

**Model Users Group Meeting
November 12, 2008
New Bern, NC**

Presentations and Q&A

1. Leta Huntsinger, PB: NC Travel Demand Modeling Guidelines and Procedures

Leta presented a step-by-step comparison of the new NCDOT modeling procedure with the previous process that has been in use for many years. These procedures are based on survey data specific to NC contained in the NC Combined Survey Database. NCDOT intends to use this guidance for model development for large non-MPO communities and small MPO communities.

Questions and Answers

- **How is this information to be disseminated to the MPOs?** This has not yet been shared outside of the Transportation Planning Branch; however the intent is to apply it to all small and medium areas.
 - **How many models are currently maintained and updated?** The total number of models is unknown; however this is much fewer than 100. The ability to update is limited based on the conversion from the Tranplan platform to TransCad and the fact that it is often necessary to start a new model rather than update.
 - **Should we be building whole county models?** Although creating CTPs for the whole county is considered a good practice, it is not necessary to use a travel demand model for the entire county. Some counties have large rural areas that are not appropriate to model.
- 2. Soon Chung, NCDOT: Integration of Land Use into Travel Demand Modeling**
- Soon Chung presented information gathered from the work done for his dissertation in Volusia County, Florida using UrbanSim with the travel demand modeling for the Long Range Transportation Plan. This methodology represented an iterative use of outputs from the travel demand model into UrbanSim and corresponding inputs into the travel demand model for forecasting of population and employment.

Questions and Answers

- **What was the basis for the number of years between the runs of the travel demand model with the UrbanSim inputs?** The model runs are very time consuming and without changes to the network, are unnecessary to repeat frequently.
- **Did the LRTP forecasting of population location consider build-out along the coastal part of the county with a new emphasis on growth in other areas?** The information presented was pre-2000 census with modeling in the late 1990's, and therefore this new dynamic was probably not considered.
- **Raleigh is experiencing the issue of redevelopment in areas that are already considered developed. How does UrbanSim handle this way of growing?** UrbanSim uses control totals that are then dispersed based on exiting use as well as tax records to predict changes in land use over time. The current version disperses within a grid rather than at the parcel level.

3. **Justin Krometis, IEM: Challenges in Evacuation Modeling**

Justin presented a comparison of travel demand modeling as used in emergency management to the traditional transportation planning use of modeling. In both cases the modeling provides information to decision makers to allow action to be taken. Justin used evacuation modeling as a basis for the comparison.

Questions and Answers

- **How does modeling for a no-notice event compare to that for hurricanes?** Determining populations to be evacuated, where they can be expected to be located, and the anticipated behaviors are considered in both types of evacuations. The differences can be dramatic in the timing as well as the possible destinations for evacuees.
- **Does evacuation modeling consider contra-flow on the interstate?** Contra-flow is considered in hurricane evacuation using the interstates. In addition, in nuclear power plant evacuation consideration is sometimes given to using contra-flow on smaller roads when there is essentially one way in and one way out.

4. **Paul Ricotta, Caliper: TransCad 5.0 Tips and Updates**

Paul demonstrated several new features of TransCad 5.0 for the group.