

Florida Model Task Force Meeting Summary

Orlando

April 18, 2002

9:00 AM – 4:30 PM

Introduction and Welcome

Danny Lamb, Dennis Hooker and Shi-Chiang Li welcomed everybody to Orlando and asked the subcommittee chairs to provide an update to the members on the latest subcommittee activities.

Subcommittee Reports

Transit Subcommittee

Shi-Chiang Li informed the members that Charles White changed positions and stepped down as chairman for the Transit Subcommittee. Kevin Feldt from the Jacksonville Transportation Authority was named as the new Subcommittee chair. Kevin reported that the Transit Subcommittee met on April 17, 2002. Mike Doherty from URS demonstrated the Generalized Nested Logit (GNL) mode choice. Kevin thanked the FDOT Systems Planning Office for funding the project and successfully bringing it to completion.

Ike Ubaka from the FDOT Public Transit Office informed the members on the new FTA rule for new start transit projects to conduct specific user benefits and costs analyses. There was a general consensus to request the FDOT Systems Planning Office to incorporate the user benefits analysis capabilities into the GNL model to allow for the type of analyses the FTA requires. In addition, the Subcommittee has asked the FDOT Public Transit Office to monitor future developments regarding this new FTA requirement and keep the Transit Subcommittee members informed through emails and teleconferences.

The draft Transit Subcommittee mission statement and goals/objectives were discussed. A teleconference will be held to finalize the mission statement and objectives. Tom Rossi from Cambridge Systematics made a presentation on the Time of Day model and Ram Pendyala from UCF presented the Activity Based model. Both of these projects are research projects funded by the FDOT.

Trip Generation Subcommittee

Imran Ghani reported that the research project to evaluate the transferability of the lifestyle model from one urbanized area to another was ongoing. Survey data from Treasure Coast and Volusia County will be incorporated into the project. A survey of Florida MPOs has been conducted and four MPOs are interested in pursuing the possibility of switching to a lifestyle model. To better handle seasonal resident trip generation rates, a comparison is conducted between the 1992 Lee County survey information and trip generation results from the model.

On a statewide basis, all available survey data is being summarized and trip rates are being developed in an effort to perhaps update the trip rates within FSUTMS. The Trip Generation Subcommittee is working with the Transportation Land Use Subcommittee to schedule a joint meeting in the near future to discuss common issues.

Freight Subcommittee

Frank Baron reported that the Freight subcommittee is monitoring the development of the statewide highway freight model, which will be completed by the end of June. The FDOT Public Transportation Office is conducting a Port Truck Study to generate truck traffic at specific ports. The Freight committee will meet some time within the next 2 to 3 months to discuss the port study.

GIS Subcommittee

Glen Ahlert reported that the majority of the subcommittee members participated in the Geodatabase Design workshop. The Subcommittee had a teleconference meeting since the MTF meeting last October and is planning to meet in June to present Version 3 of GIS-TM. The new version will be compatible with ARC-GIS and have updates to the LOS calculation to make it consistent with the 2002 LOS manual. Other features that have been added deal with traffic smoothing techniques and the ability to analyze selected trip purposes. The Subcommittee is going to conduct a survey to obtain information on the GIS modeling needs.

Transportation Land Use Subcommittee

Gary Kramer reported that during the several teleconferences the Subcommittee has held since the last MTF meeting, the Subcommittee ranked the research projects. The three top ranked projects were sent to the FDOT Systems Planning Office for funding.

The Subcommittee adopted a set of goals and objectives and developed strategies to achieve these objectives. Other issues discussed included: developing a computer based training course on the ULAM model; scheduling a joint subcommittee meeting with the Trip Generation Subcommittee, and bringing a transportation land use workshop from the National Transit Institute to Florida.

Distribution Subcommittee

Mike Neidhart reported that the Subcommittee decided not to pursue the Intervening Opportunity Model as an alternative trip distribution methodology to be included in FSUTMS. The research project by Dr. Fang Zhao from FIU is currently looking at the Destination Choice model to determine if it is a viable option. The Subcommittee is also focusing on how the existing gravity trip distribution model can be enhanced and improved.

HNET/ITS Subcommittee

The tri-chairs noted that there is the need to integrate ITS into the modeling process. The IDAS software, which is an interface between travel demand modeling and ITS, evaluates the impact of ITS strategies. A discussion took place on whether to create a new subcommittee or to reactivate the HNET Subcommittee to look into ITS issues. It was decided to reactivate the HNET Subcommittee and if, at a later date it appears more appropriate to have a separate subcommittee, it could be formed at that time. Imran Ghani was appointed as temporary chair. The members were asked to contact Huiwei Shen if they were interested in serving on the Subcommittee.

