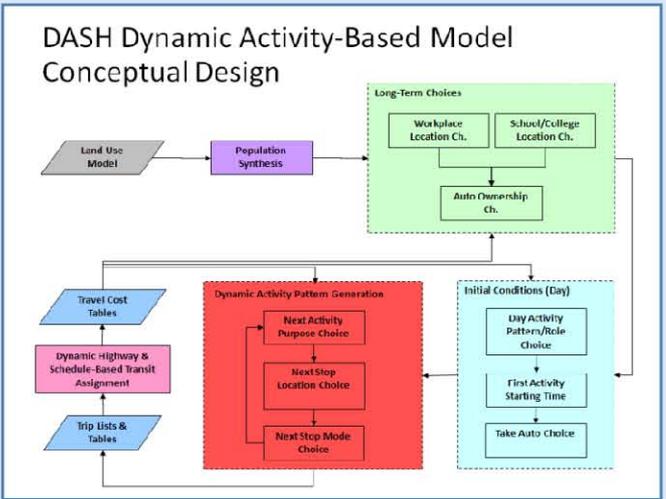


Overview



- DASH is the latest travel demand model under development at Metro. This model will serve to advance the state-of-the-art of modeling – not only in this region, but the nation.
- The multi-modal model is designed to be sensitive to the characteristics present at the time of the decision. Time-of-day affects multiple variables, including:
 - Infrastructure characteristics (e.g., HOV lanes open, peak period parking prohibition)
 - Travel costs (e.g., parking, pricing/tolls)
 - Likelihood to make trip
 - Roadway congestion characteristics
 - Transit service availability and travel time
- This model structure is well suited to respond to the policy decisions faced by the decision makers.
- Release date – Fall 2013

Key Features

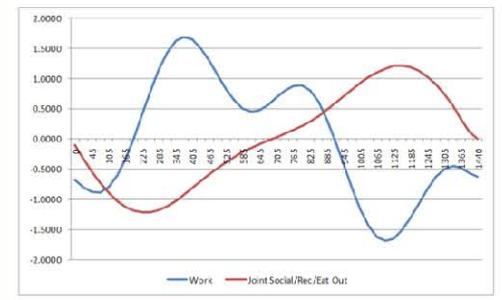
- Population synthesis
 - Universe of people is created for the region
- Trips by individuals
 - Travel for each person is determined
- Individuals have roles
 - Each role has different travel propensities (e.g., activity patterns, temporal profiles)
 - Each role reacts uniquely to stimuli (e.g., modal opportunities)
 - Each role has a unique value-of-time
- Individuals interact with each other – schedule trips accordingly
- Individuals travel in tours – not isolated/unconnected trip legs
- Clock time and infrastructure characteristics affect decisions

DASH generates an activity log for each individual

- Looks very much like a household trip diary!
 - Can be queried to produce result summaries
 - Can be processed to produce trip tables for network assignment

pid	hhid	time	activity	location	tcist	ttime	mode	role	duration
1	200169	339	Working	965	3.445	10.869	da	2	401
1	200169	940	SocRec	611	3.485	9.766	da	2	101
1	200169	1053	Enr/Hom	611	0.549	3.554	da	7	386

Marginal utility of clock time on departure for new work and joint social/recreation/eat-out activities



Applications

- Regional Transportation Plan
- Metropolitan Transportation Improvement Plan
- Corridor studies
- Emission analysis
- Special Metro and jurisdictional Projects

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