



## TECHNICAL ADVISORY COMMITTEE (TAC)

### Regular Meeting

Tuesday, March 21, 2023  
1:30 pm

#### Public Participation/Accessibility

Participation in Person: Public comments may be provided in person at the meeting. Persons who require special accommodations under the Americans with Disabilities Act (ADA) or persons who require translation services (free of charge) should contact the St. Lucie TPO at 772-462-1593 at least five days prior to the meeting. Persons who are hearing or speech impaired may use the Florida Relay System by dialing 711.

Participation by Webconference (not intended for Committee Members): Using a computer or smartphone, register at <https://attendee.gotowebinar.com/register/997783042726614366>. After the registration is completed, a confirmation will be emailed containing instructions for joining the webconference. Public comments may be provided through the webconference chatbox during the meeting.

Written and Telephone Comments: Comment by email to [TPOAdmin@stlucieco.org](mailto:TPOAdmin@stlucieco.org); by regular mail to the St. Lucie TPO, 466 SW Port St. Lucie Boulevard, Suite 111, Port St. Lucie, Florida 34953; or call 772-462-1593 until 1:00 pm on March 21, 2023.

### AGENDA

1. Call to Order
2. Roll Call
3. Comments from the Public
4. Approval of Agenda
5. Approval of Meeting Summary
  - *January 17, 2023 Regular Meeting*
6. Action Items
  - 6a. Unified Planning Work Program (UPWP) Amendments: Reviews of Amendments to the UPWP to add Fort Pierce passenger rail station planning and replace the Transit Center Visioning Workshop with an Airport Connector Planning & Conceptual Engineering (PACE) Study.

*Action: Review and recommend adoption of the UPWP Amendments, recommend adoption with conditions, or do not recommend adoption.*

- 6b. Amendment #6 to the FY 2022/23 – FY 2026/27 Transportation Improvement Program (TIP): Review of Amendment #6 to the TIP to increase the project cost and advance the construction of the Midway Road Widening Project from Selvitz Road to Jenkins Road to FY 2023/24 from FY 2025/26 using local funding that will be reimbursed.

*Action: Review and recommend concurrence of TIP Amendment #6, recommend concurrence with conditions, or do not recommend concurrence.*

- 6c. Amendment #7 to the FY 2022/23 – FY 2026/27 Transportation Improvement Program (TIP): Review of Amendment #7 to add a rumble strips installation project to the TIP.

*Action: Review and recommend adoption of TIP Amendment #7, recommend adoption with conditions, or do not recommend adoption.*

- 6d. Spot Speed Studies: Review of the Spot Speed Studies conducted on Airoso Boulevard, Port St. Lucie Boulevard, and Midway Road.

*Action: Recommend acceptance of the Spot Speed Studies, recommend acceptance with conditions, or do not recommend acceptance.*

- 6e. Strategic Intermodal System (SIS) Cost Feasible Plan (CFP) Update: Review of the draft update to the SIS CFP.

*Action: Recommend endorsement of the draft update to the SIS CFP, recommend endorsement with conditions, or do not recommend endorsement.*

- 6f. Treasure Coast Regional Planning Model #5 (TCRPM5) Land Use Data Update: Review of the TCRPM5 Land Use Data Update for adoption.

*Action: Recommend adoption of the TCRPM5 Land Use Data Update, recommend adoption with conditions, or do not recommend adoption.*

- 6g. Special Events Congestion Management and Parking Plan (SECMAPP): Review of the SECMAPP for the St. Lucie TPO area.

*Action: Recommend adoption of the SECMAPP, recommend adoption with conditions, or do not recommend adoption.*

- 6h. Transportation Alternatives Program (TAP) 2023 Grant Application: Review of a TAP grant application for the 2023 cycle.

*Action: Recommend endorsement of the TAP grant application, recommend endorsement with conditions, or do not recommend endorsement.*

- 6i. Updates to the Transportation Alternatives Program (TAP) Project Prioritization Methodology and Standardized Traffic Impact Studies (TIS) Methodology and Procedures: Review of updates to the TAP Project Prioritization Methodology and Standardized TIS Methodology and Procedures.

*Action: Recommend adoption of the updates and/or develop an update process, recommend adoption and/or develop an update process with conditions, or do not recommend adoption or develop an update process.*

7. Recommendations/Comments by Members
8. Staff Comments
9. Next Meeting: The next St. Lucie TPO TAC meeting is a regular meeting scheduled for 1:30 pm on Tuesday, May 16, 2023.
10. Adjourn

#### NOTICES

The St. Lucie TPO satisfies the requirements of various nondiscrimination laws and regulations including Title VI of the Civil Rights Act of 1964. Public participation is welcome without regard to race, color, national origin, age, sex, religion, disability, income, or family status. Persons wishing to express their concerns about nondiscrimination should contact Marceia Lathou, the Title VI/ADA Coordinator of the St. Lucie TPO, at 772-462-1593 or via email at [lathoum@stlucieco.org](mailto:lathoum@stlucieco.org).

Items not included on the agenda may also be heard in consideration of the best interests of the **public's health, safety, welfare, and as necessary to protect every person's right of access**. If any person decides to appeal any decision made by the St. Lucie TPO Advisory Committees with respect to any matter considered at a meeting, that person shall need a record of the proceedings, and for such a purpose, that person may need to ensure that a verbatim record of the proceedings is made which includes the testimony and evidence upon which the appeal is to be based.

Kreyòl Ayisyen: Si ou ta renmen resevwa enfòmasyon sa a nan lang Kreyòl Ayisyen, tanpri rele nimewo 772-462-1593.

Español: Si usted desea recibir esta información en español, por favor llame al 772-462-1593.



Coco Vista Centre  
466 SW Port St. Lucie Blvd. Suite 111  
Port St. Lucie, Florida 34953  
772-462-1593 www.stlucietpo.org

## TECHNICAL ADVISORY COMMITTEE (TAC)

### REGULAR MEETING

DATE: Tuesday, January 17, 2023

TIME: 1:30 pm

LOCATION: St. Lucie TPO  
Coco Vista Centre  
466 SW Port St. Lucie Boulevard, Suite 111  
Port St. Lucie, Florida

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### MEETING SUMMARY

1. Call to Order

Chairman Sanders called the meeting to order at 1:35 pm.

2. Roll Call

The roll was conducted via sign-in sheet, and the following members were present:

Members Present

Marty Sanders, Chairman  
Benjamin Balcer, Vice Chairman  
Joe DeFronzo  
Robert Driscoll

Selena Griffett  
Tracy Jahn

Kevin Lindgren  
Mary Savage-Dunham

Representing

St. Lucie Co. School District  
St. Lucie County Planning  
Port St. Lucie Public Works  
Independent Public  
Transportation Operator  
Fort Pierce Engineering  
St. Lucie County Transit  
Management  
TCI Airport  
Port St. Lucie Planning

Others Present

Kyle Bowman  
 Peter Buchwald  
 Yi Ding  
 Marceia Lathou  
 Rachel Harrison  
 James Brown  
 Tony Norat  
 Dan Zrallack

Representing

St. Lucie TPO  
 St. Lucie TPO  
 St. Lucie TPO  
 St. Lucie TPO  
 Recording Specialist  
 Florida's Turnpike  
 FDOT  
 St. Lucie County

3. Comments from the Public – None.

4. Approval of Agenda

\* MOTION by Vice Chairman Balcer to approve the agenda.

\*\* SECONDED by Ms. Griffett Carried UNANIMOUSLY

5. Approval of Meeting Summary

• September 20, 2022 Regular Meeting

\* MOTION by Mr. Driscoll to approve the Meeting Summary.

\*\* SECONDED by Vice Chairman Balcer Carried UNANIMOUSLY

6. Action Items

6a. Annual Officer Elections: Election of a Chairperson and a Vice Chairperson for the TAC for 2023.

Mr. Buchwald invited the TAC secretary to conduct the elections.

\* MOTION by Ms. Griffett to nominate Mr. Sanders and Mr. Balcer to serve as TAC Chairman and Vice-Chairman for 2023, respectively.

\*\* SECONDED by Mr. Driscoll

There were no other nominations and the nominations were closed.

\*\* MOTION to elect Mr. Sanders as Chairman and Mr. Balcer as Vice Chairman. Carried UNANIMOUSLY

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Chairman Sanders thanked the members for their vote of confidence, noting his pleasure at being able to serve from a position of relative neutrality, financially speaking.

6b. 2023 Meeting Dates: Approval of the proposed meeting dates for the remainder of 2023 for the St. Lucie TPO TAC.

Mr. Buchwald presented the proposed dates and times for TAC meetings in 2023.

\* MOTION by Mr. Driscoll to approve the proposed TAC meeting dates for the remainder of 2023.

\*\* SECONDED by Vice Chairman Balcer Carried UNANIMOUSLY

6c. Amendments to the FY 2022/23 – FY 2026/27 Transportation Improvement Program (TIP): Review of amendments to add funding for Paratransit Demand Response Service and Transit Travel Training to the TIP.

Mr. Buchwald explained that FDOT had added two new transit projects to its Work Program after the TPO's current Transportation Improvement Program (TIP) had been adopted and was therefore requesting that the TPO amend the TIP. He described the purposes of the projects as providing Paratransit Demand Response Service and Transit Travel Training to seniors and individuals with disabilities. Mr. Buchwald summarized the funding considerations for each of the projects and clarified that the addition of the projects would not impact the fiscal constraint of the TIP.

In response to Mr. Driscoll's questions, Ms. Jahn elaborated on how the County would use the funding, indicating that she was unsure as to whether the County would be applying for it in coming years. Mr. Buchwald then provided additional information regarding the funding source.

\* MOTION by Ms. Griffett to recommend adoption of the TIP Amendments.

\*\* SECONDED by Vice Chairman Balcer Carried UNANIMOUSLY

6d. Public Participation Plan (PPP) 2022 Annual Evaluation: Review of the PPP 2022 Annual Evaluation.

Mr. Buchwald introduced the agenda item and invited Ms. Lathou to continue. Ms. Lathou provided an overview of the TPO's public participation efforts and their intended outcomes. She explained the rationale and methodology for reviewing their effectiveness as compared with the baseline figures from 2020 or 2021 and then presented the results of the evaluation with respect to the online, in-person, and Title VI/Environmental Justice outreach activities conducted during 2022. Ms. Lathou concluded with the performance targets to be used for the 2023 evaluation.

\* MOTION by Mr. Driscoll to recommend acceptance of the Evaluation.

\* \* SECONDED by Ms. Griffett Carried UNANIMOUSLY

6e. 2023 Safety Performance Targets: Review of the 2023 Safety Performance Targets and Interim Benchmarks for adoption by the TPO.

Mr. Buchwald introduced Mr. Ding, who explained that State DOTs must annually establish statewide targets for safety performance measures according to Federal Transportation Performance Management requirements. Mr. Ding noted that FDOT had renewed its commitment to zero deaths and serious injuries for 2023 by setting Vision Zero targets for all five safety performance measures, indicating that the TPO could either support them or establish its own targets. He described how interim benchmarks were used to demonstrate progress toward the final targets and presented the 2021 safety performance results for both FDOT and the TPO. Mr. Ding then presented the 2023 Safety Performance Interim Benchmarks being recommended for adoption, explaining how they had been developed based on both historical and projected safety performance data. He concluded with an overview of local efforts at promoting roadway safety, which included the undertaking of Spot Speed Studies for several high-crash locations.

In answer to Vice Chairman Balcer's question, Mr. Ding indicated that the 2022 safety data would likely be available the following December.

Chairman Sanders noted that St. Lucie County's performance results compared favorably to those of peers, commenting that the recommended interim benchmarks appeared to be realistic. Mr. Buchwald explained the majority of the TPO's current efforts as being aimed toward speed management and spot speed studies as a strategy to reduce accident-related fatalities and serious injuries, acknowledging also the importance of other factors like enforcement and education. Chairman Sanders concurred, naming roadway design

as another factor, and applauded the City of Port St. Lucie's neighborhood speed reduction initiative. Mr. Buchwald further commended the County's reduction of speeds on portions of Midway Road. Ms. Savage-Dunham then provided an update on the City of Port St. Lucie's ongoing traffic calming and speed reduction efforts.

\* MOTION by Mr. DeFronzo to recommend adoption of the 2023 Safety Performance Targets and the 2023 Interim Benchmarks.

\*\* SECONDED by Mr. Driscoll Carried UNANIMOUSLY

6f. East Midway Road Corridor Study Scope of Services: Review of the draft Scope of Services to conduct the East Midway Road Corridor Study.

Mr. Buchwald explained that public and local agency input had previously identified several safety issues pertaining to the segment of Midway Road from U.S. 1 to Indian River Drive, including excessive speeding, inadequate bicycle and pedestrian infrastructure, unsafe turning conditions at the entrance to the St. Lucie County Savannas Recreation Area and the intersection with Weatherbee Road, and potential conflicts arising from the future crossing of the East Coast Greenway/Florida Shared-Use Network (SUN) Trail. He described the operational and safety analyses to be conducted as part of the Study, noting that a set of recommendations would be developed to improve traffic operations and safety while also accommodating multimodal needs along the corridor. Mr. Buchwald concluded with the Study's timeline, consultant, and cost.

\* MOTION by Vice Chairman Balcer to recommend approval of the draft Scope of Services.

\*\* SECONDED by Ms. Griffett Carried UNANIMOUSLY

6g. Updates to the Transportation Alternatives Program (TAP) Project Prioritization Methodology and Standardized Traffic Impact Studies (TIS) Methodology and Procedures: Review of updates to the TAP Project Prioritization Methodology and the Standardized TIS Methodology and Procedures.

Mr. Buchwald described the development and use of both the TAP Project Prioritization Methodology and the Standardized TIS Methodology and Procedures, explaining that the present update had been initiated at the request of the TAC members. Mr. Buchwald presented the revisions being suggested by TPO staff for the TAP Project Prioritization Methodology and then identified several items to

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consider with respect to the Standardized TIS Methodology and Procedures.

Ms. Griffett indicated that she would appreciate more time to review both documents. In response to her comment, Mr. Buchwald clarified that the version of the Standardized TIS Methodology and Procedures included within the agenda packet had last been revised in 2016.

Mr. Buchwald explained the source of TAP funding and the types of projects for which it may be used. He elaborated on how potential projects were scored and subsequently ranked, emphasizing the need to ensure that the prioritization criteria reflected what local agencies considered important. Mr. Buchwald noted that the item could remain on the TAC's agenda for several meetings to allow for adequate review and discussion if the members deemed it necessary. He further noted that local jurisdictions had different procedures with respect to traffic impact studies, explaining that the purpose of the Standardized TIS Methodology and Procedures was to ensure a minimum level of diligence on the part of the consulting engineers since they served the best interests of the developers and not the jurisdictions. Mr. Buchwald expounded on the increasing focus on safety and mobility in recent years and the resulting need for studies that clearly and accurately portray the impacts of development on transportation, noting that the TIS document was intended to support local jurisdictions in ensuring quality development.

In response to Ms. Savage-Dunham's question, Mr. Buchwald explained that Mr. DeFronzo's suggestions had been summarized in the staff report but not yet incorporated into the document. Mr. DeFronzo clarified that he had been informally seeking input from local planning staffs since the previous year but would support taking the time to seek formal involvement from all stakeholders. Ms. Savage-Dunham commented on the potential of the TIS document to help local staffs better advocate for their jurisdictions, noting that more time was needed to obtain valuable input.

Discussion ensued regarding safety and multimodal considerations, with Mr. Buchwald commenting that accident history and transportation equity were not typically evaluated in a traffic impact study. In response to Chairman Sanders' question, Mr. DeFronzo indicated that he was not involved in site plan review although he had conducted traffic studies as a consultant in the past. He observed that most traffic impact studies still reflected the more vehicle-focused mode of planning that had given way in recent years to an emphasis on mobility and safety. He referenced several case studies related to multimodal safety and suggested that the members consider how to

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incorporate such technical expertise in service of the intended goals and objectives.

Mr. Driscoll inquired as to whether a workshop with the local agency staffs was necessary. Mr. Buchwald indicated that local input and experience was needed alongside external technical expertise.

Chairman Sanders remarked on the importance of widespread enforcement of the TIS document, explaining that traffic consultants who upheld the new standards might get less business than those willing to maintain the status-quo. Mr. Buchwald concurred, citing the support of local elected officials as being particularly significant. In answer to Ms. Griffett’s question, Mr. Buchwald indicated that it might be helpful to seek feedback from the TPO Board before proceeding. Chairman Sanders suggested a technical subcommittee be formed to review the document, and Mr. Buchwald asked if a consultant should be engaged to manage the workshop.

Ms. Savage-Dunham commented that some members of the Port St. Lucie City Council viewed traffic studies with distrust. She recommended that development be held to the same standard regionally, noting that the present efforts could eventually result in changes to the land development code if broad consensus were achieved. Mr. DeFronzo opined that the existing methodology, while technically proficient, was weak with respect to big-picture, regional planning.

\* MOTION by Ms. Griffett to request that the TPO Board consider supporting an update to the Standardized TIS Methodology and Procedures as well as its implementation in applicable codes and local ordinances to ensure consistency with the review of the impacts of ongoing development throughout the region.

\*\* SECONDED by Mr. DeFronzo Carried UNANIMOUSLY

\* MOTION by Ms. Griffett to postpone consideration of the TAP Project Prioritization Methodology until the March TAC meeting to allow for additional review.

\*\* SECONDED by Vice Chairman Balcer Carried UNANIMOUSLY

7. Recommendations/Comments by Members – Mr. Driscoll announced a Council on Aging fundraising campaign to fill the budget shortfall for certain programs previously funded by a County match.

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Chairman Sanders thanked the members once again for his re-election.

- 8. Staff Comments – Mr. Buchwald thanked the members for their participation.
  
- 9. Next Meeting: The next St. Lucie TPO TAC meeting is a regular meeting scheduled for 1:30 pm on Tuesday, March 21, 2023.
  
- 10. Adjourn – The meeting was adjourned at 2:40 pm.

Respectfully submitted:

Approved by:

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Rachel Harrison  
Recording Specialist

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Marty Sanders  
Chairman



## AGENDA ITEM SUMMARY

Board/Committee:	Technical Advisory Committee (TAC)
Meeting Date:	March 21, 2023
Item Number:	6a
Item Title:	Unified Planning Work Program (UPWP) Amendments
Item Origination:	TPO Board
UPWP Reference:	Task 1.2 – UPWP Development
Requested Action:	Review and recommend adoption of the UPWP Amendments, recommend adoption with conditions, or do not recommend adoption.
Staff Recommendation:	Based on the proposed UPWP Amendments adding planning projects that support the UPWP Planning Priorities, it is recommended that the proposed UPWP Amendments be recommended for adoption by the TPO Board.

### Attachments

- Staff Report
- Draft Amended UPWP Pages



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 772-462-1593 www.stlucietpo.org

## MEMORANDUM

TO: Technical Advisory Committee (TAC)

FROM: Peter Buchwald  
 Executive Director

DATE: March 15, 2023

SUBJECT: Unified Planning Work Program (UPWP) Amendments

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### BACKGROUND

At the meeting on February 1st, the TPO Board discussed potential new projects that may be added to the TPO's UPWP because of available funding and changes in local agency transportation priorities. As a result of the discussion, the Board moved to amend the UPWP to add an Airport Connector Corridor Alignment Study and Fort Pierce Passenger Rail Station Planning. The proposed amendments to the FY 2022/23 – FY 2023/24 UPWP to add these two new planning projects are being presented for review and recommendation.

### ANALYSIS

The UPWP is proposed to be amended, as indicated by strikethroughs and underlines in the draft amended UPWP pages that are attached, to add the following projects:

- Airport Connector Corridor Alignment Study: As part of Task 3.1, *Long Range Transportation Planning*, of the UPWP, a study will be completed of alignment alternatives, known as a Planning & Conceptual Engineering (PACE) Study, for a new roadway connecting the proposed I-95 and Turnpike Interchanges to the St. Lucie International Airport in northern St. Lucie County. The project will be completed in partnership with St. Lucie County with the TPO contributing \$60,000 of Surface Transportation Block Grant Funding (SU) toward the project that became available when the Transit Center Visioning Workshop was cancelled as explained in the next project summary. The Study is planned to be completed by June 2024.

- **Fort Pierce Passenger Rail Station Planning:** As part of Task 3.2, *Transit Planning*, of the UPWP, an initial site plan and conceptual design will be prepared for a future passenger rail station in downtown Fort Pierce. This project replaces the Transit Center Visioning Workshop that was identified by St. Lucie County Community Services Staff to not be needed because the vision for the Transit Operations Center is already established, and it is under design. The project will be funded with approximately \$356,000 of Coronavirus Response and Relief Supplemental Appropriations Act Funding (GFSU) that was allocated to the TPO. The project will be completed in cooperation with the City of Fort Pierce and is planned to be completed by June 2024.

The proposed projects are consistent with one or more of the following UPWP Planning Priorities:

- Project Advancement: Support the local agencies in advancing the implementation of projects in the 2045 LRTP, 2045 RL RTP, and TIP
- Alternative Transportation Facilities: Support the development and implementation of alternative transportation facilities including sidewalks, bike paths/lanes, and transit, port, airport and ACES infrastructure
- Livability and Sustainability: Enhance the livability and sustainability of the local communities

Scopes of Services for these projects subsequently will be developed and presented to the TPO Advisory Committees and Board for review and approval.

## RECOMMENDATION

Based on the proposed UPWP Amendments adding planning projects that support the UPWP Planning Priorities, it is recommended that the proposed UPWP Amendments be recommended for adoption by the TPO Board.

Task 3.1 Long Range Transportation Planning		
<b>Purpose:</b>		
To implement the SmartMoves 2045 Long Range Transportation Plan (LRTP) and the Treasure Coast Regional LRTP (RLRTP) which provide for the development, management, and operation of multimodal transportation systems and considers and/or integrates facilities that serve national, statewide, or regional transportation functions.		
<b>Previous Work:</b>		
The TPO continued to implement the Go2040 LRTP. The SmartMoves 2045 LRTP was adopted in February 2021 which incorporated livability initiatives to improve mobility and quality of life through improvements that support multiple transportation modes. The Plan also incorporated Safety, Security, and Congestion Elements that inform other tasks of the UPWP.		
Performance measures developed for the Go2040 LRTP and SmartMoves 2045 LRTP were monitored and reviewed on an annual basis. Federal performance measures were reviewed, and Federal requirements with the corresponding rules promulgated were analyzed.		
Coordination occurred with state, regional, and local agencies to identify and prioritize projects which increase mobility options as part of the RL RTP.		
The TPO participated with FDOT in the major update process for the Strategic Intermodal System (SIS) Unfunded Needs and Cost Feasible Plans.		
<b>Major Activities (performed continuously by the St. Lucie TPO unless otherwise noted):</b>		
<ul style="list-style-type: none"> <li>• SmartMoves 2045 LRTP amendment and implementation</li> <li>• Participation in FTP and SIS Plan implementation and updates</li> </ul>		
<b>End Product:</b>	<b>Completion Date:</b>	<b>Performed by:</b>
TIP/LRTP Performance Report 2023	June 2023	St. Lucie TPO
I-95/Northern Connector Interchange Justification Report	June 2023	St. Lucie TPO
TIP/LRTP Performance Report 2024	June 2024	St. Lucie TPO
<u>Airport Connector Corridor Alignment Study</u>	<u>June 2024</u>	St. Lucie TPO <u>St. Lucie County</u>

Task 3.1 Long Range Transportation Planning Estimated Budget Detail for FY 2022/23						
Budget Category	Budget Category Description	PL <sup>1</sup>	SU	Private Developer	TPO Local	Total
Contract Number:						
<b>A. Personnel Services:</b>						
TPO Staff Salaries, fringe benefits, and other deductions		\$10,000	\$0	\$60,000	\$0	\$70,000
Subtotal:		\$10,000	\$0	\$60,000	\$0	\$70,000
<b>B. Contract/Consultant Services:</b>						
I-95/Northern Connector Interchange Justification Report		\$0	\$0	\$500,000	\$0	\$500,000
Airport Connector Corridor Alignment Study		\$0	\$60,000	\$0	\$0	\$60,000
Subtotal:		\$0	<del>\$0</del> \$60,000	\$500,000	\$0	<del>\$500,000</del> \$560,000
<b>C. Travel:</b>						
		\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	\$0	\$0	\$0	\$0
<b>D. Other Direct Expenses:</b>						
		\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	\$0	\$0	\$0	\$0
Total:		\$10,000	<del>\$0</del> \$60,000	\$560,000	\$0	<del>\$570,000</del> \$630,000

<sup>1</sup>Federal funds are soft matched by the FDOT non-cash match explained on page 3.

Task 3.1 Long Range Transportation Planning Estimated Budget Detail for FY 2023/24						
Budget Category	Budget Category Description	PL <sup>1</sup>	SU	FCTD	TPO Local	Total
Contract Number:						
<b>A. Personnel Services:</b>						
TPO Staff Salaries, fringe benefits, and other deductions		\$20,000	\$0	\$0	\$0	\$20,000
Subtotal:		\$20,000	\$0	\$0	\$0	\$20,000
<b>B. Contract/Consultant Services:</b>						
		\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	\$0	\$0	\$0	\$0
<b>C. Travel:</b>						
		\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	\$0	\$0	\$0	\$0
<b>D. Other Direct Expenses:</b>						
		\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	\$0	\$0	\$0	\$0
Total:		\$20,000	\$0	\$0	\$0	\$20,000

<sup>1</sup>Federal funds are soft matched by the FDOT non-cash match explained on page 3.





Task 3.2 Transit Planning

Purpose:

To provide technical assistance and guidance to local and regional transit providers, to support public transportation planning and transit grant administration activities, and to develop and implement analytical methods to identify gaps in the connectivity of the transportation system and develop infrastructure and operational solutions that provide the public, especially traditionally underserved populations, with adequate access to essential services.

Previous Work:

Intermodal planning and coordination was supported through transit planning activities in cooperation with Martin and Indian River MPOs and South Florida Commuter Services (SFCS). The St. Lucie County Origin and Destination Big Data Analysis was completed, a key step to identify areas for transit infrastructure development and improvements. The TPO Board adopted the PTASP Performance Targets for the St. Lucie TPO. The TPO Board accepted the Transit Route Optimization Study Draft Choices Report which is the first phase of a study to optimize the bus route network. TPO Staff assisted St. Lucie County in preparing its Transit Development Plan (TDP) Annual Progress Reports. The Micro-Mobility Study was conducted.

The TPO coordinated and facilitated a Park & Ride Lot Program by building upon the results of previous planning efforts. Construction of the Jobs Express Terminal was completed. Coordination with Palm Tran and FDOT resulted in commitments from those agencies to respectively operate and fund express bus service from St. Lucie County to Palm Beach County via the Jobs Express Terminal.

Other transit planning activities that were continued included providing technical and planning assistance to St. Lucie County **in order to maintain the County’s eligibility for the continued receipt of federal and state transit grant funds.** The performance of the transit system was monitored. Potential impacts caused by the extension of passenger rail service were monitored. The coordination of specialized transportation services continued through transit meetings.

Major Activities (performed continuously by the St. Lucie TPO unless otherwise noted):

- Provision of technical assistance to the transit providers
- Bus-related planning activities performed by St. Lucie County with its Section 5307 funds
- Continue coordination with FDOT, St. Lucie County Transit, and Palm Tran on the express bus service from the Jobs Express Terminal to the West Palm Beach Intermodal Center
- Transit Development Plan (TDP) Major Update
- TDP Annual Progress Reports
- Transit Center Visioning Workshop
- Support of intermodal planning, travel demand management, and transit planning coordination including implementation of the SFCS Workplan
- Park and ride lot program planning
- Passenger rail service program planning

End Product:	Completion Date:	Performed by:
<del>Transit Center Visioning Workshop Fort Pierce Passenger Rail Station Planning (Consultant scope of services in Appendix F to be utilized.)</del>	<del>December 2022</del> June 2024	St. Lucie TPO City of Fort Pierce
TDP Annual Progress Report	September 2022	St. Lucie TPO
TDP Annual Progress Report	September 2023	St. Lucie TPO
TDP Major Update (Consultant scope of services in Appendix F.)	June 2024	St. Lucie TPO



Task 3.2 Transit Planning Estimated Budget Detail for FY 2022/23							
Budget Category	Budget Category Description	PL <sup>1</sup>	SU <sup>1</sup>	FTA 5305D	<del>FCTD</del> GFSU	TPO Local	Total
Contract Number:				G1477 G2170			
<b>A. Personnel Services:</b>							
TPO Staff Salaries, fringe benefits, and other deductions		\$10,000	\$35,000	\$70,541	\$0	\$0	\$115,541
Subtotal:		\$10,000	\$35,000	\$70,541	\$0	\$0	\$115,541
<b>B. Contract/Consultant Services:</b>							
Transit Center Visioning Workshop Fort Pierce Passenger Rail Station Planning		\$0	<del>\$60,000</del> \$0	\$0	\$0	\$0	\$60,000
Subtotal:		\$0	<del>\$60,000</del> \$0	\$0	<del>\$0</del> \$356,183	\$0	<del>\$60,000</del> \$356,183
<b>C. Travel:</b>							
		\$0	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	\$0	\$0	\$0	\$0	\$0
<b>D. Other Direct Expenses:</b>							
		\$0	\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	\$0	\$0	\$0	\$0	\$0
Total:		\$10,000	<del>\$95,000</del> \$35,000	\$70,541	<del>\$0</del> \$356,183	\$0	<del>\$175,541</del> \$471,724

<sup>1</sup>Federal funds are soft matched by the FDOT non-cash match explained on page 3.

Task 3.2 Transit Planning Estimated Budget Detail for FY 2023/24						
Budget Category	Budget Category Description	PL <sup>1</sup>	SU <sup>1</sup>	FCTD	TPO Local	Total
Contract Number:						
<b>A. Personnel Services:</b>						
TPO Staff Salaries, fringe benefits, and other deductions		\$25,000	\$85,000	\$0	\$0	\$110,000
Subtotal:		\$25,000	\$85,000	\$0	\$0	\$110,000
<b>B. Contract/Consultant Services:</b>						
TDP Major Update		\$0	\$150,000	\$0	\$0	\$150,000
Subtotal:		\$0	\$150,000	\$0	\$0	\$150,000
<b>C. Travel:</b>						
		\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	\$0	\$0	\$0	\$0
<b>D. Other Direct Expenses:</b>						
		\$0	\$0	\$0	\$0	\$0
Subtotal:		\$0	\$0	\$0	\$0	\$0
Total:		\$25,000	\$235,000	\$0	\$0	\$260,000

<sup>1</sup>Federal funds are soft matched by the FDOT non-cash match explained on page 3.



## AGENDA ITEM SUMMARY

Board/Committee:	Technical Advisory Committee (TAC)
Meeting Date:	March 21, 2023
Item Number:	6b
Item Title:	Amendment #6 to the FY 2022/23 – FY 2026/27 Transportation Improvement Program (TIP)
Item Origination:	Florida Department of Transportation (FDOT) District 4
UPWP Reference:	Task 3.3 – TIP
Requested Action:	Review and recommend concurrence of TIP Amendment #6, recommend concurrence with conditions, or do not recommend concurrence.
Staff Recommendation:	Because TIP Amendment #6 is consistent with the SmartMoves 2045 LRTP and does not impact the fiscal constraint of the TIP and was completed in compliance with Resolution MPO 06-04, it is recommended that concurrence of the TIP amendment be recommended to the TPO Board.

### Attachments

- Staff Report
- TIP Amendment Request
- Draft TIP Amendment Summary
- Revised TIP Project Page
- Original TIP Project Page



Coco Vista Centre  
 466 SW Port St. Lucie Blvd, Suite 111  
 Port St. Lucie, Florida 34953  
 772-462-1593 www.stlucietpo.org

## MEMORANDUM

TO: Technical Advisory Committee (TAC)

FROM: Peter Buchwald  
 Executive Director

DATE: March 14, 2023

SUBJECT: Amendment #6 to the FY 2022/23 – FY 2026/27  
 Transportation Improvement Program (TIP)

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### BACKGROUND

The FY 2022/23 – FY 2026/27 TIP was adopted by the TPO Board on June 1, 2022, and includes the widening of Midway Road from Jenkins Road to Selvitz Road. Subsequent to the adoption of the TIP, the project cost increased, and St. Lucie County requested to advance the construction of the project to FY 2023/24 from FY 2025/26 using local funding that will be reimbursed with TPO funding. Florida Department of Transportation (FDOT) District 4 requests an amendment to reflect the changes in the TPO's TIP.

### ANALYSIS

As identified in the attached TIP Amendment Summary, the Railroad Utility and Construction phases of Midway Project will be advanced by two years to FY 2023/24 with the total cost increased by almost \$9 million. The revised and original TIP project pages are also attached.

Because new funding will be added to the TIP that equals the cost of the project, the project will not impact the fiscal constraint of the TIP. The project and the funding are identified in the Cost Feasible Plan of the TPO's SmartMoves 2045 Long Range Transportation Plan (LRTP). Therefore, the TIP amendment is consistent with the SmartMoves 2045 LRTP.

FDOT District 4 requested that the TIP be amended as soon as possible in order to maintain the project schedule so that construction can be started at the start of FY 2023/24. Therefore, through Resolution MPO 06-04, the Executive Director was authorized to amend the TIP, to approve the

associated State TIP amendments, and to report the amendments to the TPO Advisory Committees and Board.

### RECOMMENDATION

Because TIP Amendment #6 is consistent with the SmartMoves 2045 LRTP and does not impact the fiscal constraint of the TIP and was completed in compliance with Resolution MPO 06-04, it is recommended that concurrence of the TIP amendment be recommended to the TPO Board.



*Florida Department of Transportation*

RON DESANTIS  
GOVERNOR

3400 West Commercial Boulevard  
Fort Lauderdale, FL 33309

JARED W. PERDUE, P.E.  
SECRETARY

March 8, 2023

Mr. Peter Buchwald, MPO Executive Director  
St. Lucie Transportation Planning Organization  
466 SW Port St. Lucie Boulevard, Suite 111  
Port St. Lucie, FL 34953

**SUBJECT: St. Lucie Transportation Planning Organization  
TIP Amendment Request FY 2022/23 – 2026/27  
FM # 231440-5**

Dear Mr. Buchwald:

Pursuant to *Part IV – Chapter 5: Statewide and Local Transportation Program (STIP and TIP) of the work program instructions*, the Florida Department of Transportation requests your processing and approval of the attached amendment to the FY 2022/23 – 2026/27 Transportation Improvement Program.

This amendment is required because the project cost has increased by more than 20% AND \$2 million and needs to be reflected in the TIP.

The purpose of this project is to widen west Midway Rd from two lanes to four lanes based on PD&E design completed under 231440-3 and right-of-way on 231440-3. Phase groups include Railroad & Utilities, Construction and Local Advancement Reimbursement. This amendment is necessary due to significant project cost increase and advancement of the Construction Phase to FY2024.

This Transportation Improvement Program Amendment should be consistent with the Adopted Long-Range Transportation Plan. The adopted TIP remains financially constrained. The TIP amendment is as follows:

EXISTING	FM#	Project Title			Type of Work		
	231440-5	MIDWAY RD FROM WEST OF JENKINS RD TO SELVITZ RD			ADD LANES & RECONSTRUCT		
	Phase	Fund	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
	RRU	LF	0	0	0	542,148	0
	RRU	SU	0	0	50,000	0	0
	CST	CIPG	0	0	0	6,819,704	0
	CST	LF	0	0	0	7,445,036	0
	CST	SA	0	0	0	4,882,592	104,150
	CST	SU	0	0	0	2,879,832	0
	CST	TRIP	0	0	0	847,805	0
<b>TOTAL</b>		<b>0</b>	<b>0</b>	<b>50,000</b>	<b>23,417,117</b>	<b>104,150</b>	

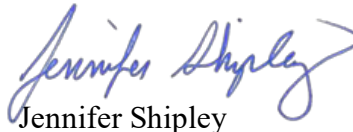
PROPOSED	FM#	Project Title			Type of Work		
	231440-5	MIDWAY RD FROM WEST OF JENKINS RD TO SELVITZ RD			ADD LANES & RECONSTRUCT		
	Phase	Fund	FY 2023	FY 2024*	FY 2025	FY 2026**	FY 2027
	RRU	LF	0	828,110	0	0	0
	CST	CIPG	0	1,700,494	0	0	0
	CST	LF	0	10,476,173	0	0	0
	CST	LFR	0	19,370,393	0	0	0
	CST	SU	0	51,400	0	0	0
	LAR	CIPG	0	0	0	7,094,463	0
	LAR	SA	0	0	0	3,643,102	0
	LAR	SU	0	0	0	3,917,247	0
	LAR	TRIP	0	0	0	3,276,644	0
LAR	TRWR	0	0	0	1,438,937	0	
<b>TOTAL</b>		<b>0</b>	<b>32,426,570</b>	<b>0</b>	<b>19,370,393</b>	<b>0</b>	

\*Local funds advancement by St. Lucie County. Reimbursement in FY 2026.

\*\*LAR (Local Advancement Reimbursement) phase was not in the approved STIP but is being added for transparency and consistency.

If you have any questions or need additional information, please contact me at (954) 777-4365.

Sincerely,



Jennifer Shipley

Interim MPO Liaison  
District Four

---

The above TIP amendment was authorized to be included in the FY 2022/23-2026/27  
Transportation Improvement Program.

Peter Buchwald  
MPO Chairman or Designee

March 15, 2023  
Date

  
Signature



**Transportation Improvement Program (TIP) Amendment  
FY 2022/23 - FY 2026/27**



TIP Amendment Number: 6  
 Current TIP Page Number: C 1-28  
 New TIP Page Number (if applicable): \_\_\_\_\_  
 STIP Page Number (if applicable): \_\_\_\_\_

Is a STIP amendment needed for this TIP Amendment? (check if yes)

Through Resolution MPO 06-04, the St. Lucie Transportation Planning Organization (St. Lucie TPO) authorized the Executive Director to amend the St. Lucie TPO TIP that was developed and adopted in compliance with U.S.C. Title 23 and Title 49 in a continuing, cooperative, and comprehensive transportation planning process, as a condition to the receipt of federal assistance, to approve the associated STIP amendments, and to report the amendments to the St. Lucie TPO Advisory Committees and Board.

This TIP Amendment is consistent with the SmartMoves 2045 Long Range Transportation Plan (LRTP) and does not change financial constraints. 2045 LRTP Page Number (if applicable): 8-2

TIP Amendment Criteria:

- A The change adds new individual projects to the current TIP
- B The change adversely impacts financial constraint
- C The change results in major scope changes
- D The change removes or deletes an individually listed project from the TIP
- E The change results in a cost increase that is greater than 20 percent and greater than \$2 million.

