



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

June 26, 2023 – 10:00 AM to 12:00 PM EDT

Location:
Broward MPO

Remote Access:
[Click here to join the Microsoft Teams meeting online](#)
Voice: +1 (213)267-3760; Access Code: 296-877-391

- I. Introductions (5 minutes)**
- II. Approval of the March 27, 2023 Meeting Summary* (5 minutes)**
- III. Approval of the April 24, 2023 Meeting Summary* (5 minutes)**
- IV. Approval of the May 1, 2023 Meeting Summary* (5 minutes)**
- V. SERPM 8.0: Model Update Status (15 minutes – Srin Varanasi, The Corradino Group)**
- VI. SERPM 8.0: Quarterly Update* (15 minutes – Srin Varanasi, The Corradino Group)**
- VII. 2050 SE Data Development (15 minutes – Group)**
- VIII. SERPM 9.0: Model Progress Update (15 minutes – Rosella Picado, WSP)**
- IX. SERPM 9.0: PTV Visum Conversion Update (15 minutes – Sijia Wang, WSP)**
- X. SERPM 9.0: Sensitivity Testing and LRTP Scenarios (15 minutes – Rosella Picado, WSP)**
- XI. Member Comments (5 minutes)**
- XII. Next Meeting – July 31, 2023**
- XIII. Adjournment***



Regional Transportation Technical Advisory Committee (RTTAC) Modeling Subcommittee

May 1, 2023, Meeting Summary

The following summarizes the RTTAC Modeling Subcommittee (RTTAC-MS) Workshop held in-person at FDOT District 4 and virtually through Microsoft Teams on May 1, 2023, at 3-4 pm.

MEETING TIME AND LOCATION

The meeting was held in person at FDOT District 4 and virtually through Microsoft Teams. The voting member, Tewari Edmonson (TPO), Mary Tery Vilches (TPO), Paul Flavien (Broward MPO), and Raj Shanmugam (FDOT D4) participated in person at FDOT District 4. Greg Gabriel (TPA) and Ana M. Calleja (FDOT D6) joined the meeting virtually through Teams.

MEETING ATTENDEES (Voting members are underlined)

1. Aditya Katragadda, Corradino Group, akatragsadda@corradino.com
2. Ana M. Calleja, FDOT D6, AnaM.Calleja@dot.state.fl.us
3. Behzad Karimi, WSP, behzad.karimi@wsp.com
4. Cesar Segovia, Florida's Turnpike Enterprise, Cesar.Segovia@dot.state.fl.us
5. Christine Springer, Jacobs, christine.springer@jacobs.com
6. Fadi Emil Nassar, Palm Beach County
7. Franco Saraceno, Kittelson & Associates, fsaraceno@kittelson.com
8. Gregory Gabriel, Palm Beach TPA, GGABRIEL@palmbeachtpa.org
9. Hui Zhao, CTS, HZhao@ctseinc.com
10. Jill Quigley, Benesch, JQuigley@benesch.com
11. Ken Kaltenbach, Corradino Group, Kkaltenbach@corradino.com
12. Maria Tery Vilches, Miami-Dade TPO, e317278@miamidade.gov
13. Min-Tang Li, Broward County, mli@broward.org
14. Paul Flavien, Broward MPO, FlavienP@browardmpo.org
15. Peter Gies, Broward MPO, giesp@browardmpo.org
16. Raj Shanmugam, FDOT D4, Raj.Shanmugam@dot.state.fl.us
17. Rosella Picado, WSP, Rosella.Picado@wsp.com
18. SungRyong Han, BCC Engineering, shan@bcceng.com
19. Tewari Edmonson, Miami-Dade TPO, Tewari.Edmonson@mdtpo.org
20. Thomas Rossi, Cambridge Systematics, TROSSI@camsys.com
21. 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. Introductions (5 minutes)

Tewari expressed the welcome and briefly went over the agenda. The RTTAC-MS voting

members briefly introduced themselves.

II. RTTAC-MS Chair and the Vice Chair Election* (10 minutes - Group)

Tewari motioned to elect Paul Flavien as the Chair of RTTAC-MS, Raj seconded. The motion was unanimously approved by the RTTAC-MS.

Tewari motioned to elect Raj Shanmugam as the Vice Chair of RTTAC-MS, Greg seconded. The motion was unanimously approved by the RTTAC-MS.

