St. Lucie Transportation Planning Organization

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

REGULAR BOARD MEETING

Wednesday, June 5, 2024
2:00 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: Using a computer or smartphone, register at https://attendee.gotowebinar.com/register/6553528445149070166. 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; 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 June 5, 2024.

AGENDA

1. Call to Order

2. Pledge of Allegiance

3. Roll Call

4. Comments from the Public

5. Comments from Advisory Committee Members (TAC/CAC/BPAC)

6. Approval of Agenda

7. Approval of Meeting Summary
   - *April 3, 2024 Regular Board Meeting*

8. Consent Agenda

   8a. Resolution 24-02 for Transportation Disadvantaged (TD) Planning Grant Application: Adoption of Resolution 24-02 authorizing the execution of the TD Planning Grant Application for FY 2024/25.

   Action: Adopt or do not adopt.

9. Action Items

   9a. Draft FY 2024/25 – FY 2028/29 Transportation Improvement Program (TIP): Adoption of the draft FY 2024/25 – FY 2028/29 TIP.

   Action: Adopt the draft TIP, adopt with conditions, or do not adopt.

9b. City of Fort Pierce Passenger Rail Station/Mobility Hub Concepts Plan: A presentation of the planning and concepts for the City of Fort Pierce Passenger Rail Station/Mobility Hub.

Action: *Accept the Concepts Plan, accept with conditions, or do not accept.*

9c. Transit Development Plan (TDP) Major Update: Review of the draft TDP Major Update for the St. Lucie TPO area.

Action: Endorse the draft TDP Major Update, endorse with conditions, or do not endorse.

9d. Advanced Air Mobility (AAM) Study Phase 2: A presentation of Phase 2 of the AAM Study.

Action: *Accept Phase 2 of the AAM Study, accept with conditions, or do not accept.*

9e. 2024/25 List of Priority Projects (LOPP): Adoption of the draft LOPP for 2024/25 for the St. Lucie TPO.

Action: Adopt the draft 2024/25 LOPP, adopt with conditions, or do not adopt.

10. FDOT Comments

11. Recommendations/Comments by Members

12. TPO Staff Comments

13. Next Meeting: The next St. Lucie TPO Board Meeting is a regular meeting scheduled for 2:00 pm on Wednesday, August 7, 2024.

14. 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.

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 with respect to any matter considered at this 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 informaciòn en español, por favor llame al 772-462-1593.

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REGULAR BOARD MEETING

DATE: Wednesday, April 3, 2024

TIME: 2:00 pm

MEETING SUMMARY

1. Call to Order

Chairman Dzadovsky called the meeting to order at 2:05 pm.

2. Pledge of Allegiance

Chairman Dzadovsky led the Pledge of Allegiance.

3. Roll Call

The roll was called, and a quorum was confirmed with the following members present:

Members Present	Representing
Commissioner Chris Dzadovsky, Chair	St. Lucie County
Commissioner Curtis Johnson, Jr., Vice Chair	City of Fort Pierce
Vice Mayor Jolien Caraballo	City of Port St. Lucie
Robert Driscoll	Community Transit
Commissioner Jamie Fowler	St. Lucie County
Mayor Linda Hudson	City of Fort Pierce
Jack Kelly	St. Lucie Public Schools
Commissioner Larry Leet	St. Lucie County
Councilwoman Stephanie Morgan	City of Port St. Lucie
Councilman David Pickett	City of Port St. Lucie
Commissioner Cathy Townsend	St. Lucie County

Others Present	Representing
Kyle Bowman (via web)	St. Lucie TPO
Peter Buchwald	St. Lucie TPO
Yi Ding	St. Lucie TPO
Marceia Lathou	St. Lucie TPO
Stephanie Torres	St. Lucie TPO
Rachel Harrison	Recording Specialist
Ciara Forbes	TPO/County Attorney
Adolfo Covelli	St. Lucie County Transit
Patrick Dayan	St. Lucie County
Cesar Martinez (via web)	Florida Department of Transportation (FDOT)
Kris McKirdy	FDOT
Thomas Salvador	City of Port St. Lucie
Emily Seitter	City of Port St. Lucie
Victoria Williams	Florida's Turnpike

4. Comments from the Public – None.

5. Comments from Advisory Committee Members (TAC/CAC/BPAC) – None.

6. Approval of Agenda

* MOTION by Mayor Hudson to approve the agenda.

