

Status of the Version 2.3 Travel Model on the 3,722 TAZ Area System

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Milestones reached at last TFS meeting (July 23)

- Network Report:
 - 2007 Highway and transit networks developed over the 3,722 TAZ system finalized for use in the Version 2.3 calibration work
 - Zonal area type measure finalized
 - Work on a set of forecast year networks for model testing is underway
- Models Development Report
 - Foundation has been set for calibration
 - 2007/08 HTS calibration files prepared
 - 2007 “Pseudo” Round 8.0 land activity on the new TAZ system developed
 - GIS-based pedestrian environment variables collected
 - 2007 Traffic counts collected prepared
 - 2007 ASC data collected
 - Bus on-board survey data compiled

Version 2.3 model calibration schedule

- September 2010: Demographic model, Trip generation, time-of day calibration results presented (today)
- November 2010: Trip Distribution, Mode Choice calibration results to be presented
- January 2011: Highway and transit assignment work completed, feedback process in place. Application process documented
- Continuing sensitivity testing will be ongoing after January

Today's Theme:

Demographic & Trip generation modeling

- Demographic sub-models
- Trip production model
- IX trip estimation
- Trip attraction model
- Non-motorized trip end estimation model

- Time of day modeling also discussed

Overview of Version 2.3 Trip Generation Process

Model Step		Model Function	Model Output (zone level)
1	Demographic sub-models	Apportion total HHs among socio-economic cross-classes	Households by size, income, and vehicle availability cross-classes (64)
2	Trip production model	Apply trip production rates	Total (I-I, I-X) motorized & non-motorized trip productions by purpose and income group
3	I-X Extraction sub-model	Remove portion of total productions that are external	Internal (I-I) motorized & non-motorized total trip productions by purpose
4	Non-motorized production estimation sub-model	Estimated portion of internal productions that are non-motorized	Internal (I-I) motorized trip productions by purpose
			Non-motorized trip productions
5	Trip attraction model	Apply trip production rates	Internal motorized & non-motorized trip attractions by purpose
6	Non-motorized attraction estimation	Estimated portion of internal attractions that are non-motorized	Internal motorized trip attractions by purpose
			Non-motorized trip attractions
7	Income disaggregation sub-model	Estimate share of HB attractions in each income group	Trip attractions by purpose and income group