**PROJECT INFORMATION**

**Project Name:** Midway Road from West of Jenkins Road to Selvitz Road

**TIP Amendment Criteria:** E

**Reason for Change/Notes:** To advance the construction and revise the funding sources and cost of the project.

Status	FPN	Limits	Description	Phase	Fund	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27
Existing	231440-5	West of Jenkins Road to Selvitz Road	Add Lanes & Reconstruction	RRU	LF	\$0	\$0	\$0	\$542,148	\$0
				RRU	SU	\$0	\$0	\$50,000	\$0	\$0
				CST	CIGP	\$0	\$0	\$0	\$6,819,704	\$0
				CST	LF	\$0	\$0	\$0	\$7,445,036	\$0
				CST	SA	\$0	\$0	\$0	\$4,882,592	\$104,150
				CST	SU	\$0	\$0	\$0	\$2,879,832	\$0
				CST	TRIP	\$0	\$0	\$0	\$847,805	\$0
<b>Total</b>						\$0	\$0	\$50,000	\$23,417,117	\$104,150
Proposed	231440-5	West of Jenkins Road to Selvitz Road	Add Lanes & Reconstruction	RRU	LF	\$0	\$828,110	\$0	\$0	\$0
				CST	CIGP	\$0	\$1,700,494	\$0	\$0	\$0
				CST	LF	\$0	\$10,476,173	\$0	\$0	\$0
				CST	LFR	\$0	\$19,370,393	\$0	\$0	\$0
				CST	SU	\$0	\$51,400	\$0	\$0	\$0
				LAR	CIGP	\$0	\$0	\$0	\$7,094,463	\$0
				LAR	SA	\$0	\$0	\$0	\$3,643,102	\$0
				LAR	SU	\$0	\$0	\$0	\$3,917,247	\$0
				LAR	TRIP	\$0	\$0	\$0	\$3,276,644	\$0
				LAR	TRWR	\$0	\$0	\$0	\$1,438,937	\$0
<b>Total</b>						\$0	\$32,426,570	\$0	\$19,370,393	\$0

This TIP Amendment has been prepared in accordance with Federal requirements.

**Authorized Signature:** Peter Buchwald  
 St. Lucie TPO Chairperson or Executive Director

**Date:** March 15, 2023

**Local Funds  
Reimbursement  
to St. Lucie  
County**

**MIDWAY RD FROM WEST OF JENKINS RD TO SELVITZ RD  
2314405 Non-SIS**



**Prior Year Cost: 4,851,546**  
**Future Year Cost: 0**  
**Total Project Cost: 32,426,570**  
**LRTP: Page 8-2**

**Project Description:** ADD LANES & RECONSTRUCT  
**Extra Description:** 2022 TPO PRIORITY #2 WIDENING FROM 2 TO 4 LANES. BASED ON PD&E COMPLETED UNDER 231440-3 DESIGN AND RIGHT OF WAY ON 231440-3 56-01: UTILITIES RELOCATION 56-02: UWHCA WITH CITY OF PORT ST. LUCIE  
**Lead Agency:** MANAGED BY FDOT **From:**  
**County:** ST. LUCIE **To:**  
**Length:** 0.785  
**Phase Group:** RAILROAD & UTILITIES, CONSTRUCTION

Phase	Fund Code	2023	2024	2025	2026	2027	Total
RRU	LF	0	828,110	0	0	0	828,110
CST	CIGP	0	1,700,494	0	0	0	1,700,494
CST	LF	0	10,476,173	0	0	0	10,476,173
CST	LFR	0	19,370,393	0	0	0	19,370,393
CST	SU	0	51,400	0	0	0	51,400
LAR	CIGP	0	0	0	7,094,463	0	
LAR	SA	0	0	0	3,643,102	0	
LAR	SU	0	0	0	3,917,247	0	
LAR	TRIP	0	0	0	3,276,644	0	
LAR	TRWR	0	0	0	1,438,937	0	
		<b>32,426,570</b>			<b>19,370,393</b>		<b>32,426,570</b>

Local Funds Reimbursement  
to St. Lucie County

**MIDWAY RD FROM WEST OF JENKINS RD TO SELVITZ RD  
2314405 Non-SIS**



**Prior Year Cost: 4,851,546**  
**Future Year Cost: 0**  
**Total Project Cost: 29,891,313**  
**LRTP: Page 8-2**

**Project Description:** ADD LANES & RECONSTRUCT  
**Extra Description:** 2022 TPO PRIORITY #2 WIDENING FROM 2 TO 4 LANES. BASED ON PD&E COMPLETED UNDER 231440-3 DESIGN AND RIGHT OF WAY ON 231440-3 56-01: UTILITIES RELOCATION 56-02: UWHCA WITH CITY OF PORT ST. LUCIE  
**Lead Agency:** MANAGED BY FDOT **From:**  
**County:** ST. LUCIE **To:**  
**Length:** 0.785  
**Phase Group:** RAILROAD & UTILITIES, CONSTRUCTION

Phase	Fund Code	2023	2024	2025	2026	2027	Total	
RRU	LF	0	0	0	542,148	0	542,148	
RRU	SU	0	0	50,000	0	0	50,000	
CST	CIGP	0	0	0	6,819,704	0	6,819,704	
CST	LF	0	0	0	7,445,036	0	7,445,036	
CST	SA	0	0	0	4,882,592	104,150	4,986,742	
CST	SU	0	0	0	2,879,832	0	2,879,832	
CST	TRIP	0	0	0	847,805	0	847,805	
					<b>50,000</b>	<b>23,417,117</b>	<b>104,150</b>	<b>23,571,267</b>



## AGENDA ITEM SUMMARY

Board/Committee:	Technical Advisory Committee (TAC)
Meeting Date:	March 21, 2023
Item Number:	6c
Item Title:	Amendment #7 to the FY 2022/23 – FY 2026/27 Transportation Improvement Program (TIP)
Item Origination:	Florida Department of Transportation (FDOT)
UPWP Reference:	Task 3.3 – TIP
Requested Action:	Review and recommend adoption of TIP Amendment #7, recommend adoption with conditions, or do not recommend adoption.
Staff Recommendation:	Because the proposed TIP amendment is consistent with the SmartMoves 2045 Long Range Transportation Plan and does not impact the fiscal constraint of the TIP, it is recommended that the proposed TIP amendment to add the Rumble Strips Installation Project be recommended to the TPO Board for adoption.

### Attachments

- Staff Report
- TIP Amendment Request
- Draft TIP Amendment Summary
- New TIP Project Page



Coco Vista Centre  
 466 SW Port St. Lucie Blvd, Suite 111  
 Port St. Lucie, Florida 34953  
 772-462-1593 www.stlucietpo.org

## MEMORANDUM

TO: Technical Advisory Committee (TAC)

THROUGH: Peter Buchwald  
 Executive Director

FROM: Yi Ding  
 Transportation Systems Manager

DATE: March 14, 2023

SUBJECT: Amendment #7 to the FY 2022/23 – FY 2026/27  
 Transportation Improvement Program (TIP)

### BACKGROUND

The FY 2022/23 – FY 2026/27 TIP was adopted by the TPO Board on June 1, 2022. The Florida Department of Transportation (FDOT) recently added a Statewide Rumble Strips Installation Project, known as SWRS – System Rumble Strips to its Work Program **subsequent to the TPO’s adoption of the TIP** and requests an amendment to add the project **to the TPO’s TIP**.

### ANALYSIS

As summarized in the attached request from FDOT District 4, the purpose of the proposed project is to install rumble strips on the shoulders of high-speed State roadways (50 mph and above). The proposed project will install 44.7 miles of rumble strips on the shoulders of various segments of the following roadways in the St. Lucie TPO area:

- Emerson Ave
- US-1
- Kings Highway
- Okeechobee Road
- S. Ocean Drive.

As identified in the attached TIP Amendment Summary, the Preliminary Engineering phase that is proposed to be added to the TIP will cost a total of \$25,000 to be funded by a Federal Advance Construction source for the Highway Safety Program (ACSS). The TIP page to be added for the new project is attached.

Because a new funding source will be added to the TIP that equals the cost of the project, the project will not impact the fiscal constraint of the TIP. The **TPO's** SmartMoves 2045 Long Range Transportation Plan (LRTP) identifies on page 3-14 one of its objectives to be to "Improve Safety and Security on the Highway System". Therefore, the TIP amendment is consistent with the SmartMoves 2045 LRTP.

### RECOMMENDATION

Because the proposed TIP amendment is consistent with the SmartMoves 2045 LRTP and does not impact the fiscal constraint of the TIP, it is recommended that the proposed TIP amendment to add the Rumble Strips Installation Project be recommended to the TPO Board for adoption.



*Florida Department of Transportation*

RON DESANTIS  
GOVERNOR

3400 West Commercial Boulevard  
Fort Lauderdale, FL 33309

JARED W. PERDUE, P.E.  
SECRETARY

January 23, 2023

Mr. Peter Buchwald, MPO Executive Director  
St. Lucie Transportation Planning Organization  
466 SW Port St. Lucie Boulevard, Suite 111  
Port St. Lucie, FL 34953

**SUBJECT: St. Lucie Transportation Planning Organization  
TIP Amendment Request FY 2022/23 – 2026/27  
FM # 452227-1**

Dear Mr. Buchwald:

Pursuant to Title 23 and Title 49, the Florida Department of Transportation requests your processing and approval of the attached amendment to the FY 2022/23 – 2026/27 Transportation Improvement Program.

This amendment is required because a new project has been added to the work program and needs to be reflected in the TIP.

The purpose of these projects is a Statewide Initiative to install rumble strips on the shoulders of high-speed state roadways (50 mph and above). The project will cover roughly 84 miles of rumble strips in Martin, St. Lucie, and Indian River counties on 24 roadway segments in Indian River County, 71 roadway segments in St. Lucie County, and 72 roadway segments in Martin County. Since it is a Districtwide project, this should be included in all Treasure Coast MPO TIPs.

This Transportation Improvement Program Amendment should be consistent with the Adopted Long-Range Transportation Plan. The adopted TIP remains financially constrained. The TIP amendment is as follows:

PROPOSED	FM#	Project Title	Type of Work	
	452227-1	SWRS – SYSTEM RUMBLE STRIPS	STATEWIDE RUMBLE STRIP INITIATIVE PROJECT FOR NORTHERN DIST. MARTIN: 72 ROADWAY SEGMENTS ST. LUCIE: 71 ROADWAY SEGMENTS INDIAN RIVER: 24 ROADWAY SEGMENTS	
	Phase	Fund	FY 2023	
	PE	ACSS		\$25,000
	<b>TOTAL</b>			

If you have any questions or need additional information, please contact Kurt Lehmann at (954) 777-4365  
Sincerely,

*Kurt Lehmann*

Kurt Lehmann  
Interim MPO Liaison  
District Four

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The above TIP amendment was authorized to be included in the FY 2022/23-2026/27 Transportation Improvement Program.

\_\_\_\_\_

MPO Chairman or Designee

\_\_\_\_\_

Date

\_\_\_\_\_

Signature



**Transportation Improvement Program (TIP) Amendment  
FY 2022/23 - FY 2026/27**



TIP Amendment Number: 6  
 Current TIP Page Number: N/A  
 New TIP Page Number (if applicable): C 1-50

\_\_\_ Is a STIP amendment needed for this TIP Amendment? (check if yes)

STIP Page Number (if applicable): \_\_\_\_\_

On April 12, 2023, the St. Lucie Transportation Planning Organization (St. Lucie TPO) authorized the Executive Director to amend the St. Lucie TPO TIP that was developed and adopted in compliance with U.S.C. Title 23 and Title 49 in a continuing, cooperative, and comprehensive transportation planning process, as a condition to the receipt of federal assistance, and to approve the associated STIP amendments.

This TIP Amendment is consistent with the SmartMoves 2045 Long Range Transportation Plan (LRTP) and does not change financial constraints.

2045 LRTP Page Number (if applicable): 3-14

TIP Amendment Criteria:

- A The change adds new individual projects to the current TIP
- B The change adversely impacts financial constraint
- C The change results in major scope changes
- D The change removes or deletes an individually listed project from the TIP
- E The change results in a cost increase that is greater than 20 percent and greater than \$2 million.

----- **PROJECT INFORMATION** -----

**Project Name:** SWRS - System Rumble Strips

**TIP Amendment Criteria:** A

**Reason for Change/Notes:** Add a project that is not included in the FDOT Work Program materials provided to the TPO at the time of FDOT Draft Tentative Work Program Endorsement and TIP adoption.

Status	FPN	Limits	Description	Phase	Fund	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27
Current										
Proposed	452227-1	Emerson Ave US-1 Kings Highway S. Ocean Drive Okeechobee Road	Statewide Initiative to install 44.7 miles of rumble strips on the shoulders of 72 roadway segments of Emerson Ave, US-1, Kings Highway, Okeechobee Road, and S. Ocean Drive.	PE	ACSS	\$25,000				
<b>Net Change</b>						\$25,000				

This TIP Amendment has been prepared in accordance with Federal requirements.

**Authorized Signature:**

\_\_\_\_\_  
 St. Lucie TPO Chairperson or Executive Director

**SWRS - SYSTEM RUMBLE STRIPS  
4522271 SIS**

**Project Description:** INSTALL RUMBLE STRIPS

**Extra Description:** Statewide Initiative to install 44.7 miles of rumble strips on the shoulders of 72 roadway segments of Emerson Ave, US-1, Kings Highway, Okeechobee Road, and S. Ocean Drive.

**Lead Agency:** MANAGED BY FDOT

**From:**

**County:** ST. LUCIE

**To:**

**Length:** 44.716

**Phase Group:** PRELIMINARY ENGINEERING

Phase	Fund Code	2023	2024	2025	2026	2027	Total
PE	ACSS	25,000	0	0	0	0	25,000
		<b>25,000</b>					<b>25,000</b>

**Prior Year Cost: 0**

**Future Year Cost: 0**

**Total Project Cost: 25,000**

**LRTP: Page 3-14**



## AGENDA ITEM SUMMARY

Board/Committee:	Technical Advisory Committee (TAC)
Meeting Date:	March 21, 2023
Item Number:	6d
Item Title:	Spot Speed Studies
Item Origination:	Unified Planning Work Program (UPWP)
UPWP Reference:	Task 3.7- Safety and Security Planning
Requested Action:	Recommend acceptance of the Spot Speed Studies, recommend acceptance with conditions, or do not recommend acceptance.
Staff Recommendation:	Because the Spot Speed Studies will assist in improving local roadway safety in the TPO area, it is recommended that the Spot Speed Studies be recommended for acceptance by the TPO Board.

### Attachments

- Staff Report
- Spot Speed Studies



Coco Vista Centre  
 466 SW Port St. Lucie Blvd, Suite 111  
 Port St. Lucie, Florida 34953  
 772-462-1593 www.stlucietpo.org

## MEMORANDUM

TO: Technical Advisory Committee (TAC)

THROUGH: Peter Buchwald  
 Executive Director

FROM: Yi Ding  
 Transportation Systems Manager

DATE: March 14, 2023

SUBJECT: Spot Speed Studies

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### BACKGROUND




According to the National Highway Traffic Safety Administration (NHTSA), one of the top reasons for traffic accidents and fatalities is driving too fast for the road conditions. In 2021, the TPO staff conducted a Speed Kills Analysis to examine the link between vehicle speed and crash severity and identify high crash locations within the TPO area. The Speed Kills Analysis identified that 75 percent of all fatal crashes in the TPO area occur on roadways with posted speeds of 40 miles per hour or higher. The Speed Kills Analysis further identified high crash locations on the local roadway network where the posted speeds are 40 miles per hour or higher. To improve roadway safety through speed management, Spot Speed Studies are included in the Task 3.7, *Safety and Security Planning*, of the Unified Planning Work Program (UPWP).

### ANALYSIS

The attached Spot Speed Studies were conducted by Kimley-Horn and Associates, one of the TPO's General Planning Consultants, for the following three roadway segments:

- Airoso Boulevard from Lakehurst Drive to Prima Vista Boulevard
- Port St. Lucie Boulevard from Cameo Boulevard to Dalton Avenue
- Midway Road from Okeechobee Road (State Road 70) to McCarty Road

In the studies, operating speeds and speed limits on selected roadway segments were collected and analyzed. The results of the studies and the recommendations contained in the studies are summarized as follows:

Location	Current Speed Limit (MPH)	Target Speed (MPH)	Recommended Speed Limit (MPH)	Recommendations
Airosa Boulevard from Lakehurst Drive to Prima Vista Boulevard	40	35	40	<p>Recommend maintaining a 40 MPH regulatory speed limit. Install electronic speed feedback signs in both directions within the study limits. Electronic speed feedback signs, also known as dynamic speed displays, provide drivers with feedback about their speed in relationship to the posted speed limit. When appropriately complemented with enforcement efforts, these signs have been shown to be effective at reducing vehicular operating speeds (Spatial Effectiveness of Speed Feedback Signs, Transportation Research Record [TRR] 2281, 2012).</p> 
SW Port St Lucie Blvd from SW Dalton Avenue to SW Cameo Boulevard	45	40	45	<p>Recommend maintaining a 45 MPH regulatory speed limit. Install a warning advisory speed of 40 MPH for the horizontal curve that exists between SW Sultan Drive and SW Aster Drive. This recommendation can be implemented using a yellow warning speed advisory plaque (W13-1 [40]) mounted to the CURVE (W1-2) warning sign.</p> 
CR 712/Midway Road from SR-70/Okeechobee Road to CR 712A/McCarty Road	50	45	50	<p>Recommend maintaining a 50 MPH regulatory speed limit. Install electronic speed feedback signs in both directions within the study limits. Install centerline rumble strips to the double yellow centerline, which are grooves within the double yellow centerline that produce noise and vibration when the tires of a vehicle come into contact with them. The noise and vibration alert the driver that they have departed from their lane and give the driver an opportunity to recover. Centerline rumble strips have an additional benefit of helping drivers navigate during poor weather conditions such as fog and rain.</p> 

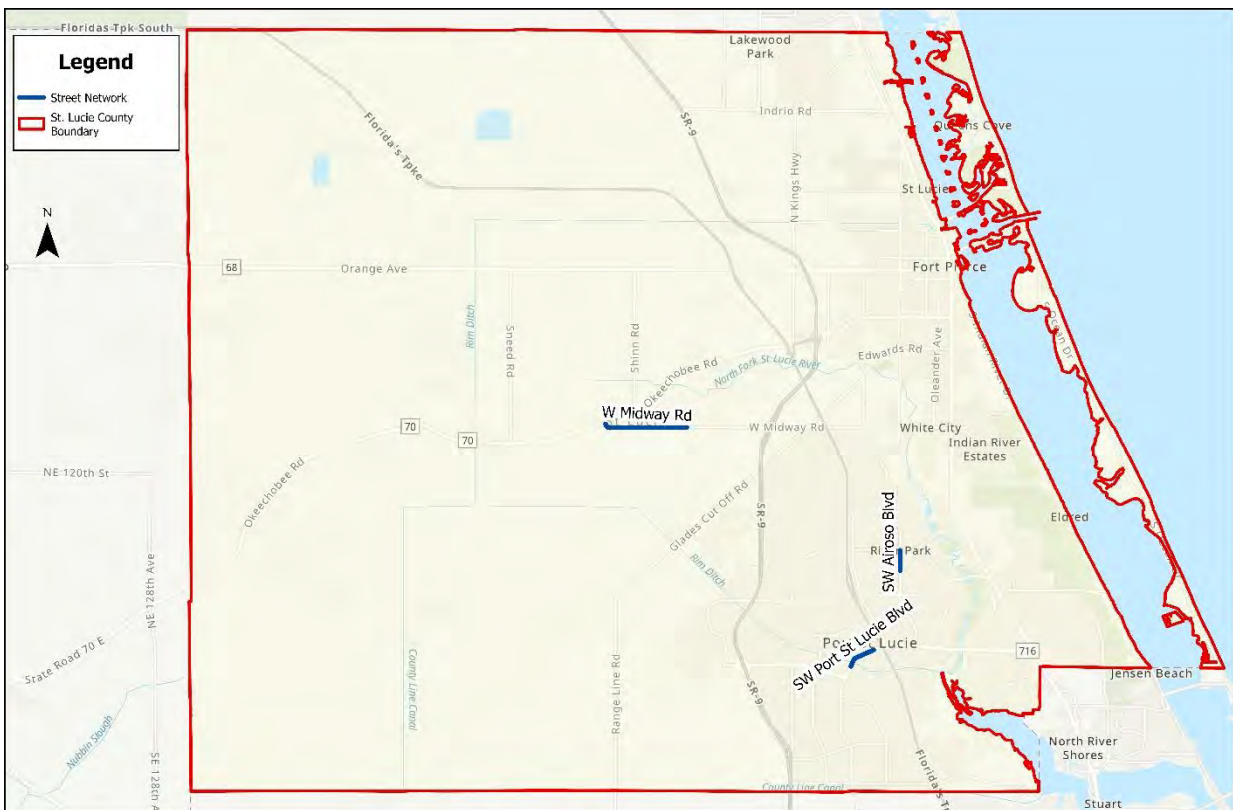
**RECOMMENDATION**

Because the Spot Speed Studies will assist in improving local roadway safety in the TPO area, it is recommended that the Spot Speed Studies be recommended for acceptance by the TPO Board.



# Spot Speed Studies

## St. Lucie County, Florida



# Kimley»Horn

© 2023 Kimley-Horn and Associates, Inc.  
February 2023  
042504025



*Spot Speed Studies  
for Submittal to  
St. Lucie TPO*

# Spot Speed Studies

*Prepared for:*  
**St. Lucie TPO**



*Prepared by:*  
**Kimley-Horn and Associates, Inc.**



## Executive Summary

Kimley-Horn was retained by the St. Lucie TPO to conduct *Spot Speed Studies* to evaluate speed limits and travel speeds for three (3) arterial roads within St. Lucie County.

According to the National Highway Traffic Safety Administration (NHTSA), one of the top reasons for traffic crashes and fatalities is driving too fast for the roadway conditions. In 2021, the St. Lucie TPO staff conducted a *Speed Kills Analysis* to examine the link between vehicle speed and crash severity and identify high crash locations within the TPO area. The *Speed Kills Analysis* identified that 75 percent of all fatal crashes in the TPO area occur on roadways with posted speeds of 40 miles per hour (MPH) or higher. The *Speed Kills Analysis* identified high crash locations on the roadway network where the posted speeds are 40 MPH or higher.

The analysis described in this report follows the speed zoning policy contained within Florida Statutes (F.S.) 316.189. Local governments may set speed limits after investigation determines such a change is reasonable and in conformity to criteria promulgated by the Florida Department of Transportation (FDOT) consistent with Section 316.189, F.S, published in the FDOT *Speed Zoning for Highways, Roads, and Streets* manual (August 2018). The FDOT manual also includes information on Target Speed. Target speed is the highest speed at which vehicles should operate on a thoroughfare in a specific context, consistent with the level of multi-modal activity generated by adjacent land uses, to provide both mobility for motor vehicles and a safe environment for pedestrians, bicyclists, and public transit users. If measured speeds are significantly exceeding the Target Speed of a roadway, physical changes to the roadway may be necessary to bring actual travel speeds more in line with the Target Speed.

Continuous 24-hour weekday (Tuesday, Wednesday, or Thursday) spot speed data and volume counts were collected within the County for two (2) arterial roads identified in the TPO's *Speed Kills Analysis* (Airoso Boulevard and Port St. Lucie Boulevard) and one (1) arterial road that the TPO Technical Advisory Committee (TAC) recommended, and the Board approved (Midway Road) due to ongoing construction on St. Lucie West Boulevard. Recommendations are made for speed management strategies based on the results of the data analysis.



**TABLE OF CONTENTS**

	<u>Page</u>
Introduction .....	1
Data Collection.....	5
Data Analysis .....	6
Findings .....	9
Conclusion .....	11

**LIST OF FIGURES**

	<u>Page</u>
Figure 1: Study Roadway Segments.....	2
Figure 2: Airoso Boulevard Segment Limits .....	3
Figure 3: Port St. Lucie Boulevard Segment Limits .....	4
Figure 4: Midway Road Segment Limits.....	5

**LIST OF TABLES**

	<u>Page</u>
Table 1: Average Speed and 10-MPH Pace .....	8
Table 2: Locations Eligible for Speed Limit Reduction .....	9
Table 3: Summary of Findings.....	11

**LIST OF APPENDICES**

- APPENDIX A      Location Maps
- APPENDIX B:    Traffic Data Collection

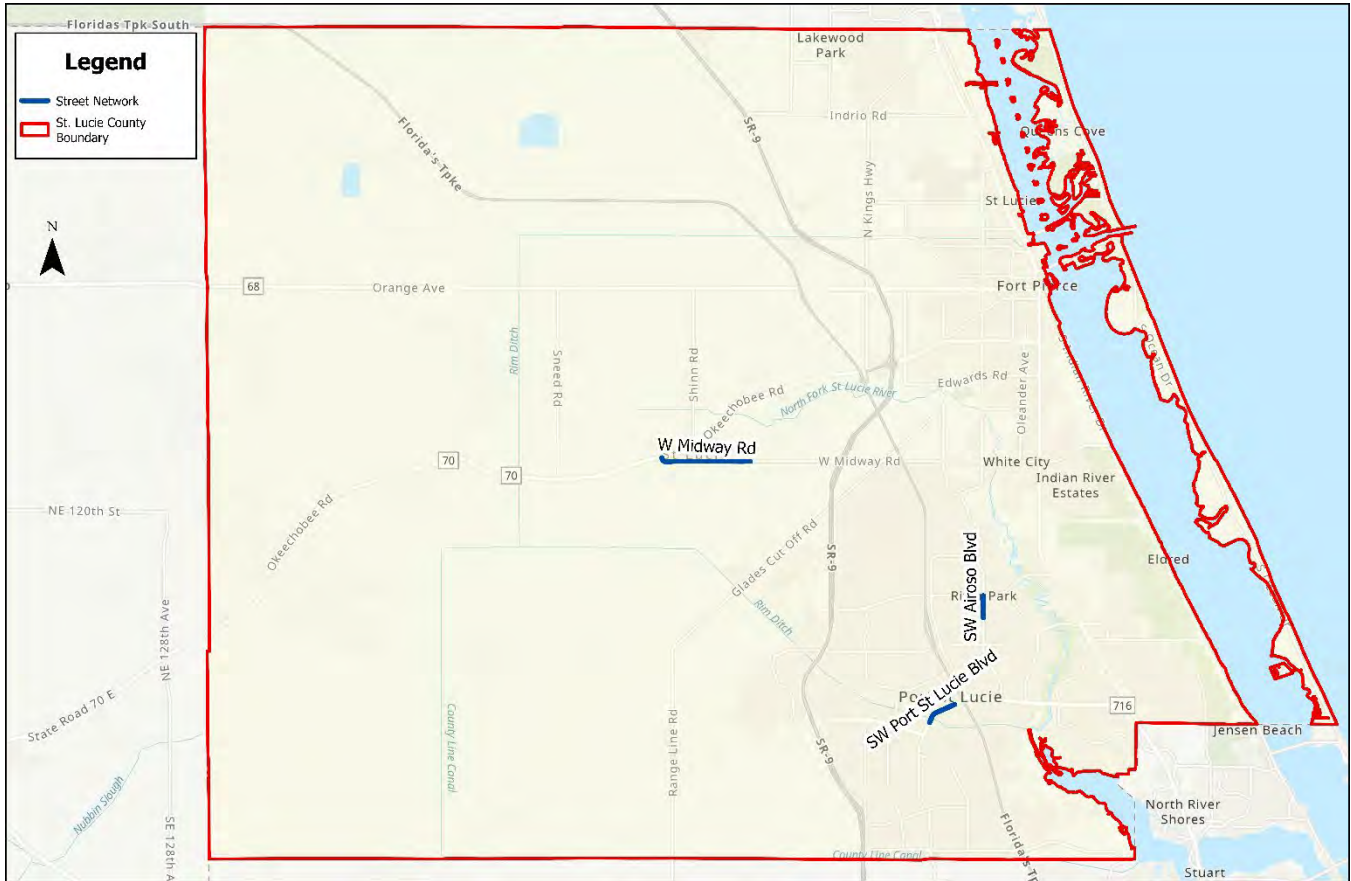
## Introduction

Spot speed studies were completed to evaluate operating speeds and speed limits on three (3) arterial roads within St. Lucie County. Two (2) of the locations were identified by the St. Lucie TPO in the *Speed Kills Analysis* and one (1) location was identified by the TPO TAC.

The study area is shown in Figure 1 and is comprised of three (3) roadway segments. Figure 2 shows the segment of Airoso Boulevard from Lakehurst Drive to Prima Vista Boulevard. Figure 3 shows the segment of Port St. Lucie Boulevard from Cameo Boulevard to Dalton Avenue. Figure 4 shows the segment of Midway Road from Okeechobee Road (State Road 70) to McCarty Road. Six (6) locations on the three (3) arterial roads were selected to gather speed and volume counts. Data collection locations are written available in Table 1 under the "Location" column.

The study methodology is based on criteria promulgated by FDOT consistent with Section 316.189, F.S. This analysis follows the process established in the FDOT *Speed Zoning for Highways, Roads, and Streets* manual (August 2018) and is consistent with comparable efforts recently performed in other municipalities.

The Federal Highway Administration (FHWA) Safe Systems Approach aims to eliminate fatal and serious injuries for all road users. It does so through a holistic view of the road system that first anticipates human mistakes and second keeps impact energy on the human body at tolerable levels. Safety is an ethical imperative of the designers and owners of the transportation system. Humans are unlikely to survive high-speed crashes. Reducing speeds can accommodate human injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.



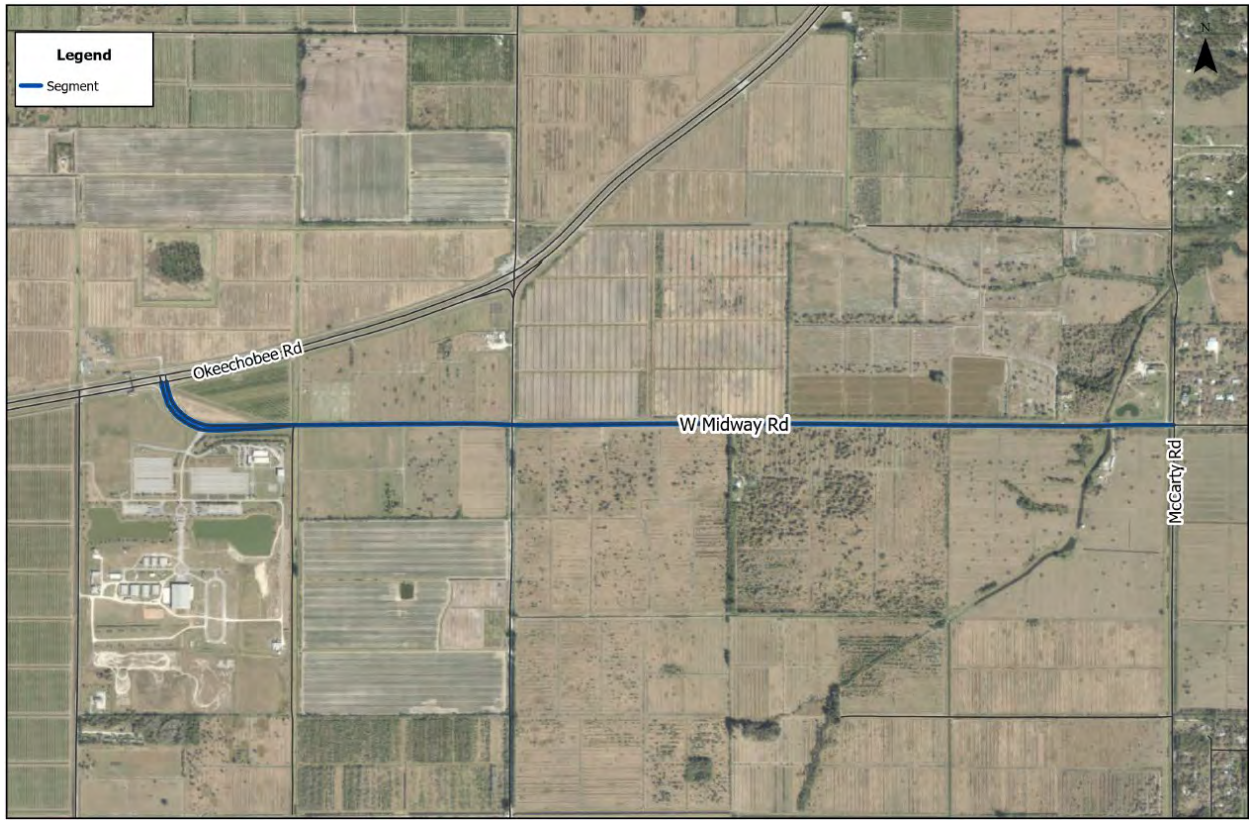
**Figure 1: Study Roadway Segments**  
(See also Appendix A)



**Figure 2: Airoso Boulevard Segment Limits**  
(See also Appendix A)



**Figure 3: Port St. Lucie Boulevard Segment Limits**  
(See also Appendix A)



**Figure 4: Midway Road Segment Limits**  
(See also Appendix A)

## Data Collection

Traffic data were collected for the selected arterial roads within St. Lucie County. The data collection included continuous 24-hour weekday (Tuesday, Wednesday, or Thursday) roadway volumes, speed classifications, and 10-MPH pace data for six (6) locations. Data collection locations were selected along the arterial road segments throughout the County. Map figures illustrating the roads included in the analysis are included in Appendix A. Detailed traffic data are included in Appendix B.

Existing speed limit data were also collected for each arterial roadway included in the analysis and were used as a guide for recommending speed management techniques.

## Data Analysis

The collected traffic data were evaluated in accordance with the guidance provided in the FDOT *Speed Zoning for Highways, Roads, and Streets* manual (2018). The following provides definitions for the traffic engineering values used in the analysis.

### **85<sup>th</sup> Percentile Speed**

The 85<sup>th</sup> percentile speed is the speed at which 85 percent of vehicles travel at or below. The 85<sup>th</sup> percentile speed was included for all locations. A summary of the calculated 85<sup>th</sup> percentile speeds is presented in Table 1.

### **10-MPH Pace**

The 10-MPH pace is the 10-MPH range of travel speeds containing the largest number of vehicles observed within the speed data collected for the study. The 10-MPH pace data were included for all locations. A summary of the calculated 10-MPH pace speeds is presented in Table 1.

The FDOT *Speed Zoning for Highways, Roads, and Streets* manual (2018) guidance indicates the following conditions consistent with Section 316.189, F.S.:

### **Condition 1**

The posted speed limit should not differ from the 85<sup>th</sup> percentile speed or the upper limit of the 10-MPH pace (whichever is less) by more than three (3) MPH.

**Condition 2**

A posted speed limit of more than eight (8) MPH below the 85<sup>th</sup> percentile speed is not authorized. Furthermore, a speed limit of four (4) to eight (8) MPH less than the 85<sup>th</sup> percentile speed shall be authorized if supported by a supplemental investigation which identifies the following:

- There are road or roadside features not readily obvious to the typical driver such as length of section, alignment, roadway width, surface condition, sight distance, traffic volume, crash experience, maximum comfortable speed in curves, side friction (roadside development), or signal progression;
- Other standard sign and markings have been tried but found ineffective; or
- To support a context classification target speed as defined in the FDOT Design Manual.

A speed limit of five (5) MPH below the current posted speed limit at each data collection location was used as the target for evaluating a speed limit reduction. For example, at the data collection location of SW Airoso Blvd from SE Calmoso Drive and SE Selva Court, the current posted speed limit is 40 MPH, making the targeted reduced speed limit 35 MPH. The 85<sup>th</sup> percentile speed and 10-MPH pace were then evaluated against Conditions 1 and 2 to determine if reducing the speed limit to 35 MPH was authorized at that location.

Table 1 provides a summary of the 85<sup>th</sup> percentile and 10-MPH pace average speeds for the six (6) data collection locations. One (1) location met Condition 2 because the desired speed limit was not more than eight (8) MPH below the 85<sup>th</sup> percentile speed. A supplemental investigation assessing traffic volumes, speeds, surrounding land use characteristics, and roadway characteristics was conducted for the one (1) location to evaluate a speed limit reduction between four (4) to eight (8) MPH below the 85<sup>th</sup> percentile speed.



Table 1: Average Speed and 10-MPH Pace

Location	Posted Speed Limit (MPH)	Context Classification (Systemwide Provisional) <sup>(1)</sup>	Average 85 <sup>th</sup> Percentile Speed (MPH)	Average 10-MPH Pace	Meets Conditions for Speed Limit Reduction <sup>(2, 3)</sup>	Target Speed Evaluated (MPH)
Airoso Blvd from SE Calmoso Dr & SE Selva Ct	40	C3R – Suburban Residential	48	35-44	No	35
Airoso Blvd from SE Bonita Ct & SE Lucero Dr	40	C3R – Suburban Residential	47	35-44	No	35
SW Port St Lucie Blvd from SW Greco Ln & SW Aster Rd	45	C4 – Urban General	49	35-44	No	40
SW Port St Lucie Blvd from SW Chestnut Ln & SW Del Rio Blvd	45	C4 – Urban General	48	35-44	Yes (Condition 2)	40
CR 712/Midway Rd west of CR 609A/Shinn Rd	50	C2 - Rural	55	45-54	No	45
CR 712/Midway Rd from CR 609A/Shinn Rd to CR 712A/McCarty Rd	50	C2- Rural	58	45-54	No	45
<b>6 Total Locations</b>						

Notes: <sup>(1)</sup> Context Classification Source: FDOT District Four

<sup>(2)</sup> “Yes (Condition 1)” indicates locations where the lesser of the 85<sup>th</sup> percentile speed or upper limit of the 10-MPH pace is within three (3) MPH of the desired speed limit (5 MPH below the current posted speed limit); “Yes (Condition 2)” indicates locations where targeted speed limit was not more than 8 MPH below the 85<sup>th</sup> percentile speed.

<sup>(3)</sup> A supplemental investigation to justify a speed limit of 4 to 8 MPH less than the 85<sup>th</sup> percentile speed was conducted for the one (1) location only meeting Condition 2.

### Findings

A speed limit study was completed to evaluate speed limits and travel speeds on three (3) arterial roads within St Lucie County.

Continuous 24-hour weekday (Tuesday, Wednesday, or Thursday) roadway volumes, speed classifications, and 10-MPH pace data were collected at six (6) locations along three (3) roadways. Table 2 provides a summary of the 85<sup>th</sup> percentile, 10-MPH pace average speeds, current posted speed limit, and potential speed limit for the one (1) arterial road that met the supplemental condition to consider for a speed limit reduction.