RTTAC-MS Voting Members effective as of May 1st, 2023:

- Paul Falvien, Chair (Broward MPO)
- Raj Shanmugam, Vice Chair (FDOT D4)
- Mary Tery Vilches (Miami-Dade TPO)
- Greg Gabriel (Palm Beach TPA)
- Ana M. Calleja (FDOT D6)

III. SERPM 9.0: Model Progress Status (30 minutes – Rosella Picado, WSP)

Rosella provided an update on the current progress of model development, outlining the accomplishments and the tasks remaining to meet the June 30th deadline. A significant enhancement in SERPM 9 is the network rebuild, utilizing open data sources like OSM and GTFS, alongside open-source procedures. This phase has reached an advanced stage of completion. Another improvement involves replacing PopSyn III with the open-source PopulationSim, which has been successfully implemented and tested using both SERPM 8 and SERPM 9 models. The ABM component of SERPM9 operates on ActivitySim which has also undergone several tests using both SERPM8 and SERPM9. The initial calibration of the model has been finished, with further systemwide calibration planned for the future. Work is currently in progress to update the truck model and internal-external model, with an estimated completion time of 2-3 weeks. Most of the calibration targets have been prepared, and the transit targets will be ready shortly.

Moving forward, the model will undergo systematic calibration, followed by the development of the future year model, which still requires inputs from the MPOs. Once the model is ready, documentation and user training will be provided to the LRTP teams. At present, PTV is converting the current version to Visum as an interim version. Recalibration will be necessary after the model development team receives the model from the PTV team. Accordingly, the Cube version of SERPM 9 is expected to be available on June 30th, while the Visum version will be accessible in the subsequent

weeks.

IV. Member Comments (5 minutes)

V. Next Meeting – June 26, 2023

The next meeting is going to be on June 26, 2023.

VI. Adjournment*

Tewari adjourned the meeting at 3:50.



Regional Transportation Technical Advisory Committee (RTTAC) Modeling Subcommittee

April 24, 2023, Workshop Summary

The following summarizes the RTTAC Modeling Subcommittee (RTTAC-MS) Workshop held virtually through MS. Teams on April 24, 2023.

MEETING TIME AND LOCATION

The workshop was held virtually through Microsoft Teams and the voting members, Tewari Edmonson (TPO), Greg Gabriel (TPA), Paul Flavien (Broward MPO), Raj Shanmugam (FDOT D4), Ana M. Calleja (FDOT D6) participated virtually through Teams.

MEETING ATTENDEES (Voting members are underlined)

1. Aditya Katragadda, Corradino Group, akatragsadda@corradino.com
2. Ana M. Calleja, FDOT D6, AnaM.Calleja@dot.state.fl.us
3. Behzad Karimi, WSP, behzad.karimi@wsp.com
4. Christine Springer, Jacobs, christine.springer@jacobs.com
5. Fadi Emil Nassar, Palm Beach County
6. Franco Saraceno, Kittelson & Associates, fsaraceno@kittelson.com
7. Gregory Gabriel, Palm Beach TPA, GGABRIEL@palmbeachtpa.org
8. Hui Zhao, CTS, HZhao@ctseinc.com
9. James Brown, Florida's Turnpike Enterprise, James.BrownJr@dot.state.fl.us
10. Jeanette Berk, Gannett Fleming, jberk@gfnet.com
11. Ken Kaltenbach, Corradino Group, Kkaltentbach@corradino.com
12. Kyeil Kim, WSP, Kyeil.Kim@wsp.com
13. Matthew Masa, Palm Beach TPA, MMasa@palmbeachtpa.org
14. Min-Tang Li, Broward County, mli@broward.org
15. Peter Gies, Broward MPO, giesp@browardmpo.org
16. Paul Flavien, Broward MPO, FlavienP@browardmpo.org
17. Raj Shanmugam, FDOT D4, Raj.Shanmugam@dot.state.fl.us
18. Rosella Picado, WSP, Rosella.Picado@wsp.com
19. Sheldon Harrison, Cambridge Systematics, sharrison@camsys.com
20. Shuo Wang, WSP, shuo.wang@wsp.com
21. Sijia Wang, WSP, Sijia.Wang@wsp.com
22. SungRyong Han, BCC Engineering, shan@bcceng.com
23. Tewari Edmonson, Miami-Dade TPO, Tewari.Edmonson@mdtpo.org
24. Thomas Rossi, Cambridge Systematics, TROSSI@camsys.com
25. Victoria Williams, Florida's Turnpike Enterprise, Victoria.Williams@dot.state.fl.us
26. Wilson Fernandez, Miami-Dade TPO, Wilson.Fernandez@miamidade.gov
27. 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. Introductions (5 minutes)

Tewari expressed the welcome and briefly went over the agenda. The RTTAC-MS voting members briefly introduced themselves.