** SECONDED by Commissioner Fowler Carried UNANIMOUSLY

7. Approval of Meeting Summary
   - February 7, 2024 Regular Board Meeting

* MOTION by Commissioner Fowler to approve the Meeting Summary.

** SECONDED by Commissioner Townsend Carried UNANIMOUSLY

8. Action Items

8a. Transportation Alternatives Program (TAP) 2024 Grant Application: Review of a TAP grant application for the 2024 cycle.

Mr. Buchwald summarized the types of projects for which TAP funding may be used and explained when the $650,000 of funding available to the St. Lucie TPO for the 2024 grant cycle would be programmed. He indicated that an application had been submitted by St. Lucie County for the Sunrise Boulevard Sidewalk Project, provided details on the project's parameters and cost, and noted that the applicant had requested approximately $1 million in funding.

Citing the right-of-way constraints on Bell Avenue due to the cemetery located on the roadway's southern border, Chairman Dzadovsky suggested that the City of Fort Pierce consider ways to incorporate easements into the site plans of future developments on that corridor.

* MOTION by Commissioner Fowler to endorse the TAP grant application.

** SECONDED by Mayor Hudson Carried UNANIMOUSLY

8b. FY 2024/25 – FY 2025/26 Draft Unified Planning Work Program (UPWP) and Proposed Budget: Review and adoption of the draft UPWP and proposed budget for the St. Lucie TPO for FY 2024/25 – FY 2025/26.

Mr. Buchwald explained the UPWP as a two-year program of transportation planning activities undertaken by the TPO and supported by State and Federal funds. He described the scope and purpose of the UPWP, noting that the one under consideration today would take effect in July 2024, and recounted a number of accomplishments from the current work program. Mr. Buchwald detailed the public involvement efforts conducted as part of the UPWP development process and identified several recurring projects and efforts that would continue into the new cycle. Mr. Ding, Ms. Torres, and Ms. Lathou presented, in turn, the proposed projects they would individually be managing, and Mr. Buchwald concluded with an overview of the proposed budget.

Chairman Dzadovsky noted the likelihood of increased freight traffic in connection with the planned expansion of the Treasure Coast International Airport and the proliferation of intermodal distribution centers around the TPO area, commenting on the need to consider those impacts during the St. Lucie Freight Network Update. Mr. Ding indicated that TPO staff would consult airport representatives and other stakeholders during the freight planning process, with Mr. Buchwald adding that they would also coordinate with FDOT to ensure that the District 4 freight activity data was updated. Chairman Dzadovsky asserted the importance of maintaining accurate freight data to facilitate the justification of new highway interchanges.

Vice Chairman Johnson initiated a discussion on the safety challenges arising from the use of ebikes and other developing technologies alongside nonmotorized forms of transportation. In response to his questions, Mr. Buchwald explained that ebike collision data was incomplete because such collisions did not always occur on roads and because, when they did, the uniform crash reporting form contained no dedicated box specifying the involvement of an ebike. Ms. Torres described efforts to improve ebike crash reporting through coordination with trauma centers, and Chairman Dzadovsky suggested that local fire personnel revise their reporting form to facilitate the documentation of ebike involvement during emergency responses. Ms. Torres noted the current State policy of allowing ebikes on trails and multiuse paths unless the practice had been prohibited by the jurisdiction in which the facility was located. Vice Chairman Johnson expressed concern regarding the speeds at which ebikes could travel, and Vice Mayor Caraballo commented on the need to include separate accommodations for motorized and nonmotorized forms of transportation when designing roadways.

Chairman Dzadovsky remarked on the possibility of implementing a blueway along the St. Lucie River. Ms. Torres indicated that the concept could be added to the Oxbow Eco-Center Pedestrian Link feasibility study, noting the timeliness of the suggestion given the current drive toward environmentally sustainable trails and wildlife corridors. Discussion ensued regarding ways to employ such facilities as tourism attractions via competitive events, with Chairman Dzadovsky relaying a proposal for a modified Iron Man in which the swimming portion of the race could be replaced by paddling. Ms. Torres commended the creativity of the idea and noted the increasing success of some of the County's competitive trail runs.

Commissioner Townsend complimented Ms. Torres on her presentation.

In response to Mr. Kelly's comment, Mr. Buchwald affirmed that the draft UPWP and budget could be amended if needed.