Blue Ribbon Panel Discussions

Introduction

At its Fall 2001 meeting, the Model task force approved a motion to form a blue-ribbon advisory panel of five to seven national experts as a means to evaluate the strengths and weaknesses of the current modeling framework and determine whether additional modeling methods and tools should be added to the FSUTMS toolbox. After a nationwide search of modeling experts and open call for nominations, the Model Task Force identified a seven-member blue-ribbon panel representing a broad range of knowledge and experience in the development and application of different modeling tools. The panel members were asked to review the current status of transportation modeling in Florida and offer insights into the future directions of transportation modeling that the state should consider. The Blue Ribbon Panel met during the first week of April and Ram Pendyala reported on the results.

Presentation by Ram Pendyala on Blue-Ribbon Panel Recommendations

The Florida Model Task Force formed Blue-Ribbon Panel, which consisted of 7 international experts. These were:

- Patrick Costinett, PBQ&D
- David Hartgen, University of North Carolina
- Dane Ismart, The Louis Berger Group
- Ken Kaltenbach, The Corradino Group
- Eric Miller, University of Toronto
- Tom Rossi, Cambridge Systematics
- Jim Ryan, Federal Transit Administration

The fundamental questions that were asked were: What transportation modeling software should serve as the engine for the Florida Standard Model? What additional tools/software should be included in the FSUTMS toolbox and interfaced with the engine?

After two days of discussions the Blue Ribbon Panel recommended that the MTF adopt a resolution to undertake a comprehensive evaluation of available modeling software options prior to making a decision. The Blue Ribbon panel developed a list of important criteria to consider in selecting the software as well as a process on how to perform the selection. A description of the list and the process can be found in the document that summarized the Blue-Ribbon panel meeting “Future Direction for Florida’s Transportation Models - Report of the Florida Statewide Model Task Force Blue Ribbon Panel”. This report can be downloaded by visit FDOT’s web site at: <http://www11.myflorida.com/planning/systems/stm/mtf/mtfhome.htm>).

The tri-chairs and subcommittee chairs developed an action plan based on the recommendations from the Blue-Ribbon Panel. The first two steps of the action plan have been completed. The first step was the Blue Ribbon panel meeting itself, which took place on April 2 and 3, 2002. The second step was a vendor presentation and a demonstration of their software, which took place on April 17, 2002. The third step will take place today, which is a MTF discussion on the Blue Ribbon panel’s findings. The remaining steps are: 1) collect data on options, this data would be obtained from vendors and the literature; 2) to conduct a research study of the options, with data obtained from users (site visits) and the benchmarking of software options; 3) finalize the criteria and assess differences; 4) address and negotiate all the administrative issues, 5) and last to hold decision meetings and form an action schedule.

General Discussion on Software Evaluation Process

The tri-chairs informed the members that FDOT Systems Planning Office has secured funding for a research project for Ram Pendyala from USF to evaluate all major software platforms. The research contract would undertake a detailed evaluation of the available software. The project would consist of such tasks as data gathering from vendors and users. Detailed interviews and demonstrations would need to be organized to evaluate how capable the software is and what its key features are. It should be clearly understood that FSUTMS will not be replaced, only the software that drives FSUTMS is being analyzed.

The MTF will form a steering committee to guide the evaluation study. Nominations were taken at the meeting and can also be submitted to Systems Planning Office after the meeting. The steering committee would ideally be a mix of the high end and the more typical end users. The number of each group could vary between 3 to 5. The tri-chairs asked for nominations. The tri-chairs will select the steering committee from the list of nominees. The following members were nominated:

1. Paul Larsen, Palm Beach Metropolitan Planning Organization
2. William Roll, Tindale-Oliver
3. Arturo Perez, Leftwich Consulting Engineers
4. Jackeline Vallejo, Orth-Rodgers & Associates, Inc.
5. Wade White, Gannett Fleming
6. Mike Doherty, URS

7. Frank Baron, Miami Dada MPO
8. Gary Kramer, West Florida Regional Planning Council
9. Budd Whitehead, Hillsborough County MPO
10. Imran Ghani, FDOT – District 2
11. Rob Schiffer, Cambridge Systematics, Inc.
12. Dan McMurphy, URS
13. Ossama Al Aschkar, Broward County MPO
14. Kevin Feldt, JTA

The members can continue submitting nominations until Friday April 26, 2002. Once the steering committee has been formed an approach will be developed to perform the evaluations over the summer.

