Florida Model Task Force Meeting
October 6, 2004
9:00 AM – 5:00 PM
Orlando, FL

Agenda Item 1: Committee Activity Updates

Presentation: Oral updates by each MTF Committee Chair were provided.

- **Land Use Committee** (Gary Kramer, Chair) - The National Transit Institute held a workshop in Pensacola in June 2004 called Coordinating Transportation and Land Use. Fang Zhao’s Land Use Modeling Research Technical Memorandum No. 1 is done and is currently under review by the MTF Land Use Committee.

- **Trip Distribution Committee** (Mike Neidhart, Chair) – The Trip Distribution Committee was tasked with evaluating whether traditional trip distribution models in Florida should be enhanced or if destination choice trip distribution models should be used. A technical memorandum detailing the evaluation of destination choice models by the Trip Distribution Committee is currently being developed. The research project showed a marginal difference in trip distribution results when comparing the two types of trip distribution models. As a result, the subcommittee evaluated destination choice models in further detail by looking at the income and spatial barrier variables and their impact on destination choice. Home-based work trips were impacted by income; however, the spatial barrier variable had minimal impact. The recommendations or conclusions of the Trip Distribution Committee are as follows:
  - Salary distribution proved to be valuable data and should be further investigated, but requires household income data.
  - The committee evaluated the impacts of various household characteristics on trips produced by different income groups. May require a special census tab request.
  - Recommended that the Trip Generation Committee evaluate how income impacts trips on the production end.
  - Consider building an add-in module for destination choice that can be incorporated into FSUTMS.

- **Freight Committee** (Frank Baron, Chair) – The Freight Committee has not been active pending further direction from FDOT Central Office. The Freight Committee will be meeting with FDOT Central Office and the statewide freight model consultants on November 3rd and 4th.

- **Data Committee** (Frank Baron, Chair) – The Data Committee is a new Committee and will be organizing soon. FTA funding is effected by our mode choice models. The Data Committee will work closely with the Transit Committee and the FDOT Transit Office to enhance data collection and improve our data. Persons with recent or relevant experience in data collection, especially relative to transit, were asked to join the committee.

- **Transit Committee** (Kevin Feldt, Chair) – The Transit Committee held a teleconference meeting in July 2004 to discuss coordination with the Data Committee. The Transit Committee has recommended a survey be completed in areas of transit service to assist in the update of transit models in Florida. FDOT has developed a scope of services for this research project. The Transit Committee is scheduling a workshop in Florida regarding the Summit program utilized to evaluate the user benefit portion of the analysis that the FTA conducts when reviewing transit New Starts projects. The Transit Committee recently discussed the ambiguity of FTA’s criteria and procedures for reviewing transit system proposals by FTA and would like to better understand the process.

- **GIS Committee** (Glen Ahlert, Chair) – The GIS Committee has been inactive during Florida’s transition to TransCAD.
Discussion: None.

Conclusions: None.

Action items:

- Review Fang Zhao’s Technical Memorandum No. 1 on land use research. Responsible Party: Land Use Committee
- Consider a special census tab request to evaluate the impacts of various household characteristics on trips produced by different income groups. Responsible Party: FDOT Central Office
- Consider the evaluation of how income impacts trips on the production end. Responsible Party: Trip Generation Committee
- Consider building an add-in module for destination choice that can be incorporated into FSUTMS. Responsible Party: FDOT Central Office
- Conduct a survey in areas of transit service to assist in the update of transit models in Florida. Responsible Party: FDOT Central Office

