



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

May 16, 2018 – 9:30 AM to 12:00 PM

Broward Metropolitan Planning Organization
Trade Centre South
100 West Cypress Creek Road, 6th Floor
Fort Lauderdale, FL 33309

Remote Access:

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

- I. Call to Order**
- II. Introductions** (10 minutes)
- III. Approval of the March 14, 2018 Meeting Summary*** (5 minutes)
- IV. SERPM 8.0: Model Update Progress** (50 minutes)
 - a. Status Overview (Jay Evans)
 - b. Confirm Base Year Networks and SE Data Completed (Marty Milkovits)
 - c. Systemwide Validation Update (Marty)
 - d. Other Implementation Notes (Marty)
- V. Regional and Local Long Range Plans Status and Methods Discussion** (50 minutes)
 - a. Transit Propensity Discussion for Upcoming LRTP (Paul Flavian)
 - b. TPA, MPO, TPO LRTP Status Reports (Group)
 - c. Future Year SE Data Progress Notes (Group)
- VI. Develop a Regional Transit Data Collection Plan** (Scott Seeburger) (20 minutes)
- VII. Member Comments** (15 minutes)
- VIII. Next Meeting – July 18, 2018 9:30 AM – 12:00 PM (Palm Beach MPO)**

IX. Adjournment*

*Action Item



Regional Transportation Technical Advisory Committee (RTTAC) Modeling Subcommittee

March 14, 2018 Meeting Summary

The following is a summary of the RTTAC Modeling Subcommittee (RTTAC-MS) meeting held on March 14, 2018.

MEETING TIME AND LOCATION

9:30 PM 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

MEETING ATTENDEES

1. Aditya Katragadda, Corradino Group, akatragadda@corradino.com
2. Andrew Uhlir, Palm Beach TPA, auhlir@palmbeachtpa.org
3. Andrew Velasquez, AECOM, andrew.velasquez@dot.state.fl.us
4. Ashutosh Kumar, CTG, AKumar@ctgconsult.com
5. Hui Zhao, FDOT D4, Hui.Zhao@dot.state.fl.us
6. Jay Evans, Cambridge Systematics, JEvans@camsys.com
7. Kevin Tilbury, Cambridge Systematics, ktilbury@camsys.com
8. Mary Tery Vilches, Miami-Dade TPO, Marta.Vilches@mdtpo.org
9. Martin Milkovits, Cambridge Systematics, MMilkovits@camsys.com
10. Paul Flavien, Broward MPO, FlavienP@browardmpo.org
11. Shi-Chiang Li, FDOT D4, Shi-Chiang.li@dot.state.fl.us
12. Sujith Rapolu, CTG, srapolu@ctgconsult.com
13. Tim Verbeke, Palm Beach MPO, tverbeke@palmbeachmpo.org
14. Tewari Edmonson, Miami-Dade TPO, Tewari.Edmonson@mdtpo.org
15. Vivek Kumar, WSP, vivek.kumar@wsp.com
16. Wilson Fernandez, Miami-Dade TPO, wilson.fernandez@mdtpo.org
17. Yingfei Huang, Cambridge Systematics, yhuang@camsys.com

MEETING NOTES

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

I. Call to Order

Paul called the meeting to order at 9:35 AM.

II. Introductions (5 minutes)

III. Approval of the January 31, 2018 Meeting Summary* (5 minutes)

Wilson motioned to adopt the January 31, 2018 Meeting Summary, Tim seconded. The motion was unanimously approved by the RTTAC-MS.

Tewari asked to amend the agenda to add an item on UPWP. Paul motioned and Tim seconded. The motion was unanimously approved by the RTTAC-MS.

IV. SERPM 8.0: Project Status (15 minutes)

Jay gave an update about the SERPM 8.0 project status. The base year network and socioeconomic (SE) data are nearly complete, with the following pending items:

- Palm Beach is revising the spatial allocation of the MAZ-level employment for employment categories that are well correlated to buildings, i.e., not construction or agriculture. Tim reported that the data is complete and ready to be sent to Cambridge Systematics.
- Broward County is updating the households and population TAZ totals. Paul responded that they will be ready by next week.
- The parking cost review is pending completion by Miami-Dade TPO. Wilson responded that they are working on this item, but that the validation should proceed using the 2010 data.

