

**AMENDED AND RESTATED THIRD MEMORANDUM OF UNDERSTANDING (MOU)
BETWEEN THE BROWARD METROPOLITAN PLANNING ORGANIZATION, THE MIAMI-
DADE TRANSPORTATION PLANNING ORGANIZATION, THE PALM BEACH
TRANSPORTATION PLANNING AGENCY, THE FLORIDA DEPARTMENT OF
TRANSPORTATION DISTRICT FOUR AND DISTRICT SIX FOR COORDINATION OF THE
SOUTHEAST REGIONAL PLANNING MODEL (SERPM) RELATED ACTIVITIES**

The Third Memorandum of Understanding (MOU) between the Broward Metropolitan Planning Organization, the Miami-Dade Transportation Planning Organization, the Palm Beach Transportation Planning Agency, the Florida Department of Transportation District Four and District Six for coordination of the Southeast Regional Planning Model (SERPM) related activities was entered into in June 2024 with a commencement date of January 1, 2025. The parties wish to amend and restate the MOU as follows.

1. PURPOSE

This Memorandum of Understanding (MOU) is entered into jointly by the following five (5) entities which form the key transportation planning agencies within Broward, Miami-Dade, and Palm Beach counties: Florida Department of Transportation, District 6 (FDOT-D6) - an agency of the State of Florida; the Florida Department of Transportation, District 4 (FDOT-D4) - an agency of the State of Florida; the Broward Metropolitan Planning Organization (MPO); the Miami-Dade Transportation Planning Organization (TPO); and the Palm Beach Transportation Planning Agency (TPA), (hereafter these public sector transportation agencies are called PARTNERS and the aforementioned Counties will be called the Tri-County Region). This is the third MOU between the agencies for these activities as the second MOU will expire on December 31, 2024. The PARTNERS are committed to developing an effective travel demand modeling tool and transportation data collection methods for transportation planning in the Tri-County Region.

The purpose of this MOU is to assign roles and responsibilities to PARTNERS and create a decision-making framework for future travel demand modeling tasks related to the Southeast Florida Regional Planning Model (SERPM). The MOU covers activities related to the on-going travel demand modeling efforts related to SERPM 9 and the future tasks to support the next generation of SERPM (hereafter referred to as SERPM 10). Furthermore, this MOU is entered to ensure mutual compliance and adherence with the statutory federal, state, and local requirements, and other related policies and procedures in procurement and production.

2. BACKGROUND

Beginning with the 2035 Long Range Transportation Plan (LRTP) effort, the Tri-County Region formally recognized SERPM as the region's travel demand model tool. SERPM 8 development was supported by these agencies including a Tri-County Regional Travel Survey completed in 2017. This shared and coordinated approach led to an effective and efficient use of transportation planning funds among the PARTNERS. Prior to this, each of the MPOs supported their respective county-wide models, which lacked the ability to dynamically model the heavy travel interactions between counties.

SERPM Version 9 simulates the travel choices of the resident and visitor population in Miami-Dade, Broward, and Palm Beach counties. With SERPM 9, the region adopted open-source, best practice software for powering its activity-based components. Also, Version 9 is the first model in the region to use highway and transit networks sourced from open-source data, including Open Street Maps and General Transit Feed Specifications. SERPM 9 also includes enhanced procedures to simulate work from home and telecommuting, recognizing the importance of these types of work arrangements post-pandemic. SERPM 10 will also continue the use of the enhanced SERPM9 features in its development.

2.1. Southeast Florida Transportation Council (SEFTC)

After several years of ad hoc cooperation, the Southeast Florida Transportation Council was created, under Florida Statutes Chapter 339. 175, to serve as a formal forum for policy coordination and communication to carry out these regional initiatives agreed upon by the MPOs from Miami-Dade, Broward, and Palm Beach Counties. An Interlocal Agreement between the three parties was completed in 2005 paving the way for the first SEFTC meeting in January 2006. SEFTC is the primary policy coordinating body for regional matters. The Regional Transportation Technical Advisory Committee (RTTAC) is the body reporting to the SEFTC and coordinating all aspects of technical issues. It also comprises several subcommittees, including a Modeling Subcommittee (RTTAC-MS).

