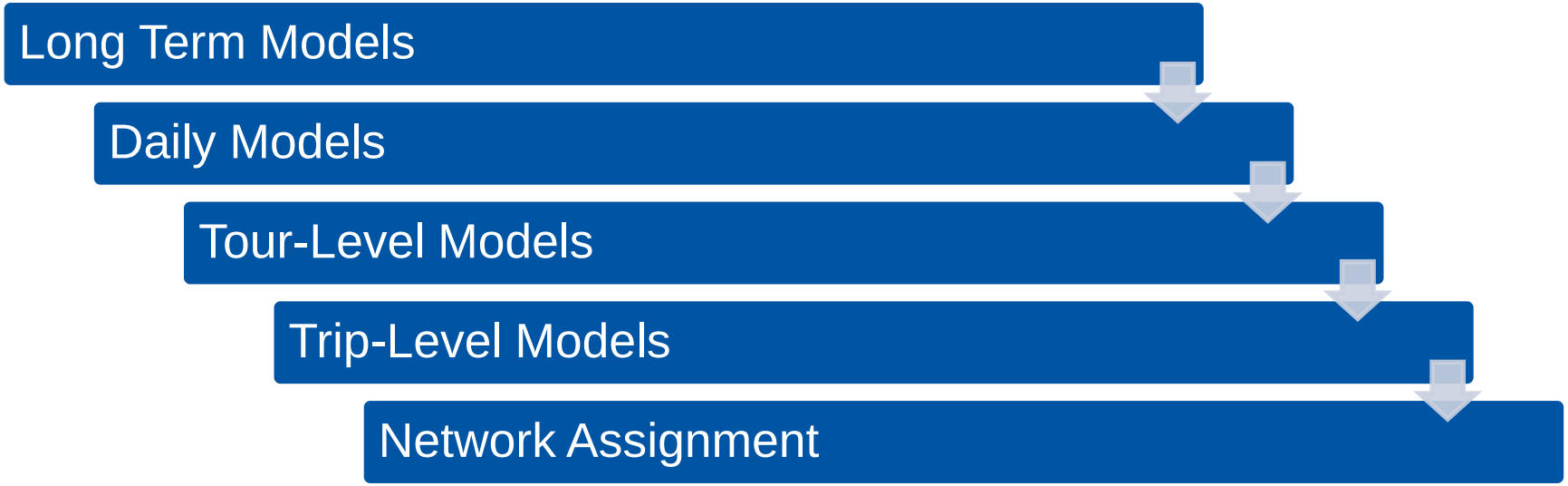
New Regional Model



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Regional Model Validation

- Supply data
- Assignment parameters
- Synthetic population
- Each model component separately
- Aggregate assignment validation
- Sensitivity testing

Other Models: Documentation

- FHWA Certification Checklist:
  - Last model revision
  - Model specification
  - Calibration data
  - Local survey
  - Model validation
  - Size of network
  - Number of zones
  - Non-home based travel

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Other Option

Check for forecasts done in your area by MnDOT, County, or Council

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Trend Analysis

- Only appropriate for rural communities where changes in traffic patterns are limited.
- Must be consistent with population/employment forecasts
- Beware “jumps” in long-term trends
- Supplement with local knowledge

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Discussion

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