V. SERPM 8.0: Model Update Progress (70 minutes)

Validation process recap

Marty provided a recap of the validation process, which includes data compilation, single pass calibration, full feedback validation, backcast, and sensitivity testing. The reporting process will use R, an open-source statistical software, to summarize model outputs and populate formatted excel reports for further analysis.

Shi-Chiang requested an initial view of the system-level outputs compared to traffic counts and the previous model. Marty responded that CS will present the system-wide summaries at the next RTTAC-MS meeting in May.

Implementation notes

Marty gave an overview on the SERPM8 implementation work, including refactoring the Cube catalog, transit path building and assignment updates, highway assignment updates, and enhancements to the ABM software.

The Cube catalog refactoring involves the definition of a folder structure controlled by the Cube scenario manager that also facilitates data handover and confirmation. Shi-

Chiang asked if the 2045 model should be a “child” in the Cube scenario manager parlance. Marty responded that there are enough differences in terms of SE data, network, and land use patterns to warrant different forecast years to be “sibling” scenarios.

Sujith reported that 80% of the model script updates are complete for transit path building and assignment. The changes include the updated segmentation of transit modes into “Local” and “Premium”. Premium transit modes include Metromover, Metrorail, Tri-Rail, and future rail and BRT services.

In the SERPM mode choice structure, autonomous vehicles will not be considered as a new mode, instead, several parameters are available to differentiate them from regular auto mode, such as parking cost, sensitivity to time, and relaxed age of using restrictions.

Tewari asked how the model treats households with a mixed vehicle technology, e.g., 1 AV and 1 normal car. Marty explained that the vehicle technology is a household-level model and households will be assumed to be either entirely AV or entirely conventional.

Vivek suggested that cost variations by time of day for UBER or Lyft should also be considered in future model development.

Wilson brought up the changing demand model software platform and asked how we should plan for it. Shi-Chiang explained that the converted model would have to be reviewed and re-validated. This would not take place until after the LRTPs are accepted.

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

- TPA, MPO, TPO LRTP status report/ Future year SE data progress notes

Paul reported that the Broward MPO is developing the future year SE data with assistance from their consultant. The data will be ready by the end of May.

Tim reported that Palm Beach TPA is also on track for their LRTP task work orders. 2045 SE data will be completed by the end of March.

Wilson reported that the 2045 SE data in Miami-Dade County is under development and will be complete by mid-May.

Both Broward MPO and Palm Beach TPA are using BEBR as a control total.

- UPWP

In preparation for the next UPWP, and in recognition of the utility found in the “big data” aspect of the recent Regional Travel Survey effort, Wilson suggested that the RTTAC-MS begin to develop an agreement on allocating funding and initiating

procedures to collect, assemble, or otherwise source 2020 validation data to be ready for the next round of model updates.

Hui said this is a very good suggestion, but that FDOT is restricted in their ability to purchase data. Miami-Dade TPO, Broward MPO, and Palm Beach TPA, however, could work together to ensure good traffic data quality for the next SERPM model update.

Tim agreed with Hui, he also mentioned that Palm Beach TPA recently received a quote for TAZ-level Streetlight data.

Shi-Chiang also suggested that the TPO, MPO and TPA consider funding an NHTS add-on.

Ashu added that another data source to consider is transit on-board surveys. Coordination across the three counties on timing and survey design would make the data more usable.

It was agreed that Wilson would bring the discussion forward to the RTTAC with an initial placeholder of \$600,000 identified for validation data preparation for year 2020. The details of the requirements specification and how costs could be shared would need to be worked out.

VII. Member Comments (10 minutes)

Tim informed the RTTAC-MS that he will resign from the Palm Beach TPA in April, Andrew Uhlir will represent Palm Beach on the RTTAC-MS. The group wished Tim farewell.

VIII. Next Meeting – May 16, 2018 9:30 AM – 12:00 PM (Broward MPO)

IX. Adjournment*

Paul adjourned the meeting at 11:21 AM.