2.2. Regional Transportation Technical Advisory Committee (RTTAC)

Pursuant to, the RTTAC and RTTAC-MS structure, membership and roles will follow those identified in the Interlocal Agreement creating SEFTC and subsequent amendments between the MPOs in the Tri-County Region.

The RTTAC is a staff-level working group tasked to address many of the issues brought before the SEFTC. The RTTAC is comprised of numerous agencies within the region including the following:

- Florida Department of Transportation District 4 (FDOT-D4)
- Florida Department of Transportation District 6 (FDOT-D6)
- Miami-Dade Transportation Planning Organization (TPO)
- Broward Metropolitan Planning Organization (MPO)
- Palm Beach Transportation Planning Agency (TPA)
- Palm Tran
- Miami-Dade Transportation and Public Works (DTPW)
- Broward County Transit (BCT)
- South Florida Regional Planning Council (SFRPC)
- Treasure Coast Regional Planning Council (TCRPC)
- Greater Miami Expressway Agency (GMX)
- South Florida Regional Transportation Authority (SFRTA)
- Florida Turnpike Enterprise (FTE)

2.3. Regional Transportation Technical Advisory Committee - Modeling Subcommittee (RTTAC-MS)

The Regional Transportation Technical Advisory Committee - Modeling Subcommittee (RTTAC-MS) was created in 2008 to provide a forum for coordination of modeling activities. The RTTAC-MS is a technical staff-level working group tasked to address many of the issues brought before the RTTAC and SEFTC. The RTTAC-MS is made up of five voting representatives: one each from FDOT-D4, FDOT-D6, Broward MPO, Miami-Dade TPO and Palm Beach TPA with additional agencies participating. As such, the RTTAC-MS has overseen the model development and maintenance efforts as part of the LRTP cycles starting with 2035 through 2050 and will continue with this role.

The RTTAC-MS provided major input into coordination of funding for model related activities and decision to transition into an Activity Based Model (ABM), Open Source network, and conversion to VISSUM. It also has served as the oversight body for the SERPM 9 development and supports activities outlined in the prior MOU. The RTTAC-MS is expected to continue its oversight role under this MOU.

3. ROLES AND RESPONSIBILITIES

All PARTNERS shall abide by the defined roles and responsibilities in the following section. Each PARTNER plays a critical role in the successful implementation of regional efforts such as SERPM. Awareness and appreciation of each other's roles is essential for effective co-operation. Joint coordination should extend across the planning, management, and delivery of major products.

3.1. SERPM Support, Maintenance and Updates

PARTNERS agree that FDOT-D4 will continue to provide the technical and administrative support functions for the refinements, maintenance, and update tasks, such as incorporating plan amendments to the SERPM9 through December 31, 2029, or until the formalization of SERPM 10 which occurs after the adoptions of the three respective 2055 LRTP's, which are expected to be completed by December 2029. All model maintenance costs will be covered by FDOT-D4 for the duration of the MOU. FDOT-D4 will be guided by Regional Transportation Technical Advisory Committee Modeling Subcommittee (RTTAC-MS). PARTNERS agree that FDOT-D4 may recruit and deploy private sector consultant teams to support SERPM maintenance and enhancements tasks, which include but are not limited to the preparation of quarterly updated versions of SERPM, updating zonal data to incorporate land use amendments of local governments, updating highway or transit network and parameters to reflect transit services changes, or revising model scripts or parameters to accommodate modeling software revisions.

FDOT-D4 will consult and seek approval of PARTNERS prior to assigning specific SERPM maintenance and update tasks to private sector consultant teams. The PARTNERS may request FDOT-D4 to address specific SERPM deficiencies through RTTAC-MS. PARTNERS will receive periodic updates from FDOT-D4 and any private sector consultant teams on all specific SERPM maintenance and update tasks through a cooperative decision-making process guided by the RTTAC-MS.