Table 2: Locations Eligible to be Considered for a Speed Limit Reduction

Location	Average 85 <sup>th</sup> Percentile Speed (MPH)	Average 10-MPH Pace	Current Speed Limit (MPH)	Potential Speed Limit Reduction (MPH)	Needs Supplemental Consideration?
SW Port St Lucie Blvd from SW Chestnut Ln & SW Del Rio Blvd	48	35-44	45	40	Yes
1 Total Location					

Results and findings from the supplemental investigation for consideration of a speed limit reduction are provided below for the one (1) arterial road listed in Table 2.

SW Port St Lucie Blvd from Dalton Avenue to Cameo Boulevard

*Current Posted Speed Limit:* 45 MPH

*Potential Speed Limit Reduction:* 40 MPH

*Supplemental Analysis and Recommendation:*




- High traffic volume at the data collection location resembles a major arterial road.
- Three-lane divided roadway with direct connections to residential neighborhood side streets.
- Sidewalks present on north and south sides of corridor with little or no separation from the road.

- There is a horizontal curve that exists between SW Sultan Drive and SW Aster Drive.
- This study recommends maintaining a 45 MPH regulatory speed limit, but adding warning speed advisory signs for the horizontal curve of 40 MPH. This can be implemented using the yellow warning speed advisory plaque (W13-1[40]) added to the CURVE (W1-2) warning signs in both directions.
- The W13-1 advisory plaque may be used to supplement a warning sign to indicate the advisory speed for a condition. If the difference between the speed limit and the advisory speed is 5 MPH, the advisory speed plaque should be used. The advisory speed plaque shall only be used to supplement a warning sign and shall not be installed as a separate sign installation according to the Manual on Uniform Traffic Control Devices (MUTCD).

**Conclusion**

The results of the Spot Speed Studies analysis supported by data and supplemental considerations is shown in Table 3.

**Table 3: Summary of Recommendations**

Location	Current Speed Limit (MPH)	Target Speed (MPH)	Recommended Speed Limit (MPH)	Recommendations
Airoso Boulevard from Lakehurst Drive to Prima Vista Boulevard	40	35	40	<p>Recommend maintaining a 40 MPH regulatory speed limit. Install electronic speed feedback signs in both directions within the study limits. Electronic speed feedback signs, also known as dynamic speed displays, provide drivers with feedback about their speed in relationship to the posted speed limit. When appropriately complemented with enforcement efforts, these signs have been shown to be effective at reducing vehicular operating speeds (Spatial Effectiveness of Speed Feedback Signs, Transportation Research Record [TRR] 2281, 2012).</p> 
SW Port St Lucie Blvd from SW Dalton Avenue to SW Cameo Boulevard	45	40	45	<p>Recommend maintaining a 45 MPH regulatory speed limit. Install a warning advisory speed of 40 MPH for the horizontal curve that exists between SW Sultan Drive and SW Aster Drive. This recommendation can be implemented using a yellow warning speed advisory plaque (W13-1 [40]) mounted to the CURVE (W1-2) warning sign.</p> 
CR 712/Midway Road from SR-70/Okeechobee Road to CR 712A/McCarty Road	50	45	50	<p>Recommend maintaining a 50 MPH regulatory speed limit. Install electronic speed feedback signs in both directions within the study limits. Install centerline rumble strips to the double yellow centerline, which are grooves within the double yellow centerline that produce noise and vibration when the tires of a vehicle come into contact with them. The noise and vibration alert the driver that they have departed from their lane and give the driver an opportunity to recover. Centerline rumble strips have an additional benefit of helping drivers navigate during poor weather conditions such as fog and rain.</p> 



## AGENDA ITEM SUMMARY

Board/Committee:	Technical Advisory Committee (TAC)
Meeting Date:	March 21, 2023
Item Number:	6e
Item Title:	Strategic Intermodal System (SIS) Cost Feasible Plan (CFP) Update
Item Origination:	Florida Department of Transportation District 4 (FDOT)
UPWP Reference:	Task 3.1 - Long Range Transportation Planning
Requested Action:	Recommend endorsement of the draft update to the SIS CFP, recommend endorsement with conditions, or do not recommend endorsement.
Staff Recommendation:	Because of the disproportionately smaller share of SIS funding being allocated to the St. Lucie TPO and Treasure Coast areas compared to Broward and Palm Beach Counties, it is recommended that the SIS CFP Update not be recommended to the TPO Board for endorsement.

### Attachments

- Staff Report
- FDOT District 4 SIS CFP Update Table
- FDOT District 4 SIS CFP Update Map
- SIS CFP Update Presentation



## MEMORANDUM

TO: Technical Advisory Committee (TAC)

FROM: Peter Buchwald  
Executive Director

DATE: March 15, 2023

SUBJECT: Strategic Intermodal System (SIS) Cost Feasible Plan (CFP) Update

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### BACKGROUND

The SIS is Florida's statewide network of high priority transportation facilities which include airports, highways, railroads, seaports, spaceports, and transit facilities. The Florida Department of Transportation (FDOT) plans for the SIS in coordination with Metropolitan Planning Organizations and other partners. FDOT is updating the SIS CFP from the current horizon year of 2045 to the year 2050. The SIS CFP was last updated and presented to the TPO in May/June 2018.

The SIS CFP Update covers the period of FY 2032/33 to FY 2049/50 and is based on 2050 revenue estimates. FDOT District 4 will present the draft SIS CFP Update for review, comment, and endorsement.

### ANALYSIS

The draft SIS CFP Update for District 4 is attached in both table and map forms. As identified in the attached presentation, the projects in the St. Lucie TPO area in the SIS CFP Update only consist of the following:

- Construction of a new Florida's Turnpike interchange at Midway Road in FY 2032/33 – FY 2034/35;
- Design of the widening of I-95 from the Martin County Line to State Route 70/Okeechobee Road in FY 2035/36 – FY 2039/40; and,
- Project Development & Environment Study (PD&E) for a new I-95 interchange at St. Lucie Boulevard in FY 2045/46 – 2049/50.

It is very fortunate that the construction of the new Florida's Turnpike interchange at Midway Road is proposed by Governor DeSantis to be advanced as part of his proposed Moving Florida Forward Program. The other two projects are limited to preliminary activities in the later intervals of the CFP that are 10 to 20 years in the future.

The draft version of the SIS CFP Update appears to allocate only about \$46.6 million of SIS funding to the St. Lucie TPO area over approximately 20 years out of a total of \$3.84 billion of SIS funding across District 4 in the CFP Update. This equates to approximately \$2.3 million of SIS funding being allocated annually to the St. Lucie TPO area despite its rapid growth.

When compared to the entire draft SIS CFP for District 4, the St. Lucie TPO area is receiving only approximately one percent of the funding despite having approximately eight percent of the population of District 4. The vast majority of the SIS funding in the CFP is allocated to Broward and Palm Beach Counties with the Treasure Coast Counties receiving a disproportionately smaller share.

#### RECOMMENDATION

Because of the disproportionately smaller share of SIS funding being allocated to the St. Lucie TPO and Treasure Coast areas compared to Broward and Palm Beach Counties, it is recommended that the SIS CFP Update not be recommended to the TPO Board for endorsement.

ID	FACILITY	FROM	TO	Design			Right of Way / Construction			P3 Funds			Other Funds	IMPRV TYPE	
				PDE	PE	TOTAL	ROW	CON	TOTAL	COST	Begin Yr	#Yrs			
1107	I-595	E. of I-75	W. of I-95								902,909	2033	12		MGLANE
3671	Copans Road	at SFRC		2,000	5,199	7,199	23,630	26,513	50,143						GRASEP
3934	Florida Turnpike	at Midway Rd						20	20						N-INCH
3937	I-595 and Davie Rd at SR 84/I-595	S. of SR 84	SR 84	2,000	2,147	4,147	2,204		2,204						HWYCAP
3939	I-595 and Flamingo Rd at SR 84/I-595	NW 8th St	S. of Broward Blvd	2,000	2,301	4,301									HWYCAP
3936	I-595 and NW/SW 136th Ave at SR 84/I-595	SW 5th St	NW 2nd St	2,000	6,373	8,373									HWYCAP
3938	I-595 and Pine Island Rd at SR 84/I-595	N. of Nova Rd	SR 84	2,000	5,567	7,567									HWYCAP
3940	I-595 and University Drive at SR 84/I-595	S. of SR 84	N. of SR 84	2,000	6,644	8,644									HWYCAP
3409	I-95	Miami-Dade/Broward C/L	N. of Hollywood Blvd				64,817	189,010	253,827						M-INCH
3399	I-95	S. of Linton Boulevard	6th Ave South		33,646	33,646		377,508	377,508						MGLANE
3670	I-95	at SR 714 / Martin Hwy			196	196		2,159	2,159						M-INCH
3404	I-95	Martin/St. Lucie C/L	SR 70		23,552	23,552									MGLANE
3665	I-95	High Meadow Ave	Martin/St. Lucie C/L		6,726	6,726									MGLANE
3664	I-95	CR 708 / Bridge Rd	High Meadow Ave		9,985	9,985									MGLANE
3403	I-95	Martin/Palm Beach C/L	CR 708/Bridge Rd		6,516	6,516									MGLANE
3401	I-95	Okeechobee Blvd	S. of Indiantown Road	3,000	36,225	39,225									MGLANE
3416	I-95	at Belvedere Rd			3,431	3,431									M-INCH
3402	I-95	Indiantown Road	Martin/Palm Beach C/L		4,412	4,412									MGLANE
3398	I-95	SR-84	S. of Broward Blvd	3,000	33,526	36,526									HWYCAP
3400	I-95	6th Ave South	N. of Okeechobee Blvd		83,956	83,956	2,484	941,988	944,472						MGLANE
3415	I-95	at Commercial Blvd					46,052	8,226	54,278						M-INCH
3414	I-95	at Oakland Park Blvd					10,698	42,765	53,463						M-INCH
3669	I-95	at CR 512			126	126		451	451						M-INCH
3413	I-95	at Davie Blvd						28,154	28,154						M-INCH
3412	I-95	Miami-Dade/Browad C/L	N. of Griffin Road				180,049		180,049						HWYCAP
3397	I-95	N. of Broward Blvd	Sunrise Blvd	2,000	4,757	6,757	2,000		2,000						HWYCAP
3944	I-95	at 53rd St		3,000	6,000	9,000									N-INCH
3945	I-95	at St. Lucie Blvd		3,000		3,000									N-INCH
3942	SR 710	Congress Ave	Palm Beach/Martin C/L		2,300	2,300									ITS
3394	SR 80	W. of Royal Palm Beach Blvd	I-95	3,000		3,000									HWYCAP
3943	SR 80 Bypass/US 27 Connector	US 27	US 441/SR 715	2,750	4,313	7,063									NR
3673	SR 814 / Atlantic Blvd	at SFRC		2,000	3,443	5,443	3,382	38,631	42,013						GRASEP
3935	SR 834 / Sample Road	at FEC Railway		2,000	5,199	7,199									GRASEP
3672	SR 834 / Sample Road	at SFRC		2,000	6,938	8,938	177,844	77,849	255,693						GRASEP
3405	SR-710	Martin/Okeechobee C/L	Martin Powerplant Road				7,700	84,067	91,767						A2-4
3417	SR-714/Monterey Road	at FEC Railway			7,357	7,357	4,742	80,925	85,667						GRASEP
3393	SR-80	Binks Forest Dr	Royal Palm Beach Blvd	1,500	2,587	4,087									HWYCAP
3396	SR-80	US 27	I-95		1,576	1,576		17,687	17,687						ITS
3941	University Dr	S. of SW 30th St.	S. of SR 84	1,500	5,160	6,660									HWYCAP
3391	US 27	Krome Avenue (Miami-Dade County)	Evercane Road (Hendry County)		2,217	2,217		25,612	25,612						ITS
3392	US 27	Pembroke Road	SW 26th Street (N. of Griffin Rd)	3,000	17,515	20,515									SERVE
3390	US 27	Broward/Palm Beach C/L	Evercane Road (Hendry County)	2,000	39,341	41,341									FRTCAP
3389	US 27	Krome Avenue (Miami-Dade County)	Broward/Palm Beach C/L	2,000	29,009	31,009									FRTCAP
3667	US-27	Broward/Palm Beach C/L	S. of SW 2nd St (South Bay)		819	819		9,456	9,456						ITS

Funded CFP Totals

456,809

2,476,623

902,909

Total CFP Funds= 3,836,341

LEGEND

NOTES

IMPROVEMENT TYPES

(A) FY 2032/2033 - 2034/2035	Mega Projects Phased Over Time
(B) FY 2035/2036 - 2039/2040	
(C) FY 2040/2041 - 2044/2045	
(D) FY 2046/2047 - 2049/2050	

- (1) All values in thousands of Present Day Dollars (2023).
- (2) All phase costs shown as supplied by each District.
- (3) CON includes both Construction (CON52) and Construction Support (CEI).
- (4) ROW includes both Right-of-Way Acquisition/Mitigation (ROW43/45) and Right-of-Way Support.
- (5) "P3 Funds" - Used to fund Public-Private Partnership projects over a specified number of years.
- (6) Revenue forecast provides separate values for PDE and PE than for ROW and CON.
- (7) Other Funds - assumed to be toll revenue or partner funded.
- (8) This is a DRAFT and revisions will be made based on further coordination.

- A1-3: Add 1 Lane to Build 3
- A2-4: Add 2 Lanes to Build 4
- A2-6: Add 2 Lanes to Build 6
- A2-8: Add 2 Lanes to Build 8
- A4-12: Add 4 Lanes to Build 12
- A1-AUX: Add 1 Auxilliary Lane
- A4-SUL: Add 4 Special Use Lanes

- ACCESS: Access
- BRIDGE: Bridge
- FRTCAP: Freight Capacity
- GRASEP: Grade Separation
- HWYCAP: Highway Capacity
- PTERM: Passenger Terminal
- ITS: Intelligent Transp. System
- MGLANE: Managed Lanes

- M-INCH: Modify Interchange
- N-INCH: New Interchange
- NR: New Road
- PDE: Project Dev. Env.
- SERVE: Add Svc/Front/CD System
- STUDY: Study
- UP: Ultimate Plan



# 2050 COST FEASIBLE PLAN

## District 4

State of Florida Department of Transportation  
Systems Implementation Office

### FY 2032/2033 - FY 2049/2050

#### LEGEND

##### Bridge, Interchange, Intersection Improvements (Highest phase funded shown)

- Construction & Mega Projects (CON)
- Right of Way (ROW)
- Preliminary Engineering (PE)
- Project Development and Environmental (PDE)

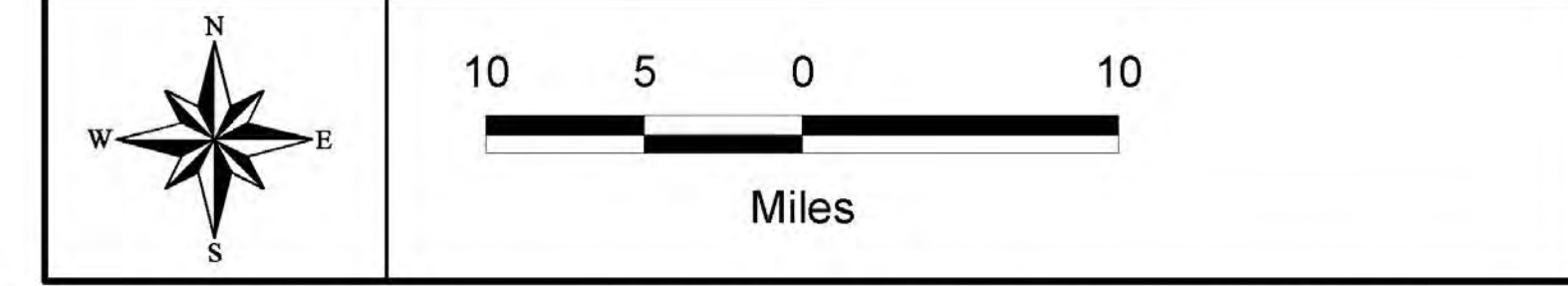
##### Corridor Improvements (Highest phase funded shown)

- Construction & Mega Projects (CON)
- Right of Way (ROW)
- Preliminary Engineering (PE)
- Project Development and Environmental (PDE)

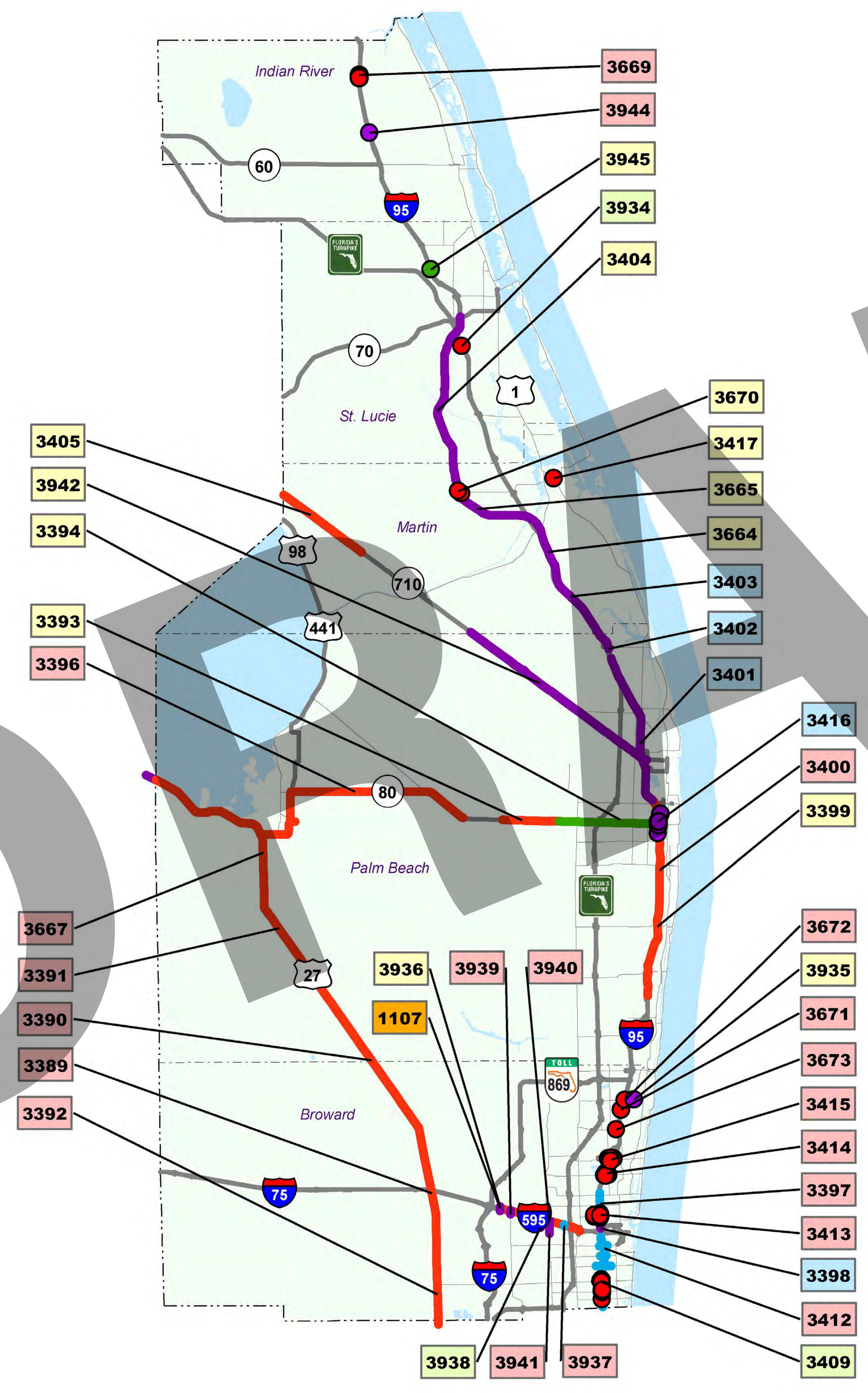
##### Funding Band Tag (Highest phase funded shown)

- 1234 Green (Band A) - FY 2032/2033 to FY 2034/2035
- 1234 Yellow (Band B) - FY 2035/2036 to FY 2039/2040
- 1234 Blue (Band C) - FY 2040/2041 to FY 2044/2045
- 1234 Red (Band D) - FY 2045/2046 to FY 2049/2050
- 1234 Mega Projects Phased Over Time

- Interstate Highway
- U.S. Highway
- State Highway
- Toll Roads
- SIS Highways
- Other State Roads
- Future SIS Highways



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# STRATEGIC INTERMODAL SYSTEM COST FEASIBLE PLAN (Highway Mode) UPDATE

Florida Department of Transportation



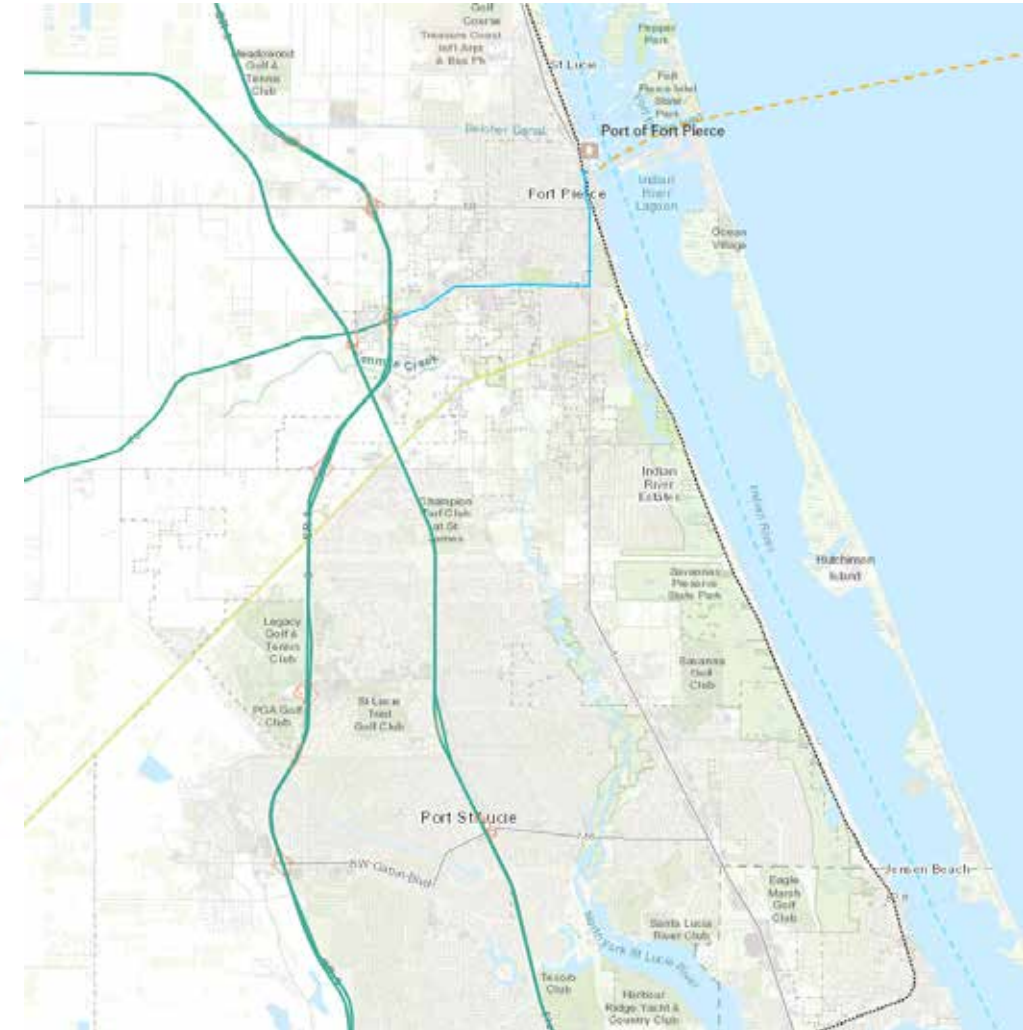
March/April 2023

# AGENDA

- Background and Purpose
- SIS Project Programming
- Previous Coordination
- Draft Cost Feasible Plan
- Schedule
- Safety Message and Questions

# BACKGROUND AND PURPOSE

- The Strategic Intermodal System (SIS)
  - Focuses resources on transportation facilities and services that support critical interregional, interstate, and international trips
  - High priority network of transportation facilities important to the state's economy and mobility
- 2050 Cost Feasible Plan (Highway Mode)
  - Ensures consistency with the goals of the Florida Transportation Plan (FTP) and the objectives of the SIS Policy Plan
  - Evaluate SIS highway capacity needs based on future revenues
  - Develops a phased plan for cost feasible improvements to SIS highways
  - Does not include other SIS Modes (Freight and Passenger Rail, Airports, Seaports, Spaceports, and Urban Fixed Guideways)



[SIS ATLAS LINK](#)

# SIS PROJECT PROGRAMMING

SIS Funding Strategy

- 1st Five Year Work Program
  - Funded (year 1)
  - Programmed for funding (years 2-5)
- 2nd Five Year Plan
  - Planned for funding (years 6-10)
- Cost Feasible Plan
  - Considered financially feasible (years 11-25)
- Multi-Modal Unfunded Needs Plan (MMUNP)
  - Transportation projects that meet mobility needs, but where funding is not expected to be available during the 25-year time period of the SIS Funding Strategy.



Long-Range Planning

[SIS OVERVIEW](#)

# PREVIOUS COORDINATION

- Joint Virtual Workshop
  - Held on August 5<sup>th</sup>, 2022
  - Agenda Included:
    - Intent of the SIS CFP
    - Tentative Schedule
    - Input from Partners Regarding:
      - FDOT Proposed Projects
      - Recommendations for Additional Projects



# DRAFT COST FEASIBLE PLAN (SAINT LUCIE COUNTY)

ID	FACILITY	FROM	TO	Design			Right of Way and Construction			Improvement
				PDE	PE	TOTAL	ROW	CON	TOTAL	TYPE
3404	I-95	Martin/St. Lucie County Line	SR-70		\$ 23,552	\$ 23,552	\$ 11,000	\$ 264,258		MGLANE
3945	I-95	at St. Lucie Blvd.		\$ 3,000	\$ 6,000	\$ 3,000		\$ 67,320		N-INCH
3934	Florida's Turnpike	at Midway Road				\$ -		\$ 20,000	\$ 20,000	N-INCH

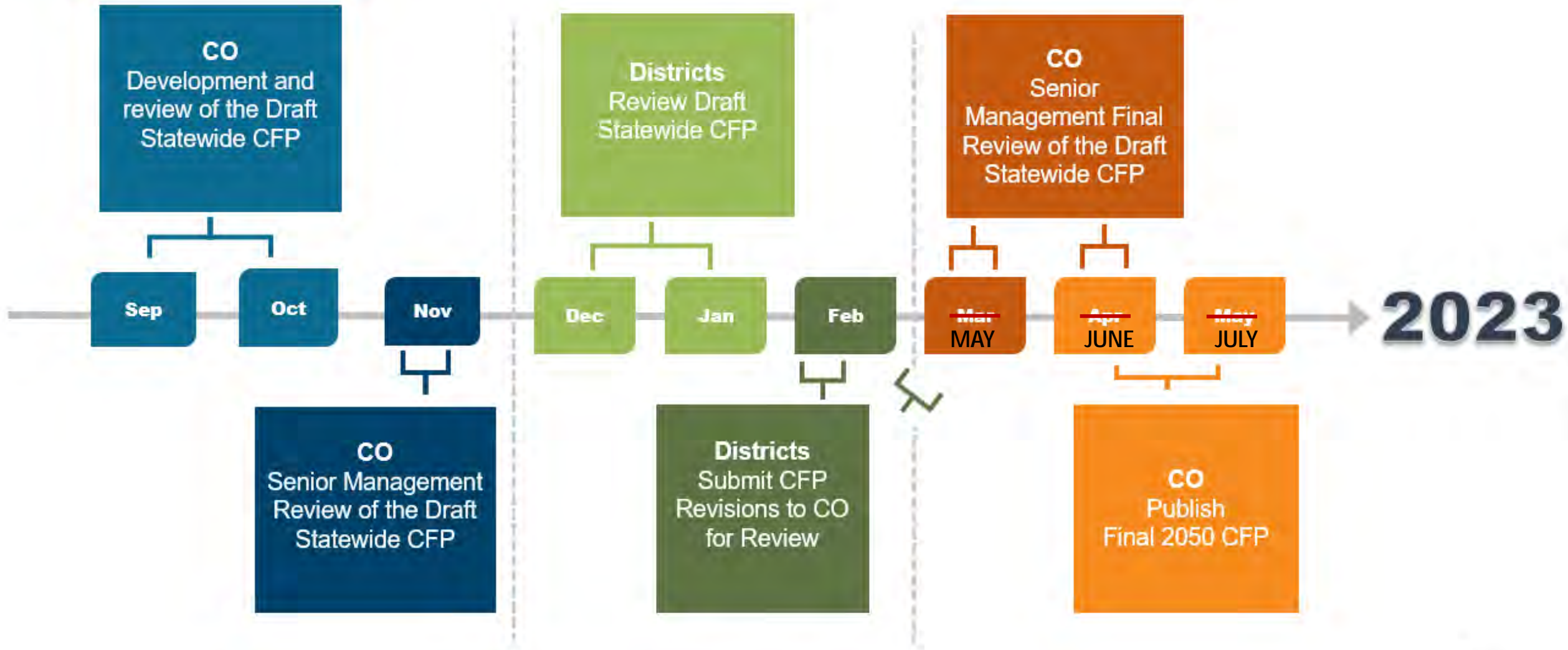
**LEGEND**

FY 2032/2033 - 2034/2035
FY 2035/2036 - 2039/2040
FY 2040/2041 - 2044/2045
FY 2045/2046 - 2049/2050
Requested, But Not Feasible

**NOTES**

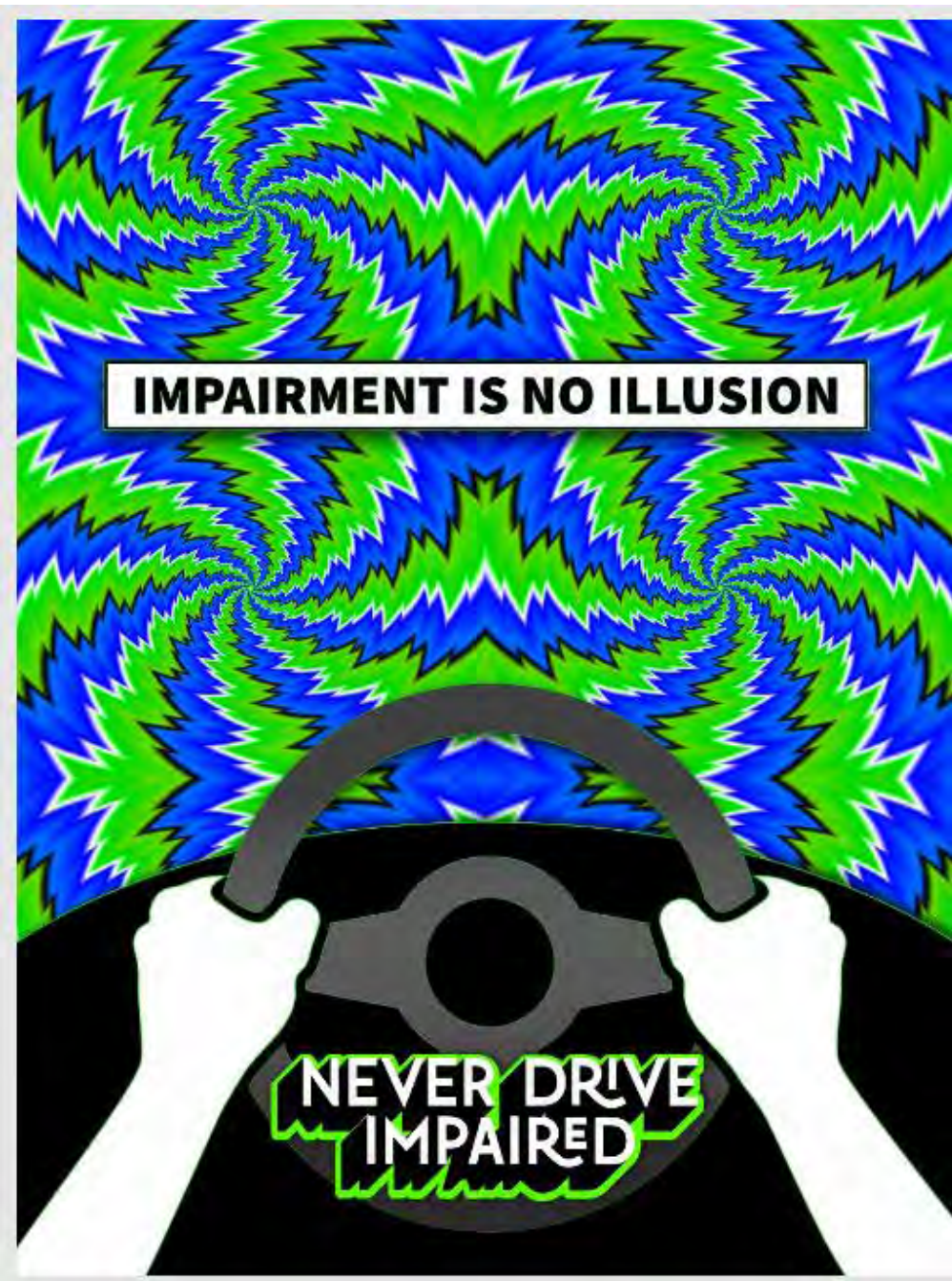
- (1) All values in thousands of Present Day Dollars (2023).
- (2) All phase costs shown as supplied by each District.
- (3) CON includes both Construction (CON52) and Construction Support (CEI).
- (4) ROW includes both Right-of-Way Acquisition/Mitigation (ROW43/45) and Right-of-Way Support.
- (5) Revenue forecast provides separate values for PDE and PE than for ROW and CON.
- (6) This is a DRAFT and revisions will be made based on further coordination.

# SCHEDULE





QUESTIONS?





## AGENDA ITEM SUMMARY

Board/Committee:	Technical Advisory Committee (TAC)
Meeting Date:	March 21, 2023
Item Number:	6f
Item Title:	Treasure Coast Regional Planning Model #5 (TCRPM5) Land Use Data Update
Item Origination:	Unified Planning Work Program (UPWP)
UPWP Reference:	Task 2.1 – Travel Demand Modeling
Requested Action:	Recommend adoption of the TCRPM5 Land Use Data Update, recommend adoption with conditions, or do not recommend adoption.
Staff Recommendation:	Because the TCRPM5 Land Use Data Update responds to the increased 2045 growth projections and the unexpected recent development activity occurring in the TPO area, it is recommended that the TCRPM5 Land Use Data Update be recommended for adoption by the TPO Board.

### Attachments

- Staff Report
- TCRPM5 Land Use Data Update



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## MEMORANDUM

TO: Technical Advisory Committee (TAC)

THROUGH: Peter Buchwald  
 Executive Director

FROM: Yi Ding  
 Transportation Systems Manager

DATE: March 14, 2023

SUBJECT: Treasure Coast Regional Planning Model #5  
 (TCRPM5) Land Use Data Update

---

### BACKGROUND

The TPO's SmartMoves 2045 Long Range Transportation Plan (LRTP) relies on the TCRPM5 for estimating the 2045 roadway traffic volume projections which assist to identify the project needs in the LRTP. The TCRPM5 relies on the 2045 growth projection adopted by the TPO for the TPO area that is based on the 2045 growth projections provided by the Bureau of Economic and Business Research (BEBR) at the University of Florida.

Since the SmartMoves 2045 LRTP was adopted in February 2021, BEBR increased its High Growth Projection for the TPO area from 525,100, which was adopted by the TPO, to 566,000, and the TPO area has experienced tremendous development activity that was unexpected. Therefore, Task 2.1, *Travel Demand Modeling*, of the TPO's Unified Planning Work Program (UPWP) includes an update to review and adjust, as necessary, the 2045 land use data, consisting of the population and employment projections, that the TCRPM5 uses to estimate the 2045 roadway traffic volume projections. Subsequently, the project needs in the SmartMoves 2045 LRTP may be revised to reflect the 2045 roadway traffic volume projections.

### ANALYSIS

The attached TCRPM5 Land Use Data Update report was completed by the Corradino Group, one of the TPO's General Planning Consultants. The Update

incorporated both bottom-up and top-down approaches to adjust the 2045 land use data as below:

	Population	Household	Employment
Adopted	525,100	211,538	183,349
Revised	581,710	234,143	216,355

Subsequently, revised 2045 land use data was input into the TCRPM5 to model the 2045 roadway traffic volume projections and compare them to the projections in the SmartMoves 2045 LRTP.

Based on the comparison, it was identified that daily traffic volumes increased on most major arterials with the greatest increases on Crosstown Parkway, Tradition Parkway, Village Parkway, Southwest Becker Road, and Glades Cut Off Road resulting in an increase of 7.8 percent in total Vehicle Miles Traveled (VMT) in the TPO area. This analysis reinforces the need for the Southwest Annexation Area Roadway Network to be completed as it was planned and for the widening of Glades Cut Off Road to be prioritized.

It should be noted that the analysis also identified that despite the increased 2045 roadway traffic volumes in the TPO area, the impacts of these increased volumes on the Indian River County and Martin County roadway systems is insignificant. This suggests that the travel patterns across County lines are successfully changing from those in the past which can be attributed to the land use decisions by the local jurisdictions that have resulted in more mixed uses being developed in the TPO area. These mixed uses provide the residents with opportunities to live, work, shop, play, etc. without having to leave the TPO area.

It should also be noted that if the TPO Board adopts the revised 2045 land use data, it will be used immediately in Project Development and Environment (PD&E) Studies that are underway such as for the widening of Glades Cut Off Road and Florida's Turnpike from Okeechobee Road to State Route 60.

## RECOMMENDATION

Because the TCRPM5 Land Use Data Update responds to the increased 2045 growth projections and the unexpected recent development activity occurring in the TPO area, it is recommended that the TCRPM5 Land Use Data Update be recommended for adoption by the TPO Board.