II. SERPM 8.0: Model Update Status (5 minutes – Aditya Katragadda, The Corradino Group)

Aditya reported that Corradino is preparing SERPM 8.531. As part of this update, PopSyn III will be replaced with PopulationSim. The team has been testing PopulationSim for Southeast Florida and the results have been very similar to PopSyn III. Aditya also reported that population and employment data for Broward County in the 2045 LRTP+ scenario have been updated.

III. 2050 SE Data Development (15 minutes – Group)

Tewari gave a presentation on the 2050 population and employment control totals for Palm Beach, Broward, and Miami-Dade counties. The control totals were prepared by each MPO individually. Tewari explained how the control totals were estimated and what assumptions were considered. Tewari explained that BEBR has recalibrated its population base forecast to the 2020 census data which resulted in a drop in the base population in the BEBR forecast. As a result, the 2020 base population becomes less than what was forecasted for 2020 five years ago. The decline is a result of the decline in migration and birth and increased mortality due to COVID-19. It is a continuing trend happening at the state and national levels. The source of the 2020 employment data, provided by the state, is Dun & Bradstreet. To develop the 2050 employment control totals, several factors were considered including statewide and national trends, and factors unique to the region such as industry mix and regional competitiveness.

IV. SERPM 9.0: Model Progress Update (15 minutes – Rosella Picado, WSP)

Rosella reported during the past few weeks the team has been working on full implementation of the model in CUBE. The goal is to develop the fully runnable model in CUBE by the end of April and hand it over to PTV for conversion to Visum. The team has made very good progress. This week the team will perform some additional checks to make sure the model runs smoothly and without any hiccups. Corradino is also preparing the auxiliary models. While PTV will be working on the model conversion, WSP will focus on the model calibration and validation reports. Later on, all the model updates resulting from the model calibration and validation will be transferred to the Visum model. Raj emphasized that the model should be ready by the end of June so the LRTP and RTP teams can start modeling and testing the LRTP and RTP scenarios.

V. SERPM 9.0: PTV Visum Conversion Update (15 minutes – Sijia Wang, WSP)

Rosella reported that PTV has worked on a process to convert the networks to Visum. PTV has converted the highway network successfully and WSP reviewed the network which looked fine. For the transit conversion, PTV requested some additional information and more clarifications which WSP has provided. PTV is currently working on the transit conversion.

VI. Member Comments (5 minutes)

Tewari announced that he has accepted a new position at Miami-Dade DTPW. Mary Tery from TPO will resume Tewari's responsibilities and roles.

VII. Next Meeting – May 1, 2023

Tewari is going to schedule an in-person meeting for May 1st, 2023 at FDOT D4. The main agenda for next week's meeting will be selecting the new chair and vice chair for RTTAC-MS.



Regional Transportation Technical Advisory Committee (RTTAC) Modeling Subcommittee

March 27, 2023, Meeting Summary

The following summarizes the RTTAC Modeling Subcommittee (RTTAC-MS) Meeting held on March 27, 2023, both virtually and in-person at FDOT District 4.

MEETING TIME AND LOCATION

From the voting member, Tewari Edmonson (TPO), Raj Shanmugam (FDOT D4), and Paul Flavien (Broward MPO) participated in person at FDOT District 4.

MEETING ATTENDEES (Voting members are underlined)