General Discussion on Criteria Ranking Process

Six groups were formed with approximately 9 members each. The members were given the attached list of criteria and asked to rank them 1 through 5. Number 1 signified that the criterion was not important while number 5 meant that the criterion was extremely important. The members were also allowed to assign a 0, which would mean that the criterion was not an issue at all. The members were given 2 hours to assign a number to the criteria, calculate a group average, and submit the score.

The group's scores were averaged and discussed by the members. Initially the discussion focused on the process itself. Several members felt that their personal opinions were not well represented by the group. Some groups had members that assigned a 1 to a criterion while another member assigned a 5, resulting in a score of 3. It appeared that the difference of opinion was created by what type of user the member was. A suggestion was made to collect the original scoring sheet by individual members and average the scores by user type. These would be: MPOs, consultants, FDOT, etc. After some discussion it was decided that the overall results would probably come out the same, and that it was more important to focus on those criteria that scored 1 or 2 points and make sure everyone understood what they meant and to see if they could be eliminated from the software evaluation process. Following was the list of criteria, which the MTF decided to eliminate from any further evaluation:

- Maintenance of traffic
- Carpooling strategies
- Flextime
- Technology (telecommuting)
- Incident management
- Construction management
- Language longevity

A lengthy discussion took place concerning the source code availability of the software. According to the Blue Ribbon Panel, the availability source code should not be an issue in selecting the software package, simple because none of the packages will provide the

source code. According to the panel, it was more important to focus on the flexibility of the input and output file structure so that the users can obtain the data in the format needed to execute routines outside of the software package.

However, the availability of source code was the deciding issue in selecting Tranplan some 15 years ago. Having the source code eliminates the dependency on a particular vendor; it enables the users to make changes that are necessary without having to wait for the next version. A comment was made that the perhaps during the negotiations the point could be made to the vendors that State would not purchased the software unless the source code was provided. Since the source code availability issue was not clearly understood by all the members, the members were asked to vote again. Following is the result:

Source Code Availability Score*	Number of Votes
1	5
2	4
3	19
4	9
5	3

*Rate importance on a scale from 1 through 5 (1=least important)

Forty members voted, which brought the average to 3 and allowed the source code availability criterion to remain important in the evaluation of the software package. It was also decide to eliminate TRANSIMS from the criteria list and to evaluate it as a product.

Report from the Subgroups on the Criteria Ranking Process

Lime Green Group - Mike Neidhart

The group discussed the criteria and as a group assigned the points.

Blue Group - Gary Kramer

The group entered the points individually and then averaged the score for the group. Some discussion took place on HOV facilities for they were important in some areas and not in others.

Yellow Group - Glen Ahlert

Each member filled out the sheet and then the scores were averaged.

Green Group - Frank Baron

The group did not have enough time to fully consider all of the criteria. The criteria themselves should be grouped better. Some of the criteria overlapped, while others were missing. The groups should be based on the type of users, rather than a mix of different users within one group.

Red Group - Kevin Feldt

The scores were discussed to obtain an average. The group added micro simulation to the list.

Orange Group - Paul Larsen (Imran Ghani had lead the group, but had to leave early)

The group scored their individual score and then the score was averaged.

General discussion

The general discussion focused on the process used in the ranking of evaluation criteria. Some members felt that perhaps a retaking of the criteria ranking should occur using different make up of the groups as well as a different grouping of the criteria. The point spread was also discussed; perhaps the bigger spread would give a clearer ranking order. The clarity of the criteria and the White Paper were discussed. If a retaking would take place, all members should be allowed to vote, including those not present today. Other points of discussions were whether the members were to rank the criteria from their own agency perspective or the statewide perspective. The idea of asking people to fill out a profile together with the ranking was discussed.

It was decided that the results of the current ranking was enough to establish a general direction. During the evaluation process the issues will be identified. A motion was made to include a user survey as part of the evaluation study. The survey would obtain data on the users; the results of the survey would be documented as part of the data collection effort of the study. The steering committee will determine the form and the content of the survey. A vote was taken and all except one member voted for the steering committee of the evaluation study to design and implement a more detailed user survey.

Meeting was adjourned at 4:30 PM