Responding to Vice Mayor Caraballo's inquiry, Mr. Buchwald indicated that TPO staff would be conducting an update to the Electric Vehicle Study to incorporate recent trends in the EV industry, such as the increase in the electrification of freight vehicles and increased automation. Vice Mayor Caraballo noted several challenges related to the increase in EVs, including the need to provide adequate charging infrastructure and replace lost gasoline tax revenue, while Mayor Hudson emphasized the need to consider impacts to the electrical grid. Chairman Dzadovsky commented on the role of private enterprise in

providing charging facilities, and Vice Mayor Caraballo remarked on the possibility of establishing franchise fees to provide local jurisdictions with revenue. Mr. Buchwald described the TPO's previous efforts to assist St. Lucie County in analyzing appropriate locations for EV charging facilities, elaborated on the issue of incentivizing private development of such facilities, and recounted his interactions on the subject with the Fort Pierce Utilities Authority. Councilwoman Morgan then reported on the Florida MPO Advisory Council's efforts to replace the gasoline tax.

Commissioner Leet noted the increasing popularity of hydrogen vehicles, speculating that they might gain market share at the expense of EVs.

* MOTION by Mr. Kelly to adopt the FY 2024/25 – FY 2025/26 draft UPWP and proposed budget.

** SECONDED by Vice Mayor Caraballo Carried UNANIMOUSLY

8c. Resolution No. 24-01 for the Metropolitan Planning Organization (MPO) Agreement: Adoption of Resolution No. 24-01 authorizing the execution of an MPO Agreement for the receipt of Federal and State funds to support the implementation of the UPWP.

Mr. Buchwald explained FDOT's requirement that the TPO execute an MPO Agreement to receive Federal and State funds in support of the implementation of the UPWP. He indicated that Resolution 24-01 had been reviewed by the TPO attorney and would authorize the TPO's Executive Director to execute the Agreement, as well as any subsequent documents or contracts needed for the receipt of UPWP funding.

* MOTION by Mr. Kelly to adopt Resolution 24-01.

** SECONDED by Mayor Hudson Carried UNANIMOUSLY

9. <u>Discussion Items</u>

9a. Community Profiles Update: An analysis of Census data for the TPO area that informs and guides the TPO's public outreach to disadvantaged communities.

Mr. Buchwald introduced the agenda item and invited Mr. Ding to continue. Mr. Ding noted the Federal Title VI requirement for MPOs to ensure that traditionally underserved communities were provided with

opportunities to meaningfully engage in the transportation planning process, explaining that the development of Community Profiles assisted the TPO in providing those opportunities. He described the methodology by which the update had been completed, a process that included using Census data to identify geographical areas in St. Lucie County with a comparatively high percentage of minority residents, residents with limited English proficiency, residents living below the poverty line, residents living with disabilities, households without a vehicle, and senior residents. Mr. Ding then presented with the aid of a map the geographical areas that had been identified as disadvantaged according to these parameters.

Several members expressed doubt regarding the accuracy of the Community Profiles data, especially considering the 2020 Census had been conducted during the COVID-19 Pandemic. Chairman Dzadovsky questioned the disadvantaged score assigned to South Hutchinson Island, and Mr. Ding explained that it had mostly been due to the high average age of the residents. Commissioner Townsend further noted that there were several low-income neighborhoods on the Island. Mr. Kelly likewise questioned the validity of the scores given to the area near the intersection of Port St. Lucie Boulevard and U.S. 1. In response, Mr. Buchwald described the methodology by which the map overlays had been developed, indicating that staff could change the thresholds determining disadvantage if the members deemed it necessary. Chairman Dzadovsky encouraged the members to consider the potential funding opportunities presented by the data rather than its possible shortcomings given that it would not be updated to the same extent for another 10 years.

In response to several members' requests for clarification, Mr. Buchwald and Mr. Ding described how the Community Profiles data was used as a guide for the TPO's public outreach efforts and updated in the years between Census updates using American Community Survey results. Mr. Buchwald explained that the map itself could function as an overlay to ensure that projects and programs were benefitting disadvantaged areas while the data on individual parameters could be used to inform outreach planning, citing as an example the provision of interpretation services during outreach to Limited English Proficiency areas. Mr. Buchwald further explained that the information assisted the TPO in evaluating its priorities to ensure that the area's needs were being met, with one example being the prioritization of sidewalks or new transit routes in neighborhoods with low rates of vehicle ownership.