Agenda Item 2: Central Office Update

Presentation: Huiwei Shen, FDOT Central Office

- Statewide Passenger and Freight Models
  - More urgent need to develop, calibrate, and validate the passenger and freight statewide models due to realignment of statewide model to support Strategic Intermodal System (SIS) analysis.
  - Original freight model was commodity-based and only included long-haul freight trucks (service distribution trucks not included).
  - Refined network and zonal system and then contracted with Caliper Corporation to convert statewide passenger and freight models into TransCAD and to make improvements.
  - Caliper used TransCAD’s trip table estimation function to account for trucks not included in the original freight model, such as service distribution trucks. An acceptable way to project truck trips in the future could not be developed and therefore the trip table estimation methodology is not used by the current statewide model validation efforts.
  - Passenger model network based on Caliper database but determined network needed to be thinned out. Corradino contracted to calibrate and validate the passenger model. Cambridge Systematics is contracted to use Quick Response Freight Manual (QRFM) to forecast missing piece of trucks. These two models will be integrated after model calibration and validation.
  - Statewide passenger and freight models scheduled to be up and running and integrated by Thanksgiving 2004.
- FSUTMS Interface
  - Caliper working on FSUTMS interface that will include Scenario Manager, Model Builder, and Parameter Editor.
    - A scope of services between Caliper Corporation and FDOT Central Office was written in March 2004 with
the first draft interface due at the May 2004 MTF meeting. FDOT would then review and comment on the interface and conduct beta testing. The final interface was scheduled for delivery at the Fall 2004 MTF meeting (today). FDOT recently learned that Caliper Corporation expects to release the FSUTMS interface with TransCAD 4.8 in November 2004. Beta testing has only been conducted internally by Caliper Corporation. FDOT has not beta-tested the interface.

- Model User Survey
  - Model user survey conducted on behalf of the Model Task Force as part of a Quality Assurance Program.
  - Respondents felt research funding should not be used for production purposes and need tighter control on research project deadlines. FDOT Central Office is evaluating the process now.
  - Respondents noted need for strong technical support in FDOT Central Office. FDOT Central Office is forming a Modeling Section Study Group and Yongqiang Wu has joined Central Office as the Modeling Manager.
  - Respondents noted the need to focus more on modeling instead of on GIS. Terry Corkery, the training program coordinator, is working with Cambridge Systematics and Transportation Support Group on developing a comprehensive modeling workshop workbook that will utilize Florida examples and standards. It is currently on hold pending receipt of the FSUTMS interface from Caliper. A new workshop will also be added to the training program, titled FSUTMS Executive Summary workshop. It will be designed for managers and decision-makers for one day as a primer on modeling.

Discussion: None.

Conclusions:
- Both statewide passenger and freight models will be up and running and integrated by Thanksgiving 2004.
- Caliper Corporation was scheduled to complete the final FSUTMS user interface by today but has not provided a draft user interface for review, comment, and beta testing yet.
- FDOT Central Office is evaluating the research funding process in response to model user survey.
- FDOT is increasing their technical expertise in the Central Office.
- FDOT is developing a new training program for 2004 – 2005 that will focus more on modeling and will utilize Florida examples and standards.

Action items: None.

Agenda Item 3: Model Users’ Survey Results

Presentation: Danny Lamb, MTF Tri-Chair

- MTF goal is to improve transportation modeling in Florida to adequately address our needs and emerging issues. Key component is ensuring that existing and newly developed models and modeling techniques
follow a consistent and uniform approach throughout Florida. The driving force of selecting TransCAD was to help accomplish this goal by enabling the development of the next generation of FSUTMS. Conducted large survey before TransCAD selection of areas that need improvement relative to modeling in Florida.

- The MTF will conduct a model user survey every year
- This year’s survey focused on Central Office support and TransCAD model conversion and support.
- Members of the Florida modeling community were contacted by telephone and responses were obtained by personal interview technique. There were 44 participants and identity of respondents remained anonymous.

Discussion:

- Some attendees questioned the validity of the survey since it was not scientific and did not include all Florida modelers that had possession of a TransCAD key.
- The MTF responded that survey participants included the voting members of the MTF and their consultants and was not meant to be scientific.
- Caliper stated that the survey included conflicting information and that survey comments on training workshops were not consistent with what Caliper received in their training courses.