The following is a list of key responsibilities of the PARTNERS towards SERPM support, enhancements, maintenance, and update tasks that all PARTNERS shall abide by:

1. Each party to this MOU will designate and maintain a representative and alternate who has the authority to speak for their respective agency on the RTTAC-MS. The representatives will be available, upon adequate notice, to attend and participate in the RTTAC-MS meetings or otherwise provide timely input into the preparation, coordination, and review of SERPM development, maintenance, and update tasks. Prompt requests for input will be forwarded to the appropriate contact person(s) to allow for a timely review and comment period.
2. PARTNERS make available to FDOT-D4, at no cost to PARTNERS, relevant, readily available, resources such as data and information systems to the extent achievable for use and share their knowledge of local conditions relevant to the project to the extent possible.
3. FDOT-D4 will have the responsibility of disseminating and maintaining up to date SERPM networks to the PARTNERS and other users.
4. All proposed changes to the current SERPM shall be transmitted to FDOT-D4 from PARTNERS and other users. These changes shall be evaluated and transmitted from FDOT-D4 to the RTTAC-MS for consideration to be formally accepted. Upon acceptance, FDOT-D4 shall notify the availability of a revised model version to the PARTNERS and other users. There shall be no more than four (4) version releases during a calendar year.
5. FDOT-D4 shall maintain a tracking log of all model version changes and model releases to users.
6. All PARTNERS will have ownership rights to the model under the procedures identified in the MOU and will be guaranteed access to the model, at any stage during its development and upon completion, within their agency roles and responsibilities.
7. PARTNERS to provide full and open communication.
8. PARTNERS will bear in-kind contribution in their respective capacities for consultant contract selection or administration.

3.2. Travel Data Collection

Travel behavior is an ever-evolving matter, but these changes have been accelerated since early 2000 with the technological advances in general and urban infill trends within the Tri-County Region. As such, the PARTNERS recognize the need for a robust and multi-dimensional data collection effort to primarily enhance the SERPM product by understanding the Tri-County Region's travel characteristics. The PARTNERS also recognize that the data collected can serve to support activities other non-transportation-related functions.

The Southeast Florida Regional Travel Study was completed in 2017 and represented a major effort for the region to collect information on household characteristics and travel activity on selected sample household's representative of the Tri-County Region. The findings from the household survey were instrumental in development of SERPM 8. Additionally, the Regional Travel Study collected GPS based travel data for system and freight movement. This data was very useful to understand travel behavior and supplemented the household information. It is the intent of the parties to further explore utility of these "big data" sources to support the enhancements and the development of SERPM and other transportation planning activities.

PARTNERS agree to examine the use state-of-the-art and innovative techniques for data collection that will lead to more cost-effective means to collect vital travel information. Innovative techniques refer to methods such as usage of mobile phone data for anonymously identifying origin-destinations or usage of

existing National Household Travel Survey (NHTS) data to supplement traditional methods of identifying household travel characteristics.

PARTNERS encourage RTTAC member agencies take on efforts to collect transit user information through their respective transit providers. Transit market and trends information is an important component to support model calibration as this data is difficult to attain in a statistically significant number through a comprehensive regional effort.

3.3. Model Development

The PARTNERS agree that the SERPM 10 development will be focused on updating the model to support the respective cycle of long-range transportation plan (LRTP) updates. SERPM 10 will also serve as a viable tool for corridor level, area-wide, and multimodal analyses. The following procedures are being put in place to ensure achievement of these goals.

