Model Validation

Trip Generation
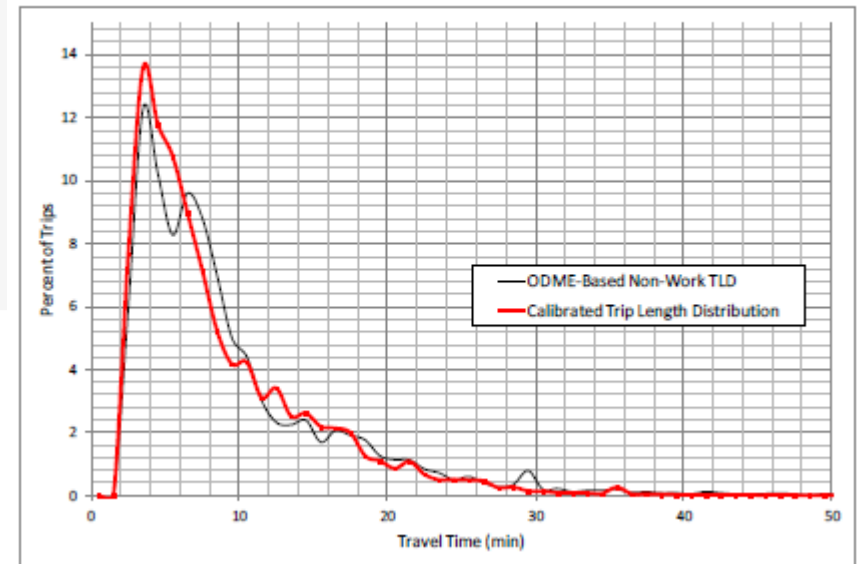
➤ Trip Rate Review

» Reasonableness checks

CAMBRIDGE SYSTEMATICS

Trip Distribution

➤ Trip Length Frequency Distribution (TLFD)

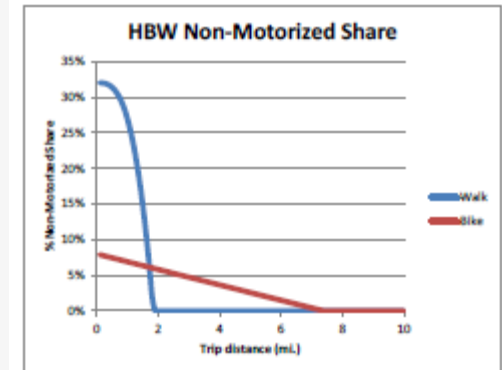➤ Average Trip Length

➤ % Intrazonal

➤ District to District flows

FIGURE 4.2: NON-WORK TRIP TIME DISTRIBUTION

Legend:
— ODME-Based Non-Work TLD
— Calibrated Trip Length Distribution

X-axis: Travel Time (min)
Y-axis: Percent of Trips

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Mode Split

➤ Non-Motorized

» Calibrate to ACS or CHTS shares

» Can also use Big Data such as Strava for bike trips

➤ Transit

» District based summaries

» Calibrate to observed boarding data

CHTS-California Household Travel Survey

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Traffic Assignment

- Compare modeled and observed volumes
  - » At screenlines (a screenline splits a study area into two parts, capturing performance measures for flows from one part of the study area to the other)
  - » Aggregates by facility type and area type
- Can validate at daily or peak period level
- Statistics
  - » R-squared, RMSE, Volume/Count ratio
  - » Regional, subarea
- "Top 10" Errors

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CSTDM Screenlines