# 2045 Revised Land Use Data Development for St. Lucie County

Contract C19-09-696



March 9, 2023

PREPARED FOR  
ST LUCIE TRANSPORTATION PLANNING ORGANIZATION (TPO)



**St. Lucie** Transportation  
Planning  
Organization

SUBMITTED BY

**THE CORRADINO GROUP**

## Table of Contents

Introduction .....	1
1. Data Gathering and Mapping.....	1
1.1 Data Gathered from the Local Agencies .....	1
1.2. Data Gathered from Development Regional Impact (DRI) Projects .....	4
2. Revised 2045 TAZ Data in TCRPM5 Format .....	9
2.1 Balancing Top-Down and Bottom-up Approaches: .....	9
2.2 Assessment of System-wide Impact on the Roadway System.....	13
Appendices.....	17
Appendix A – Raw Data with Project Geocoding.....	i
Appendix B – List of TAZs with Preliminary Projects Data .....	viii
Appendix C – List of TAZs With Growth Comparison.....	xi
Appendix D – Map of Inactive DRI Projects .....	xiv
Appendix E – List of DRI TAZs with Final Data.....	xv

## List of Figures

<b>Figure 1:</b> TAZs Tagged for Household and Employment Revisions Based on the .....	4
<b>Figure 2:</b> Approved Projects for DRI .....	5
<b>Figure 3:</b> TAZs Tagged for DRI Project Consideration.....	6
<b>Figure 4:</b> Population Comparison Between Revised and Official Scenario .....	10
<b>Figure 5:</b> Household Comparison Between Revised and Official Scenario.....	11
<b>Figure 6:</b> Employment Comparison Between Revised and Official Scenario .....	12
<b>Figure 7:</b> Impact on Major Roadways in St. Lucie County .....	14

## List of Tables

<b>Table 1:</b> BEBR 2045 Estimates Comparison for St. Lucie County.....	1
<b>Table 2:</b> Project Distribution Relevant to Socioeconomic Data Revisions.....	2
<b>Table 3:</b> Employment Development Data (Sq Ft) to Employee Estimate for St. Lucie County .....	3
<b>Table 4:</b> Total Household Units and Employment Square Footage Considered for the.....	3
<b>Table 5:</b> Development Intensities Needed to Adjust for DRIs .....	8
<b>Table 6:</b> Socioeconomic Data Comparison by County Between Official and Revised Scenario .....	9
<b>Table 7:</b> Highway Evaluation Statistics by County Between Official and Revised Scenario .....	13
<b>Table 8:</b> Model Volumes West of I-95 at Major Roadways in the Study Area .....	15
<b>Table 9:</b> Model Volumes East of I-95 at Major Roadways in the Study Area .....	15
<b>Table 10:</b> Model Volumes on I-95 & Turnpike at Major Roadways in the Study Area .....	15
<b>Table 11:</b> Model Volumes on US 1 at Major Roadways in the Study Area.....	16
<b>Table 12:</b> Model Volumes for Village Parkway at Major Roadways in the Study Area .....	16

## Introduction

The Treasure Coast Regional Planning Model (TCRPM) uses the population and employment projections (land use data) for estimating the 2045 roadway traffic volume forecasts. This model scenario was developed using the 2045 Long Range Transportation Plan (LRTP) Cost Feasible roadway network and the 2045 approved land use data. The current 2045 land use data used in the model was developed based on the 2045 control totals adopted by the St. Lucie Transportation Planning Organization (TPO) at the March 2019 Board Meeting. The basis for this approval was the Bureau of Economic and Business Research (BEBR) at the University of Florida growth projections. BEBR publishes low, medium, and high population projections for all counties in the State of Florida, annually. The TPO adopted the BEBR high population projections to be used in the 2045 LRTP development. The TPO area is experiencing significant growth and development in recent years. In addition, BEBR has proposed changes to its 2045 growth projections since the development of the earlier population projections in 2019.

The most recent BEBR 2045 projections for St. Lucie County are compared below in Table 1.

**Table 1: BEBR 2045 Estimates Comparison for St. Lucie County**

BEBR 2045 Projections	Low	Medium	High
Using 2021 Estimate, Published February 2022	373, 400	469,700	566,000
Using 2017 Estimate, Published January 2018	360,400	431,200	525,100

The purpose of this project is:

1. To add the approved projects lists between 2015-2022 to the model’s TAZ data.
2. To revise/reallocate the 2045 land use data based on the recent control totals (based on BEBR high/TPO adopted control totals).

## 1. Data Gathering and Mapping

### 1.1 Data Gathered from the Local Agencies

The consultant researched and gathered the approved developments database from the city of Port St. Lucie, the city of Fort Pierce, and St. Lucie County. After initial filtering of the data, it was observed that out of the total approved projects shared by respective organizations, some projects were considered relevant, and some projects were considered extraneous for socioeconomic revisions. The projects that would result in population/employment changes are considered relevant in this case, while the projects such as landscaping and parking lot improvements, etc. are considered non-relevant. Table 2 shows the distribution of projects that were considered for data revisions.

**Table 2: Project Distribution Relevant to Socioeconomic Data Revisions**

Agency	Total Approved Projects (2016-2022)	Relevant Projects (to TCRPM5)	Non-Relevant Projects (to TCRPM5)
City of Fort Pierce	92	91	1
City of Port St. Lucie	195	91	104
St. Lucie County	370	115	255

The development data was then linked geographically one by one to intersecting TAZs (Travel Analysis Zones). This was done by cross-referencing their details like the parcel numbers (using the parcel shapefile), street addresses (using Google maps) and/or X and Y coordinates in some cases (Appendix A) for each development.

The assessed database was then used to estimate the preliminary population, households, and employment numbers (Appendix B). Household estimates were calculated by first identifying them as Single Family\Multi-Family and then adding the total number of units by development for each TAZ. Corresponding population numbers for household developments, such as new single family\multi-family units were calculated by taking the product of the number of units with the average household size (2.48) of St. Lucie County.

Employment Estimates were calculated by first identifying the type of employment that the development would incur. Once the type/category was identified, the nonresidential square footage in the development database was used to calculate the number of jobs by dividing the space required for each job, using Table 3. Appendix B shows the preliminary estimates developed using the above methodology for each TAZ by the development data source. Table 4 shows the total number of TAZs, household units, and non-residential square footage that were considered.

Once the preliminary estimates were developed, they were overlaid on the official 2045 data (used in TCRPM) using GIS (Geographic Information Systems). TAZ-level population and employment comparisons were made for the TAZs encompassing all of the approved developments between 2016 and 2022 (Appendix C).



**Table 3: Employment Development Data (Sq Ft) to Employee Estimate for St. Lucie County**

Source: FDOT D4 Research on Average Working Spaces (Sq ft/Employee) by Employment Category

Employment Category	Space Required (Sq ft/ Employee)
Retail Activity	981
Amusement Services	
Restaurants and Bars	122
Wholesale Trade and Warehousing	1613
Manufacturing	1042
Agriculture	
Construction	
Utilities	
Transportation	
Education Elementary K-12	1296
Education Postsecondary	
Hotels and Motels	2408
Federal, State, and Local Government	778
Professional and Business Services	402
Personal Services	769

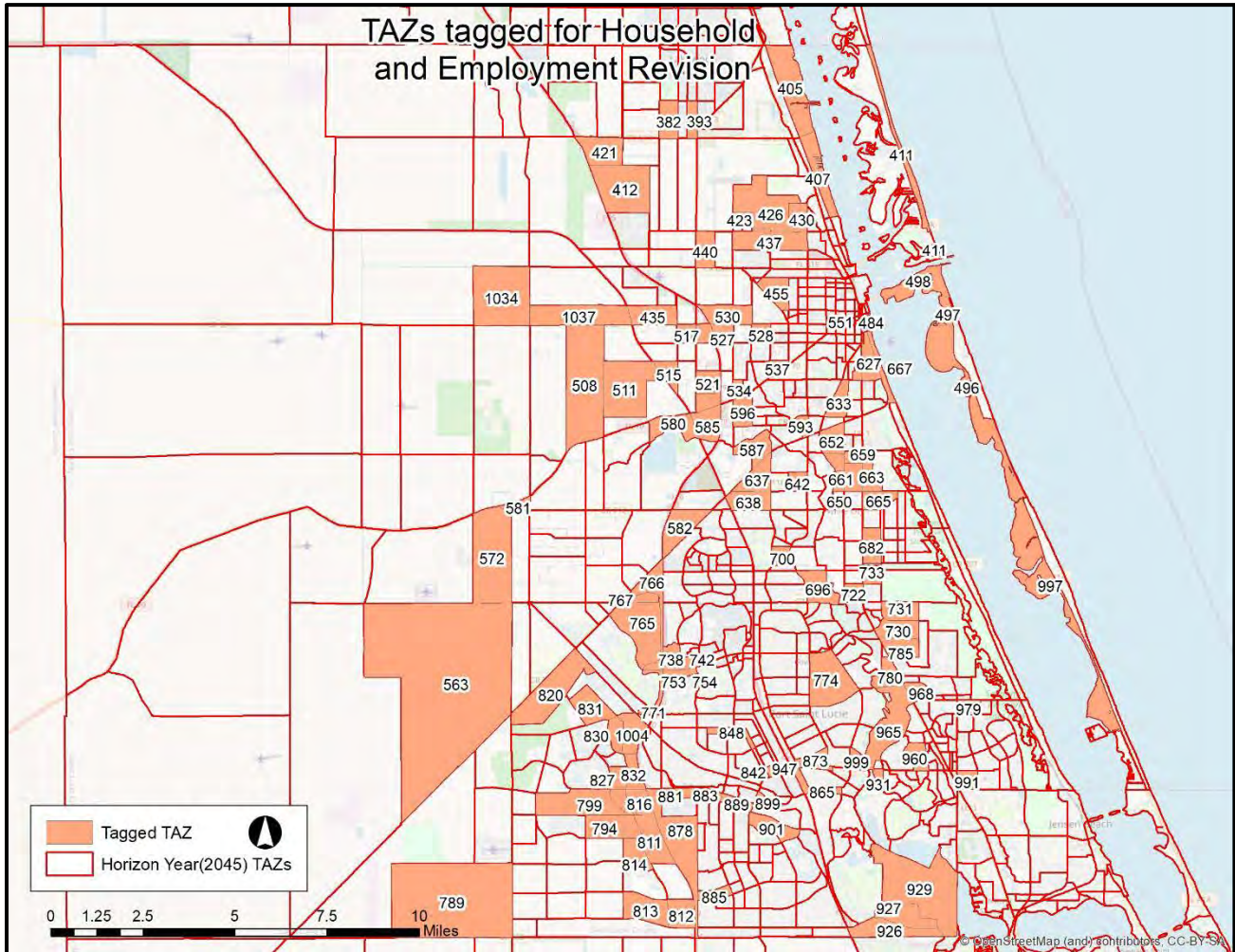
**Table 4: Total Household Units and Employment Square Footage Considered for the Data Revision**

Data Source	Relevant Approved Projects	Number of TAZs Impacted	Households (Units)	Non-Residential (Sq Ft)	Employee Estimate
St. Lucie County	91	84	5,124	8,026,679	7,551
City of Fort Pierce	91	41	3,604	4,598,021	4,318
City of Port St. Lucie	115	75	1,991	5,438,422	3,140
Other Considered Projects	3	4	16,966	1,650,042	1,682
<b>Overall</b>		<b>132</b>	<b>27,685</b>	<b>19,713,164</b>	<b>16,691</b>

If the current 2045 TAZ data (e.g., population, households, and employment) were less than the development-produced population/employment estimates, the TAZs were flagged as potential candidates for data revisions (see Figure 1). The difference between the development-produced data and the current TAZ data (delta) was then allocated to the TAZs to produce the revised population/employment data. Figure 1 shows the TAZs that were used for data edits based on

the project database shared by the city of Fort Pierce, the city of Port St. Lucie, and St. Lucie County.

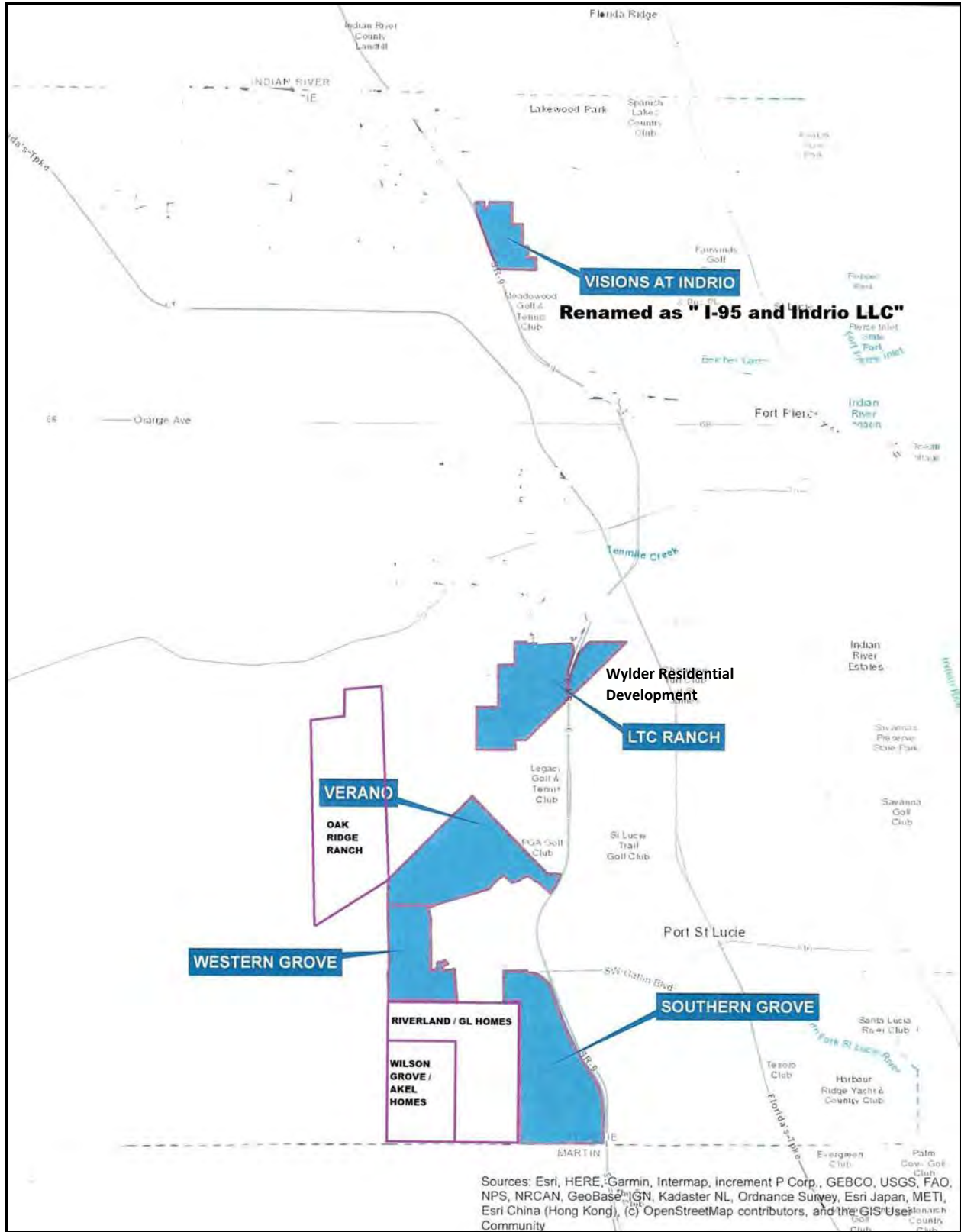
**Figure 1: TAZs Tagged for Household and Employment Revisions Based on the Development Locations**



### 1.2. Data Gathered from Development Regional Impact (DRI) Projects

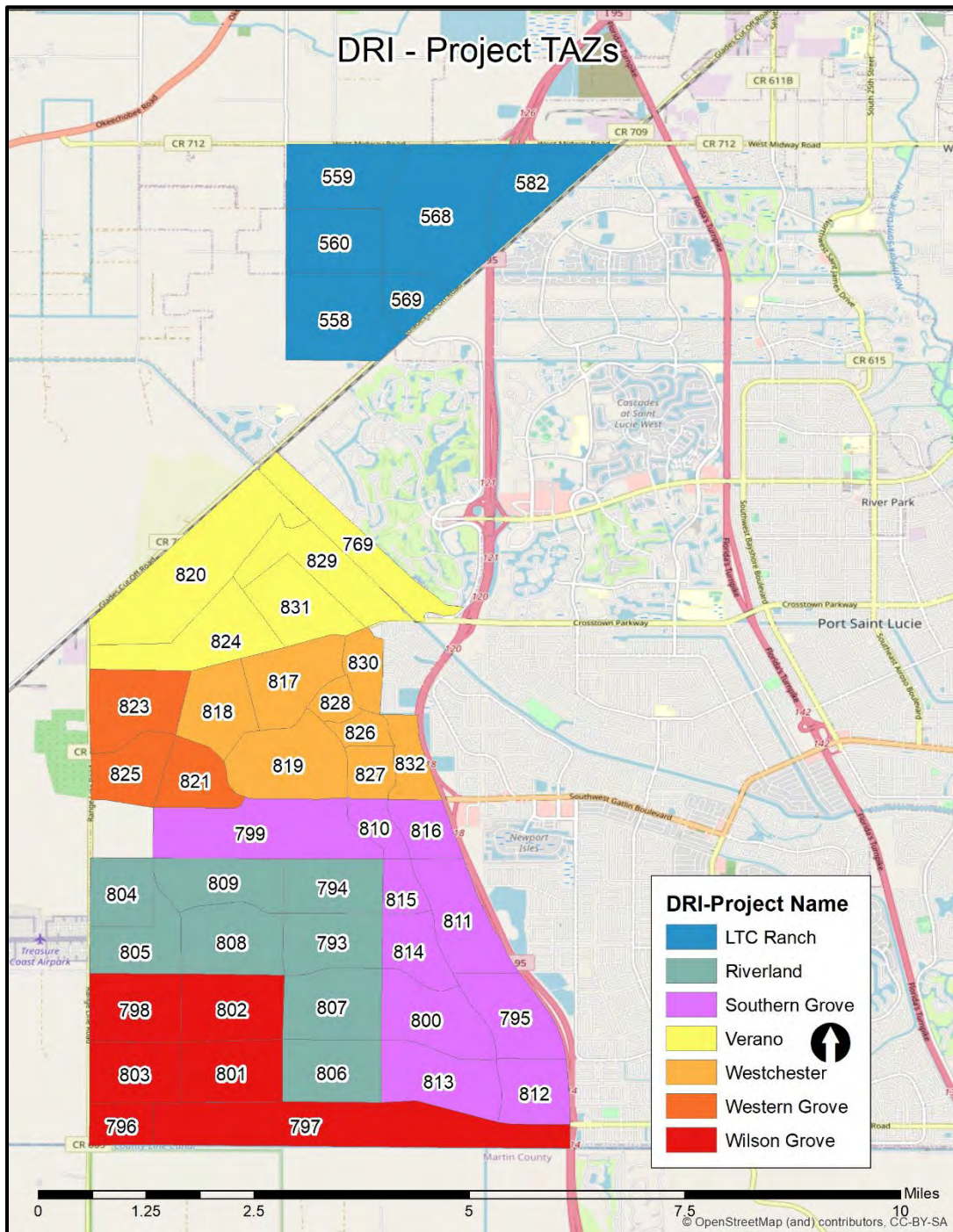
Florida Turnpike Enterprise, as part of their Project Development & Environment (PD&E) analysis projects reviews, provided a list of Development of Regional Impact (DRI) projects that included development names, household units, and future built areas of development. The consultant coordinated with the City of Fort Pierce, Port St. Lucie, and St. Lucie County on inputs from the developments. These inputs helped in delineating the projects that were approved (Figure 2) and could be considered for data revisions. The projects that were not approved were taken out from the list of consideration (Appendix D).

Figure 2: Approved Projects for DRI



The consultant did extensive research on gathering the relevant information on DRI projects. The tasks included searching for site plans, traffic impact studies, and any external data sources that can provide relevant additional information for allocating the right growth to the right TAZs. After gathering and manually filtering out the relevant information, appropriate TAZs were marked for data revisions (Figure 3).

**Figure 3: TAZs Tagged for DRI Project Consideration**



The assessed data was then used to estimate the preliminary population, households, and employment numbers (Table 4). Employment Estimates were calculated by first identifying the type of employment that the development would incur. Once the type/category was identified, the employment type square footage in the development database was used to calculate the number of jobs by dividing the space required for each job, using Table 2.

Once the preliminary estimates were developed, they were overlaid on the revised 2045 socioeconomic data (computed above) using GIS (Geographic Information Systems). TAZ-level population and employment comparisons were made for the TAZs encompassing the DRI projects (Table 4). If the current rolled-up 2045 TAZ data (e.g., households, and employment) were less than the development-produced population/employment estimates, the TAZs were flagged as potential candidates for data revisions (see Table 4).

The difference between the DRI development-produced data and the revised TAZ data (delta) was then allocated to the TAZs to produce the revised population/employment data. Various site plans that were researched and gathered by the consultant were cross-referenced to distribute the households and employment data. If the site plan has an area\TAZ zoned exclusively as residential, then only households were allocated to those TAZs using proportions based on total area.

Satellite Imagery was also referenced to inspect the reasonableness of the TAZ-level population and employment distribution.

Table 5 shows the comparison of the additional growth from the DRI projects (DRI HH, DRI EMP) compared to the original project-level analysis conducted in section 1.1 (HH45 Revised and Emp45 Revised). Red highlighted cells indicate the additional growth from the DRIs that is needed to be added to the TAZ system, as a result of the DRI projects reviews. Appendix E contains the final TAZ-level distribution of the data as a result of the DRI reviews and analysis.

Table 5: Development Intensities Needed to Adjust for DRIs

Development Name	City	Approval Year	TAZs	DRI HH Estimate	Commercial (Sq ft)	Industrial (Sq ft)	Other Offices (Sq ft)	DRI EMP Estimate	HH45 Revised	EMP45 Revised	Growth HH (HH 45 Revised - HH15)	Growth Emp (Emp 45 Revised - Emp15)	Adjust HH to the official data	Adjust EMP to the official data
LTC Ranch	Port St. Lucie	1993	582;568;569;558;560;559	2,500			980,100	1,275	7038	764	6986	475	-	511
Indrio & I95 LLC	St. Lucie	2022	412; 421	2,683	1,088,000			1,109	5922	2,114	5683	2048	-	-
TC International Airport	St. Lucie	2021	422; 426			55,053		53	421	4218	353	3247	-	-
Westchester	Port St. Lucie	2002	817; 818; 819; 826; 827; 828; 830; 832	6,245			1,295,567	1,685	4993	3559	2985	1782	1,252	-
I-95/Midway Road Industrial Center	Port St. Lucie	NA	582			3,500,000		3,359	0	0	0	0	-	-
Verano	Port St. Lucie	2002	769; 829; 831; 820; 824	7,200	848500			865	1136	11	704	11	6,064	854
Western Grove	Port St. Lucie	2002	823; 825; 821			213,444	164,567	419	3369	1553	3368	1480	-	-
Southern Grove	Port St. Lucie	2005	816; 810; 811; 795; 799; 812; 797; 815; 814; 800; 813	7,388	1,831,465	8,745,000	2,929,737	14,069	5769	7867	5268	6440	1,619	6,202
Riverland	Port St. Lucie	2005	794; 793; 809; 807; 806; 797; 808; 804; 805	11,700	892,668	1,361,250	1,688,577	4,412	1439	301	1439	301	10,261	4,111
Wilson Grove	Port St. Lucie	2005	797;801;802;796;803;798	7,700	765,000	1,361,250	1,966,122	4,643	2485	6	2485	1	5,215	4,637
													24,411	16,315

## 2. Revised 2045 TAZ Data in TCRPM5 Format

### 2.1 Balancing Top-Down and Bottom-up Approaches:

In February 2022, the BEBR released its latest population projection for St. Lucie County, predicting a high population of 566,000 by 2045 and 601,400 by 2050 based on April 1, 2021 estimate. The St. Lucie County control total estimates continue to grow each year after 2019. In coordination with St. Lucie TPO, a new control total of 581,710 was established based on the official model 2045 population of 525,100 and considering the growing trend of the population control totals 56,610 in the future.

The bottom-up approach of TAZ-level population growth of 117,149 additions to the adopted control total of 525,100 resulted in a total population of 642,249. A balancing effort was conducted to match the top-down control total of 581,710, by reducing the growth of the population in the TAZs that did not have immediate approved projects.

To accommodate the above number as the total population of the region, a population reallocation procedure was developed to reallocate the growth of the TAZs in St. Lucie County. Growth in households of different TAZs influenced by the above developments (both DRIs and developments database from the local agencies) were fixed. For the TAZs without any immediate approved projects, the growth between the base year (2015) and horizon year (2045) was reduced proportionately, to match the newly established county control totals.

Table 6 shows the summary of the total population, household, and employment numbers revised for St. Lucie County. It also shows the difference between the official 2045 scenario and the final revised scenario, with its effect on total control totals for the Treasure Coast Region.

**Table 6: Socioeconomic Data Comparison by County Between Official and Revised Scenario**

COUNTY	Official Model 2045 SE Data			Revised 2045 SE Data		
	Population	Household	Employment	Population	Household	Employment
Indian River	201,839	86,077	94,626	201,839	86,077	94,626
St. Lucie	<b>525,100</b>	<b>211,538</b>	<b>183,349</b>	<b>581,710</b>	<b>234,143</b>	<b>216,355</b>
Martin	181,312	81,127	98,986	181,310	81,126	98,986
Regional	<b>909,060</b>	<b>379,018</b>	<b>377,541</b>	<b>964,859</b>	<b>401,346</b>	<b>409,967</b>
St. Lucie Changes				<b>+56,610</b>	<b>+22,605</b>	<b>+33,006</b>

Figure 4 shows the population difference between the official 2045 scenario and the revised 2045 scenario. Figure 5 shows the household difference between the official 2045 scenario and the revised 2045 scenario. Figure 6 shows the employment difference between the official 2045 scenario and the revised 2045 scenario. Employment numbers are mainly positive because the land allocation procedure does not revise the existing employment growth. Figure 4 and Figure 5 show negative ranges for TAZs because these are the ones from where the growth is extracted to balance the new growth of population and household numbers.

Figure 4: Population Comparison Between Revised and Official Scenario

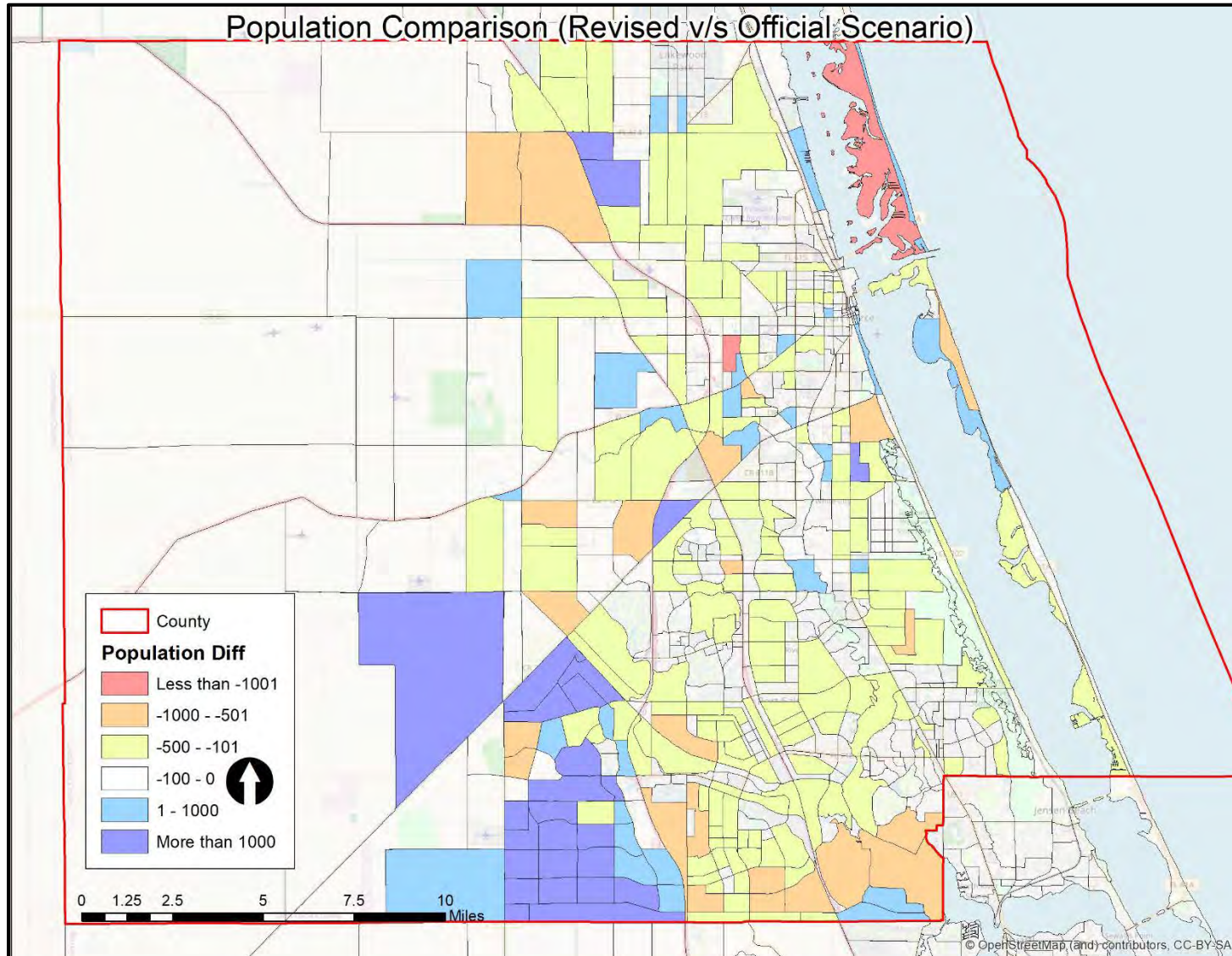




Figure 5: Household Comparison Between Revised and Official Scenario

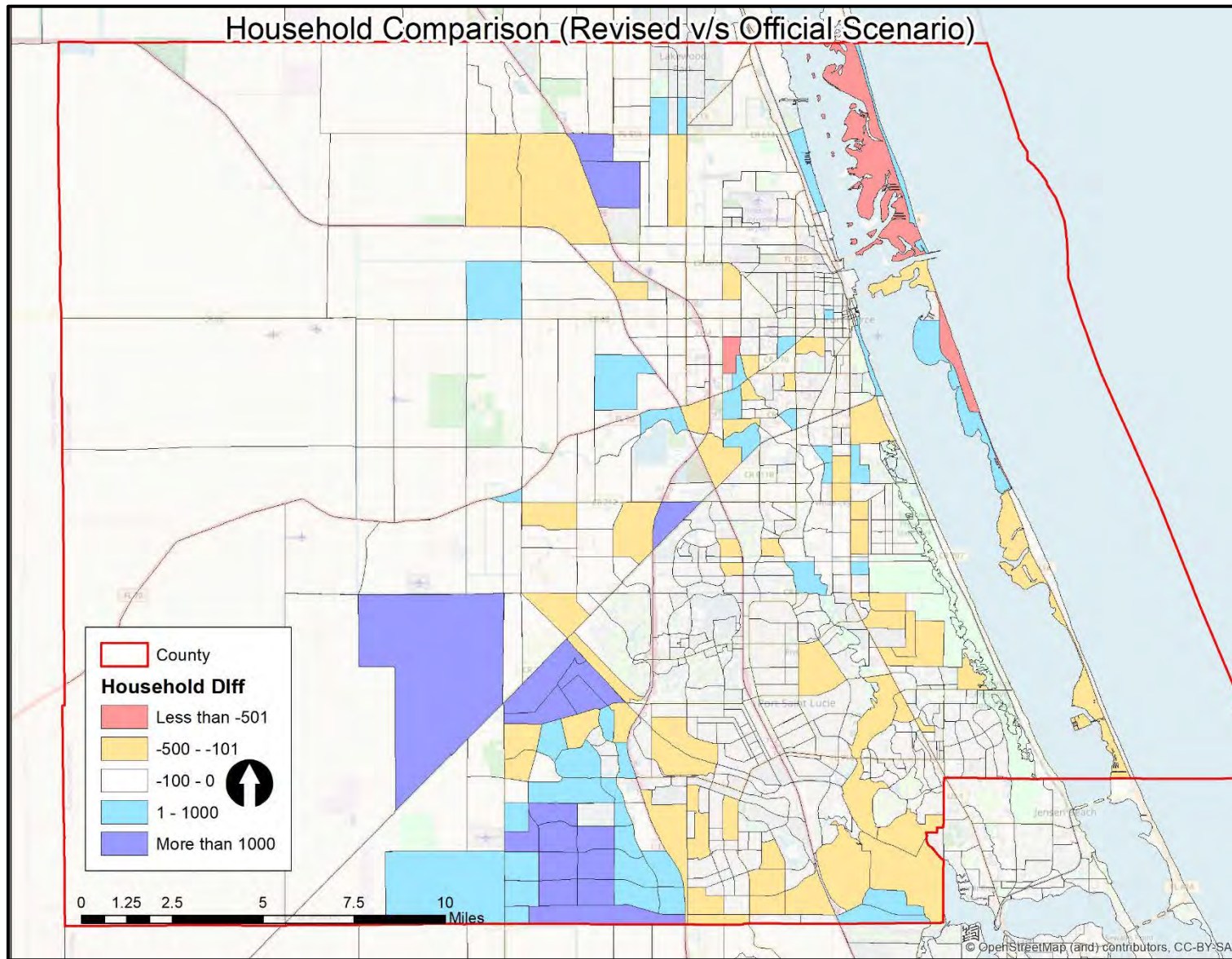
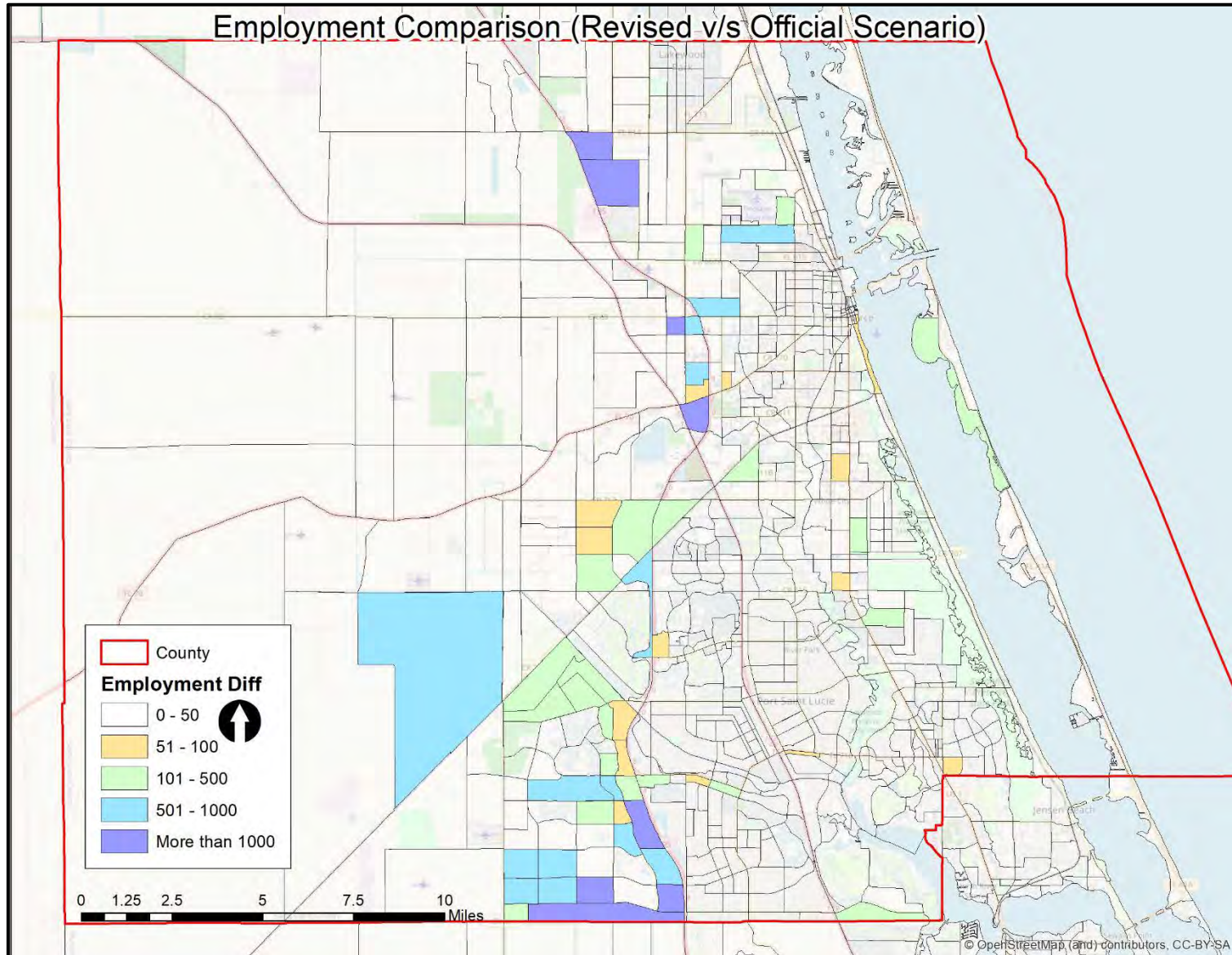


Figure 6: Employment Comparison Between Revised and Official Scenario



## 2.2 Assessment of System-wide Impact on the Roadway System

Using the revised 2045 socioeconomic data, the 2045 TCRPM5 Cost-Feasible Scenario was run. Key performance metrics summaries were compared with the current 2045 model results. Table 6 documents the impact of the new developments on the roadway network. In St. Lucie County there was an increase of 1 million Vehicle Miles Traveled (VMT), that corresponds to a 7.8% increase from the officially adopted model.

**Table 7: Highway Evaluation Statistics by County Between Official and Revised Scenario**

Statistics	2045 Official Model			2045 Revised Model			% Difference (St. Lucie)
	Indian River	St. Lucie	Martin	Indian River	St. Lucie	Martin	
Total Number of Directional Links	2,416	4,256	1,795	2,416	4,256	1,795	
Total Lane Miles	1,134	2,011	1,161	1,134	2,011	1,161	
Total Directional Miles	741	1,293	751	741	1,293	751	
Total Volume All Links	16,827,546	36,108,371	17,611,194	16,729,144	38,205,044	17,694,240	5.80%
Average (Directional) Volumes of All Links	6,965	8,484	9,811	6,924	8,978	9,858.00	5.80%
Total VMT All Links	6,230,756	<b>11,455,991</b>	8,128,595	6,239,644	<b>12,351,172</b>	8,270,887	7.80%
Total VHT All Links	134,964	<b>304,572</b>	190,245	134,184	<b>328,333</b>	191,349	7.80%
Original Speed (VMT/Free flow VHT)	51.62	<b>48.41</b>	53.31	51.75	<b>48.4</b>	53.5	
Congested Speed (VMT/Congested VHT)	46.17	<b>37.61</b>	42.73	46.5	<b>37.6</b>	43.2	

The model output volumes on major roads in the vicinity of the new developments in the county were also evaluated (see Table 7 to Table 11).