Vice Mayor Caraballo commended the TPO and its agency partners on providing interpretation services but urged them to consider

door-to-door methods of outreach, recounting a recent interaction with a non-English speaker who was unaware of the transportation options available to her.

Vice Chairman Johnson suggested that members take their jurisdiction's profile data into account when making decisions regarding development. Chairman Dzadovsky concurred, envisioning a situation in which he might negotiate with a developer for a bus stop or sidewalk depending on the relevant neighborhood's needs. Mr. Buchwald indicated that the members could contact Mr. Ding if they required any data going forward.

Commissioner Townsend initiated a discussion on redirecting the funding for the Art in Public Places program toward the County's ART bus system. Chairman Dzadovsky and Mayor Hudson explained the differences in how local jurisdictions contributed funding toward the Art in Public Places program, with Vice Mayor Caraballo subsequently clarifying the role of the City of Port St. Lucie's Art Advisory Board. Commissioner Townsend asserted that maintaining the existing funding mechanism and reallocating the revenue toward artistic bus shelters would still result in aesthetically pleasing public facilities while providing a creative source of support for the expanding transit program, thereby helping more people. Chairman Dzadovsky reiterated his suggestion that members negotiate the inclusion of bus stops and bus shelters as part of the development process, remarking that members could require developers to incorporate artistic features in their facilities. Vice Mayor Caraballo noted several challenges surrounding the reallocation of the funding but identified the issue as an opportunity for dialogue about how the members might best advocate for their constituents.

10. FDOT Comments – Ms. McKirdy introduced herself and provided updates on several of FDOT's current projects within the TPO area. She also reported that the complaint filed by Florida and several other States in opposition to the Federal Greenhouse Gas (GHG) Emissions Rule had been upheld in court, indicating that she would provide more information as it came available. Chairman Dzadovsky welcomed Ms. McKirdy and thanked her for the information.

    Ms. Williams provided details on two upcoming public meetings concerning the planned widening of the Turnpike.

11. Recommendations/Comments by Members – None.

12. TPO Staff Comments – Mr. Buchwald clarified that the previously announced Turnpike meetings would present alternatives for the widening of the segment between State Route 70 and State Route 60. He also informed the members that they would be receiving a presentation from Turnpike representatives after the public meetings so they might offer their comments and suggestions.

    Mr. Buchwald then provided updates on two regulatory initiatives discussed at the February Board meeting, reporting that the proposed State legislation affecting the oversight of Florida MPOs had not passed. He further reported that the GHG Emissions Rule had been overturned, as already mentioned by Ms. McKirdy.

13. Next Meeting: The next St. Lucie TPO Board Meeting is a regular meeting scheduled for 2:00 pm on Wednesday, June 5, 2024.

14. Adjourn – The meeting was adjourned at 3:20 pm.

Respectfully submitted:

_____
Rachel Harrison
Recording Specialist

Approved by:

_____
Commissioner Chris Dzadovsky
Chairman

St. Lucie Transportation Planning Organization

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AGENDA ITEM SUMMARY

Board/Committee:	St. Lucie TPO Board
Meeting Date:	June 5, 2024
Item Number:	8a
Item Title:	Resolution 24-02 for Transportation Disadvantaged (TD) Planning Grant Application
Item Origination:	Unified Planning Work Program (UPWP)
UPWP Reference:	Task 3.8–Transportation Disadvantaged Program
Requested Action:	Adopt or do not adopt.
Staff Recommendation:	Because the TD Grant facilitates the implementation of the TD program in the TPO area, it is recommended that the Board adopt Resolution No. 24-02 to authorize the TPO Executive Director to apply for a FY 2024/25 TD Planning Grant and to execute an agreement for the Grant.

Attachments

- Staff Report
- Excerpt from UPWP
- Resolution No. 24-02

St. Lucie Transportation Planning Organization

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MEMORANDUM

TO: St. Lucie TPO Board

THROUGH: Peter Buchwald
Executive Director

FROM: Marceia Lathou
Transit/ACES Program Manager

DATE: May 29, 2024

SUBJECT: Resolution 24-02 for Transportation Disadvantaged (TD) Planning Grant Application

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BACKGROUND

The Florida Legislature created Florida's TD Program in 1979 to foster the coordination of transportation services for the State's TD population. The TD population consists of individuals whose physical or mental disability, income status, or age make them unable to transport themselves or to purchase transportation. The TD Program is administered at the State level by the Florida Commission for the Transportation Disadvantaged (FCTD) and at the local level by the St. Lucie County Transit Department under the oversight of the Local Coordinating Board for the Transportation Disadvantaged (LCB).