1. FDOT-District 4 will serve as the lead agency for the preparation, and development of the SERPM 10
2. The preparation and development of the SERPM10 will require concurrence from all PARTNERS of this MOU, each PARTNER will be responsible for identifying the issues that must be addressed in the process to satisfy its respective requirements and needs.
3. All PARTNERS of this MOU agree that the FDOT-District 4 may request the support of a private sector consultant team to assist in developing SERPM10 beginning in fiscal year 2025. All PARTNERS of this MOU will participate in the selection of the consultant team. All PARTNERS will participate in the management of the consultant through a cooperative decision-making process guided by the RTTAC-MS, as established or amended under Section 3.1.
4. FDOT-District 4 will be responsible for ensuring that deliverables of the Model Development effort are provided within the agreed upon milestones to support the respective LRTPs.
5. All PARTNERS will have ownership rights to the model under the procedures identified in the MOU and will be guaranteed access to the model, at any stage during its development and upon completion, within their agency roles and responsibilities.
6. PARTNERS shall coordinate efforts to collect consistent employment data and formulate a unified forecasting methodology for horizon year (2055) databases.
7. PARTNERS will bear in-kind contribution in their respective capacities for consultant contract selection or administration.
8. All PARTNERS agree that SERPM 10 or its associated network and files will not be shared with any entity other than the respective PARTNER LRTP development teams UNTIL ALL PARTNER LRTP's have been formally adopted.

3.4. Socio-economic (SE) Data Development

The Broward, Miami-Dade, and Palm Beach MPOs shall prepare the mid-based population and employment datasets for the base year (2025) and future year forecasts (2055) in a timely basis and consistent format with the SERPM10 structure. The base year dataset (2025) should be prepared and be available no later than June 30, 2027, to support the model development tasks. Future year dataset (2055) is to be utilized during the LRTP update phases. The RTTAC-MS shall serve as the coordination forum to

review, set timetables, and ensure consistency in key SE data development assumptions. The MPOs will have the sole discretion in deciding suitable modifications or corrections to their respective datasets.

3.5. Review of SERPM 9 Activities

RTTAC will perform an annual review of SERPM development, maintenance, and update activities. Based upon the results of this assessment, the RTTAC shall provide a recommendation to confirm funding for future activities. RTTAC will provide recommendations to Southeast Florida Transportation Council (SEFTC).

In addition, the RTTAC will address any policy issues (funding, formal agreements, etc.) emerging from the SERPM development, maintenance, and update efforts, but will allow the RTTAC-MS to be the decision-making body for all technical modeling issues.

4. DURATION OF MEMORANDUM OF UNDERSTANDING

This MOU shall have a term of five (5) years from and shall take into effect January 1, 2025, (upon the expiration of the Second SERPM MOU) through December 31, 2030. Nine (9) months before the expiration of the MOU, the PARTNERS will examine the terms hereof and agree to either reaffirm the same, amend provisions or discontinue MOU arrangement. However, the failure to amend or to reaffirm the terms of this MOU shall not invalidate the decisions rendered among the PARTNERS during the term of this MOU.

It is recognized that continued coordination will be necessary to ensure the utility of SERPM 10 products beyond 2030. Future coordination may lead to the development of new MOU's or Joint Participation Agreements (JPA) among the various PARTNERS and federal, state, and/or regional agencies. The following is a general schedule of the major work elements related to SERPM support. Detailed schedules and timetables will be set by the PARTNERS through the RTTAC-MS. This schedule supports model delivery timetable to the respective partners on or before June 30, 2028.

FDOT-District 4 agrees to meet or exceed the model delivery schedule listed above and in [Table 1](#) below unless otherwise modified by the PARTNERS. FDOT-District 4 will inform all the PARTNERS through RTTAC-MS if there is any delay or changes in consultant fees.

Table 1 – SERPM Development and Support Schedule

SERPM Development and Support Plan

Calendar Year Task (Jan-Dec)	2025	2026	2027	2028	2029	
Fiscal Year Task (Jul-Jun)	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030
SERPM 9 Maintenance/Support						
SERPM 10 Procurement						
Travel/Traffic Data Collection						
SE Data Development						
SERPM 10 Model Development (to Delivery)						
SERPM 10 Development Refinements						

5. FUNDING

Because the proposals may involve funding, concurrence, or permitting actions from several of the PARTNERS, each PARTNER will be responsible for identifying the issues that must be addressed in the process to satisfy its respective statutory requirements. Each of the signatories to this MOU agree to the funding schedule as shown in [Table 2](#) which covers the activities outlined in this MOU. This funding arrangement shall be included as part of the respective MPO's Unified Planning Work Programs (UPWP) for the time periods covered under this MOU.

