Meeting Summary: Florida Model Task Force

11/30/2010 - 12/2/2010

Tuesday, November 30, 2010

Tri-Chair Welcome and Meeting Objectives

Mr. Larry Foutz welcomed the attendees, and noted that this meeting was important for short and long-range decision making. A subsequent meeting in May will help to confirm these decisions.

Shi-Chang Li provided a presentation highlighting the need for the transportation department to provide Safety, Mobility, Service and Funding. The purpose of this meeting is to make decisions on models that will allow us to move forward on the 2010 Long Range Transportation Plan updates and to provide a vision for the future.

Danny Lamb: Long range improvements need to reflect changing trends and emerging issues in transportation.

Model Development Status Updates by District Model Coordinators

District 1: A Long-Range Transportation Plan (LRTP) model is being examined that would include all of District 1. They are beginning to explore Activity-Based (AB) models for Polk County.

District 2: Adding a Select Zone/Select Link Capability to the NERPM model. A new model for the Big Bend area is being developed to accommodate a large, multi-phase development. Gainesville is working on their LRTP.

District 3: One validated model (Florida-Alabama) and two others being calibrated.

District 4: New reporting features have been added. A Time-of-Day (TOD) model has been implemented on the highway portion of the model. A tool for dynamic windowing has been implemented. HEVAL has been implemented in Cube/Voyager. A road user cost feature has also been implemented. Matrix Estimation (ME) procedures have been used to increase model accuracy. Dynamic Traffic Assignment (DTA) subarea processes have been implemented. Enhanced usability including a self-install GIS geodatabase capability has been implemented. A SERPM 7 work program is being prepared for a January 2011 release.

District 5: The GIS true-shape network is being used to support LRTP for communities. Travel time and speed data is being collected to support the volume-delay function recalibration. SunRail Phase 2 and two other major studies are ongoing. The OUATS model has been completed, and includes income sensitivity. An update to 2040 will be done soon.

District 6: See presentation

District 7: Two alternatives analyses and five regional transit corridor studies are ongoing. A separate transit-oriented model is available. Jan 2013 is the deadline for model readiness to support LRTP. Other topics include DTA, run time, hardware requirements, Air Quality and the MOVES model.

District 8 (Turnpike): Land Use model is updated to a 2009 base year. The turnpike is working with District 3 to study the NW bypass and working with District 1 to update the Central Florida Parkway forecasts.

Transit and Rail Committee

Steve Ruegg made a presentation on the purpose and need for Intercity Passenger Forecasting (ICPF). This was followed by comments from the Ad Hoc committee members, including Jon Weiss, Wade White and Jeannette Berk. Topics discussed included:

- The importance of access and egress to understand high-speed rail demand was discussed.
- The use of a multi-modal model will permit the model to reflect the effect of access and egress service.
- The need to create a business plan during the first half of next year.
- The need to cooperate with other agencies and other studies to expand the source of data.
- There may be other sources of funding available for model development.

Myung Sung and Daniel Harris presented the final results of the TBEST/New Starts Study. Final comments are due on the day of the presentation, but there will be opportunities for comments from all transit agencies.

A question was asked if there is a funding mechanism for transit data collection, as there is for traffic data collection. Daniel Harris replied that there is currently no such state funding, but the Transit Office is looking into this. He also mentioned that a system for data storage and distribution for transit is being investigated. A standard reporting system is also being considered.

Myung Sung noted that good highway times are important as well for transit and emphasized the importance of early data collection for Alternatives Analyses.

Jon Weiss previewed Wednesday's presentation on the travel model update study.

Model Advancement Committee

Wilson Fernandez announced the formation of the Activity-Based Modeling Sub-Committee which will be headed by Milton Locklear. A request for volunteers was made, and a response via a show of hands indicated 5-6 individuals were interested who will give their names to Diana Fields for membership on this sub-committee. This committee will function as an umbrella group for model advancement. All input is welcome.

Wilson noted the importance of meeting timelines for LRTP updates, and that different Districts and MPO's have different deadlines. With this in mind, he asked each sub-committee to report on progress that might be used in the next LRTP update:

Toll Subcommittee: Sample scripts for toll modeling are available, with a comparison to the Turnpike model. They are testing transferability to CUBE. Priority should be placed on finalizing CUBE toll modeling. Additional funding is required to proceed.

Time of Day Sub-committee: Phase I is completed, and Phase II is about to proceed as the scope is being formulated. TOD factors are available. December 2013 is a deadline for Phase II.

Dynamic Traffic Assignment Sub-committee: There is a need to determine how best to serve the Florida modeling community with DTA. More time will be required to implement in LRTPs – this is a mid-term development in terms of schedule.

Siva Srinivasan presented their forthcoming work on activity based model development. He and Abdul Jihardi of USF will lead this.

A question was asked if DaySim alone is being considered – this is being done for consistency with current research. A number of other questions were asked regarding the following topics:

- Survey data size relative to 2001
- Fleet mix sensitivity to Air Quality
- Alternative-fuel Vehicles
- MOVES Training
- AQ re-designation schedule delays Announcements delayed until December
- Attraction-end data, and tourist data needs
- Effect of data from bordering states

Toll Sub-Committee -- Jack Klodzinski

The next steps for the toll committee involve developing research problem statements. No funding currently for new projects. The scripting for open road tolling reasonably replicates the Turnpike model results. They are working with Citilabs to implement ramp to ramp tolling in CUBE. Basic toll sample scripting is available for use and testing by other districts.

Jack Klodzinski presented slides on potential areas for research.

Questions were asked and discussion of same regarding:

- Modeling multiple toll options
- Variable pricing (SERPM model tested this) which is done within an automated loop. The dynamic nature of actual variable tolling challenges the ability of a static model. Time of Day effects is very important in this regard adding sensitivity of time shifts due to tolls. The SHRP2

CO4 project is looking at the effect of pricing on demand. Peter Vovsha, Principal Investigator of that study, mentioned that reliability is as important as time in travel decisions.

- Stochastic toll modeling
- Testing existing toll models
- Congestion Pricing

Cautions on developing investment-grade forecasts

Time of Day Subcommittee:

Krishnan Viswanathan presented the results of Phase I of the Time of Day (TOD) study. TOD factors are available for application by the districts.

Other questions were asked regarding:

- Count comparisons yes this was done
- Income significant at what level County
- Appropriateness of multinomial logit for TOD choice Maybe ordered logit would be better
- Applicability for LRTP and Transit

Timing and next steps for Phase II – Steve Ruegg commented that we will be consistent with overall model development vision and available independent variables.