The St. Lucie TPO provides planning-related staff support and resources to the County and the LCB to assist in the identification of and response to public transportation needs in the St. Lucie service area. The TD Program and the support and resources provided by the TPO for the TD Program are further described in the attached excerpt from the TPO's FY 2024/25 – FY 2025/26 Unified Planning Work Program (UPWP).

ANALYSIS

Attached is St. Lucie TPO Resolution No. 24-02 which authorizes the application for TD Program funding and the subsequent execution by the

TPO Executive Director of a TD planning grant agreement for the funding for FY 2024/25.

The funding allocation from the FCTD to the TPO for the TD grant for FY 2024/25 is $29,741 and does not require a local match. The grant funds will be used to perform planning-related work tasks for the TD program as per Florida Statutes and as described in the UPWP excerpt.

The TPO Attorney has reviewed and approved the Resolution for form and correctness.

RECOMMENDATION

Because the TD Grant facilitates the implementation of the TD program in the TPO area, it is recommended that the Board adopt Resolution No. 24-02 to authorize the TPO Executive Director to apply for a FY 2024/25 TD Planning Grant and to execute an agreement for the Grant.

Task 3.8 Transportation Disadvantaged (TD) Program		
Purpose:		
To provide coordination and planning services for the St. Lucie County TD Program in accordance with Chapter 427 FS, Rule 41-2 FAC, and the Americans with Disabilities Act (ADA) which includes the identification of unmet TD needs.		
Previous Work:		
TPO Staff assisted the Community Transportation Coordinator (CTC) in its role of providing safe, coordinated TD services to elderly persons, persons with disabilities, veterans, at-risk children, and economically disadvantaged citizens. TPO staff assisted the redesignation of St. Lucie County as CTC and in the development of the Transportation Disadvantaged Service Plan/Coordinated Plan and Annual Update. Staff assisted in finding alternatives to accommodate unmet local needs. TPO staff provided administrative services to the LCB. This included preparation of meeting summaries, agendas, grant applications, progress reports, and other products. Staff also assessed legislatively mandated changes to the State TD program and undertook TD-related activities as necessary to comply with State legislation. The TD program is coordinated with other public transit planning and services, including veteran services, through the LCB and associated work products. TPO staff coordinated with FDOT, the County, and the transit operator and provided technical assistance for the transitioning of non-life sustaining trips from the current demand response program services to fixed or deviated route services. The TD Program continued to incorporate Environmental Justice into its mission by identifying and addressing, as appropriate, the effects of programs, policies, and activities on minority and low-income populations. The TPO continued to strive to involve the potentially affected public and to develop partnerships with and enhance the participation by traditionally underserved communities.		
Major Activities (performed continuously by the St. Lucie TPO unless otherwise noted):		
• LCB Meeting Support • LCB Planning Support • CTC Technical Assistance • TD Grant Applications • TD Invoice and Progress Reports		
End Product:	Completion Date:	Performed by: St. Lucie TPO
TDSP 2024 Annual Update	December 2024	
TDSP 2025 Annual Update	December 2025	
CTC 2025 Evaluation	June 2025	
CTC 2026 Evaluation	June 2026	
LCB Meeting Summaries (Independent contractor services to be used)	After the LCB Meetings	

Task 3.8 Transportation Disadvantaged (TD) Program Estimated Budget Detail for FY 2024/25						
Budget Category	Budget Category Description	PL (CPG)	SU (STBG)	FCTD (TD)	TPO Local	Total
Contract Number:						
A. Personnel Services:						
TPO Staff Salaries, fringe benefits, and other deductions		$0	$0	$23,038	$0	$23,038
Subtotal:		$0	$0	$23,038	$0	$23,038
B. Contract/Consultant Services:						
LCB Meeting Summaries		$0	$0	$2,000	$0	$2,000
Subtotal:		$0	$0	$2,000	$0	$2,000
C. Travel:						
Travel Expenses		$0	$0	$800	$0	$800
Subtotal:		$0	$0	$800	$0	$800
D. Direct Expenses:						
Advertising		$0	$0	$550	$0	$550
General & Administrative Charges		$0	$0	$1,500	$0	$1,500
Training & Seminar		$0	$0	$300	$0	$300
Postage		$0	$0	$15	$0	$15
Subtotal:		$0	$0	$2,365	$0	$2,365
Total:		$0	$0	$28,203	$0	$28,203