**Table 8: Model Volumes West of I-95 at Major Roadways in the Study Area**

Location (West of I-95)	2045 Official Model	2045 Revised Model	% Difference
Okeechobee Road	32,007	33,651	5.1%
Midway Road	23,538	24,645	4.7%
Glades Cut-off Road	11,002	18,514	68.3%
St. Lucie West Blvd	18,747	21,535	14.9%
Crosstown Parkway	31,024	44,837	44.5%
Tradition Parkway	56,243	80,556	43.2%
SW Becker Road	22,335	59,230	165.2%

**Table 9: Model Volumes East of I-95 at Major Roadways in the Study Area**

Location (East of I-95)	2045 Official Model	2045 Revised Model	% Difference
Okeechobee Road	61,306	61,192	-0.2%
Midway Road	23,336	26,270	12.6%
St. Lucie West Blvd	63,804	67,970	6.5%
Crosstown Parkway	45,327	53,021	17.0%
Tradition Parkway	57,015	61,903	8.6%
SW Becker Road	39,657	47,198	19.0%

**Table 10: Model Volumes on I-95 & Turnpike at Major Roadways in the Study Area**

Location (South of)	I-95			Turnpike		
	2045 Official Model	2045 Revised Model	% Difference	2045 Official Model	2045 Revised Model	% Difference
Okeechobee Road	118,497	124,594	4.90%	54,725	55,473	2.00%
Midway Road	124,343	130,933	5.00%	57,423	57,765	1.60%
St. Lucie West Blvd	131,707	141,619	7.50%	57,423	57,765	1.60%
Crosstown Parkway	130,552	139,623	6.20%	57,423	57,765	1.60%
Tradition Parkway	109,538	114,088	4.10%	61,205	59,547	-2.30%
SW Becker Road	114,082	121,195	6.30%	72,082	70,456	-1.70%

**Table 11: Model Volumes on US 1 at Major Roadways in the Study Area**

US 1 (South Of)	2045 Official Model	2045 Revised Model	% Difference
Virginia Avenue	48,222	47,020	-2.5%
Edwards Road	48,430	47,425	-2.1%
Midway Road	56,712	54,903	-3.2%
E Prime Vista Blvd	62,722	59,754	-4.7%
Crosstown Pkwy	72,415	71,057	-1.9%
SE Port St. Lucie Blvd	88,022	85,208	-3.2%

**Table 12: Model Volumes for Village Parkway at Major Roadways in the Study Area**

Village Parkway (South of)	2045 Official Model	2045 Revised Model	% Difference
Crosstown Parkway	17,500	24,756	41.5%
Tradition Parkway	35,494	60,269	69.8%
North of SW Becker Road	10,405	26,177	151.6%

Based on the comparison between the revised 2045 model outputs and the currently adopted model outputs, it was observed that St. Lucie County VMT increased by 7.8% using the revised 2045 data. It is noted that most of the high-intensity developments are situated in Southwest St. Lucie County/City of Port St. Lucie. The major arterials in the area, such as Cross-Town Parkway, Traditions Parkway, Village Parkway, Southwest Becker Road, and Glades Cut-off Road have increased daily volumes (AADTs). Since the assessment of the level of service to the roadway system is beyond the scope of this study, it is recommended to evaluate the traffic operations and level of service and congestion analyses in more refined subarea/corridor forecasting processes. It was also observed that the impact on Indian River and Martin County roadway systems is insignificant.



## AGENDA ITEM SUMMARY

Board/Committee:	Technical Advisory Committee (TAC)
Meeting Date:	March 21, 2023
Item Number:	6g
Item Title:	Special Events Congestion Management and Parking Plan (SECMAPP)
Item Origination:	Unified Planning Work Program (UPWP)
UPWP Reference:	Task 3.4 – Congestion Management Process (CMP)
Requested Action:	Recommend adoption of the SECMAPP, recommend adoption with conditions, or do not recommend adoption.
Staff Recommendation:	Because SECMAPP would address congestion, parking, and safety issues associated with special events in the TPO area as part of the TPO's CMP, it is recommended that the SECMAPP be recommended for adoption by the TPO Board.

### Attachments

- Staff Report
- SECMAPP



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## MEMORANDUM

TO: Technical Advisory Committee (TAC)

THROUGH: Peter Buchwald  
 Executive Director

FROM: Yi Ding  
 Transportation Systems Manager

DATE: March 14, 2023

SUBJECT: Special Events Congestion Management and Parking Plan (SECMAPP)

### BACKGROUND

Congestion and parking issues are occurring at special events in the TPO area such as in Downtown Fort Pierce and South Hutchinson Island, the Fenn Center and Lawnwood Regional Park, Clover Park, the Port District and Botanical Gardens of Port St. Lucie, and the McCarty Ranch Preserve. These issues are likely to increase with the tremendous growth that the TPO area is experiencing. Therefore, Task 3.4, *Congestion Management Process (CMP)*, of the Unified Planning Work Program (UPWP), includes the development of a SECMAPP for the TPO area.

### ANALYSIS

The SECMAPP was prepared by Kimley-Horn, one of the TPO's General Planning Consultants. As part of the SECMAPP, interviews first were conducted with representatives of each of the local agencies with responsibility for management of the special events to initially identify any congestion, parking, and safety issues associated with the special events from the perspectives of the local agencies. Subsequently, special events at each of the locations were observed, and congestion, parking, and safety issues associated with the events were identified. Recommendations for improvements to address the congestion, parking, and safety issues were then developed and prioritized.



Finally, potential grant funding opportunities for the proposed improvements were identified.

The attached SECMAPP report organizes the findings of the interviews and observations and the recommended improvements into the following sections:

- Special Event Location Evaluations – Evaluates and quantifies traffic congestion and parking issues at the Special Events locations.
- Special Event Needs Analysis – Evaluates existing roadway network and parking areas and identifies potential changes/improvements to the existing Special Events operations and area roadway network.
- Special Events Improvement Project Development – Determines potential future projects to address current Special Events traffic and parking deficiencies, grouped into services, technology, and infrastructure categories.
- Project Prioritization – Creates a prioritization list which is categorized into near-term (can be implemented within 1 year), mid-term (can be implemented in 1-5 years), and long-term (can be implemented in 5+ years).
- Funding Source Identification – Identifies applicable grant opportunities for the proposed improvements.

The SECMAPP provides detailed findings and a number of recommended improvements to address the congestion, parking, and safety issues that were identified. The improvements are to be implemented at the discretion of the local agencies. However, there is the potential for eligible improvements to be considered for CMP funding from the TPO.

### RECOMMENDATION

Because SECMAPP would address congestion, parking, and safety issues associated with special events in the TPO area as part of the TPO's CMP, it is recommended that the SECMAPP be recommended for adoption by the TPO Board.



# St. Lucie

## Special Events Congestion Management and Parking Plan

*March 2023*

*Prepared By:*

**Kimley»»Horn**

**TABLE OF CONTENTS**

Introduction ..... 1

Regional Partner Coordination ..... 3

Special Event Location Evaluation..... 7

    McCarty Preserve – Bonfire Hayride ..... 7

    Clover Park (Mets)..... 16

    Downtown Fort Pierce/South Beach..... 28

    The Port District/Botanical Gardens/City Center ..... 42

    Fenn Center/Lawnwood Regional Park ..... 47

    St. Lucie County Fairgrounds/Emergency Operations Center ..... 56

Special Events Needs Analysis ..... 67

    McCarty Preserve – Bonfire Hayride ..... 67

    Clover Park (Mets)..... 69

    Downtown Fort Pierce/South Beach..... 71

    The Port District/Botanical Gardens/City Center ..... 73

    Fenn Center/Lawnwood Regional Park ..... 75

    St. Lucie County Fairgrounds/Emergency Operations Center ..... 77

Special Events Improvement Project Development..... 79

Project Prioritization ..... 82

Funding Source Identification ..... 84

**TABLE OF FIGURES**

**Figure 1: Special Events Locations ..... 2**

**Figure 2: McCarty Preserve Roads ..... 15**

**Figure 3: Clover Park Roads ..... 26**

**Figure 4: Clover Park Pedestrian Paths and Bike Lanes ..... 27**

**Figure 5: Downtown Fort Pierce/South Beach Roads ..... 39**

**Figure 6: Downtown Fort Pierce Pedestrian Paths and Bicycle Lanes ..... 40**

**Figure 7: South Beach Pedestrian Paths and Bicycle Lanes ..... 41**

**Figure 8: Port District/Botanical Gardens/City Center Roads ..... 45**

**Figure 9: Port District/Botanical Gardens/City Center Pedestrian Paths and Bicycle Lanes ..... 46**

**Figure 10: Fenn Center/Lawnwood Regional Park Roads ..... 54**

**Figure 11: Fenn Center/Lawnwood Regional Park Pedestrian Paths and Bike Lanes ..... 55**

**Figure 12: St. Lucie County Fairgrounds/Emergency Operations Center Roads ..... 65**

**Figure 13: St. Lucie County Fairgrounds/Emergency Operations Center Pedestrian Paths and Bike Lanes ..... 66**

**Figure 14: McCarty Ranch Preserve Recommended Improvements ..... 68**

**Figure 15: Clover Park Recommended Improvements ..... 70**

**Figure 16: Downtown Fort Pierce/South Beach Recommended Improvements ..... 72**

**Figure 17: The Port District/Botanical Gardens/City Center Recommended Improvements ..... 74**  
**Figure 18: Fenn Center/Lawnwood Regional Park Recommended Improvements ..... 76**  
**Figure 19: St. Lucie County Fairgrounds/Emergency Operations Center Recommended  
Improvements..... 78**

**APPENDIX**

**A. Meeting Notes**

## INTRODUCTION

Kimley-Horn was retained by the St. Lucie TPO to establish a Special Events Congestion Management and Parking Plan (SECMAPP) for Special Events locations in the St. Lucie TPO area. The Special Events locations are as follows:

- (1) McCarty Ranch Preserve
- (2) Clover Park
- (3) Downtown Fort Pierce/South Beach
- (4) The Port District/Botanical Gardens/City Center
- (5) Fenn Center/Lawnwood Regional Park
- (6) St. Lucie County Fairgrounds/Emergency Operations Center

**Figure 1** shows the special event locations. The Regional Partners include the City of Fort Pierce, City of Port St. Lucie, and St. Lucie County Area Regional Transit. Five (5) virtual meetings were held with regional partners, including:

- (1) City of Port St. Lucie Parks & Recreation (Paul Grives)
- (2) St. Lucie County (County Transit – Adolfo Covelli, Parks & Recreation – Willie Redden)
- (3) St. Lucie County Sheriff's Office (Sargent Matt Dietrich)
- (4) Botanical Gardens Staff (Jeff Chambers)
- (5) City of Fort Pierce (Fort Pierce Police Department – Sargent Fasanello)

This report serves as the documentation of the SECMAPP and summarizes the findings and recommended improvements into the following sections:

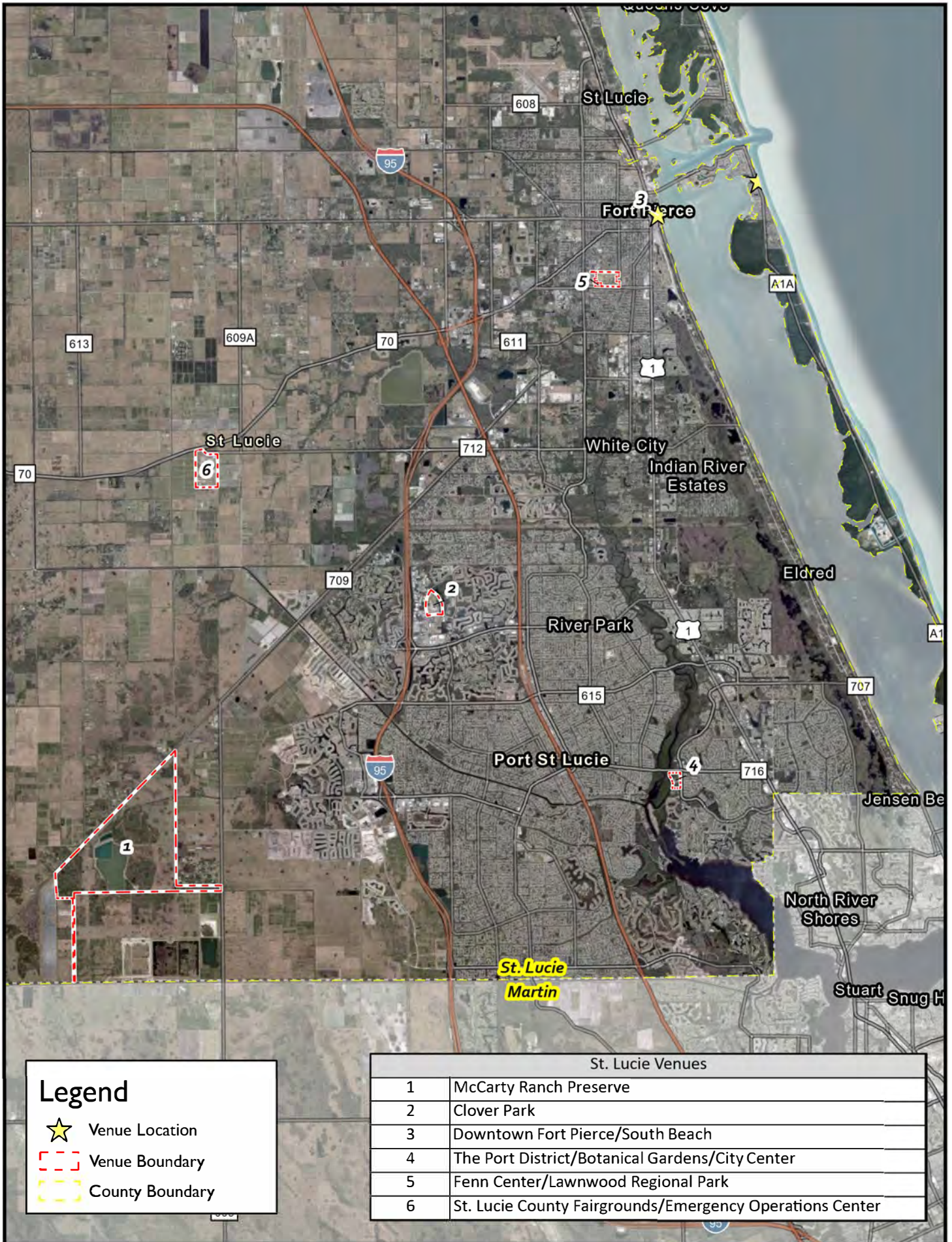
**Special Event Location Evaluations** – Evaluates and quantifies traffic congestion and parking issues at the Special Events locations.

**Special Event Needs Analysis** – Evaluates existing roadway network and parking areas and identifies potential changes/improvements to the existing Special Events operations and area roadway network.

**Special Events Improvement Project Development** – Determines potential future projects to address current Special Events traffic and parking deficiencies, grouped into services, technology, and infrastructure categories.

**Project Prioritization** – Creates a prioritization list which will be categorized into near-term (can be implemented within 1 year), mid-term (can be implemented in 1-5 years), and long-term (can be implemented in 5+ years).

**Funding Source Identification** – Identifies applicable State and Federal grant opportunities for the proposed improvements.



**Legend**

- ★ Venue Location
- [- - -] Venue Boundary
- [---] County Boundary

St. Lucie Venues	
1	McCarty Ranch Preserve
2	Clover Park
3	Downtown Fort Pierce/South Beach
4	The Port District/Botanical Gardens/City Center
5	Fenn Center/Lawnwood Regional Park
6	St. Lucie County Fairgrounds/Emergency Operations Center

## REGIONAL PARTNER COORDINATION

Five (5) virtual meetings were held with the following regional partners:

- City of Port St. Lucie Parks & Recreation
- St. Lucie County (County Transit and Parks & Recreation)
- St. Lucie County Sheriff's Office
- Port St. Lucie Botanical Gardens
- City of Fort Pierce

The following summarizes the meetings. Detailed meeting notes are provided in **Appendix A**.

### City of Port St. Lucie Parks & Recreation

A virtual meeting was held with the Special Events Coordinator, Paul Grives, from the City of Port St. Lucie Parks & Recreation, on Tuesday, December 13, 2022. Paul identified current problems with their congestion management and parking during special events. The main points from this meeting include:

- Mid Florida Events Center Events:
  - St. Patrick's Day (Friday & Saturday events)
    - Parking garage is available to park during parade, but no one uses it
  - Freedom Fest: 4<sup>th</sup> of July
  - Festival of Lights with fireworks
    - Close parking garage during this event
    - New officers were unaware of what roads to close, and resulted in chaotic traffic operations
- The City of Port St. Lucie has five (5) to six (6) Parks & Recreation officers assigned to each special event
  - Officers meet before event to plan
  - Sergeant Colin Duncombe started 3-4 months ago and runs things
- Downtown Fort Pierce
  - Wayfinding for garage does not mention the garage is always free
- McCarty Ranch Preserve
  - Land utilized for utilities; field is used for events with:
    - Pony rides
    - Food vendors
    - Stage
  - Only one entrance into the park (Range Line Road)
  - Parking is on the road leading into Park from Range Line Road
    - Vehicles on the park entry road have never parked all the way to park entrance
  - PVC was recently installed to organize in parking area
  - Rent portable lights for pedestrians during special events
  - Police presence is limited to the inside of the park
- Recommendations for McCarty Ranch Preserve
  - **Entrance to park could be improved**
  - **New road from Tradition Parkway to Range Line would cut travel time in half**
- Botanical Gardens would like to host River Nights but cannot while parking is under construction until possibly October 2023

## St. Lucie County Transit

A virtual meeting was held with Adolfo Covelli from St. Lucie County Transit and Willie Redden from St. Lucie County Parks & Recreation on Tuesday, December 19, 2022. The main points from this meeting include:

- County Transit mostly does not provide the shuttling for special events
  - **Shuttling is recommended for future events to assist with loss of parking at venues such as the Botanical Gardens**
- Botanical Gardens
  - Has satellite parking and shuttling, but they are requesting large buses and there is a 2-year waitlist to provide this
    - Also, shortage of shuttle drivers
  - Overflow parking is currently at the Intermodal Transit Facility which will be upgraded within the next 4 years
  - The City of Port St. Lucie owns the Intermodal facilities to park and shuttle and are therefore in control of these services
- Clover Park
  - No observed traffic congestion but it was noted that the parking has changed which caused minor congestion but not of any major concern
  - The County does not have the authority over the Clover Park parking
  - Transit did provide service for “Citizen’s Academy”
- St. Lucie County Fair is run by Fair Association

## St. Lucie County Sherriff’s Office

A virtual meeting was held with Sergeant Matt Dietrich from the St. Lucie Sheriff’s Office on Friday, January 13, 2023. The main points from this meeting include:

- Clover Park holds the New York Mets
  - Mets hire Sheriff’s Officer for security
  - Traffic builds up for these events
    - NW Peacock Blvd is particularly heavy with traffic
    - **Recommendation to have a pickle to help ease traffic and to have a signal timing plan for events to run as many people out of the event as possible**
- Fenn Center/Lawnwood Regional Park
  - Was utilized as a vaccine distribution center
  - Biggest issue is mix of pedestrian and vehicle traffic
    - East lot is westbound only
    - Up to 1,000 people at a time coming in. Pedestrians have to walk up from parking area and then having to cross the street
      - **Recommendation to stop vehicles to let pedestrians pass**
      - **Recommendation to add traffic sign at the 19<sup>th</sup> Street and Virginia Avenue intersection**
        - o Current limited lefts out
    - No marked pedestrian crossing except at Virginia Avenue
    - Multiple cones and message boards
- St. Lucie County Fairgrounds
  - Was utilized as a vaccine distribution center



- Issue is distance to walk in from parking area
  - **Recommend shuttles**
- No issue into Fairgrounds
- Employee Entrance on Peacock Road and main entrance on W Midway Road
- If planned well, this location could host large events
- Need more sign boards

### Port St. Lucie Botanical Gardens

A virtual meeting was held with Volunteer Chair, Jeff Chambers, from the Port St. Lucie Botanical Garden on Thursday, December 15, 2022. The main points of this meeting include:

- Botanical Gardens Current Conditions
  - 170 parking spaces while park is under construction (originally 400 parking spaces)
  - Vendors are not able to park with reduced parking area
  - Three different events were cancelled leading to financial strain
  - Used to have events with 60-70 vendors and 400 + parking spots
- Shuttling
  - City has offered 4 shuttles: 1 for pickup, 1 for drop-off, and 2 in transit for the Botanical Gardens
  - Fort Pierce Police Department shuts down half of the parking area during events, which includes the area where shuttles turn around
  - Requesting a parking garage, but they are aware of the high cost and neighbors would likely object
- Operations for December Holiday Lights Event
  - Have police presence to help with congestion and crossing guards for safety on site
    - 4 police cars onsite to block off road
    - Crossing guards at Port St Lucie Boulevard & West Moreland
- Current congestion issue – West Moreland congestion builds up to Port St. Lucie Boulevard then west over the bridge

### City of Fort Pierce

A virtual meeting was held with Sergeant Fasanello from the Fort Pierce Police Department on Tuesday, December 13, 2022. The main points of this meeting include:

- Past Events
  - Christmas Parade
    - Permitted event with road closures (34-35 roads) with no major concern
    - Message boards were set out to inform the public
    - Congestion when exiting events
  - To exit downtown events there is usually congestion since there are only two exit points US-1 or the beach
- **Recommendation to improve bike and pedestrian safety**
- Variable message boards
  - Currently, events have 2-3 boards
  - Lack of wayfinding in downtown
  - No social media awareness of events
  - **Recommendation to have more boards**

- **Recommendation to coordinate with Public Works and inform of road closures on social media**
- **Recommendation to get City of Fort Pierce Committee involved in event planning**

## SPECIAL EVENTS NEEDS ANALYSIS

Based on the field observations from the special events, existing roadway network and parking areas were evaluated to determine advantageous operations that allow for safe and expedient ingress and egress to and from each special event location. In addition, potential changes/improvements to the existing Special Events operations and area roadway network to achieve desired operations are below.

### McCarty Preserve – Bonfire Hayride

#### (1) Wayfinding

- Two (2) variable message boards for advertising the event are recommended to face each direction (northbound and southbound traffic) on Range Line Road each side of the park entrance, instead of the current single variable message board placed at the park entrance.
- Two (2) brown static signs indicating direction to McCarty Ranch Preserve should be placed at SW Discover Way and Range Line Road facing westbound traffic after it is paved, and at SW Martin Highway and SW Allapatah Road (Range Line Road) facing westbound traffic (in Martin County). The current static sign on eastbound W Midway Road and Glades Cut off Road should be placed further away from the intersection to give drivers time to decide to turn right towards McCarty Ranch Preserve.
- A sign like the “Event Parking” with the red arrow located near the main parking lot should also be placed on the park driveway near the entrance to avoid confusion about parking as the parking lot is a long distance from entrance.

#### (2) Traffic Routing and Operations

- It is recommended that a pedestrian trail or path be placed on the south side of the park driveway to increase safety for pedestrians that are trying to walk back to their vehicles or the park.
- It also recommended that the trolley pick up/drop off riders in the designated trolley stops instead of the driveway, to prevent a queue of outbound vehicles behind the trolley.
- Intersection lighting is recommended at Glades Cut Off Road and Range Line Road to help northbound traffic see stop sign and east-west traffic.

#### (3) Parking Demand/Capacity

- Parking on the park driveway should be straight in instead of angled, so that vehicles have a smoother exit and have minimal delays.

#### (4) Parking Management

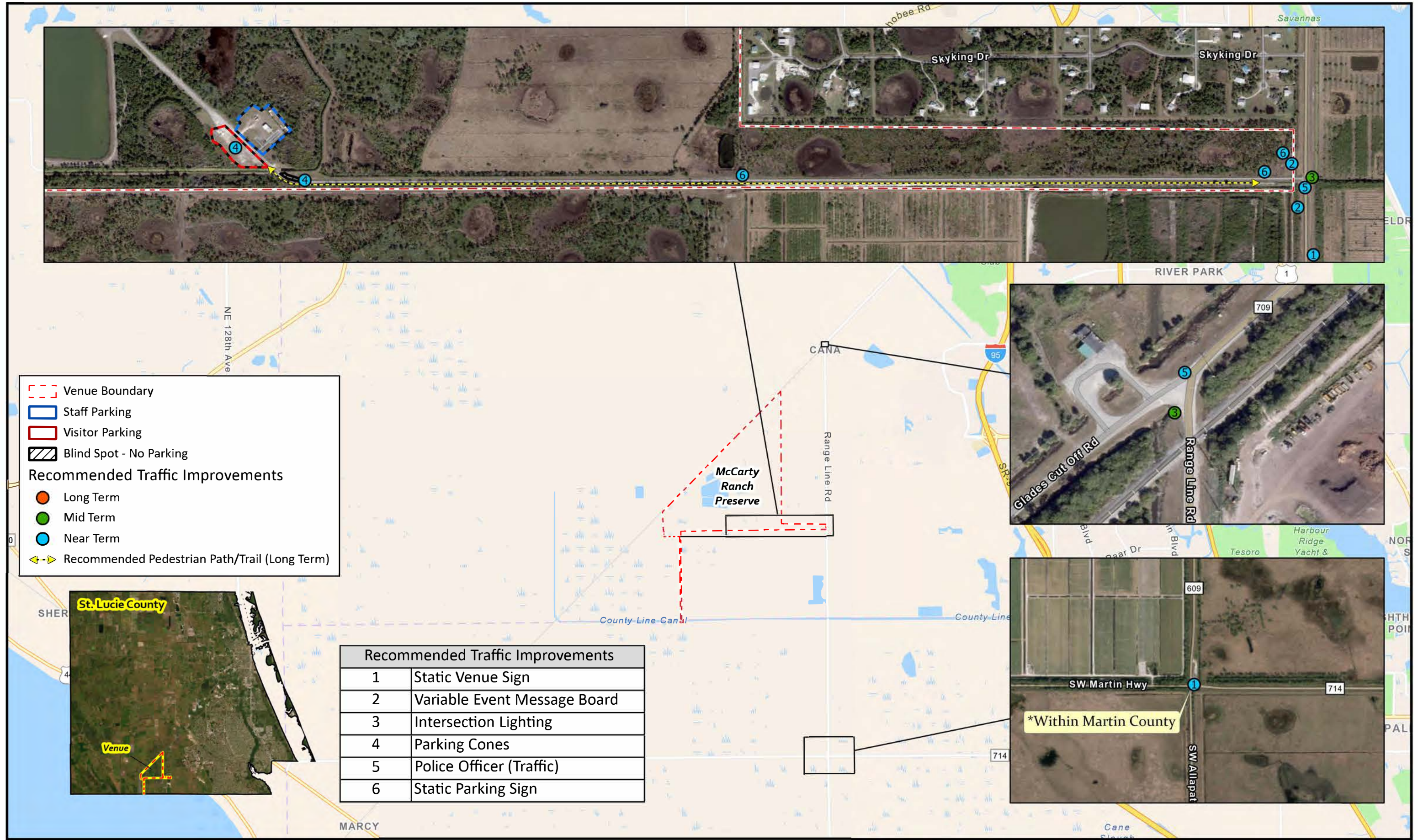
- Cones or no parking signs should be mounted at the blind spot on the park driveway curve to improve safety for pedestrians.
- Exit signs should be placed in the parking lot to direct drivers out of the parking lot.
- For larger events, additional trolley stops should be placed closer to park entrance to serve all the parked vehicles.

#### (5) Event Staff and Law Enforcement

- Parking staff should have coordination meetings prior to the event so that staff understands operations and their roles during the event.
  - These meetings should go over past event mistakes and how to better improve for future events.
- For large events, it is recommended that a police officer be positioned at the park entrance to stop traffic and let vehicles out of the park.

**Figure 14 illustrates the recommended improvements and locations.**

# Figure 14 - McCarty Ranch Preserve



### Clover Park (Mets)

#### (1) Wayfinding

- Recommend variable message boards at the St Lucie West Boulevard and NW Peacock Boulevard intersection, NW University Drive and NW Peacock Boulevard intersection, and St Lucie West Boulevard and NW Country Club Drive intersection.
- Recommend Variable message sign on northbound NW Peacock Boulevard directing to both parking entrances.
- Rideshare should be better marked, better lit, and easier to access.

#### (2) Traffic Routing and Operations

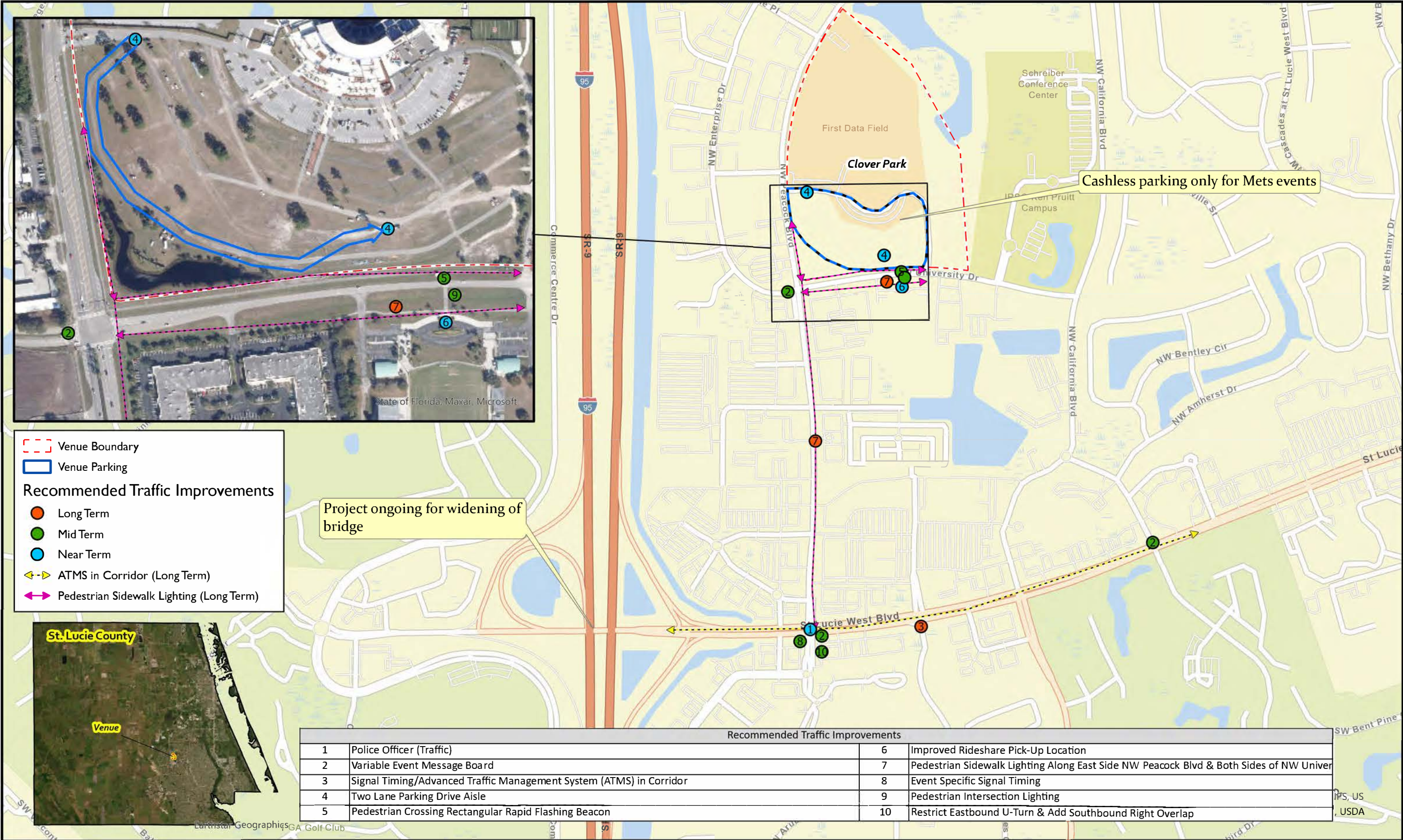
- Recommend restricting U-turns for the eastbound left at the St Lucie West Boulevard and NW Peacock Boulevard intersection and allowing a southbound right overlap movement. The U-turns can be restricted using a blank out sign restricting U-turns at certain times of the day when events are held.
- Recommend event specific signal timing at the St Lucie West Boulevard and NW Peacock Boulevard intersection to provide more southbound green time.
- Recommend Advanced Traffic Management System (ATMS) on St Lucie West Boulevard corridor
- Recommend placing pedestrian sidewalk lighting along east side of NW Peacock Boulevard and both sides of NW University Drive.
- Recommend a pedestrian crossing rectangular rapid flashing beacon (RRFB) and pedestrian intersection lighting for the bus stop located on NW University Boulevard between NW Peacock Boulevard and Piazza Drive to improve safety for pedestrians who are walking from the parking lot across the street to Clover Park.
- Two lane parking drive aisles internal to the parking lot are recommended to reduce queues on the public roads.

#### (3) Law Enforcement

- Recommend police officer presence at the St Lucie West Boulevard and NW Peacock Boulevard intersection, NW University Drive and NW Peacock Boulevard intersection, and NW University Drive and Piazza Drive intersection to control traffic.

**Figure 15 illustrates the recommended improvements and locations.**

Figure 15 - Clover Park



## Downtown Fort Pierce/South Beach

### (1) Wayfinding

- For Friday Fest recommend placing a detour sign further south on Melody Lane to help guide vehicles that are not event related to a major intersection (i.e., Orange Avenue).
- Recommend better wayfinding signage for parking to guide vehicles to the main parking lot (Fort Pierce Public Parking Garage) or other satellite lots.
- Recommend temporary event static signs and variable message boards for street closures.
- Signs with directions to main points of interest in downtown including parking present throughout downtown area should be reflective and with bigger letters to help visibility at night. These signs should be edited to clearly indicate free public parking.
- Recommend placing a sign that indicates the Marina Square parking lot is full to prevent vehicles from circling around.

### (2) Traffic Routing and Operations

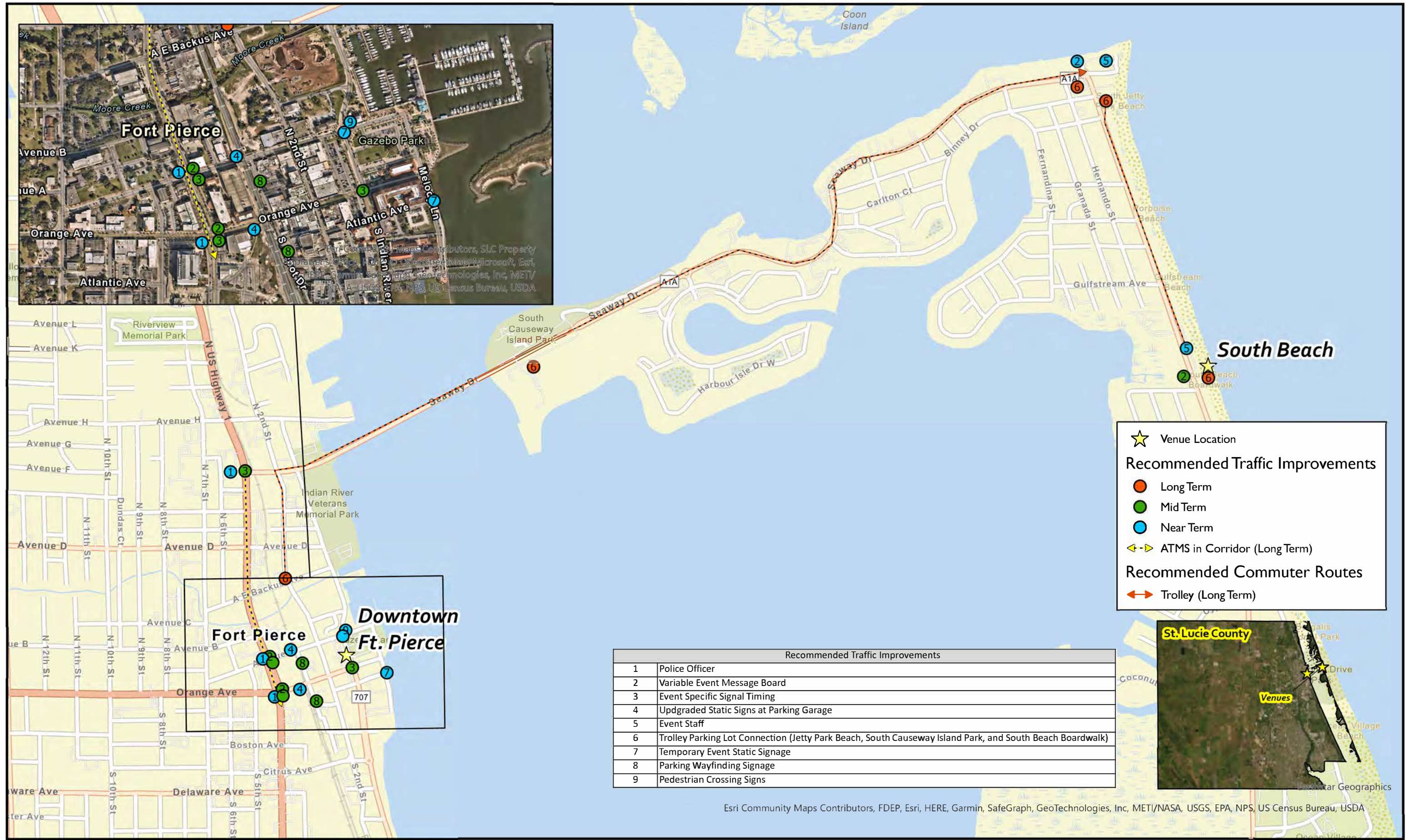
- Recommend placing more Pedestrians Crossing signs on S Indian River Drive approaching crosswalks at Atlantic Avenue.
- Recommend pedestrian improvements for downtown intersections including Leading Pedestrian Intervals (LPIs), Pedestrian Crossing Signs, and more pedestrian level lighting.
- Recommend installing Yield to Pedestrians Crossing signs on all legs of N Indian River Drive and Avenue A.
- Recommend improving ADA non-compliant sidewalk present at Indian River Drive and Orange Avenue.
- Recommend installing sidewalks at the further parking lots (south of A E Backus Avenue between N 2nd Street and N Indian River Drive, AE Backus Museum & Gallery, and west of Indian River Drive between A E Backus Avenue and Avenue D) to connect pedestrians to the existing sidewalk network.
- Recommend more green time outbound for the signal timing at Orange Avenue and US Highway 1 at the end of events.
- Recommend event specific signal timing at the N US Highway 1 and Seaway Drive intersection.
- Recommend a trolley parking lot connection near open area parking south of AE Backus Avenue, at South Causeway Island Park, Jetty Park Beach, and South Causeway Island Park

### (3) Parking Management, Event Staff, Law Enforcement

- Recommend police presence at the Avenue A and N 6<sup>th</sup> Street intersection and the S 5<sup>th</sup> Street and Atlantic Avenue intersection.
- Recommend event staff at the South Beach Boardwalk and South Jetty Park Beach.