The annual breakdowns for these activities may be modified based on anticipated expected workload/costs by the RTTAC-MS without a formal amendment of the MOU, if is said modification does exceed the total amount of the MOU. Such modifications shall be reflected accordingly in the respective MPO's UPWPs.

The Broward, Miami-Dade and Palm Beach MPOs agree to fully fund the cost of socio-economic data development and updates of their respective jurisdictions.

Table 2 - SERPM 10 Partner Funding Schedule

		FY 2025	FY 2026	FY2027	FY 2028	FY 2029	TOTAL
Model Maintenance SERPM 9 (FDOT-D4)							
	FDOT	25,000	25,000	25,000	25,000	25,000	125,000
Model Development SERPM10							1,000,000
	FDOT	0	250,000	250,000	0	0	500,000
	MPO	0	85,000	85,000	0	0	170,000
	TPO	0	100,000	100,000	0	0	200,000
	TPA	0	65,000	65,000	0	0	130,000
Breakdown by Agency		TOTALS					1,125,000
	FDOT	25,000	275,000	275,000	25,000	25,000	625,000
	MPO	0	85,000	85,000	0	0	170,000
	TPO	0	100,000	100,000	0	0	200,000
	TPA	0	65,000	65,000	0	0	130,000

6. AMENDMENTS

PARTNERS may only modify this MOU by unanimous agreement of the parties to the MOU. This MOU and any amendments or modifications to the MOU shall become effective upon execution.

7. SEVERABILITY



Any PARTNER may terminate its participation in this MOU upon thirty (30) days written notice. The 30-day notice requirement shall commence upon giving of the notice. Notice of intent to terminate shall be given in writing to the RTTAC Chair and RTTAC-MS Chair. Said notice transmitted to the official office of the RTTAC Chair and RTTAC-MS Chair by certified mailed, return receipt requested. Only future funding will be impacted from such termination.

8. CONCLUSIONS

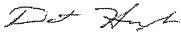

In signing this MOU, the undersigned understands and accept the roles and responsibilities assigned to each of the parties. Each of the parties agrees to pursue maximum cooperation and communication to ensure that the project fully complies with applicable Federal, State and County requirements and results in a minimum duplication of effort and is performed in a cost-effective manner.

SIGNATURE OF PARTICIPATING PARTNERS


For the Florida Department of Transportation FDOT - District 4

<div>DocuSigned by:  D67B7B72D88D4A2...</div>		06/05/2024 9:45 AM EDT
Signature		Date
Cesar Martinez		District Planning & Environmental
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Name	<div>DocuSigned by:  6C73D25AA128471</div>	Title
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Witness		

For the Florida Department of Transportation FDOT - District 6

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Signature		Date
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Name	<div>DocuSigned by:  705CB16FD3D5405...</div>	Title
		05/30/2024 7:41 AM EDT
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For the Miami-Dade Transportation Planning Organization (TPO)



Signature Date

Aileen Bouclé, AICP Executive Director

Name Title



Witness

Approved as to Form and Legal Sufficiency

By: 


For the Broward Metropolitan Planning Organization (MPO)



Greg Stuart (Jun 18, 2024 12:49 CDT)

Jun 18, 2024

<i>Signature</i>	<i>Date</i>
Gregory Stuart	Executive Director
<i>Name</i>	<i>Title</i>
Vilma Hurtado	
<i>Witness</i>	

For the Palm Beach Transportation Planning Agency (TPA)

	6/7/2024
Signature	Date

Valerie Neilson	TPA Executive Director
Name	Title
	
Witness	

In anticipation of the next round of LRTP updates for the Tri-County Region, the MOU will guide the development and maintenance of the SERPM 10 from beginning to end of its use. It is expected that the LRTPs will be adopted by December 2029.