Task 3.8 Transportation Disadvantaged (TD) Program Estimated Budget Detail for FY 2025/26						
Budget Category	Budget Category Description	PL (CPG)	SU (STBG)	FCTD (TD)	TPO Local	Total
Contract Number:						
A. Personnel Services:						
TPO Staff Salaries, fringe benefits, and other deductions		$0	$0	$23,038	$0	$23,038
Subtotal:		$0	$0	$23,038	$0	$23,038
B. Contract/Consultant Services:						
LCB Meeting Summaries		$0	$0	$2,000	$0	$2,000
Subtotal:		$0	$0	$2,000	$0	$2,000
C. Travel:						
Travel Expenses		$0	$0	$800	$0	$800
Subtotal:		$0	$0	$800	$0	$800
D. Direct Expenses:						
Advertising		$0	$0	$550	$0	$550
General & Administrative Charges		$0	$0	$1,500	$0	$1,500
Training & Seminar		$0	$0	$300	$0	$300
Postage		$0	$0	$15	$0	$15
Subtotal:		$0	$0	$2,365	$0	$2,365
Total:		$0	$0	$28,203	$0	$28,203

[1]Federal funds are soft matched by the FDOT non-cash match explained on page 3.

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RESOLUTION NO. 24-02

A RESOLUTION OF THE BOARD OF THE ST. LUCIE TRANSPORTATION PLANNING ORGANIZATION (TPO) AUTHORIZING THE APPLICATION FOR TRANSPORTATION DISADVANTAGED (TD) GRANT FUNDS AND EXECUTION OF A TD GRANT AGREEMENT WITH THE FLORIDA COMMISSION FOR THE TRANSPORTATION DISADVANTAGED FOR FISCAL YEAR 2024/25.

WHEREAS, the St. Lucie Transportation Planning Organization Governing Board hereinafter "BOARD" is eligible to apply for and receive Transportation Disadvantaged grant funds and to undertake a transportation disadvantaged service program as authorized by Section 427.0159, Florida Statutes, and Rule 41-2, Florida Administrative Code.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD THAT:

1. The BOARD has the authority to apply for TD funds and to execute a TD grant agreement for Fiscal Year 2024/25.

2. The BOARD authorizes the TPO Executive Director to apply for TD grant funds and execute a TD grant agreement on behalf of the BOARD with the Florida Commission for the Transportation Disadvantaged.

3. The BOARD's Registered Agent in Florida is the TPO Executive Director. The Registered Agent's address is 466 SW Port St. Lucie Boulevard, Suite 111, Port St. Lucie, Florida, 34953.

4. The BOARD authorizes the TPO Executive Director to sign any and all agreements or contracts which are required in connection with the TD grant funds.

5. The BOARD authorizes the TPO Executive Director to sign any and all assurances, reimbursement invoices, warranties, certifications and any other documents which may be required in connection with the application, agreement or subsequent agreements.

PASSED AND DULY ADOPTED this 5th day of June, 2024.

ST. LUCIE TRANSPORTATION
PLANNING ORGANIZATION (TPO)

_____
Chris Dzadovsky, TPO Chairman

ATTEST:

_____
Marceia Lathou
Transit/ACES Program Manager

APPROVED AS TO FORM AND
CORRECTNESS:

_____
Ciara Forbes
St. Lucie TPO/Asst. County Attorney

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AGENDA ITEM SUMMARY

Board/Committee:	St. Lucie TPO Board
Meeting Date:	June 5, 2024
Item Number:	9a
Item Title:	Draft FY 2024/25 – FY 2028/29 Transportation Improvement Program (TIP)
Item Origination:	Unified Planning Work Program (UPWP) and Federal and State requirements
UPWP Reference:	Task 3.3 – TIP
Requested Action:	Adopt the draft TIP, adopt with conditions, or do not adopt.
Staff Recommendation:	Based on the recommendations of the TPO Advisory Committees and as the draft FY 2024/25 – FY 2028/29 TIP appears to be consistent with the SmartMoves 2045 Long Range Transportation Plan and the Draft Tentative Work Program that was endorsed by the TPO Board, it is recommended that the draft TIP be adopted.