**Figure 16 illustrates the recommended improvements and locations.**

# Figure 16 - Downtown Fort Pierce/South Beach





### The Port District/Botanical Gardens/City Center

#### (1) Wayfinding

- Recommend implementing four (4) variable event message boards along SE Westmoreland Boulevard and SE Port St Lucie Boulevard.

#### (2) Traffic Routing and Operations

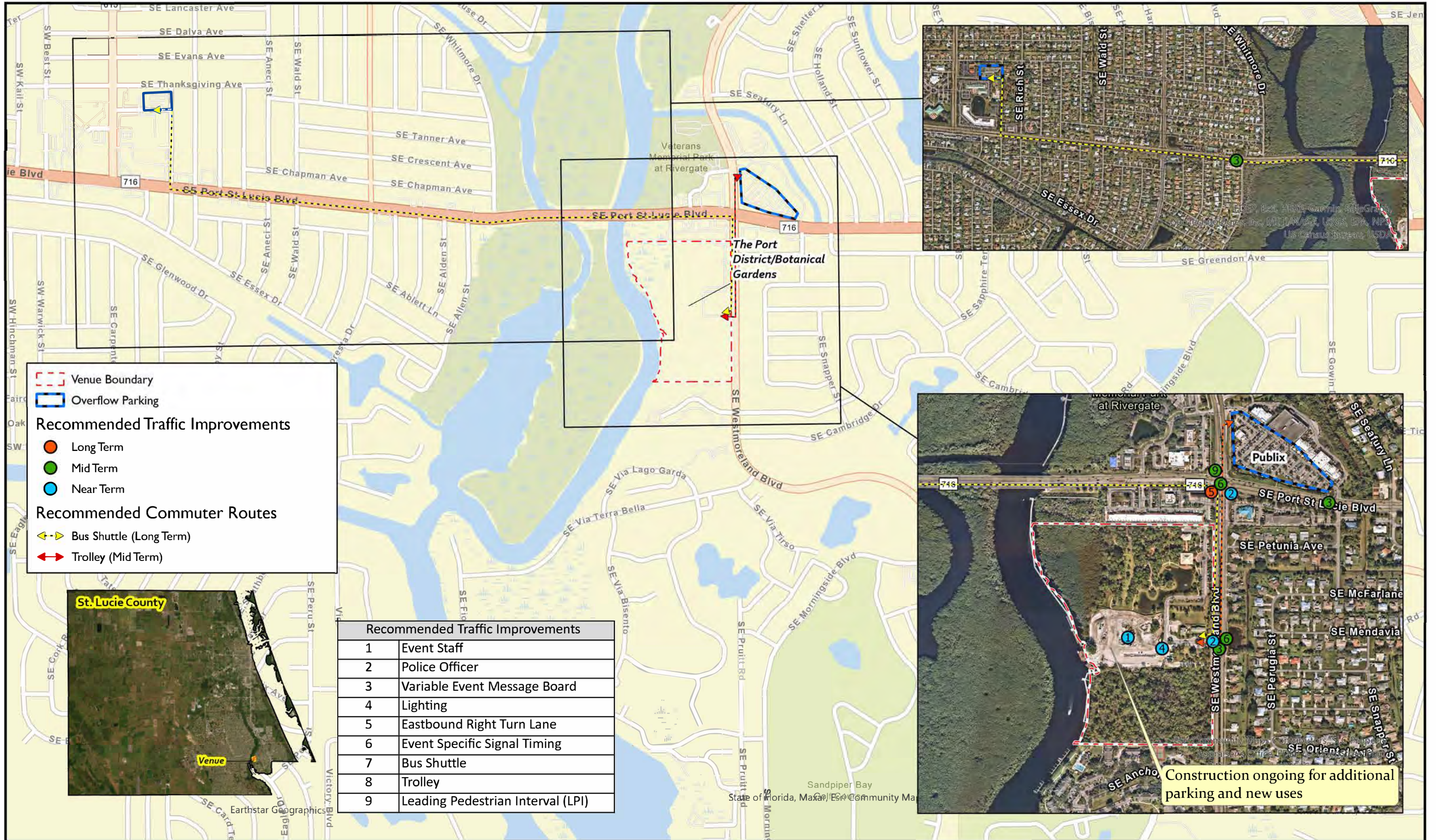
- Recommend implementing pedestrian level lights or portable lights in the parking area on-site to improve safety for pedestrians.
- Recommend changing current Turning Vehicles Yield for Pedestrians Sign on southbound SE Veterans Memorial Parkway at SE Port St Lucie Boulevard to a Turning Vehicles Stop for Pedestrians Sign.
  - Adding a Turning Vehicles Stop for Pedestrians Sign to the mast arm facing southbound traffic at this intersection to increase visibility for the second right-turn lane.
- Recommend programming a Leading Pedestrian Interval (LPI) to the signal timing at SE Veterans Memorial Parkway and SE Port St Lucie Boulevard to increase safety for pedestrians in the west leg crosswalk.
- Recommend implementing an eastbound right turn lane on SE Port St Lucie Boulevard and SE Westmoreland Boulevard.
- Recommend bus shuttle commuter routes to satellite parking.
- Recommend event specific signal timing at intersection of SE Port St Lucie Boulevard and SE Westmoreland Boulevard and entrance of Botanical Gardens.

#### (3) Parking Management, Event Staff, Law Enforcement

- Recommend having event staff help with parking management.
- Recommend having police officer presence at entrance and the SE Port St Lucie Boulevard and SE Westmoreland Boulevard intersection.

**Figure 17 illustrates the recommended improvements and locations.**

# Figure 17- The Port District/Botanical Gardens/City Center

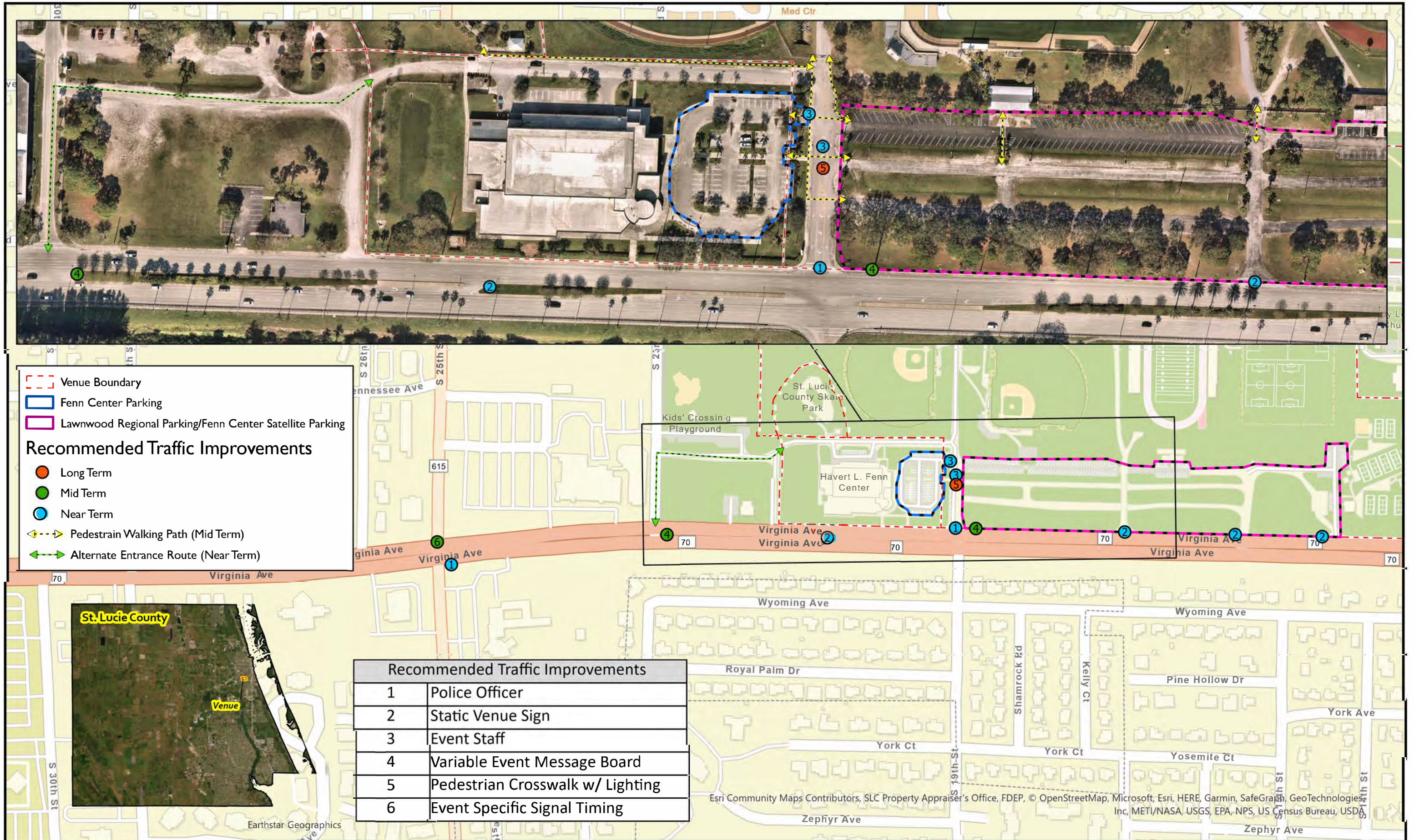


### Fenn Center/Lawnwood Regional Park

- (1) Wayfinding
  - Four (4) static venue signs are recommended to be placed along Virginia Avenue for the venue entrances. Two (2) variable event message boards are recommended to be placed along Virginia Avenue.
- (2) Traffic Routing
  - For the special event observed, all traffic was accommodated. However, for larger events providing an alternative route is recommended (i.e., S 23<sup>rd</sup> Street).
- (3) Traffic Operations
  - Recommend creating a special events signal timing to be implemented at the intersections observed.
  - During special events held at rush hour, it is recommended that there be additional green time programmed for the southbound and westbound left turn at the Virginia Avenue and S 25<sup>th</sup> Street intersection.
  - It is recommended that pedestrian routes be paved to improve accessibility in the parking lot.
  - Recommend adding a pedestrian crosswalk with lighting between the main lot and satellite parking lot.
- (4) Parking Demand/Capacity
  - The main lot was at full capacity for the special event observed, but satellite did not fill up entirely. However, if the satellite parking does fill, the adjacent field to the west can be used for parking. If the field is used as parking for future events, parking improvements and upgrades such as delineation and staff is recommended.
- (5) Parking Management, Event Staff, Law Enforcement
  - Staff to manage parking operations is recommended. Barriers or a sign showing that the parking lot is full would be more efficient for drivers and congestion. However, this should be done with help with staff so that ride-share can still drop off at the venue entrance or a designated drop-off location.
  - It is recommended that police officers be present at the S 19<sup>th</sup> Street and Virginia Avenue intersection for large events to help control traffic.

**Figure 18 illustrates the recommended improvements and locations.**

# Figure 18 - Fenn Center/Lawnwood Regional Park



### St. Lucie County Fairgrounds/Emergency Operations Center

#### (1) Wayfinding

- Two (3) variable message signs advertising event and location are recommended to be placed along SR-70. One (1) variable message board is recommended to be placed along W Midway Road.
- Recommend using a static wayfinding sign that directs vehicles to use both lanes to enter parking to help with drivers thinking there is only one lane to enter.

#### (2) Traffic Routing

- Recommend widening driveway for a third lane along James W Bass Boulevard and internal to site to alleviate congestion backup to W Midway Road.

#### (3) Traffic Operations

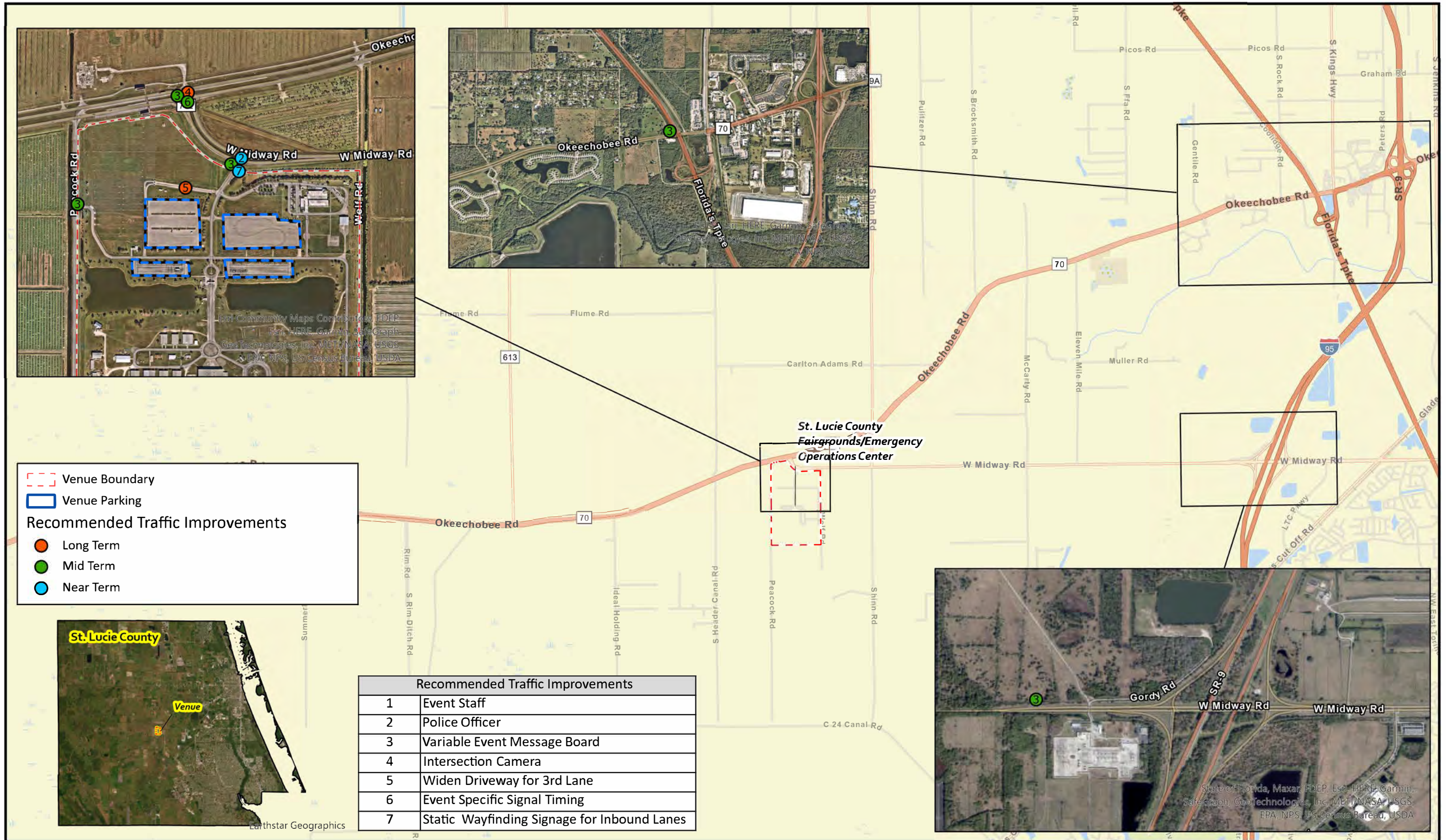
- Due to the minimal eastbound traffic at the SR-70 and W Midway Road intersection, it is recommended to have an event specific signal timing reallocating green time from the eastbound through movement to the westbound left movement.
- Recommend adding an intersection camera to W Midway Road and SR-70 to relay operation back to Traffic Management Center (TMC).

#### (4) Parking Management, Event Staff, Law Enforcement

- Recommend having a police officer present at the W Midway Road and James W Bass Boulevard intersection to control traffic.

**Figure 19 illustrates the recommended improvements and locations.**

# Figure 19 - St. Lucie County Fairgrounds/Emergency Operations Center



## SPECIAL EVENTS IMPROVEMENT PROJECT DEVELOPMENT

The Special Events Needs Analysis was used to determine potential future projects to address current Special Events traffic and parking deficiencies. The projects were grouped into three categories: (1) Services, (2) Technology, and (3) Infrastructure. Draft maps with the approximate locations for each potential improvement were provided for each Special Event location.

### McCarty Preserve – Bonfire Hayride

- (1) Services
  - Pre-planning meetings among parking staff to improve coordination and organization of event
  - Police presence on Range Line Road and park entrance intersection
- (2) Technology
  - Variable message board to be placed at the park entrance
- (3) Infrastructure
  - Intersection lighting at the Glades Cut Off Road and Range Line Road intersection
  - Once Discovery SW Discovery Way gets paved, placing a static sign at the intersection with Range Line Road to indicate McCarty Ranch Preserve is to the left
  - Brown static sign indicating direction to McCarty Ranch Preserve at SW Martin Highway and SW Allapatah Road
  - Sign like the “Event Parking” with the red arrow located near the main parking lot placed on the park driveway near the entrance
  - Moving current static sign on eastbound W Midway Road and Glades Cut off Road further away from the intersection
  - Parking cones mounted at the blind spot on the park driveway

### Clover Park (Mets)

- (1) Services
  - Police officer presence at the St Lucie West Boulevard and NW Peacock Boulevard intersection, NW University Drive and NW Peacock Boulevard intersection, and NW University Drive and Piazza Drive intersection
- (2) Technology
  - Variable message boards at St Lucie West Boulevard and NW Peacock Boulevard, NW University Drive and NW Peacock Boulevard, and St Lucie West Boulevard and NW Country Club Drive
  - Variable message sign on northbound NW Peacock Boulevard directing to both parking entrances
  - Event specific signal timing at the St Lucie West Boulevard and NW Peacock Boulevard intersection
  - Advanced Traffic Management System (ATMS) on St Lucie West Boulevard corridor
- (3) Infrastructure
  - Two lane parking drive aisles internal to parking lot
  - Improved ride share location
  - Pedestrian Crossing Rectangular Rapid Flashing Beacon (RRFB) at the bus stop located on NW University Boulevard between NW Peacock Boulevard and Piazza Drive
  - Pedestrian intersection lighting at the bus stop located on NW University Boulevard between NW Peacock Boulevard and Piazza Drive

- Restricting U-turns for the eastbound left at the St Lucie West Boulevard and NW Peacock Boulevard intersection and allowing a southbound right overlap movement
- Pedestrian sidewalk lighting along east side of NW Peacock Boulevard and both sides of NW University Drive

### Downtown Fort Pierce/South Beach

#### (1) Services

- Police presence at the Avenue A and N 6th Street intersection and the S 5th Street and Atlantic Avenue intersection
- Event staff at South Beach Boardwalk and South Jetty Park Beach

#### (2) Technology

- Variable message boards for street closures around Downtown Ft. Pierce and South Beach
- Leading Pedestrian Intervals (LPis)
- Event specific signal timing at the N US Highway 1 and Seaway Drive intersection and more green time outbound for the signal timing at Orange Avenue and US Highway 1

#### (3) Infrastructure

- Wayfinding signage for parking to guide vehicles to the main parking lot (Fort Pierce Public Parking Garage) or other satellite lots
- For Friday Fest, placing a detour sign further south on Melody Lane
- Temporary event static signs for street closures
- Pedestrians Crossing signs on S Indian River Drive approaching crosswalks at Atlantic Avenue
- Parking wayfinding signage and general signage improvements around various locations downtown
- Pedestrian Crossing Signs and more pedestrian level lighting
- Improving ADA non-compliant sidewalk present at Indian River Drive and Orange Avenue
- Installing sidewalks at the further parking lots (south of A E Backus Avenue between N 2nd Street and N Indian River Drive, AE Backus Museum & Gallery, and west of Indian River Drive between A E Backus Avenue and Avenue D)
- Trolley parking lot connection (Jetty Park Beach, South Causeway Island Park, and South Beach Boardwalk, and open area parking south of AE Backus Avenue)

### The Port District/Botanical Gardens/City Center

#### (1) Services

- Event staff to manage parking operations
- Police officer presence at entrance at the SE Port St Lucie Boulevard and SE Westmoreland Blvd intersection

#### (2) Technology

- Variable event message boards along SE Westmoreland Boulevard and SE Port St Lucie Boulevard
- Programming a Leading Pedestrian Interval (LPI) to the signal timing at SE Veterans Memorial Parkway and SE Port St Lucie Boulevard
- Event specific signal timing at intersection of SE Port St Lucie Boulevard and SE Westmoreland Boulevard and entrance of Botanical Gardens

#### (3) Infrastructure

- Pedestrian level lights or portable lights in the parking area on-site



- Changing current Turning Vehicles Yield for Pedestrians Sign on southbound SE Veterans Memorial Parkway at SE Port St Lucie Boulevard to a Turning Vehicles Stop for Pedestrians Sign and adding a Turning Vehicles Stop for Pedestrians Sign to the mast arm facing southbound traffic at this intersection
- Eastbound right turn lane on SE Port St Lucie Boulevard and SE Westmore Boulevard
- Bus Shuttle Commuter Routes to satellite parking

### Fenn Center/Lawnwood Regional Park

- (1) Services
  - Event staff to manage parking operations
  - Police officer presence at the S 19th Street and Virginia Avenue intersection for large events
- (2) Technology
  - Event specific signal timing on intersections observed
  - Additional green time programmed for the southbound and westbound left turn on the Virginia Avenue and S 25<sup>th</sup> Street intersection during rush hour events
  - Variable event message boards placed along Virginia Avenue
- (3) Infrastructure
  - Static venue signs places along Virginia Avenue for the venue entrances
  - Alternative route for larger events (i.e., S 23<sup>rd</sup> Street)
  - Pedestrian crosswalk with lighting between the main lot and satellite parking lot
  - Paved pedestrian routes in parking lot
  - Adjacent field to the west of satellite parking lot improvements

### St. Lucie County Fairgrounds/Emergency Operations Center

- (1) Services
  - Police officer present at the W Midway Road and James W Bass Boulevard intersection
- (2) Technology
  - Variable message signs advertising event and location placed along SR-70
  - Event specific signal timing reallocating green time from the eastbound through movement to the westbound left movement at the SR-70 and W Midway Road intersection
- (3) Infrastructure
  - Static wayfinding sign that directs vehicles to use both lanes to enter parking
  - Intersection camera on the SR-70 and W Midway Road intersection
  - Widening driveway for a third lane along James W Bass Boulevard and internal to site

## PROJECT PRIORITIZATION

Using the potential improvement projects found in the Special Events Improvement Project Development, a prioritization list was created and grouped in the following groups:

- (1) Near-Term (can be implemented within 1 year)
- (2) Mid-Term (can be implemented in 1-5 years)
- (3) Long-Term (can be implemented in 5+ years)

The Special Events Improvement Project Development and associated maps were revised to identify the potential improvements by priority.

### McCarty Preserve – Bonfire Hayride

- (4) Near-Term
  - Pre-planning meetings among parking staff to improve coordination and organization of event
  - Brown static sign indicating direction to McCarty Ranch Preserve at SW Martin Highway and SW Allapatah Road
  - Sign like the “Event Parking” with the red arrow located near the main parking lot placed on the park driveway near the entrance
  - Moving current static sign on eastbound W Midway Road and Glades Cut off Road further away from the intersection
  - Parking cones mounted at the blind spot on the park driveway
  - Police presence on Range Line Road and park entrance intersection
  - Variable message boards to be placed at the park entrance
- (5) Mid-Term
  - Intersection lighting at the Glades Cut Off Road and Range Line Road intersection
- (6) Long-Term
  - Once Discovery SW Discovery Way gets paved, placing a static sign at the intersection with Range Line Road to indicate McCarty Ranch Preserve is to the left

### Clover Park (Mets)

- (1) Near-Term
  - Police officer presence at the St Lucie West Boulevard and NW Peacock Boulevard intersection, NW University Drive and NW Peacock Boulevard intersection, and NW University Drive and Piazza Drive intersection
  - Two lane parking drive aisles internal to parking lot
  - Improved ride share location
- (2) Mid-Term
  - Variable message boards at St Lucie West Boulevard and NW Peacock Boulevard, NW University Drive and NW Peacock Boulevard, and St Lucie West Boulevard and NW Country Club Drive
  - Variable message sign on northbound NW Peacock Boulevard directing to both parking entrances
  - Pedestrian Crossing Rectangular Rapid Flashing Beacon (RRFB) at the bus stop located on NW University Boulevard between NW Peacock Boulevard and Piazza Drive
  - Pedestrian intersection lighting at the bus stop located on NW University Boulevard between NW Peacock Boulevard and Piazza Drive
  - Restricting U-turns for the eastbound left at the St Lucie West Boulevard and NW Peacock Boulevard intersection and allowing a southbound right overlap movement

- Event specific signal timing at the St Lucie West Boulevard and NW Peacock Boulevard intersection

## (3) Long-Term

- Pedestrian sidewalk lighting along east side of NW Peacock Boulevard and both sides of NW University Drive
- Advanced Traffic Management System (ATMS) on St Lucie West Boulevard corridor

**Downtown Fort Pierce/South Beach**

## (1) Near-Term

- Police presence at the Avenue A and N 6th Street intersection and the S 5th Street and Atlantic Avenue intersection
- Wayfinding signage for parking to guide vehicles to the main parking lot (Fort Pierce Public Parking Garage) or other satellite lots
- For Friday Fest, placing a detour sign further south on Melody Lane
- Temporary event static signs for street closures
- Event staff at South Beach Boardwalk and South Jetty Park Beach
- Pedestrians Crossing signs on S Indian River Drive approaching crosswalks at Atlantic Avenue

## (2) Mid-Term

- Variable message boards for street closures around Downtown Ft. Pierce and South Beach
- Parking wayfinding signage and general signage improvements around various locations downtown
- Pedestrian improvements for downtown intersections including Leading Pedestrian Intervals (LPis), Pedestrian Crossing Signs, and more pedestrian level lighting
- Improving ADA non-compliant sidewalk present at Indian River Drive and Orange Avenue
- Installing sidewalks at the further parking lots (south of A E Backus Avenue between N 2nd Street and N Indian River Drive, AE Backus Museum & Gallery, and west of Indian River Drive between A E Backus Avenue and Avenue D)
- Event specific signal timing at the N US Highway 1 and Seaway Drive intersection and more green time outbound for the signal timing at Orange Avenue and US Highway 1

## (2) Long-Term

- Trolley parking lot connection (Jetty Park Beach, South Causeway Island Park, and South Beach Boardwalk, and open area parking south of AE Backus Avenue)

**The Port District/Botanical Gardens/City Center**

## (1) Near-Term

- Event staff to manage parking operations
- Police officer presence at entrance at the SE Port St Lucie Boulevard and SE Westmoreland Blvd intersection
- Pedestrian level lights or portable lights in the parking area on-site
- Changing current Turning Vehicles Yield for Pedestrians Sign on southbound SE Veterans Memorial Parkway at SE Port St Lucie Boulevard to a Turning Vehicles Stop for Pedestrians Sign and adding a Turning Vehicles Stop for Pedestrians Sign to the mast arm facing southbound traffic at this intersection

## (2) Mid-Term

- Variable event message boards along SE Westmoreland Boulevard and SE Port St Lucie Boulevard

- Programming a Leading Pedestrian Interval (LPI) to the signal timing at SE Veterans Memorial Parkway and SE Port St Lucie Boulevard
  - Event specific signal timing at intersection of SE Port St Lucie Boulevard and SE Westmoreland Boulevard and entrance of Botanical Gardens
- (3) Long-Term
- Eastbound right turn lane on SE Port St Lucie Boulevard and SE Westmore Boulevard
  - Bus Shuttle Commuter Routes to satellite parking

### Fenn Center/Lawnwood Regional Park

- (1) Near-Term
- Event staff to manage parking operations
  - Police officer presence at the S 19<sup>th</sup> Street and Virginia Avenue intersection for large events
  - Static venue signs placed along Virginia Avenue for the venue entrances
  - Alternative route for larger events (i.e., S 23<sup>rd</sup> Street)
  - Pedestrian crosswalk with lighting between the main lot and satellite parking lot
  - Paved pedestrian routes in parking lot
  - Event specific signal timing on intersections observed
  - Additional green time programmed for the southbound and westbound left turn on the Virginia Avenue and S 25<sup>th</sup> Street intersection during rush hour events
- (2) Mid-Term
- Variable event message boards placed along Virginia Avenue
- (3) Long-Term
- Adjacent field to the west of satellite parking lot improvements

### St. Lucie County Fairgrounds/Emergency Operations Center

- (1) Near-Term
- Police officer present at the W Midway Road and James W Bass Boulevard intersection
  - Static wayfinding sign that directs vehicles to use both lanes to enter parking
- (2) Mid-Term
- Variable message signs advertising event and location placed along SR-70
  - Event specific signal timing reallocating green time from the eastbound through movement to the westbound left movement at the SR-70 and W Midway Road intersection
- (3) Long-Term
- Intersection camera on the SR-70 and W Midway Road intersection
  - Widening driveway for a third lane along James W Bass Boulevard and internal to site

## FUNDING SOURCE IDENTIFICATION

Applicable State and Federal grant opportunities were researched to determine potential funding mechanisms for the proposed improvements. The funding opportunities are the following:

Grant Name	Agency	Funding Max	Required Match	Date Open	Date Due	Priorities	Types of Projects
<a href="#">Auto Club Group Foundation</a>	American Automobile Association (AAA)	Not Listed	Not Listed	Rolling	Rolling	<p>Traffic Safety                      Traffic safety programs, research and initiatives that make our roadways safer for all users.</p> <p>Community Service                      Initiatives that focus on the priority areas of Traffic Safety, Education, and Tourism.</p>	The Auto Club Group Foundation is dedicated to supporting <b>traffic safety programs</b> , research and initiatives that make our roadways safer for all users.
<a href="#">Community Facilities Florida</a>	United States Department of Agriculture	Not Listed	15% - 75%	Rolling	Rolling	To purchase, construct, and / or improve essential community facilities, purchase equipment and pay related project expenses.	<p>Public facilities such as town halls, courthouses, airport hangars or <b>street improvements</b></p> <p>Community support services such as child care centers, community centers, <b>fairgrounds</b> or transitional housing</p> <p>Public safety services such as fire departments, police stations, prisons, police vehicles, fire trucks, public works vehicles or <b>equipment</b></p>
<a href="#">Gary Sinise Foundation First Responder Grant Program</a>	Gary Sinise Foundation	\$100,000	N/A	Open	Rolling	Emergency relief, training, and essential equipment for First Responders. The Gary Sinise Foundation prioritizes volunteer, low, and underfunded departments. Grant requests are limited to equipment and training only. Building costs, operating costs, and weapons costs are not allowed. Applicants are limited to 1 grant every 12 months.	Training grants, mental health treatment, <b>equipment</b> , scuba gear, community programming funding, retreat sponsorships, community meal funding, turnout gear sets, fire fighting tools, radios, program sponsorships.

Grant Name	Agency	Funding Max	Required Match	Date Open	Date Due	Priorities	Types of Projects
<a href="#">Grid Resilience Grants</a> (Topic Area 1)	Department of Energy	Amount eligible entity has spent on resilience investments in the last 3 years or \$100M, whichever is lower.	50%	11/18/22  Next funding cycle opens Q1 2024.	12/16/22 Concept Papers  04/06/23 Full application	(1) Transform community, regional, interregional, and national resilience, including in consideration of future shifts in generation and load;  (2) Catalyze and leverage private sector and non-federal public capital for impactful technology and infrastructure deployment;  (3) Advance community benefits.	Undergrounding of electrical equipment, <b>hardening of power lines</b> , facilities, substations, of other systems, weatherization technologies and equipment, monitoring and control technologies, including microgrids and battery-storage sub-components, <b>utility pole management</b> , Adaptive Protection Technologies.  The following activities are <b>NOT</b> eligible for funding: construction of new electric generating facility, large-scale battery storage facility that is not used for enhancing system adaptive capacity during disruptive events, or cybersecurity.
<a href="#">Hazard Mitigation Grant Program</a>	Federal Emergency Management Agency (FEMA) via Florida Division of Emergency Management (FDEM)	Varies	25%	Following Presidentially Declared Disaster	Varies	Funds hazard mitigation plans and rebuild in a way that reduces, or mitigates, future disaster losses in their communities. When requested by an authorized representative, this grant funding is available after a presidentially declared disaster	<b>Infrastructure retrofit (measures to reduce risk to existing utility systems, roads, and bridges)</b> , Drainage system upgrades and improvements, Structural elevation, Land contour alteration, Wind breaks, Flood wall installation or improvement, Elevation of roads, Flood proofing, Acquisition or relocation  <b>Ineligible:</b> Projects that address, without an increase in the level of protection, the operation, deferred or future maintenance, rehabilitation, restoration, or replacement of existing structures, facilities, or infrastructure
<a href="#">Law Enforcement Officer and Fire/EMS Safety Grants</a>	Guardian Angel Devices	Not listed	Not listed	Open	Rolling	To save lives with their high-tech wearable safety lights.	<b>Wearable safety lights</b> - law enforcement, fire and rescue, construction, roadside, etc.

Grant Name	Agency	Funding Max	Required Match	Date Open	Date Due	Priorities	Types of Projects
<a href="#">National Police Association Grants</a>	National Police Association	\$1,000 per year	N/A	Open	Rolling	The NPA provides grants to law enforcement reserve divisions, explorers, cadets, chaplains, and other programs established to help citizens help police departments accomplish their goals. The NPA will also consider grants to departments for equipment and training.	Community services, K9 ballistic vests, support for cadet programming, <b>officer safety equipment</b> , support for D.A.R.E. programming,
<a href="#">PENN Entertainment Foundation</a>	Penn Entertainment	Not Listed	Not Listed	Open	04/01/23	Address the broad needs of the residents of the communities in which PEF operates or has a business interest.	Foundation grants generally fall in the following categories:  Community Development: Projects and programs related to <b>community infrastructure improvements, public safety</b> , economic development, housing, historic preservation, citizen involvement, civic leadership training, and other general community activities.
<b>Ronald C. Hart Family Foundation Grants</b>	Ronald C. Hart Family Foundation P.O. Box 611327 Rosemary Beach, FL 32461	\$10,000	\$0	Rolling	Rolling	Improving public safety and community health.	Enhancement and support of public safety, including crime prevention, <b>law enforcement, and police agencies</b>

Grant Name	Agency	Funding Max	Required Match	Date Open	Date Due	Priorities	Types of Projects
<a href="#">Safety Grant Program (Safety Equipment for Law Enforcement Agencies)</a>	Spirit of Blue Foundation	Up to \$20,000	None listed	Must fill out a grant consideration form	Not listed. Likely 6/23	Priorities: Protecting Life - passive protection tools to defend officers, deputies, or agents. Projecting Force - the right tools and equipment to respond to critical threats with the appropriate speed and strength. Creating Advantage - access to better equipment, better information, and the ability to coordinate efforts and solutions better than adversaries.	K9 ballistic vest, K9 heat alarm, <b>Guardian Angel personal lighting devices</b> , concealable vest carriers, C-A-T tourniquets, holographic weapon sites, night vision binoculars, tactical training classes, ballistic shields, <b>Fox Fury LED lights</b> , officer ballistic vests, cellular phones.
<a href="#">Shared Asset Program</a>	Florida Sheriffs Association <a href="https://www.flsheriffs.org/law-enforcement-programs/fsa-grant-program">https://www.flsheriffs.org/law-enforcement-programs/fsa-grant-program</a>	\$85,500 Average	\$0	Rolling	Rolling	To provide effective and timely support, training, and information exchange for Florida's sheriffs and to foster effective law enforcement, crime prevention and apprehension of criminals and protection of life and property of the citizens of Florida.	The program provides funds for assets that can be shared regionally, such as boats, utility terrain vehicles, drones, and speed trailers. Note that dynamic message signs may be an option.



## **A. Meeting Notes**



## AGENDA ITEM SUMMARY

Board/Committee:	Technical Advisory Committee (TAC)
Meeting Date:	March 21, 2023
Item Number:	6h
Item Title:	Transportation Alternatives Program (TAP) 2023 Grant Application
Item Origination:	2023 TAP Grant Cycle
UPWP Reference:	Task 3.3 - Transportation Improvement Program
Requested Action:	Recommend endorsement of the TAP grant application, recommend endorsement with conditions, or do not recommend endorsement.
Staff Recommendation:	Based on the inclusion of the project in the 2022/23 TA Priority Project List, it is recommended that the Peacock Trail Project be recommended for endorsement by the TPO Board for the allocation of the TAP funding from the 2023 grant cycle.

### Attachments

- Staff Report
- Peacock Trail Project Application Excerpts



## MEMORANDUM

TO: Technical Advisory Committee (TAC)

FROM: Peter Buchwald  
Executive Director

DATE: March 15, 2023

SUBJECT: Transportation Alternatives Program (TAP)  
2023 Grant Application

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### BACKGROUND

The TAP provides funding to the St. Lucie TPO for the following:

- Construction of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized modes;
- Construction of infrastructure-related projects and systems that will provide safe routes for non-drivers, including children, older adults, and individuals with disabilities, to access daily needs;
- Conversion of abandoned railroad corridors into trails for pedestrians, bicyclists, or other non-motorized modes;
- Construction of turnouts, overlooks, and viewing areas;
- Community improvement activities including the control/removal of outdoor advertising, preservation/rehabilitation of historic transportation facilities, vegetation management practices in rights-of-way, and archaeological activities relating to impacts from transportation projects;
- Environmental mitigation activities including pollution prevention and abatement activities related to highway construction or runoff and activities that reduce vehicle-caused wildlife mortality; and,
- Recreational Trails and Safe Routes to School Programs.

The funding available for the 2023 TAP grant cycle for the St. Lucie TPO is at least \$650,000 that will be programmed by the Florida Department of Transportation (FDOT) District 4 in Fiscal Year 2026/27. The TPO Advisory Committees recommend to the TPO Board the endorsement/prioritization of the TAP grant applications received during the grant cycle for submittal to FDOT. Candidate TAP Projects originate from the 2022/23 TA Priority Project List.

