



**Regional Transportation Technical Advisory Committee (RTTAC)
Modeling Subcommittee
DRAFT Meeting Agenda**

March 14, 2018 – 9:30 AM to 12:00 PM

Miami-Dade Transportation Planning Organization
Stephen P. Clark Government Center, 10th Floor, CITT Room
111 NW 1st St, Miami, FL 33128

Remote Access:

<https://global.gotomeeting.com/join/918633461>
Voice: +1 (646) 749-3122; Access Code: 918-633-461

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- I. Call to Order**
 - II. Introductions (10 minutes)**
 - III. Approval of the January 31, 2018 Meeting Summary*** (5 minutes)
 - IV. SERPM 8.0: Project Status (15 minutes)**
 - V. SERPM 8.0: Model Update Progress (70 minutes)**
 - VI. Regional LRTP Status and Methods Discussion (40 minutes)**
 - VII. Member Comments (10 minutes)**
 - VIII. Next Meeting – May 16, 2018 9:30 AM – 12:00 PM (Broward MPO)**
 - IX. Adjournment***

*Action Item



Regional Transportation Technical Advisory Committee (RTTAC) Modeling Subcommittee

January 31, 2018 Meeting Summary

The following is a summary of the RTTAC Modeling Subcommittee (RTTAC-MS) meeting held on January 31, 2018.

MEETING TIME AND LOCATION

1:30 PM to 4:00 PM

Florida Department of Transportation, District 4

District Office Conference Room 2

3400 West Commercial Blvd., Fort Lauderdale, FL 33309

MEETING ATTENDEES

1. Aditya Katragadda, Corradino Group, akatragadda@corradino.com
2. Andrew Velasquez, AECOM, andrew.velasquez@dot.state.fl.us
3. Ashutosh Kumar, CTG, AKumar@ctgconsult.com
4. Behzad Karimi, WSP, behzad.karimi@wsp.com
5. Bill Ball, Tindale Oliver, bball@tindaleoliver.com
6. Bill Cross, Broward MPO, crossw@browardmpo.org
7. Carlos Roa, Miami-Dade TPO, carlos.roa@mdtpo.org
8. Franco Saraceno, Renaissance Planning, fsaraceno@ciesthatwork.com
9. Huiwei Shen, FDOT, huiwei.shen@dot.state.fl.us
10. Hui Zhao, FDOT D4, Hui.Zhao@dot.state.fl.us
11. Jack Schnettler, Atkins, jack.schnettler@atkinsglobal.com
12. Jay Evans, Cambridge Systematics, JEvans@camsys.com
13. Jeanette Berk, Gannett Fleming, jberk@gfnet.com
14. Jeremy Goldstein, Renaissance Planning, jgoldstein@citythatwork.com
15. Jessica Josselyn, Kittelson, jjosselyn@kittelson.com
16. Lisa Colmenares, Miami-Dade TPO, lisa.colmenares@mdtpo.org
17. Martin Milkovits, Cambridge Systematics, MMilkovits@camsys.com
18. Mike Brown, TPS, TPS.Mike.Brown@comcast.net
19. Neil Lyn, FDOT D6, Neil.Lyn@dot.state.fl.us
20. Paul Flavien, Broward MPO, FlavienP@browardmpo.org
21. Rosella Picado, WSP, rosella.picado@wsp.com
22. Scott Seeburger, FDOT D4, Scott.Seeburger@dot.state.fl.us
23. Shi-Chiang Li, FDOT D4, Shi-Chiang.li@dot.state.fl.us
24. Sujith Rapolu, CTG, srapolu@ctgconsult.com

25. Tim Verbeke, Palm Beach MPO, tverbeke@palmbeachmpo.org
26. Tewari Edmonson, Miami-Dade TPO, Tewari.Edmoson@mdtpo.org
27. Thomas Rossi, Cambridge Systematics, trossi@camsys.com
28. Victoria Williams, FTE, victoria.williams@dot.state.fl.us
29. Wilson Fernandez, Miami-Dade TPO, wilson.fernandez@mdtpo.org
30. Yingfei Huang, Cambridge Systematics, yhuang@camsys.com
31. Yongqiang Wu, CTS, ywu@ctseinc.com

MEETING NOTES

Below is a summary of items discussed during the meeting. Action items and motions are underlined.

I. Call to Order

Neil Lyn called the meeting to order at 1:31 PM.

II. Introductions (5 minutes)

III. Approval of the September 27, 2017 Meeting Summary* (5 minutes)

Wilson Fernandez motioned to adopt the November 15, 2017 Meeting Summary, Paul Flavien seconded. The motion was unanimously approved by the RTTAC-MS.

IV. SERPM 8.0: Project Status (15 minutes)

Jay Evans updated the subcommittee that the project is on schedule for delivery in September and a training / workshop in October.

V. SERPM 8.0: ABM Estimation Results* (30 minutes)

Tom Rossi provided a report on the activity-based model estimation that was recently completed. Not all model components were re-estimated due to the household survey data sample size and low trip rates. Model components that have been re-estimated are the following: workplace location choice; tour destination choice; tour mode choice; stop location choice; and trip mode choice.

Tour mode choice shows a reasonable sensitivity to level of service and person/household attributes. High income households and households with more cars favor driving alone over transit or non-motorized modes. People in higher density area are more likely to use non-motorized modes.

The work location choice estimation results showed that part-time workers and females are more sensitive to distance. Estimation results show a positive intrazonal (live and work in the same zone) effect. Size variables relationships (industry by occupation) were maintained from those developed for SERPM 7 based on the National Household Travel Survey (NHTS) dataset.

The tour destination choice estimation results show similar positive intrazonal effects as work location choice. The size variables combinations (e.g., employment by type, households) are structured to differ by tour purpose.