Conclusions:

Summary of TransCAD experience in Florida based on survey responses:

- MTF and FDOT working to address modeling needs
- Technical questions generally answered promptly and satisfactorily by Caliper staff
- TransCAD is a technically sound software product
- Process of purchasing TransCAD software and keys has been relatively easy
- Locals have not been involved in model conversion process
- Each converted TransCAD model different; not standardized
- Major effort to make converted TransCAD models functional
- Caliper training not tailored to Florida
- TransCAD version release/compatibility issues
- Single-session TransCAD hardware key inconvenient
- Difficulty negotiating and executing contracts with Caliper
- Lack of responsiveness by Caliper to local needs and concerns
- Unwillingness of Caliper to take direction

Action items: None.
Agenda Item 4: Future Directions and Group Discussion

Presentation: Danny Lamb, MTF Tri-Chair

- TransCAD conversion status
  - Converted Models: Gainesville, Broward, Palm Beach, District 5, Miami
  - Re-validated Converted Models: Broward, Palm Beach
  - Developed in TransCAD without Caliper Conversion: Treasure Coast RPM III, Highway-only completed in mid-October.

- Florida user interface – Caliper has not yet delivered first draft

- New FSUTMS Comprehensive Modeling Workshop - FDOT on hold until interface received

- FSUTMS Powered by TransCAD has not developed quickly enough and the business relationship is not consistent with the MTF’s goal of maintaining a consistent and uniform modeling approach.

- Alternative actions are to continue with Caliper (TransCAD) or proceed with negotiations with Citilabs (Cube Voyager)

- Summaries were given on:
  - Current Caliper TransCAD Florida Edition cost for Florida public agencies and consultants
  - Proposed Citilabs Cube Voyager cost for Florida public agencies and consultants
  - Florida service experience with Caliper including model conversions, user interface, and training
  - Service proposal from Citilabs on model conversions, user interface, and training

- Changes in Cube Voyager since software selection
  - FTA Summit Calculator incorporated into Cube
  - Integration with ArcGIS – ArcGIS license is completely optional
  - Cube 4 coming spring 2005 – ArcGIS will be full embedded in CUBE 4 and will replace Viper. Cube 3 exchangeable for new Cube 4 at no cost and Cube 4 will not require an ArcGIS license.

Discussion:

- The recommendation to the full MTF to proceed with negotiations with Citilabs was passed unanimously by the MTF Leadership (Tri-Chairs and Committee Chairs).

- Several MPOs are going through LRTP updates now and cannot wait any longer for a decision. They must know now if they should switch to a new product.

- Since Gainesville is already in the LRTP alternatives testing phase using TransCAD, FDOT District 2 wanted reassurance that a switch to Cube would not affect the ability to meet their deadlines. If the switch to Cube is approved, FDOT will make every effort to work with the MPO to ensure that conversion and re-validation is done very quickly. If possible, FDOT will try to keep the TransCAD maintenance agreements with those MPOs that have already converted to TransCAD.

- Details on contract negotiations with Caliper were requested. The Systems Planning Office project manager provided an update on contractual issues.

- FDOT District 5 asked Citilabs how long it would take to convert the District 5 model to Cube Voyager since
the District 5 converted TransCAD model has not been calibrated yet. Citilabs responded that it would take one week to reproduce the same results in either Cube Voyager or Cube Tranplan.

- There was a motion made and seconded to delay voting on anything at this meeting and reconvene as soon as possible for a vote. The motion did not pass.
- The task force went through several iterations of discussion in preparing the wording of the final motion.
- The following motion was made and seconded: “MTF RECOMMENDS THAT FDOT CENTRAL OFFICE IMMEDIATELY PROCEED WITH NEGOTIATIONS WITH CITILABS.”
  - VOTE: APPROVED (25 yeas, 0 nays, and 3 abstentions,)
- The next MTF meeting will be early February and then another one in late Spring 2005, in response to the request for increased frequency of MTF meetings in the model user survey.

Action Item:
- FDOT Central Office is to proceed with negotiations with Citilabs.

**Agenda Item 5: Upcoming Transit Modeling Improvements**

**Presentation: Ram Pendyala, University of South Florida**

Postponed until next MTF meeting.