### ANALYSIS

A TAP grant application (excerpts attached) was received for the 2023 TAP grant cycle from the City of Port St. Lucie for the Peacock Trail Project which is included in the 2022/23 TA Priority Project List. The project consists of the construction of a 12 to 14-foot wide, multi-surface, shared-use path from SW Hayworth Avenue to SW Dreyfuss Boulevard as depicted in the attached project location map. The trail will be approximately one mile in length and connect the Jobs Express Terminal to O.L. Peacock Sr. Park. The project is estimated to cost \$1,674,174, and the applicant is requesting a total of \$1,619,174 of TAP grant funding.

### RECOMMENDATION

Based on the inclusion of the project in the 2022/23 TA Priority Project List, it is recommended that the Peacock Trail Project be recommended for endorsement by the TPO Board for the allocation of the TAP funding from the 2023 grant cycle.



		<p>Peacock Trail Gatlin Blvd. to Dreyfuss Blvd.</p>	<p>March 2023</p>
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# Transportation Alternatives Program (TAP) 2023

## FUNDING APPLICATION

Submittal Date:

### APPLICANT INFORMATION

<b>Agency/Organization Name:</b>			
<b>Agency Contact Name:</b>		<b>Title:</b>	
<b>Mailing Address:</b>		<b>City:</b>	<b>State: FL Zip Code:</b>
<b>County:</b>		<b>MPO/TPO (if applicable):</b>	
<b>Telephone:</b>		<b>Email Address:</b>	

#### CERTIFICATION OF PROJECT SPONSOR/IMPLEMENTING AGENCY SUPPORT:

Certification of project sponsor/implementing agency support is attached.

Yes (Required)

**PROJECT TYPE:**  Infrastructure  Non-infrastructure

*FDOT requires locally administered infrastructure projects be implemented by a LAP certified agency; Non-infrastructure projects do not require LAP certification. If the project applicant intends to administer the project but is not LAP certified at the time of application submittal, they may seek project-specific certification prior to project authorization if their application is selected, or they may partner with a LAP certified agency or with FDOT to serve as the project sponsor and implementing agency. Non-profit organizations are not eligible for LAP certification.*

#### FOR INFRASTRUCTURE PROJECTS ONLY - APPLICANT'S LOCAL AGENCY PROGRAM (LAP) CERTIFICATION STATUS

- Currently fully LAP Certified / Year of Certification:
- Not LAP Certified but will seek project-specific certification
- Not LAP Certified but project will be administered by the FDOT District
- Not LAP Certified but have secured a LAP Sponsor/Implementing Agency as identified below:

<b>LAP Sponsor/Implementing Agency Name:</b>			
<b>LAP Sponsor/Implementing Agency Contact Name:</b>		<b>Title:</b>	
<b>Mailing Address:</b>		<b>City:</b>	<b>State: FL Zip Code:</b>
<b>Telephone:</b>		<b>Email Address:</b>	

**PROJECT INFORMATION**

**PROJECT NAME/TITLE:**

**ELIGIBLE TRANSPORTATION ALTERNATIVES PROJECT CATEGORY:**

Please check the one Transportation Alternatives eligible project category that the proposed project will address. Checking more than one category does not ensure or increase eligibility. Additional guidance on eligible project activities is included in Appendix B of the [FDOT TA Program Guidance](#).

1.  Construction, planning and design of on and off-road facilities for bicyclists, pedestrians, and other forms of nonmotorized transportation (pedestrian and bicycle facilities)
2.  Construction, planning and design of infrastructure-related projects/systems to provide safe routes for non-drivers including children, older adults, individuals with disabilities (safe routes for non-drivers)
3.  Conversion and use of abandoned railroad corridors for non-motorized use
4.  Construction of turnouts, overlooks, and viewing areas
5.  Inventory, control or removal of outdoor advertising
6.  Historic preservation and rehabilitation of historic transportation facilities
7.  Vegetation management practices in transportation rights of way
8.  Archaeological activities related to impacts from transportation projects
9.  Environmental mitigation activities
10.  Safe Routes to School

**\*NOTE:** Safe Routes to School (SRTS) funding under Transportation Alternatives is separate from the FDOT SRTS Program; however, if FDOT SRTS Program funds are to be used on any phase of the project then the project will need to comply with the Florida SRTS program requirements. For more information, visit <https://www.fdot.gov/safety/2A-Programs/Safe-Routes.shtm>.

**PROJECT LOCATION:**

<b>Roadway name:*</b>		
<input type="checkbox"/> <b>On-State System Road</b> <small>(State Roadway)</small>	<input type="checkbox"/> <b>Off-State System Road</b> <small>(Local Roadway)</small>	<b>Roadway number:</b> <small>(i.e. US, SR, CR, etc., if applicable)</small>

**\*NOTE:** For off-road/trail projects please indicate adjacent roadway

**PROJECT LIMITS:**

If project has various locations (e.g. city-wide), include attachments specifying each termini and project length.

<b>South or West Termini:</b> <small>Street Name/Mile Post/Other</small>	<b>North or East Termini:</b> <small>Street Name/Mile Post/Other</small>
<b>Project Length (in miles):</b>	
<b>Attachment included?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>A location map with aerial view is attached to this application.</b> <input type="checkbox"/> Yes (Required) <i>Label important features, roadways, etc. to clearly locate and show the boundaries of the project.</i>	

**PROJECT DESCRIPTION:**

**Brief Description (1,000 character limit)** (e.g. *planning, design and construction of a sidewalk along Sample Road*)

*Detailed Scope of Work:*

A detailed scope of work is attached.

Yes (Required)

*Clearly describe the existing conditions and the proposed project in detail, including specifics on the major items of work (e.g. width of sidewalks or trails, materials to be used, etc.), the purpose and need for this project, and the desired improvements.*

Conceptual or design plans are attached.

Yes  No

Typical Section drawings are attached.

Yes  No

Other attachment (e.g. studies, documentation to support the project).

Yes  No

If yes, please describe (250 character limit):

**PUBLIC INVOLVEMENT(500 character limit for each question below):**

**Has the applicant received input from stakeholders?** Briefly explain:

Yes  No

**Have public information or community meetings been held?**

Yes  No

If yes, please provide a brief description and attach supporting documentation:

**Describe public and private support for the project** (e.g. *petitions, endorsements, resolutions, letters of support*):



Is the project within limits of wetlands, contamination/hazardous waste areas or endangered/threatened species?

Yes  No

If Yes, specify and provide documentation:

Is environmental permitting required?

Yes  No

If Yes, specify and provide documentation:

Provide any additional project specific information that should be considered:

**PROJECT IMPLEMENTATION**

Please indicate the project phases included in this funding request:

- Planning activities
- Project Development and Environment Study (PD&E)
- Preliminary Engineering/Final Design
- Right-of-Way (ROW)
- Construction
- Construction Engineering and Inspection activities (CEI)

Please indicate who will execute the project phases identified for this project:\*

Planning	PD&E	Preliminary Engineering/ Final Design	ROW	Construction	CEI
<input type="checkbox"/> Implementing agency staff	N/A	<input type="checkbox"/> Implementing agency staff	N/A	<input type="checkbox"/> Implementing agency staff	<input type="checkbox"/> Implementing agency staff
<input type="checkbox"/> Consultant	<input type="checkbox"/> Consultant	<input type="checkbox"/> Consultant	<input type="checkbox"/> Consultant	<input type="checkbox"/> Consultant	<input type="checkbox"/> Consultant
<input type="checkbox"/> FDOT	<input type="checkbox"/> FDOT	<input type="checkbox"/> FDOT	<input type="checkbox"/> FDOT	<input type="checkbox"/> FDOT	<input type="checkbox"/> FDOT
<input type="checkbox"/> Not applicable	<input type="checkbox"/> Not applicable	<input type="checkbox"/> Not applicable	<input type="checkbox"/> Not applicable	<input type="checkbox"/> Not applicable	<input type="checkbox"/> Not applicable

\*NOTE: Local agencies are not eligible to be certified in PD&E and/or ROW (Refer to FDOT LAP Manual Chapters 11 and 12).

Is this project related to other FDOT funded phases that are complete, underway, or in FDOT's 5-year Work Program?

Yes  No

If Yes, please describe. If previous phases of this project were constructed as LAP projects, please provide the associated FDOT Project Number (i.e. FPID/FMN numbers) (500 character limit):

Is there a proposed maintenance plan for when the project is complete?  Yes  No

If yes, please provide a brief description and attach supporting documentation as appropriate (500 character limit):

## PROJECT RIGHT-OF-WAY / EASEMENT REQUIREMENTS

Is right-of-way acquisition proposed?  Yes  No

If yes, describe existing right-of-way (ROW) ownerships along the project, including when the ROW was obtained and how ownership is documented (i.e., plats, deeds, prescriptions, easements) (500 character limit). Attach ROW documentation as appropriate.

Also describe proposed acquisition including timeline, expected fund source, limitations on fund use or availability, and who will acquire and retain ownership of proposed right-of-way (500 character limit):

Will temporary construction easements be required?  Yes  No

If Yes, please describe (500 character limit):

**PROJECT COST ESTIMATE AND FUNDING REQUEST**

**ESTIMATED PROJECT COST:**

A detailed project cost estimate is attached.

Yes (Required)

Provide a summary of the estimated cost for the work being proposed, indicating local fund allocation as appropriate.

Project Phase	TA funds	Local funds	Total Cost
Planning Activities	\$	\$	\$
Project Development & Environmental Study (PD&E)	\$	\$	\$
Design Costs/Plan Preparation	\$	\$	\$
Environmental Assessment (s) associated with the design phase	\$	\$	\$
Permits associated with the design phase (including application fees, mitigation and permit acquisition work)	\$	\$	\$
Right-of-Way	\$	\$	\$
Construction	\$	\$	\$
Construction Engineering and Inspection Activities (CEI)	\$	\$	\$
Other costs* (please describe)	\$	\$	\$
<b>TOTAL ESTIMATED PROJECT COST</b>	\$	\$	\$
<b>PERCENT OF TOTAL PROJECT COST</b>			<b>100%</b>

\*FDOT does not allow programming for contingency costs. Any contingency costs should be accounted for using local funds.





FDOT IN-HOUSE DESIGN SUPPORT (Phase 31) (REQUIRED)	1	LS	\$5,000	\$ 5,000.00	FDOT In-House Support must be included as an FHWA Participating Item; Local Agencies have the option to request funding for Design and CEI, percentages are at the discretion of the Local Agency.				
ADDITIONAL FDOT IN-HOUSE DESIGN SUPPORT FOR CRITICAL PROJECTS	0	LS	\$2,000	\$ -					
FDOT IN-HOUSE CONSTRUCTION SUPPORT (Phase 61) (REQUIRED)	1	LS	\$5,000	\$ 5,000.00					
ADDITIONAL FDOT IN-HOUSE CONSTRUCTION SUPPORT FOR CRITICAL PROJECTS	0	LS	\$2,000	\$ -					
PRELIMINARY ENGINEERING (DESIGN) (Phase 38) (OPTIONAL)**	1	LS		\$ -					
CONTINGENCY (Phase 58) (REQUIRED)	Contingency is not a FHWA Participating Item					1	LS		\$ -
TRANSIT RELATED PROJECTS (10% FTA ADMINISTRATIVE FEE)	Administrative Fee is not a FHWA Participating Item					0	LS	10%	\$ -
CONSTRUCTION ENGINEERING & INSPECTION ACTIVITIES (CEI) (Phase 68) (OPTIONAL)***	1	LS		\$ -		1	LS		\$ -
FDOT OVERSIGHT CEI (3% OF TOTAL CONSTRUCTION COST ESTIMATE) (Phase 62) (REQUIRED)	1	LS	3%	\$ 48,471.10		FDOT In-House Support must be included as an FHWA Participating Item			
				\$ 1,619,174.34					\$ 55,000.00

\*Projects on the State Highway System and Critical Projects **SHALL** utilize FDOT pay items numbers and descriptions.  
 \*\*Estimated cost for preparation of the Construction Plans, Specs, and estimate package.  
 \*\*\*Estimated cost for Construction Engineering and Inspection; Must provide an estimate if seeking reimbursement for Professional Services.

**Non-participating items:**  
 - Mowing & Litter removal  
 - Engineering work; Optional services; Survey; Video inspection; MOT plans preparation; As-builts/record drawings  
 - Utility work -- this includes, but is not limited to: valve adjustments, utility relocations, FPL power pole relocations, AT&T directional bore, etc...  
 - Contingency  
 Other elements may be non-participating; the ones listed above are the commonly used pay items that are non-participating.

**DESIGN AND CEI FEE GUIDE:**

	Recommended Percentage (%) of Construction Cost Estimate
DESIGN (Phase 38)	15-30%
CONSTRUCTION ENGINEERING & INSPECTION ACTIVITIES (CEI) (Phase 68)	15-30%

**PLEASE NOTE:** THE FUNDING REQUEST FOR PROFESSIONAL SERVICES IS OPTIONAL. THE PERCENTAGES ABOVE IS ONLY A GUIDE. LOCAL AGENCIES ARE RESPONSIBLE FOR DETERMINING THE APPROPRIATE PERCENTAGE OF CONSTRUCTION FOR DESIGN AND CEI ESTIMATES AS WELL AS CONTINGENCY. COST MAY CHANGE AFTER PROJECT AWARD DUE TO DESIGN AND CONSTRUCTION VARIABLES. REVIEW OF FDOT FUNDING ALLOCATION WILL BE EVALUATED OVER THE LIFE OF THE PROJECT. THE LOCAL AGENCY WILL BE RESPONSIBLE FOR ALL INELIGIBLE/NON-PARTICIPATING COST AND COSTS IN EXCESS OF THE FDOT FUNDING ALLOCATION.

If you have any questions regarding an eligible or non-participating item, please contact District Four Local Program Unit.

Prepared by: Clyde Coffy PE Number: 92159  
 Name: \_\_\_\_\_ Signature: [Signature] Date: 3/9/23

Reviewed by: \_\_\_\_\_ PE Number: 74638  
 Name: Diana Spriggs Signature: [Signature] Date: 3/9/23

Approved by (Agency Responsible Charge): \_\_\_\_\_



## AGENDA ITEM SUMMARY

Board/Committee:	Technical Advisory Committee (TAC)
Meeting Date:	March 21, 2023
Item Number:	6i
Item Title:	Updates to the Transportation Alternatives Program (TAP) Project Prioritization Methodology and Standardized Traffic Impact Studies (TIS) Methodology and Procedures
Item Origination:	TAC
UPWP Reference:	Task 3.5 - Bicycle-Pedestrian/Complete Streets Planning Task 4.2 – Intergovernmental Planning and Coordination
Requested Action:	Recommend adoption of the updates and/or develop an update process, recommend adoption and/or develop an update process with conditions, or do not recommend adoption or develop an update process.
Staff Recommendation:	It is recommended that the TAP Project Prioritization Methodology be reviewed and revisions be recommended based on the review and that a process be developed for reviewing the comments provided to date regarding the TIS Methodology and Procedures and for updating it.

### Attachments

- Staff Report
- TAP Project Prioritization Methodology with Suggested Revisions
- Kittelson & Associates Summary Memorandum
- TIS Methodology and Procedures with Kittelson & Associates Comments



Coco Vista Centre  
 466 SW Port St. Lucie Blvd, Suite 111  
 Port St. Lucie, Florida 34953  
 772-462-1593 www.stlucietpo.org

## MEMORANDUM

TO: Technical Advisory Committee (TAC)

FROM: Peter Buchwald  
 Executive Director

DATE: March 15, 2023

SUBJECT: Updates to the Transportation Alternatives Program (TAP) Project Prioritization Methodology and Standardized Traffic Impact Studies (TIS) Methodology and Procedures

### BACKGROUND

The Transportation Alternatives Program (TAP) Project Prioritization Methodology was developed in collaboration with the St. Lucie Transportation Planning Organization (TPO) Advisory Committees and was subsequently adopted by the TPO Board in June 2011. The TAP Project Prioritization Methodology has been used successfully by the TPO since its adoption to transparently rank and prioritize Transportation Alternatives (TA) Projects for the TPO's List of Priority Projects (LOPP).

The Standardized Traffic Impact Studies (TIS) Methodology and Procedures were initially developed by the TPO in January 2014 and informally updated in June 2016. The TIS Methodology and Procedures are used in varying degrees by the local agencies as part of their development review processes to ensure at least a minimum level of reliability in the TIS conducted by applicants for proposed developments within the jurisdictions of the local agencies.

At previous meetings of the Technical Advisory Committee (TAC), including at the meeting in September 2022, consensus was obtained by the TAC to request that the TAP Project Prioritization Methodology and the TIS Methodology and Procedures be reviewed and updated as appropriate based on the reviews. Therefore, the reviewing and updating the TAP Project Prioritization Methodology and the TIS Methodology and Procedures was initiated at the subsequent TAC Meeting in January 2023.

At the meeting in January 2023, the TAC reviewed revisions to the TAP Project Prioritization Methodology proposed by the TPO staff and consensus was obtained to postpone action on the proposed revisions until the next TAC meeting to provide additional time for review by the TAC members. The TAC also obtained consensus at the meeting to request support from the TPO Board, which may include the use of one of the TPO's consultants, in updating the Standardized TIS Methodology and Procedures.

The TAC's request for support in updating the Standardized TIS Methodology and Procedures was presented to the TPO Board at its meeting on February 1st as part of a discussion of potential new Unified Planning Work Program (UPWP) projects. However, the Board moved to amend the UPWP to include Fort Pierce Passenger Rail Station Planning and an Airport Connector Corridor Alignment Study.

Subsequent to the TPO Board Meeting, the City of Port St. Lucie engaged Kittelson & Associates (KA) to review the Standardized TIS Methodology and Procedures and suggest revisions for an update which is most appreciated.

## ANALYSIS

The adopted TAP Project Prioritization Methodology is attached again with suggested revisions by the TPO Staff indicated by strikethroughs and underlines. The TAP revisions are based on the TPO Staff experiences of ranking TAP projects since the initial adoption of the TAP Project Prioritization Methodology.

The suggested revisions include the broadening of the Project Need/Function criteria to include the implementation of the recommendations of any objective, safety-related study such as a Road Safety Audit or Corridor Study and the location of a project within an Environmental Justice (EJ) neighborhood. The suggested revisions also include the clarification of the Project Details criteria with regard to whether a project addresses a roadway segment with a history of pedestrian and bicycle crashes and whether local/private funds have already been raised/appropriated and dedicated to the project.

A summary memorandum from KA and the TIS Methodology and Procedures with the revisions suggested by KA are attached. The revisions appear to be comprehensive and sharpen the direction to applicants and reviewing agencies, clarify gray areas that may be interpreted in multiple ways, define further the thresholds that the TIS should incorporate, and emphasize the evaluation of the multimodal network.



## RECOMMENDATION

It is recommended that the TAP Project Prioritization Methodology be reviewed and revisions be recommended based on the review and that a process be developed for reviewing the comments provided to date regarding the TIS Methodology and Procedures and for updating it.



## MEMORANDUM

---

Date: March 10, 2023 Project #: 28904  
 To: Joseph DeFronzo, PE, RSP1  
 Traffic Operations Division Director, Public Works Department  
 City of Port St. Lucie  
 121 SW Port St. Lucie Boulevard  
 Port St. Lucie, Florida 34984  
 CC: Mary Savage-Dunham (City of PSL), Diana Spriggs (City of PSL), Heath Stocton (City of PSL), Colt Schwerdt (City of PSL), Jessica Keller (Kittelison)  
 From: Kok Wan Mah, PE  
 Project: SLTPO TIS Methodology and Procedures Document Review  
 Subject: Review Comments

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### Introduction

The City of Port St. Lucie has retained Kittelison and Associates to provide a review and recommendations for updates to the St. Lucie County TPO *Standardized Traffic Impact Studies (TIS) Methodology and Procedures* dated January 2014, updated June 2016. The document provides guidance and requirements for conducting a traffic impact study within St. Lucie County, including the incorporated cities.

The purpose of the review is to update any outdated requirements, tighten the language of requirements to provide for clear and concise direction to both Applicants and review agencies, provide greater emphasis to accommodate alternative modes of travel, and ensure that the requirements satisfy the need by the review agencies to manage growth properly in the County.

### Review Comments – PDF Markup

In order to provide easier context for proposed changes, a PDF copy of the *Standardized Traffic Impact Studies (TIS) Methodology and Procedures* is provided with this memo that includes comments and proposed revisions in line with the text of the document. An explanation for the comments is included to provide rationale for the changes included therein.

### Additional Definitions

Appendix A of the document includes a number of terms and definitions related to the conduct of a traffic impact study. It is recommended that the following additional terms and definitions be added:

- Average Annual Daily Traffic (AADT) refers to a basic traffic parameter for determining the level of service for motorized vehicles along a roadway. It is the total volume passing a point or segment of a roadway facility, in both directions, for one year, divided by the number of days in the year.

- Arterial Road refers to a classification of roadway providing service which is relatively continuous and of relatively high traffic volume, long trip length, and high operating speed.
- Capacity refers to the availability of a transportation facility to accommodate users, expressed in an appropriate unit of measure, such as average daily trip ends of two-way peak hour trips. It means the maximum rate of flow at which persons or vehicles can be reasonably expected to traverse a point or uniform segment of a lane or roadway during a specified time period under prevailing roadway, traffic, and control conditions.
- Collector Road refers to a roadway providing service which is of relatively moderate traffic volume, moderate trip length, and moderate operating speed. Collector roads collect and distribute traffic between local roads or arterial roads.
- Concurrency is an evaluation of whether a transportation facility or service has adequate capacity to accommodate the trips generated from a proposed development. *Concurrency*, as used in growth management under s. 163.3180, FS, stipulates that public facilities and services needed to support development shall be available at the same time the impacts of such development will occur. Concurrency for transportation facilities is optional for local governments under s. 163.3180(1), FS and, if applied, the local government comprehensive plan must provide the principles, guidelines, standards, and strategies, including adopted levels of service, to guide its application.
- Internal Capture are trips that remain on a proposed development's site due to the presence and interaction of non-residential and residential land uses which in combination reduce impact on the surrounding roadway network.
- Level of Service (LOS) is a quantitative stratification of the quality of service of a service or facility into six letter grade levels with "A" describing the highest quality and "F" describing the lowest quality. With regard to traffic and transportation, the measure of the functional and operational characteristics of a roadway based upon traffic volume in relation to road capacity. The LOS for alternative modes may be based on headways for transit modes, access, length, width, and connectivity for pedestrian and bike modes.
- Pass-By is the percentage of a development's total traffic that is considered already on the road network and merely stops at the development in passing.
- Peak-Hour is hours of which traffic volumes are the highest during a 24-hour period, usually the highest volume in the am (between 7am and 9 am) and in the pm (between 4 pm and 6pm)
- Peak-Hour Factor (PHF) is the ratio of the hourly volume to the peak 15-minute flow rate for that hour; specifically  $\text{hourly volume} / (4 \times \text{peak 15-minute volume})$ .
- Roadway Functional Classification refers to the assignment of roads into categories according to the character of service they provide in relation to the total road network. Basic functional categories include limited access facilities, arterial roads, and collector roads, which may be subcategorized into principal, major or minor levels. Those levels may be further grouped into urban and rural categories.
- SIS Facility refers to the Strategic Intermodal System (SIS) and relates to statewide and interregional significant transportation facilities and services that provide for the smooth and efficient transfer of both passengers and freight, including but not limited to interstates, ports, airports, and railways.

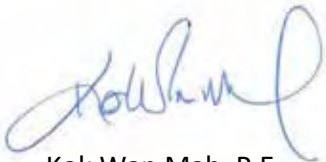
March 16, 2023

- Vested Trips are trips from an approved development that are distributed on the road network and treated as existing as a means to monitor background traffic growth and preserve capacity for that development.


## Conclusion

The in-line comments and recommendations within the accompanying PDF provides an update, rather than overhaul of the SLTPO *Standardized Traffic Impact Studies (TIS) Methodology and Procedures*. The current state of the practice is continuing to evolve, putting more emphasis on multimodal accommodations, quality of travel, and safety of the transportation environment. This is seen in the most recent versions of the FDOT QLOS Handbook (2023) and FDOT Site Impact Application Guide. The proposed changes provided will provide St. Lucie County and Cities within the county to take an incremental step in managing growth and lay out clear and concise language to conduct a traffic impact study.

Sincerely,



Kok Wan Mah, P.E.  
Associate Transportation Engineer  
Kittelsohn and Associates Inc.  
kmah@kittelsohn.com

	<b>St. Lucie</b> Transportation Planning Organization	Coco Vista Centre 466 SW Port St. Lucie Blvd, Suite 111 Port St. Lucie, FL 34953 772-462-1593 <a href="http://www.stlucietpo.org">www.stlucietpo.org</a>
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# **STANDARDIZED TRAFFIC IMPACT STUDIES (TIS) METHODOLOGY AND PROCEDURES**

- **ST. LUCIE COUNTY**
- **CITY OF FORT PIERCE**
- **CITY OF PORT ST. LUCIE**

January 2014, updated June 2016

**TRAFFIC IMPACT STUDIES METHODOLOGY AND  
PROCEDURES  
(DRAFT)**

**Table of Contents**

1. Purpose and Applicability ..... 1

2. Methodology Statement ..... 1

3. Impacted Roadways/Intersections ..... 1

4. Analysis Scenarios ..... 2

5. General Analysis Requirements ..... 3

6. Software..... 4

7. Trip Generation ..... 4

8. Internal Capture ..... 5

9. Passer-By Capture ..... 5

10. Distribution and Assignment ..... 6

11. Traffic Counts ..... 6

12. Background Traffic Growth/Future Traffic ..... 6

13. Level of Service Standards ..... 6

14. Inventory of Existing and Future Conditions ..... 7

15. Site Access ..... 7

16. Multimodal Considerations..... 8

17. Mitigation of Impacts ..... 8

**Appendices**

Appendix A – Definitions

Appendix B – Alternative Study Network Identification Methodology

Appendix C – Analysis Requirements

Appendix D – Example of Passer-By Capture

Appendix E – Traffic Counts

Appendix F – Annual Traffic Growth Rate Determination

Appendix G – Turn Lane Need and Length Determination

Appendix H – Mitigation of Impact

Appendix I – De Minimis Requirements

# Summary of Comments on TIS Methodology and Procedures (KAI review).pdf

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Page: 2

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**T** Number: 1 Author: kmah Subject: Highlight Date: 3/9/2023 7:57:14 PM -05'00'  
Consider having this at the very beginning after the TOC.

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(Category: Flow)

## 1. PURPOSE AND APPLICABILITY

The purpose is to provide a generally uniform methodology for identifying potential traffic impacts of new development and redevelopment on the transportation system and developing mitigation strategies to offset those impacts. However, the need to perform a Traffic Impact Study (TIS) will be determined in accordance with the applicable local government requirements and provisions.

The TIS is to be signed and sealed by a registered professional engineer licensed to practice in Florida.

Any reference to the "Local Government" in these guidelines shall mean the City of Ft. Pierce, City of Port St. Lucie, St. Lucie County, their consultants, sub-consultants, contractors, or employees, as applicable. Any reference to the "Applicant" in these guidelines shall mean the person or party making application to the Local Government, to include the Applicant's consultants, sub-consultants, and contractors.

Unless otherwise agreed to in an approved Methodology Statement, the procedures of this unified methodology document will be followed.

## 2. METHODOLOGY STATEMENT

Prior to conducting any study, a Methodology Statement shall be prepared by the Applicant and submitted to the Local Government for review and approval. The purpose of the Methodology Statement is to establish agreed upon methodologies and assumptions prior to the start of the study. The methodology shall address the following minimum elements:

- Description of land uses, site location, build-out schedule, and phasing
- Preliminary site plan
- Trip Generation
- Internal Capture
- Background Traffic Growth Procedure
- Distribution and Assignment
- Committed Network

It shall be the Applicant's responsibility to ensure that a traffic study is not prepared or submitted without an approved Methodology Statement signed by the Local Government.

## 3. IMPACTED ROADWAYS/INTERSECTIONS

At a minimum, the following impacted roadway segments and intersections shall be analyzed in the TIS:

- a. Any Road Segment to which development traffic makes its first connection to the Major Road Network, provided the development traffic consumes one percent or



## Page: 3

Number: 1 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:21:04 PM -05'00'  
"of the SLTPO Standardized Traffic Impact Studies (TIS) Methodology and Procedures"

(Category: clarification)

Number: 2 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:20:56 PM -05'00'  
", including roads, transit, bicycle, and pedestrian facilities,"

We want to provide greater emphasis for alternative mode evaluation.

Number: 3 Author: kmah Subject: Sticky Note Date: 3/3/2023 8:52:34 AM -05'00'  
add "multimodal"

It is significant early on to acknowledge that these procedures are for all road users.

Number: 4 Author: kmah Subject: Highlight Date: 3/3/2023 8:53:59 AM -05'00'  
Does this vary between jurisdictions within the county?

Author: kmah Subject: Sticky Note Date: 3/9/2023 7:59:53 PM -05'00'  
Differences exist between cities and county.

Consider a work session with TPO, county, and cities to identify the differences and discuss in an effort to provide consistency throughout the county.

Number: 5 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:00:57 PM -05'00'  
There should be a section that outlines the thresholds by which a TIS is required. (i.e., Number of daily and peak-hour trips)

Are these thresholds different between cities within the county? If not, recommend including here.

At a minimum, a traffic statement should be provided that shows the trip generation for the proposed site with a request to waive the TIS if it is below the threshold.

(Category: Clarification)

Number: 6 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:20:38 PM -05'00'  
Not sure where to include it, but there should be a check made by the applicant to state whether or not the subject parcel is part of a larger parent tract or PUD. If so, then analysis of the parent tract would be needed.

For example, a traffic methodology may come in for a proposed Chick-Fil-A, then later, another one for a proposed O'Reilly's Auto Parts, and then for a medical office. If all three are on different parcels, but all part of the same PUD, what mechanisms are in place for the city or county to be aware of this and require a traffic study for the full PUD (parent tract)?

Impacts (and resulting mitigation) will be understated if individual parcels are reviewed without looking at the project as a whole.

(Category: Clarification)

Author: kmah Subject: Sticky Note Date: 3/3/2023 8:59:05 AM -05'00'  
Also consider adding narrative for the timing that a TIS will be required. Use permit? Overall development plan? Final site plan?

Number: 7 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:04:47 PM -05'00'  
Potentially move section 2 to next page and include a map on this page to show outline of county with shading of each of the cities that this document pertains to.

This will help provide an illustration and emphasis of the areas that this document would apply.

Author: kmah Subject: Sticky Note Date: 3/10/2023 8:03:22 AM -05'00'  
The St. Lucie County GIS Interactive Map site includes one called "Know Your Jurisdiction" that is simple and can be inserted here.

Number: 8 Author: kmah Subject: Sticky Note Date: 3/10/2023 8:04:47 AM -05'00'  
Is there a TCEA in the County/City? If so, how does that change the requirements for the TIS?

Insert text on how these requirements change if site is in a TCEA.

(Category: Clarification)

Author: kmah Subject: Sticky Note Date: 3/9/2023 8:05:08 PM -05'00'  
Not in Port St. Lucie.  
Possibly City of Ft. Pierce.

Number: 9 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:05:56 PM -05'00'  
Between Section 2 and Section 3, consider adding general submittal requirements for the TIS.

Comments from page 3 continued on next page

## 1. PURPOSE AND APPLICABILITY

The purpose is to provide a generally uniform methodology for identifying potential traffic impacts of new development and redevelopment on the transportation system and developing mitigation strategies to offset those impacts. However, the need to perform a Traffic Impact Study (TIS) will be determined in accordance with the applicable local government requirements and provisions.

The TIS is to be signed and sealed by a registered professional engineer licensed to practice in Florida.

Any reference to the "Local Government" in these guidelines shall mean the City of Ft. Pierce, City of Port St. Lucie, St. Lucie County, their consultants, sub-consultants, contractors, or employees, as applicable. Any reference to the "Applicant" in these guidelines shall mean the person or party making application to the Local Government, to include the Applicant's consultants, sub-consultants, and contractors.

Unless otherwise agreed to in an approved Methodology Statement, the procedures of this unified methodology document will be followed.

## 2. METHODOLOGY STATEMENT

Prior to conducting any study, a Methodology Statement shall be prepared by the Applicant and submitted to the Local Government for review and approval. The purpose of the Methodology Statement is to establish agreed upon methodologies and assumptions prior to the start of the study. The methodology shall address the following minimum elements:

- Description of land uses, site location, build-out schedule, and phasing
- Preliminary site plan
- Trip Generation
- Internal Capture
- Background Traffic Growth Procedure
- Distribution and Assignment
- Committed Network

It shall be the Applicant's responsibility to ensure that a traffic study is not prepared or submitted without an approved Methodology Statement signed by the Local Government.


## 3. IMPACTED ROADWAYS/INTERSECTIONS

At a minimum, the following impacted roadway segments and intersections shall be analyzed in the TIS:

- a. Any Road Segment to which development traffic makes its first connection to the Major Road Network, provided the development traffic consumes one percent or

Electronic submittal? Number of hardcopies?  
Include a copy of the site plan.  
Signed and sealed by an engineer registered in Florida.

(Category: Clarification)

 Author: kmah    Subject: Sticky Note    Date: 3/6/2023 9:38:06 AM -05'00'  
Hardcopy not required.

---

more of the existing or committed two-way peak-hour service capacity,

- b. Major Road Segment on which the two-way peak-hour project traffic consumes **five percent or more** of the existing or committed two-way peak-hour service capacity,
- c. Site driveway connections to public roads. In addition, if the development has no direct connection to the Major Road Network, the intersections of the local/non-major roads (that provides access to the development) with the Major Road Network shall be analyzed, and
- d. Major Intersections that are part of the impacted roadways.

To determine whether peak-hour development traffic consumes one percent or five percent or more of the existing service capacity of a road, the generalized roadway service volumes from the latest version of the Generalized Service Volumes tables of the Florida Department of Transportation (FDOT) shall be used. Roadway functional classification shall be based on the St. Lucie TPO's Federal Functional Classification Map and, for roads that are not contained on the map, it shall be based on the Local Government's Comprehensive Plan.

An alternative study network identification methodology can be followed by the Applicant; this methodology is described in **Appendix B**. Agreement on the use of the alternative study network methodology shall be reached during the methodology phase and its use acceptance is at the Local Government's discretion.

#### 4. ANALYSIS SCENARIOS

The Applicant shall be required to provide an analysis of the following scenarios:

- e. **Existing scenario** is defined as the analysis of existing traffic on the Existing Network.
- f. **Background scenario** is defined as the analysis of existing traffic plus background traffic on the **committed network**.
- g. **Background scenario with mitigation** is defined as the analysis of existing traffic plus background traffic on the committed network with the inclusion of **any other improvements** that are required to restore a facility to its adopted level of service standard.
- h. **Future scenario** is defined as analysis of existing traffic, plus background traffic, plus project traffic on the committed network.
- i. **Future Scenario with mitigation** is defined as analysis of existing traffic, plus background traffic, plus project traffic on the committed network with the inclusion of any other improvements (if needed) that are required to restore a facility to its adopted level of service standard.

A detailed definition of the analysis scenarios is included in **Appendix A**.

## Page: 4

**T** Number: 1 Author: kmah Subject: Highlight Date: 3/3/2023 9:24:08 AM -05'00'

Does this usually include an adequate study area for past projects?

**S** Author: kmah Subject: Sticky Note Date: 3/9/2023 8:06:59 PM -05'00'

There have been times when it does not.

**S** Author: kmah Subject: Sticky Note Date: 3/9/2023 8:07:22 PM -05'00'

Consider lowering significance threshold to 3%.

**T** Number: 2 Author: kmah Subject: Highlight Date: 3/9/2023 8:07:44 PM -05'00'

Why is Appendix B cited before Appendix A?

(Category: Flow)

**T** Number: 3 Author: kmah Subject: Highlight Date: 3/9/2023 8:19:36 PM -05'00'

"Future background scenario"

(Category: Clarification)

**T** Number: 4 Author: kmah Subject: Highlight Date: 3/3/2023 9:22:26 AM -05'00'

First 3 years of an adopted work program or any improvements in 5 years?

**S** Author: kmah Subject: Sticky Note Date: 3/9/2023 8:08:55 PM -05'00'

Include consistent with buildout year of project. For example, if the buildout year is in 3 years, then a programmed improvement fives years out should not be considered.

**T** Number: 5 Author: kmah Subject: Highlight Date: 3/9/2023 8:19:22 PM -05'00'

"Future background scenario with mitigation"

(Category: Clarification)

**T** Number: 6 Author: kmah Subject: Highlight Date: 3/9/2023 8:19:13 PM -05'00'

"the minimum"

This proposed text change is important so that Applicants do not "over improve" deficiencies whereby adding project traffic will show no additional improvement needed.

**S** Number: 7 Author: kmah Subject: Sticky Note Date: 3/10/2023 8:05:25 AM -05'00'

"This also includes any mitigation improvements identified in scenario 4g."

(Category: Clarification)

**T** Number: 8 Author: kmah Subject: Highlight Date: 3/9/2023 8:19:06 PM -05'00'

"Future buildout scenario"

(Category: Clarification)

**T** Number: 9 Author: kmah Subject: Highlight Date: 3/9/2023 8:12:10 PM -05'00'


Appendix A should be referenced before Appendix B.

## 5. GENERAL ANALYSIS REQUIREMENTS


A Level of Service (LOS) analysis shall be undertaken for all impacted roadways and intersections (as listed in Section 3 of this document) in accordance with the procedures below:

- a. For the facility on the Major Road Network to which the development has direct access:
  - Detailed capacity and turn-lane length analyses shall be undertaken for site driveway connections to that facility and/or of the local street providing site traffic access to that Major Road facility.
  - Turn-lane length analysis shall only be required for the first impacted signalized or major unsignalized intersections along the directly accessed facility.
- b. For analysis of roadways outside of the area as described in Sub-section 5.a above, the latest version of FDOT's generalized tables shall be used as an initial screening tool. If failure is estimated, more detailed analysis is required using the procedures described below.
  - i. Road segment limits shall be as defined in the Annual Level of Service Report prepared by the St. Lucie TPO. Adjustments, if appropriate, shall be proposed in the Methodology Statement and be developed based on acceptable engineering and planning practices as set forth in the *Highway Capacity Manual*.
  - ii. All analyses undertaken shall be adjusted to the average of the peak season using FDOT's Peak Season Conversion Factors (PSCF). Other time periods or a.m. analysis may be required if requested during the methodology meeting or during the first review round.
- c. All signalized intersections and major unsignalized intersections within the study area shall be analyzed.
- d. When the FDOT generalized roadway service volume tables are used, the following information shall be provided for each facility in a separate table:
  - Class of roadway (interrupted or uninterrupted)
  - Maintenance jurisdiction (city, county, or state-maintained)
  - Area type
  - Posted speed
  - LOS standard
- e. Other parameters that govern the roadway/intersection capacity analysis shall be based on the parameters described in the latest version of the *Highway Capacity Manual*.
- f. Where driveway movements are restricted (e.g. right-in/right-out driveways), the necessary U-turn movements and project traffic added at the upstream and

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 Number: 1 Author: kmah Subject: Highlight Date: 2/27/2023 11:05:15 AM -05'00'

Why not all of the intersections within the study area?