For the stop/trip level models, the stop location proximity and distance parameters are reasonable and the Tour mode is the key indicator of trip mode, as expected.

The documentation of model estimation is estimated to be delivered shortly. The technical memo will include a summary of estimation process, key model estimation results and interpretation, and links to detailed model estimation results.

Neil motioned to approve the estimated model and proceed with implementation, Paul seconded and the motion was approved unanimously.

Tom also gave an overview about model validation. Model validation will be done according to model validation plan. All demand components will be validated by running model and comparing results to best observed-data source.

Shi-Chiang Li asked if the household travel survey data had been compared to other existing survey data, such as the NHTS or ACS, to identify changing trends in travel behavior than 10 years ago. Jay responded that WSP performed checks against ACS data during the conduct of the household travel survey project.

VI. **SERPM 8.0: Non-ABM Model Update*** (30 minutes)

Cruiseport Model

Tom presented an analysis and recommended implementation for the cruiseport model. The model is based on the average number of cruises and passengers by day of week for each port, Port Everglades survey, and Streetlight data on person travel to and from port TAZs. Analysis showed that demand disperses relatively quickly as distance from the port increases.

The recommended model approach is to input the number of cruise passengers for each port, based on average cruiseport schedule in the base year. Cruise passengers are assumed to travel by HOV2 and have the same distribution from the ports as other travel generated by ABM. Passengers trips will be allocated to arrive in mid-day period and depart in AM peak period, following the typical cruise schedule.

There was a question about why average daily passengers between Tuesday and Thursday is used, instead of peak daily cruise passengers data. Tom responded that demand levels can be factored up for studies that require peak day (e.g., Monday/Friday) demand but that the including the peak demand in the regional model would overstate the cruiseport traffic. Hui suggested to add documentation of the cruiseport development and recommended application into the user guide. CS will configure the cruiseport demand as a model input and will provide recommendations for application on when to use the peak or average demand.

Paul motioned to approve the proposed cruiseport model approach, Tim seconded. The motion was approved unanimously by the RTTAC-MS.

External Model

Marty Milkovits presented the results of the external travel analysis. The analysis used survey data from Streetlight, SunPass toll transponder data, and the 2015 license plate survey. These data were combined with the results of the NCHRP 716 model and a model derived from the license plate survey data.

Marty explained that Streetlight data may accurately represent the first stop of a traveler within the region, but this may not be the final destination and thus the reported travel would be biased towards shorter trips. Alternatively, the license plate survey data asserts that all travel is from the home and that travelers from outside of the region have the same distribution of travel as those from within the region. This implies that the license plate survey dataset may be biased towards longer trips. In the comparison, the NCHRP 716 model estimates effectively balances the two data sets, although it does not capture turnpike restricted access.

Marty recommended to maintain NCHRP models for all external stations except the turnpike. The turnpike should be represented as a different station type and calibrated using Streetlight data.

Wilson moved to approve this plan to update the external models, Paul seconded. The motion was approved unanimously by the RTTAC-MS.

Employment data

Wilson explained that the Miami-Dade review identified issues in the 2015 employment data. Tim Verbeke also mentioned that Palm Beach is reviewing their dataset after a study of employment along Okeechobee Boulevard. Palm Beach TPA is constructing an employment set based on their parcel-level employment data and plans to complete this effort by March, 2018. Jay responded that CS has been reviewing the issues and is coordinating with the TPA, TPO, and MPO, as necessary, to review and reallocate employment.

VII. Regional LRTP Status and Methods Discussion (60 minutes)

a. 2045 Zonal Data Development

i. Miami-Dade 2045 Socioeconomic Data Development

Wilson explained that the Miami-Dade TPO is working with their consulting team to develop the 2045 socioeconomic data. The goal is to develop a MAZ level SE data forecasting method for Miami-Dade county, and to share it with the other RTTAC members in Southeast Florida.

Jeremy Goldstein gave a presentation about the data development method and project status. Several major trends were identified in Miami-Dade County, including an increasing average life expectancy, stable and slightly declining birth rates, and slightly declining annual population migration rates. The team estimated that the annual population growth rate in Miami-Dade County will be 3.3%. This results in an estimated population in 2045 that is 100,000 lower than the number projected by the Bureau of Economic and Business Research (BEBR). The team is working on an employment projection in Miami-Dade County using an iterative allocation method. Their employment projections are expected to be completed by the end of May. Miami-Dade TPO will discuss with regional partners before finalizing the forecast results. The methodology will also be shared with other counties.

Jay reminded the group that BEBR data was used as county-level control totals in Broward and Palm Beach. Wilson responded that BEBR forecasts need to be verified individually by each county. Shi-Chiang recommended that the MPO, TPA, and TPO should build a consensus on SE data forecasting methodology.

Jay asked when the 2045 SE data will be available from the other counties. Tim reported that the Palm Beach TPA is working on developing the 2045 SE data for Palm Beach County but the timeline is not certain yet; it could be later than May. Paul said that Broward MPO will have the 2045 SE data by May.

i. Other Discussion

b. LRTP and/or RTP Scenario Testing with SERPM 7.0

Jessica Josslyn asked whether SERPM 8 will be ready by July for scenario testing, and if not, whether SERPM 7.0 use should be considered. Wilson indicated that readiness of future year socioeconomic data may be of greater concern than readiness of the SERPM 8, but that SERPM 8 should be used even if it is only a preliminary version. Jay recommended to aim to use a preliminary version of SERPM 8 for scenario testing.

II. Member Comments (10 minutes)

III. Next Meeting – March 14, 2018 1:00 PM – 3:30 PM (Miami-Dade TPO)

IV. Adjournment*

Neil adjourned the meeting at 4:14 PM.

*Action Item