1. Aditya Katragadda, Corradino Group, akatragsadda@corradino.com
2. Ashutosh Kumar, Insight Transportation Consulting, ashu.kumar@insighttcinc.com
3. Behzad Karimi, WSP, behzad.karimi@wsp.com
4. Cesar Segovia, Florida's Turnpike Enterprise, Cesar.Segovia@dot.state.fl.us
5. Christine Springer, Jacobs, christine.springer@jacobs.com
6. Danyu Shi, BCC Engineering, dshi@bcceng.com
7. Franco Saraceno, Kittelson & Associates, fsaraceno@kittelson.com
8. Gregory Gabriel, Palm Beach TPA, GGABRIEL@palmbeachtpa.org
9. Hui Zhao, CTS, HZhao@ctseinc.com
10. James Brown, Florida's Turnpike Enterprise, James.BrownJr@dot.state.fl.us
11. Jeanette Berk, Gannett Fleming, jberk@gfnet.com
12. Jill Quigley, Benesch, JQuigley@benesch.com
13. Ken Jefferies, FDOT D6, Ken.Jeffries@dot.state.fl.us
14. Ken Kaltenbach, Corradino Group, Kkaltenbach@corradino.com
15. Kyeil Kim, WSP, Kyeil.Kim@wsp.com
16. Matthew Masa, Palm Beach TPA, MMasa@palmbeachtpa.org
17. Min-Tang Li, Broward County, mli@broward.org
18. Paul Flavien, Broward MPO, FlavienP@browardmpo.org
19. Peter Gies, Broward MPO, giesp@browardmpo.org
20. Raj Shanmugam, FDOT D4, Raj.Shanmugam@dot.state.fl.us
21. Sheldon Harrison, Cambridge Systematics, sharrison@camsys.com
22. Shuo Wang, WSP, shuo.wang@wsp.com
23. Sijia Wang, WSP, Sijia.Wang@wsp.com
24. SungRyong Han, BCC Engineering, shan@bcceng.com
25. Srinivas Varanasi, Corradino Group, svaranasi@corradino.com
26. Sujith Rapolu, CTG, srapolu@ctgconsult.com
27. Tewari Edmonson, Miami-Dade TPO, Tewari.Edmonson@mdtpo.org
28. Thomas Rossi, Cambridge Systematics, TROSSI@camsys.com
29. Wilson Fernandez, Miami-Dade TPO, Wilson.Fernandez@miamidade.gov
30. Yongqiang Wu, CTS, [yw@ctseinc.com](mailto:ywu@ctseinc.com)

MEETING NOTES

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

I. Introductions (5 minutes)

Tewari expressed the welcome and briefly went over the agenda. The RTTAC-MS voting members briefly introduced themselves.

II. Approval of the December 05, 2022 Meeting Summary* (5 minutes)

Paul motioned to approve the December 05, 2022 Meeting Summary; Raj seconded. The motion was unanimously approved by the RTTAC-MS.

III. Approval of the January 30, 2023 Meeting Summary* (5 minutes)

Paul motioned to approve the January 30, 2023 Meeting Summary; Raj seconded. The motion was unanimously approved by the RTTAC-MS.

IV. SERPM 8.0: Model Update Status (15 minutes – Srin Varanasi, The Corradino Group)

Srin reported the updates that will be incorporated into that SERPM 8.531. The updates include the work that has been done in the past three months. These updates are primarily SE data adjustments along the I-95 corridor in Palm Beach County and replacing PopSyn III with PopulationSim. PopulationSim has fully been implemented in SERPM8. The SERPM8 model was run with the new synthetic population from PopulationSim and the results from the validation report are within the acceptable ranges.

V. SERPM 8.0: Quarterly Update* (15 minutes – Srin Varanasi, The Corradino Group)

Raj motioned to approve the SERPM 8 quarterly updates of version 8.531, Paul seconded. The motion was unanimously approved by the RTTAC-MS.

VI. SERPM 8.0: PopulationSim Deployment (15 minutes – Kyeil Kim, WSP)

Kyeil reported WSP has been addressing the comments the team received after the PopulationSim training. Also, WSP has successfully implemented PopulationSim in the most recent version of SERPM 8 (8.531). Srin added that Corradini is testing the user-friendliness of the PopulationSim. Srin expects the review to be complete within the next two weeks.

VII. 2050 SE Data Development (15 minutes – Group)

Tewari and Paul reported that their MPOs have provided the 2050 SE data to WSP. Palm Beach TPA is still in the process of preparing the 2050 SE data. Tewari suggested that

MPOs should coordinate post this RTTAC-MS meeting regarding the 2050 SE data. Tewari emphasized that SE data should be prepared as soon as possible as it is on the critical path to meet the June 30th deadline for SERPM9.

VIII. SERPM 9.0: Model Progress Update (15 minutes – Sijia Wang, WSP)

Sijia reported that WSP has PopulationSim with the new SE data received from the agencies. WSP is currently working on some inconsistencies between the synthetic population (generated by PopulationSim) and ActivitySim. These inconsistencies should be addressed within the next couple of weeks. WSP is also working on the network assignment and skimming updates. The SERPM9 skims will be compared against the SERPM8 skims to make sure they are not significantly different.

IX. SERPM 9.0: PTV Visum Conversion Update (15 minutes – Sijia Wang, WSP)

Sijia reported that WSP is working to prepare a runnable SERPM9 CUBE by the end of April and pass it to PTV to begin the model conversion from CUBE to Visum. At the same time that PTV is doing the conversion, WSP will work on the model calibration and validation in CUBE.

X. Member Comments (5 minutes)

XI. Next Meeting – April 24, 2023

The next meeting will be virtual on April 24, 2023.

XII. Adjournment*

Tewari adjourned the meeting at 11:05.