 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:13:06 PM -05'00'

Revised text to state that the turn lane analysis should apply to all intersections within the study area.

---

 Number: 2 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:16:40 PM -05'00'

i. Peak-hour factor (PHF), not to exceed 0.95 for the future conditions analysis)

ii. The existing signal timing, including its maximum and minimum settings, shall be used for the initial analysis of future conditions. Any signal timing changes outside of the existing minimum and maximum setting may be presented for local agency approval as part of the mitigation strategy.

iii. Truck factors for each lane group should reflect existing conditions. If a portion of the proposed development includes industrial uses, then truck factors shall be recalculated for movements where project trips are present.

(Category: Additional requirements)

downstream median openings or intersections should be identified and analyzed.

In addition to the requirements of Sub-sections (a) through (f) above, the Local Government may require the inclusion of proposed or anticipated traffic signals in the future year condition that may not exist in the “existing condition”, including signals at development entrances.

## 6. SOFTWARE

Use of analysis software shall be discussed and agreed to during the Methodology phase. The Applicant shall provide an electronic copy of the analysis files as well as a hard copy of the summary sheets, unless an electronic from is requested by the Local Government. Preferred analysis softwares are listed below:

- a. For unsignalized intersections, the Highway Capacity Software (HCS) is the preferred software for analyzing delay and LOS.
- b. For signalized intersections, the use of the Highway Capacity Software is considered acceptable; however, the latest version of Synchro software using the latest HCM methodology is preferred.
- c. For interrupted flow road segment (i.e. signalized roadways) analysis, the preferred software is the latest version of Synchro.
- d. For uninterrupted flow roads (those with more than two-mile signal spacing) the latest version of the FDOT’s HighPlan software is recommended.
- e. Other analysis software may be required by the Local Government to address situations not addressed by the above provisions, or if requested by the Applicant and approved by the Local Government during the Methodology Statement in Section 2 of this guideline.

For additional information regarding analysis requirements and software please refer to Appendix C.

## 7. TRIP GENERATION

Trips from/to the site shall be estimated using the latest Institute of Transportation Engineers (ITE) *Trip Generation Manual*, including separate trip generation estimates for interim traffic-generating uses. Other trip rates may be required by the Local Government or may be used if requested by the Applicant and approved by the Local Government during the Methodology Statement process (Section 2 of this document).

To encourage redevelopment of previously developed sites, a credit for any previously existing land uses may be given for the replacement of any traffic-generating building or structure that previously existed on the site. The applicability and/or magnitude of the credit shall be discussed with the Local Government during the Methodology Statement process. If the site was dormant during the time when collection of the traffic count data was conducted, then the “prior vested” portion of



## Page: 6

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Number: 1 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:18:53 PM -05'00'  
"or Synchro utilizing HCM methodologies"

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Synchro is widely used and follows HCM methodologies, so it should be acceptable to use for intersection analyses.

Number: 2 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:18:43 PM -05'00'  
Recommend adding SIDRA for roundabout analysis.

---

Number: 3 Author: kmah Subject: Highlight Date: 2/27/2023 11:30:59 AM -05'00'

---

Number: 4 Author: kmah Subject: Highlight Date: 3/9/2023 8:22:46 PM -05'00'  
Is there an expiration on vested trips? (i.e., trips from previous use on the project site)  
Recommendation:

Author: kmah Subject: Sticky Note Date: 3/3/2023 9:53:32 AM -05'00'  
R2CTPO guidance on vested trips:

---

- \* 1st Year: 100% credit of trips generated by prior use
- \* 2nd Year: 80% credit of trips generated by prior use
- \* 3rd Year: 60% credit of trips generated by prior use
- \* 4th Year: 40% credit of trips generated by prior use
- \* 5th Year: 20% credit of trips generated by prior use
- \* After 5 years, 0% credit provided for trips generated by prior use

the development traffic must be added as “background” traffic. For purposes of access management analysis, the total trips (prior vested plus additional, new trips) should be analyzed at site access and connection points to the Major Road network.

## 8. INTERNAL CAPTURE

Internal capture estimates shall be based on acceptable methodologies contained in the most current *ITE Handbook* where the ITE data is not applicable, professional judgment should be applied.

## 9. PASSER-BY CAPTURE

The total gross external trips of the project traffic may be reduced by a passer-by factor to account for traffic that is already traveling on the adjacent roadway and once the project is constructed it will stop by the project on their way from an origin to a primary destination. Such factor shall be based on ITE acceptable methodologies and percentages.

In no event shall the total number of passer-by trips (i.e. entering plus exiting the site) exceed 10 percent of the total background traffic on the adjacent roadway. In analysis of the site-access intersections with major roads, the passer-by trips shall be included and separately identified.

In cases where median controls limit left-in/left-out access to the site, traffic on the “far side” of the road can be considered in assessing the upper limit of captured trips; however, the effects of that traffic in the associated necessary U-turns and added flow at the upstream and downstream median openings or intersections should be identified as development traffic at those locations.

In accordance with the Florida Traffic Impact Handbook, the passer-by capture percentage shall be computed as the total number of trips entering and exiting the site that is claimed as captured divided by the number of background trips passing by the site on major roads directly abutting or passing through the site. An example of this computation is provided in Appendix D.

## 10. DISTRIBUTION AND ASSIGNMENT

Manual trip distribution and assignment is acceptable for use as long as they are reviewed and accepted by the Local Government and logically replicates the existing and future travel patterns.

The latest adopted Greater Treasure Coast Regional Planning Model (GTCRPM) is also acceptable in determining the trip distribution percentages and trip assignments, especially when TIS is being performed for sizable developments and for multi-land use developments. The results of the model will be reviewed by the Local Government for reasonableness and to ensure that existing and future travel patterns are correctly simulated.

## Page: 7

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Number: 1 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:25:11 PM -05'00'

"In no case will an internal capture of more than 20 percent (20%) of the gross project trip ends be allowed, unless the reviewing agency accepts a higher internal-capture percentage based on verifiable documentation (e.g. field studies of comparable sites)."

This places a cap on internal capture. Higher rates will be allowed subject to review and approval of the reviewing jurisdiction.

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T Number: 2 Author: kmah Subject: Highlight Date: 2/27/2023 11:31:08 AM -05'00'

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Number: 3 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:24:24 PM -05'00'

"or when the buildout year is anticipated to be greater than five years."

## 11. TRAFFIC COUNTS

All counts shall be conducted based on acceptable professional engineering standards. Raw-turning movement counts (minimum 2 hours) and daily tube counts (minimum 48 hours) shall be provided for all the intersections and road segments that are being analyzed. The raw counts shall be adjusted to the average of the peak season using FDOT's Peak Season Conversion Factors. The Local Government may request other peak-season adjustment factors or adjustment methodologies that may result in different peak-season adjustment factors; however, this request shall be evaluated during the development of the Methodology Statement. Please refer to Appendix E for additional information regarding traffic counts requirements.

## 12. BACKGROUND TRAFFIC GROWTH/FUTURE TRAFFIC

Existing traffic counts shall be increased by a growth factor up to the project's build-out date, which shall be reasonably specified, to account for increases in existing traffic due to other approved or Pending Developments. The development build-out date shall be no less than three years and no more than ten years from the date of the initial transportation methodology submittal.

For acceptable techniques to estimate annual traffic growth rates please refer to Appendix F.

## 13. LEVEL OF SERVICE STANDARDS

- a. The adopted LOS standards for all major road segments shall be consistent with the standards per the Local Government's latest adopted Comprehensive Plan.
- b. The overall intersection LOS standard shall be the same standard as that of the segment (facility) within which the intersection is located. Where different LOS standards apply to different legs of an intersection, the overall intersection LOS standard will be the same as the leg with the least restrictive LOS (e.g. one road LOS Standard "D" and the other road LOS Standard "E", then intersection LOS Standard is "E").
- c. The delay for individual turning-movements and through-movements may exceed the segment standard by one letter grade provided that the volume/capacity (V/C) ratio for the subject movement remains less than or equal to one. Average delays of up to 100 seconds are acceptable for individual turning movements where the V/C ratio is less than 0.8.
- d. For site access driveways and local street connections serving site access traffic, delays of up to 100 seconds will be considered acceptable.

## 14. INVENTORY OF EXISTING AND FUTURE CONDITIONS

At minimum, the following additional information shall be provided:

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**T** Number: 1 Author: kmah Subject: Highlight Date: 3/9/2023 8:26:16 PM -05'00'

Add following criteria:

Need to include heavy vehicles.

If project within 2 miles of a school, then counts collected during time of year when school is in session.

Include pedestrian and bicycle counts for locations where school is within 2 miles.

Counts conducted for typical weekday (Tue, Wed, Thurs), excluding holidays. For certain land uses, City reserves the right to request counts and analysis for peak weekend period.

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**T** Number: 2 Author: kmah Subject: Highlight Date: 2/27/2023 11:31:29 AM -05'00'

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**S** Number: 3 Author: kmah Subject: Sticky Note Date: 2/27/2023 11:36:05 AM -05'00'

Minimum annual growth rates in all cases shall be two percent (2%) unless support documentation is provided to justify a lower percentage and is approved by the reviewing agency.

---

**S** Number: 4 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:28:22 PM -05'00'

What about committed trips? Does each city and the county track committed trips (i.e., trips from approved but not yet constructed developments)? If so, then suggest using higher of committed trips or historical growth with a minimum of 2%.

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**T** Number: 5 Author: kmah Subject: Highlight Date: 2/27/2023 11:31:34 AM -05'00'

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- a. The geometry, speed limit, and the adopted LOS standard of all the existing roadways and intersections, based on the Local Government's adopted Comprehensive Plan, and committed intersection and roadway improvement projects within the impacted area,
- b. Existing vehicle counts and data supporting heavy vehicle factors for capacity analysis,
- c. Graphic representation (stick diagrams) of the project's proposed access locations, types, and internal roads with connections to public roadways. The graphic shall also cover the area immediately adjacent to the project and this graphic should include:
  - All external, major roadways,
  - Existing or future access points, and
  - Types of developments surrounding the project,
- d. Pavement marking plans/concept plans of roadways that provide direct access to the project and that have been completed or are undergoing design or route study phase, if available,
- e. Graphic representation of project traffic (volume and percent distribution), existing traffic volumes, future background volumes, and future total volumes, and
- f. Inventory of existing or committed traffic-control devices (i.e. traffic signals and stop signs).

## 15. **SITE ACCESS**

Driveway location(s) shall meet the Local Government's and/or FDOT's minimum standards regarding location, corner clearance, minimum distance between driveways, number of driveways serving a site, minimum sight distances, median openings, and U-turn restrictions, as or where applicable. **Appendix G** documents the procedures to determine the need for turn lanes and corresponding turn lane lengths.

## 16. **MULTIMODAL CONSIDERATIONS**

When designing the site, the following multimodal recommendations should be taken into consideration, and their applicability should be discussed with the Local Government during the Methodology Statement process in Section 2 of this document.



### **a. For pedestrians:**

- 1) Provide connectivity from the building structures to existing sidewalks adjacent to the site,
- 2) Internal circulation and connections to existing sidewalks should be provided

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**T** Number: 1 Author: kmah Subject: Highlight Date: 3/9/2023 8:30:33 PM -05'00'  
Provide guidance for when second access will be required based on threshold for trips, or provisions for when secondary emergency access is needed in cases when the primary access may be blocked by a disabled vehicle.

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**T** Number: 2 Author: kmah Subject: Highlight Date: 2/27/2023 11:54:22 AM -05'00'


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**S** Number: 3 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:30:58 PM -05'00'  
"At a minimum, the TIA should demonstrate how the project will maintain or improve upon the existing operations and safety for pedestrians, bicyclists, and transit riders."


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**S** Number: 4 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:32:24 PM -05'00'  
"The TIS shall include a section for Multimodal Considerations and address each of the following modes separately."




so that pedestrians do not need to walk significantly “out of the way”. In other words, pedestrian connections should be direct and reasonable, minimizing the distance that pedestrians need to walk to go from one place to another,

- 3) New external and internal crosswalks and any associated traffic control devices (if required),
- 4) To the extent possible, minimize pedestrian-vehicle conflicts,
- 5) Specify minimum cross-walk widths, and
- 6) Depending on the hours of operation of the site, consideration should be given to the need for illuminated sidewalks and crosswalks. 

**b. For transit vehicles/users:**

- 1)  If there is a transit stop adjacent to the site or within walking distance of the site, adequate pedestrian connections need to be provided not only between the site and the bus stop but also between the main entrance of the building and the bus stop,
- 2) Relocation of an existing bus stop or creation of a new stop, in coordination with the Local Government Transit Manager and/or Community Transit, as applicable, to provide for safe or better access to the building and site, and
- 3) Appropriate design of relocated or a new bus stop to address amenities (bench, shelter, etc.).

**c. For bicycles:**


- 1)  If internal bike facilities are proposed, adequate connections to existing bike lanes should be provided, and 
- 2) Provision of bike racks. 

## 17. MITIGATION OF IMPACTS

It is the responsibility of Local Governments to apply the technical guidance provided in the previous sections and in the Appendices in a manner consistent with the current Florida Statutes and Local Government ordinances and land development code.

Acceptable mitigation options are:

- 1) **Restore to adopted standard**
- 2) **Proportionate Share Mitigation**

For general guidance about mitigation and further detail about identification of adequate mitigation, please refer to  Appendix H.



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Number: 1 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:32:45 PM -05'00'

"For any proposed project with a residential component, identify any schools or colleges within 2 miles of the site and provide an inventory of available sidewalks, sidewalk conditions, missing sidewalk links, and pedestrian-actuated crossings."

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T Number: 2 Author: kmah Subject: Highlight Date: 3/9/2023 8:34:35 PM -05'00'

1) Provide an inventory of any transit stops or rail stations within 1/4-mile of the nearest access to the site with information on available sidewalks and crosswalks, the route number, hours of transit operation, headways, and existing transit amenities (i.e., shelter, concrete pad, trash receptacle, etc).

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T Number: 3 Author: kmah Subject: Highlight Date: 3/6/2023 10:17:49 AM -05'00'

to existing bicycle lanes should be provided.

Connections should be made anyway.

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Number: 4 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:35:44 PM -05'00'

"or secured bike lockers."

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T Number: 5 Author: kmah Subject: Highlight Date: 2/27/2023 12:07:16 PM -05'00'

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## APPENDICES



## APPENDIX A DEFINITIONS

For purposes of this document, the following definitions shall apply:

- a. **Committed Network** – Existing Network plus transportation system improvements included in the adopted work programs of the County, the FDOT, or other agencies with authority and responsibility for providing transportation system capacity, or other improvements that are guaranteed by a security instrument acceptable to the Local Government that ensures construction will begin in the current fiscal year of such work programs.
- b. **Background Traffic:** Existing traffic plus growth in existing traffic between the existing conditions and the future conditions. Please refer to Appendix F for acceptable techniques to estimate future background traffic volumes.
- c. **Existing Network** – Major Roads which are currently in use by the public.
- d. **Existing Scenario** - Analysis of existing traffic on the Existing Network.
- e. **Background Scenario** – Analysis of existing traffic, plus background traffic on the committed network.
- f. **Background Scenario with Mitigation** – Analysis of existing traffic, plus background traffic on the committed network. For locations which are estimated to fail under background conditions, the Applicant shall identify improvements needed to restore level of service to the adopted level of service standard.
- g. **Future Scenario** – Analysis of existing traffic, plus background traffic, plus the project's traffic on the committed network. For locations which are estimated to fail, the Applicant shall identify when each failure is expected to occur as a fraction of the development trips associated with on-site land use quantities, and estimated year. These parameters may be estimated by interpolating between the "Existing Scenario" analysis and the "Future Scenario" (without mitigation) analysis. If new corridors that shift travel patterns are proposed as the solution, the interpolation should be based on an analysis that does not consider the new corridor. In the case of large Mixed Use Planned Unit Developments (MPUDs), the Local Government reserves the right to modify timing of failure estimates to reflect or incorporate other pending or approved developments that are presented or become effective between the time the methodology is approved and the time when the list of improvements to cure identified deficiencies at build-out are finalized by the Local Government.
- h. **Future Scenario with Mitigation** – Analysis of existing traffic, plus background traffic, plus project traffic on the committed network with the inclusion of any other improvements that are required to restore the adopted level of service standard. This analysis scenario will be required only if mitigation is necessary as the result of the future scenario analysis. For purposes of analyzing site access

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Number: 1 Author: kmah Subject: Sticky Note Date: 3/3/2023 9:09:38 AM -05'00'

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- AAADT
- Arterial Road
- Capacity
- Collector Road
- Concurrency
- Internal Capture
- Level of Service
- Pass-By
- Peak-Hour
- Peak-Hour Factor
- Roadway Functional Classification
- SIS Facility
- Vested Trips

requirements only, the Local Government may allow consideration of improvements scheduled in the first five years of the Capital Improvement Program. For large MPUDs, the Local Government may require an additional five, ten, and/or fifteen year analysis of the financial feasibility of the improvements that are required to restore level of service to the adopted level of service standard.

- i. **Heavy Vehicle** – Vehicles that have more than four tires touching the pavement, including trucks, buses, and recreational vehicles (RVs). Trucks cover a wide range of vehicles, from lightly loaded vans and panel trucks to the most heavily loaded coal, timber and gravel haulers. RVs also include a broad range, including campers, both self-propelled and towed; motor homes; and passenger cars or small trucks towing a variety of recreational equipment, such as boats, snowmobiles, and motorcycle trailers.
- j. **Major Intersections** - All signalized intersections and/or unsignalized intersections with other major roadways.
- k. **Major Roadway, Major Road Network, or Regulated Road** – Shall include all collector and above-classified roadways per the latest St. Lucie TPO’s Federal Functional Classification Map.
- l. **Pending Development** – Is a development for which a complete application has been filed for (a) a Traffic Impact Study, (b) an Initial or Final Certificate of Capacity, or (c) an Initial or Final Certificate of Capacity Development Order.
- m. **Road Segment** – In an interrupted flow facility, a road segment is the piece of road from one traffic signal to the next traffic signal and is usually considered to include the traffic signal at the “downstream” end of the segment. “Road Facilities” are usually composed of several contiguous road segments.

## APPENDIX B

### ALTERNATIVE STUDY NETWORK IDENTIFICATION METHODOLOGY

#### Area of Influence Based

- a. The area to be studied will be based on the New External Trip Generation of the proposed development. The table below shall determine the development's area of influence.

New External Daily Trip Generation	Radius of Area of Influence
0 – 200	Only segments directly accessed by the proposed development
201 – 500	0.5 miles
501 – 1,000	1.0 miles
1,001 – 5,000	2.0 miles
5,001 – 10,000	3.0 miles
10,001 – 20,000	4.0 miles
Over 20,000	5.0 miles

- b. The radius of influence shall be measured from each connection of the project to the Major Road Network.
- c. All major signalized and unsignalized intersections on the roadway segments within the area of influence shall be studied.
- d. If the study radius ends between intersections identified in c. above, the study area shall extend to the next major intersection.

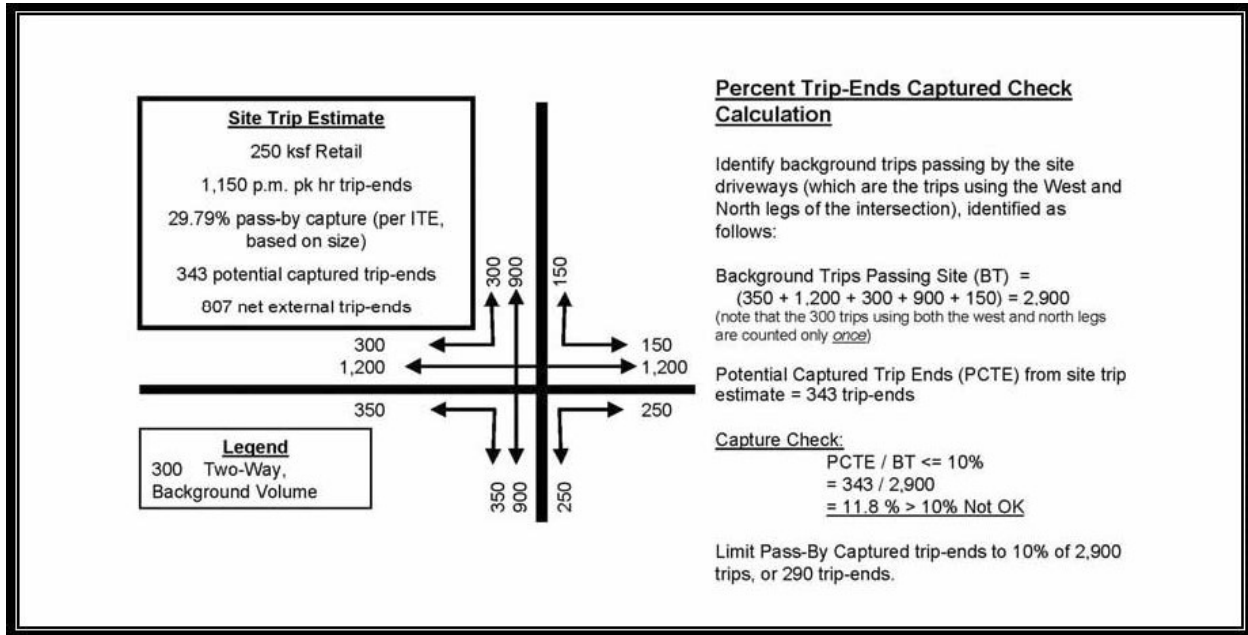
## APPENDIX C

### ANALYSIS REQUIREMENTS

- (1) If any analysis software is used as an alternative to the FDOT's generalized tables, a detailed LOS analysis of all Major Intersections within the facility is required.
- (2) The input data to the software shall be field verified and provided in the report including, but not limited to:
  - Geometry, including lane widths and turn-lane lengths
  - Heavy vehicle factor
  - Directional factor (D Factor, not to be less than 0.52 for the future conditions analysis)
  - Peak-hour factor (PHF, not to exceed 0.95 for the future conditions analysis)
  - Values of the above parameters should be estimated in the future conditions analysis to reflect unconstrained demand conditions
  - Existing signal timing and phasing can be obtained from the traffic signal maintaining agency. The existing signal timing, including its maximum and minimum settings, shall be used for the initial analysis of future conditions. Any timing change outside of the existing minimum and maximum setting may be presented for Local Government approval as part of the mitigation strategy
  - Segment lengths
- (3) If the FDOT generalized roadway service volume tables are used, the following information shall be provided in a separate table:
  - Class of roadway (interrupted or uninterrupted)
  - Maintenance jurisdiction (city, county, or state-maintained)
  - Area type
  - Posted speed
  - LOS standard
- (4) Other parameters that govern the roadway/intersection capacity analysis shall be based on the parameters described in the latest version of the Highway Capacity Manual.
- (5) The Local Government may require the inclusion of proposed or anticipated traffic signals in the future year condition that may not exist in the "existing condition", including signals at development entrances.

## APPENDIX D EXAMPLE OF PASSER-BY CAPTURE


The graphic below depicts an example of how passer-by capture may be computed.






## APPENDIX E

### TRAFFIC COUNTS


- a. Weekday traffic counts shall be collected during <sup>1</sup>typical weekdays (Tuesdays, Wednesdays, or Thursdays) and not immediately before, during, or immediately after a holiday or special event.
- b. For saturated intersections, the FDOT methodology shall be followed to estimate the turning movement counts by multiplying the average annual daily traffic (AADT) tube count at appropriate locations by field verified "D" and minimum K100 factors and by applying the percentage turns obtained from the field turning-movement counts.
- c. In no event, however, shall the estimated, turning-movement counts be less than the existing field counts.
- d. Tube counts at appropriate locations shall be provided for segment analysis using the FDOT procedures. The segment tube counts at mid-block locations shall be checked against turning-movement counts at near intersections. In general, the mid-block counts and turning-movement counts shall not be significantly different unless the difference can logically be explained.
- e. Approved FDOT or St. Lucie TPO maintained counts may be used if they are less than two years old. However, new counts may be requested if there are recent impacts or improvements to the transportation system that cause significant changes in traffic patterns. Counts more than two years old will not be acceptable unless otherwise <sup>2</sup>approved by the Local Government during the Methodology Statement. 

 <sup>3</sup>


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 Number: 1 Author: kmah Subject: Highlight Date: 3/6/2023 10:34:05 AM -05'00'  
further defined. What does "typical" mean?

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 Number: 2 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:38:49 PM -05'00'  
"Counts collected by consultants shall be less than one year old at the time of the TIS submittal."

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 Number: 3 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:37:35 PM -05'00'  
"f. For projects sites within 2 miles of a school, counts shall be collected only on days when schools are in session."

## APPENDIX F

### ANNUAL TRAFFIC GROWTH RATE DETERMINATION

Background traffic growth rates and background traffic volume estimates to be used in the TIS shall be based on techniques approved in the Methodology Statement (Section 2 of this document). Any combination of the following techniques is considered acceptable:

- a. Historical growth rates (minimum of the past three years) may be used in areas where the expected growth is representative of the past growth.
- b. Traffic from approved and pending developments may be required in areas where the historical trend is determined by the Local Government to be inappropriate. This may be accomplished through application of the latest adopted GTCRPM.
- c. To determine future traffic on roads that currently do not exist, the use of the GTCRPM (the latest, adopted model) is recommended.

The socioeconomic data shall reasonably represent, if appropriate, the approved or pending developments in the vicinity of the project as approved in the Methodology Statement. Minimum annual growth rates in all cases shall be one percent, unless otherwise approved in the Methodology Statement.

The assumed growth rate for each impacted roadway segment analyzed shall be presented in tabular form. The background traffic growth estimates will be reviewed by the Local Government to ensure growth reasonably reflects recent and expected growth trends. The connections of surrounding traffic analysis zones in the model should be reviewed to reflect other approved and pending developments and to ensure appropriate network loading.

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T Number: 1 Author: kmah Subject: Highlight Date: 3/9/2023 8:41:55 PM -05'00'

In cases where data used includes 2020 and 2021, the effect of traffic during the pandemic will automatically result in negative growth, so a minimum of five years should be used. If the r-squared value of the growth trend is less than 0.70, then use 10 years.

## APPENDIX G

### TURN LANE NEED AND LENGTH DETERMINATION

#### **a. Right Turn Lanes**

The potential need for right-turn lanes at the site access connections shall be evaluated based on guidelines provided in the Florida Department of Transportation's Driveway Information Guide (September 2008). These guidelines are essentially based on roadway speed and type.

#### **b. Left Turn Lanes**

The need for left-turn lanes is typically evaluated based on research documented in National Cooperative Highway Research Program (NCHRP) Report 279 Intersection Channelization Design Guide. The curves included in this report are included below.

#### **c. Deceleration and Storage Lengths**

- 1) Deceleration length shall be based on Index 301 of FDOT's Design Standards.
- 2) Storage Length shall be based on 95<sup>th</sup> percentile queue estimates provided by the software used in the level of service computation.
- 3) The provision of deceleration and storage lengths may be modified or waived by the Local Government's Engineer or his/her designee if it is determined that due to site specific constraints, the implementation will not be feasible or practical.

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T Number: 1 Author: kmah Subject: Highlight Date: 3/9/2023 8:42:44 PM -05'00'  
Consider updating this to use NCHRP 457 and Florida Design Manual 212.

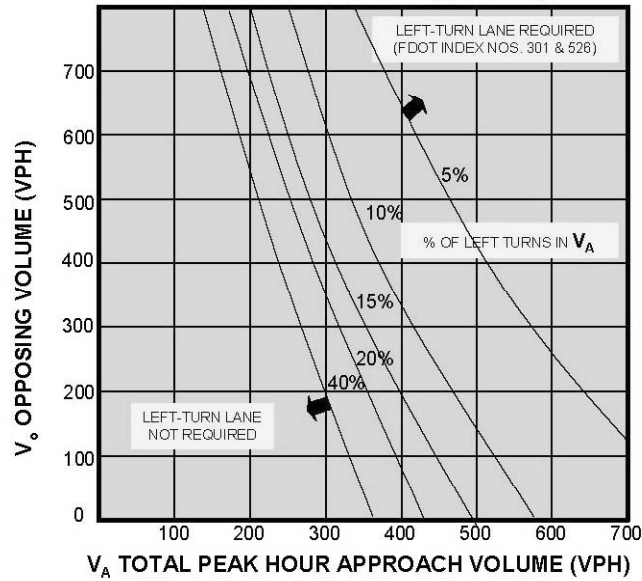
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T Number: 2 Author: kmah Subject: Highlight Date: 3/9/2023 8:43:28 PM -05'00'  
Consider updating to Report 457

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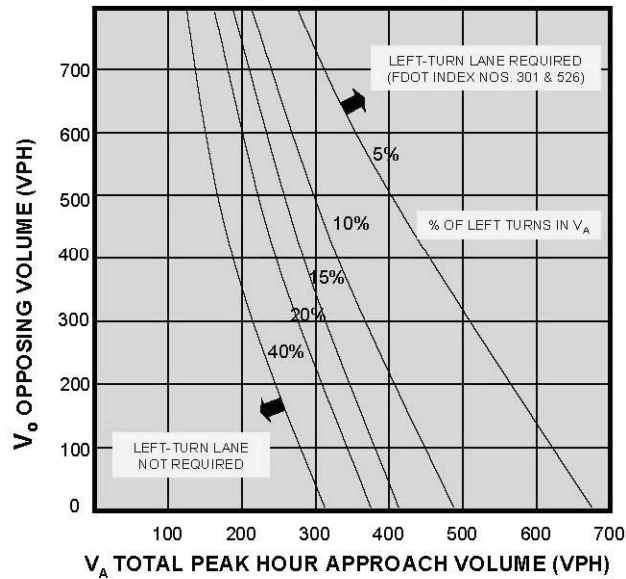
T Number: 3 Author: kmah Subject: Highlight Date: 3/9/2023 8:44:54 PM -05'00'  
This is outdated. Update to Florida Design Manual (FDM) Index 212.

**GRAPH 2A. LEFT-TURN LANE WARRANTS – TWO-LANE FACILITIES (≤ 40 MPH)**



**Note:** Left-turn lane not required when intersection of  $V_A$  and  $V_O$  is below the curve corresponding to the % of left turns in  $V_A$ .


**GRAPH 2B. LEFT-TURN LANE WARRANTS – TWO-LANE FACILITIES (45-50 MPH)**



**Note:** Left-turn lane not required when intersection of  $V_A$  and  $V_O$  is below the curve corresponding to the % of left turns in  $V_A$ .

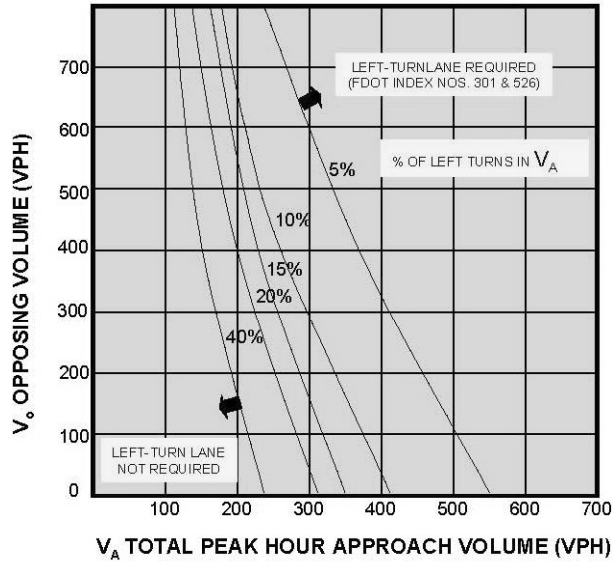
Graph 2A & 2B – Source: Derived from National Cooperative Highway Research Program Report #279.

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 Number: 1 Author: kmah Subject: Sticky Note Date: 3/9/2023 8:45:42 PM -05'00'  
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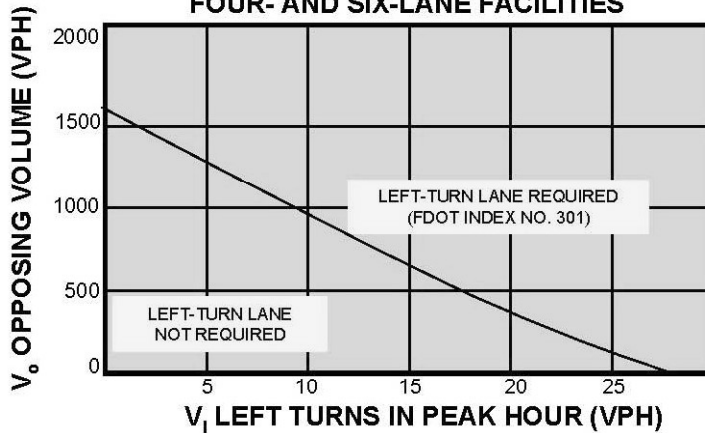


**GRAPH 2C. LEFT-TURN LANE WARRANTS – TWO-LANE FACILITIES (55-60 MPH)**



**Note:** Left-turn lane not required when intersection of  $V_A$  and  $V_O$  is below the curve corresponding to the % of left turns in  $V_A$ .


**GRAPH 2D. LEFT-TURN LANE WARRANTS – FOUR- AND SIX-LANE FACILITIES**



**Note:** When  $V_O < 400$  VPH, a left-turn lane is not normally warranted unless the advancing volume ( $V_A$ ) in the same direction as left-turning traffic exceeds 400 VPH. ( $V_A > 400$  VPH).

Graph 2C & 2D – Source: Derived from National Cooperative Highway Research Program Report #279.

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## APPENDIX H

### MITIGATION OF IMPACTS

This Appendix provides guidance on how the adequacy of mitigation will be technically determined and reviewed by the Local Government. Further, it is the responsibility of Local Government to ensure that technical calculations are applied in a manner that is consistent with the current Florida Statutes and Local Government ordinances and codes.

#### a. General Guidance

- 1) Improvements for mitigation of impacts at an individual location must work effectively and flow efficiently and safely relative to upstream and downstream roadway conditions. As examples:
  - A proposed improvement that relies upon dual lefts, three thru lanes, and a right turn lane to provide adequate capacity to serve the traffic demand at an intersection approach where only one lane feeds traffic might not be considered an effective, efficient or safe improvement because (for example) one lane can only feed traffic at a rate of 1,850 vehicles per hour but the intersection capacity analysis relies upon approach lane capacity in excess of the 1,850 vehicles per hour.
  - A proposed improvement that cannot achieve effective lane utilization due to downstream conditions would not be considered an effective improvement. For example, provision of a second through lane with a receiving lane on the far side of an intersection of only 300 feet in length would not be effective
  - Analyses of improvements to closely-spaced intersections should include evaluations of the traffic flow interaction and signal timings of the two intersections to ensure that the proposed improvements will achieve the intended result.
- 2) For unsignalized intersections, below-standard conditions should be mitigated by first considering the addition of auxiliary lanes, then consideration of signalization. If development traffic contributes to side-street volumes but the deficient delay is not mitigated through auxiliary lane addition, warrants for signalization are not met, and signalization is shown to be a viable solution when warranting conditions are met, then a financial contribution to future signalization may be considered as mitigation. See the "Proportionate Share Mitigation" section below for share computation methodology for adding a traffic signal at a previously unsignalized location.
- 3) Widening of the major road may also be necessary.

#### b. Mitigation Options

1. **Restore to adopted standard** – Identify an improvement at an impacted location that restores level of service to the adopted standard for the "future year with development traffic" condition, as defined in the Analysis Scenarios section of these Guidelines.

**2. Proportionate Share Mitigation** – The proportionate share payment shall be calculated as follows:

- a. Identify all the needed improvements to bring all deficient locations in the study network back to the adopted LOS standard,
- b. Submit a cost estimate of the required improvements.
- c. Calculate the proportionate-share cost of those improvements per the following formula:
  - i) For road segments:
 

**Proportionate share cost** = Total cost of improvement triggered by the project X Project traffic / Increase in capacity created by the improvement. The increase in facility capacity shall be based on the generalized service volume table provided in the “Impacted Roadways/Intersections” section of this document. The above values shall be in units of peak hour, two-way values.
  - ii) For signalized and unsignalized intersections (where signalization is not needed):
 

**Proportionate share cost** = Total cost of improvement triggered by the project X Project traffic / Increase in capacity created by the improvement.  
Where: Project traffic is the development traffic in all movements at the intersection increase and in capacity is the sum of the changes in physical capacity of all of the movements at the intersection
  - iii) For installation of signals at unsignalized locations:
 

**Proportionate share cost** = Total cost of improvement x Project traffic / Increase in capacity created by the improvement,  
Where: Project traffic is the development traffic in *all* movements at the intersection and increase in capacity is the sum of the changes in physical capacity for the minor-street movements only at the intersection

If other unforeseen situations arise, they will be dealt with on a case-by-case basis.
- d. Cost values shall include route study costs, design, right-of-way, construction, construction engineering/inspection costs, and contingency costs.
- e. Where an improvement to an alternate road (which draws background traffic away from an existing road that has been estimated to fail) is identified as a solution to congestion and where development traffic is assigned to both the existing road as well as the alternate road, the proportionate share computation will include the total development traffic on the existing road and the new road.

## **APPENDIX I**

### **DE MINIMIS REQUIREMENTS**

St. Lucie County, the City of Port St. Lucie and the City of Fort Pierce have different thresholds as to when to require a traffic impact study (project impacts to be considered as non de minimis). Therefore, this Appendix provides a general recommendation about when to consider a project impact as de minimis for transportation concurrency.

#### **De Minimis Threshold**

As a general guideline, it is recommended that a project impact is de minimis for transportation concurrency purposes if it would not affect more than 1 percent of the maximum volume at the adopted level of service of the affected transportation facility.

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If this is the threshold by which a traffic study is required, then this should be moved near the beginning of the document under a section titled, "Applicability"