SECOND 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

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; and the Palm Beach Transportation Planning Agency, (hereafter these public sector transportation agencies are called PARTNERS and the aforementioned Counties will be called the Tri-County Region). This is the second MOU between the agencies for these activities as the first MOU expired on June 30, 2019. 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 SERPM8 and the future tasks to support the next generation of SERPM (hereafter referred to as SERPM 9). 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.

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)
- Miami-Dade Expressway Authority (MDX)
- South Florida Regional Transportation Authority (SFRTA)
- Florida Turnpike Enterprise

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 2035, 2040 and 2045 LRTP cycles.

The RTTAC-MS provided major input into coordination of funding for model related activities and decision to transition into an Activity Based Model (ABM). It also has served as the oversight body for the SERPM 8 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 SERPM 8 through December 31, 2024, or until the formalization of SERPM 9 which occurs after the adoptions of the three respective 2050 LRTP's, which are expected to be completed by December 2024. As such, all model maintenance funds depicted in *Table 2* of this MOU will be allocated to FDOT D4 to carry out this effort. Maintenance of SERPM 9 will be addressed through a subsequent 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 be 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 the year 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. Such transit data should be collected preferably during calendar year 2020 for consistency with the census and regional travel data collection efforts for calibration and validation of SERPM 9.

3.3. Model Development

The PARTNERS agree that the SERPM 9 development will be focused on greatly enhancing the model forecasting capabilities to support the respective long-range transportation plan (LRTP) updates. The SERPM 9 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. The Miami-Dade TPO will serve as the lead agency for the preparation, and development of the SERPM 9
- 2. 2.Because preparation and development of the SERPM9 will require concurrence from all PARTNERS, each PARTNER will be responsible for identifying the issues that must be addressed in the process to satisfy its respective requirements and needs.
- 3. PARTNERS agree that the Miami-Dade TPO may request the support of a private sector consultant team to assist in developing SERPM9 beginning in fiscal year 2021. All the PARTNERS of this MOU will participate in the selection of the consultant team. All the 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. The Miami-Dade TPO will be responsible for ensuring that deliverables of the Model Development effort are provided in a 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 (2050) databases.
- 7. PARTNERS will bear in-kind contribution in their respective capacities for consultant contract selection or administration.
- 8. All PARTNERS agree that SERPM 9 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 census-based population and employment datasets for the base year (2020) and future year forecasts (2050) in a timely basis and consistent format with the SERPM9 structure. The base year dataset (2020) should be prepared and be available no later than June 30, 2022 to support the model development tasks. Future year dataset (2050) are 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 8 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, 2020, (upon the expiration of the first SERPM MOU) through December 31, 2024. 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 9 products beyond 2024. 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 the SERPM support. Detailed schedules and timetables will set by the PARTNERS through the RTTAC-MS. This schedule supports model delivery timetable to the respective partners on or before June 30, 2023.

Miami-Dade TPO agrees to meet or exceed the model delivery schedule listed above and in *Table 1* below unless otherwise modified by the PARTNERS. Miami-Dade TPO 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)	2020		2021		2022		2023		2024	
Fiscal Year Task (Jul-Jun)	FY 2020	FY	2021	FY 2	2022	FY:	2023	FY 2	2024	FY 2025
SERPM 8 Maintenance/Support		 								
SERPM 9 Procurement		1 1 1		i I]
Travel Data Collection				1 1				1 1		I I I
SE Data Development		I I						1 1		1 1 1
SERPM 9 Model Development (to Delivery)] 		
SERPM 9 Development Refinements		1		1		I I I				1

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 9 Partner Funding Schedule

		FY 2020	FY 2021	FY2022	FY 2023	FY 2024	TOTAL
Model Maintenance (Led by FDOT D4)			150,000				
	FDOT	0	0	25,000	25,000	25,000	75,000
	МРО	0	0	8,500	8,500	8,500	25,500
	TPO	0	0	10,000	10,000	10,000	30,000
	TPA	0	0	6,500	6,500	6,500	19,500
Model Development (Led by Miami TPO)			1,000,000				
	FDOT	0	250,000	250,000	0	0	500,000
	МРО	0	85,000	85,000	0	0	170,000
	ТРО	0	100,000	100,000	0	0	200,000
	TPA	0	65,000	65,000	0	0	130,000
Breakdown by Agency			1,150,000				
	FDOT	0	250,000	275,000	25,000	25,000	575,000
	МРО	0	85,000	93,500	8,500	8,500	195,500
	TPO	0	100,000	110,000	10,000	10,000	230,000
	TPA	0	65,000	71,500	6,500	6,500	149,500

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 6

DA THE	10/14/19 Date						
Signature	Date						
DAT HUYNH	PLANNING & ENVIRONMENTAL ADMINTMATOR						
Name	Title						
Chomas	Metropolitan Planning Administrator						
Witness	4						
For the Florida Department of Trans	sportation FDOT - District 4						
Signature	10/14/2019 Date						
Signature	Date						
Birgit Olkuch	Interim Planning and Environmental Administrator						
Name	Interim Planning and Environmental Administrator						
Christing M. Fasiska	TRANSPORTATION PLANNING MANAGER						
Witness							
For the Broward Metropolitan Plan	ning Organization (MPO)						
0							
D.C.	October 4, 2019						
Signature	Date						
Bryan Galetka	Chair Broward MPO						
Name	Title						
	EXECUTIVE DIRECTOR						
Witness							

For the Miami-Dade Transportation Planning Organization (TPO)

	October 4, 2019
Signature	Date
Oliver C. Cilbert III	Chair Miami-Dade TPO
Oliver G. Gilbert III Name	Title
US Desco	
Witness	
For the Palm Beach Transportation Planning Agency (TPA)	
Elm.	October 4, 2019
Signature	Date
Robert Weinroth	Member Palm Beach TPA
Name	Title
Malle	
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 9 from beginning to end of its use. It is expected that the LRTPs will be adopted by December 2024.

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MIAMI-DADE TPO