Attachments

- Staff Report
- Draft FY 2024/25 – FY 2028/29 TIP

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MEMORANDUM

TO: St. Lucie TPO Board

THROUGH: Peter Buchwald
Executive Director

FROM: Yi Ding
Transportation Systems Manager

DATE: May 29, 2024

SUBJECT: Draft FY 2024/25 – FY 2028/29 Transportation Improvement Program (TIP)

BACKGROUND

According to Federal and/or State requirements, the St. Lucie Transportation Planning Organization (TPO) annually must develop a Transportation Improvement Program (TIP). The purpose of the TIP is to identify the transportation improvement projects located within the TPO area that have been prioritized and are receiving Federal and State funding over the next five years.

In addition, the TIP is used to coordinate projects among the U.S. Department of Transportation (USDOT), the Florida Department of Transportation (FDOT), and the local governments located within the TPO area. The TIP is developed by the TPO in cooperation with these agencies and the Treasure Coast International Airport, the Port of Fort Pierce, St. Lucie Area Regional Transit (ART), and the general public.

ANALYSIS

The development of the TIP is a year-long process that is continuous, cooperative, and comprehensive. For the TPO's FY 2024/25 – FY 2028/29 TIP, the process started in May 2023 with the development of the TPO's List of Priority Projects (LOPP). The LOPP then was reviewed by the TPO Advisory

Committees, adopted by the TPO Board, and submitted to FDOT District 4 in June 2023.

The LOPP was utilized by FDOT District 4 to develop their Draft Tentative Work Program for FY 2024/25 – FY 2028/29. The Draft Tentative Work Program was reviewed and recommended for endorsement by the TPO Advisory Committees and was subsequently endorsed by the TPO Board in October 2023.

The Final Tentative Work Program was received from FDOT in April 2024 and used to prepare the attached TIP that is also available through the web-based Interactive TIP on Community Remarks. The Final Tentative Work Program, which is a primary component of the draft TIP, was reviewed by TPO staff and appears to be consistent with the Draft Tentative Work Program that was recommended for endorsement by the TPO Advisory Committees.

The draft TIP includes the following multimodal highlights:

- The widening of the Midway Road from Glades Cut Off Road to Jenkins Road and the new Turnpike interchange at Midway Road are programmed for construction in FY 2026/27;

- The payback of the local funding by the TPO for the advancement of the widening of Midway Road from Jenkins Road to Selvitz Road is programmed for FY 2025/26;

- The Project Development and Environment Study (PD&E) for the widening of California Boulevard from Del Rio Boulevard to Crosstown Parkway is programmed;

- The PD&E for the widening of I-95 from the Martin County Line to Okeechobee Road is programmed for FY 2024/25;

- The intersection improvement of Gatlin Boulevard at Savona Boulevard is programmed for construction in FY 2024/25;

- The resurfacing of the Green River Parkway Trail from Walton Road to the Martin County Line is programmed for construction in FY 2025/26;

- The construction of the SR-A1A SUN Trail from Fort Pierce Inlet State Park to the Indian River County Line is programmed in FY 2027/28;

- The design of the Port of Fort Pierce SUN Trail Connector project is programmed for FY 2024/25;

- The sidewalk on Nebraska Avenue from Lawnwood Circle to 13th Street is programmed for construction in FY 2025/26;

- Completing the sidewalk gap on St. James Drive from Lazy River Parkway to Royce Avenue is programed for construction in FY 2026/27;

- The resurfacing projects of Orange Avenue from Lamont Road to N. 32nd Street and Okeechobee Road from BMP 6.351 to Ideal Holding Road are programmed for construction in FY 2027/28;

- Over $1,674,000 of funding is programmed for the Peacock Trail Project through the TPO's Transportation Alternatives Program (TAP) funding from the 2023 grant cycle;

- The advancement by two years to FY 2025/26 of the construction for the widening of Port St. Lucie Boulevard from Becker Road to Paar Drive with local funding and the payback by the TPO of the local funding in FY 2027/28 are programmed; and,

- The programming of eleven airport projects resulting in approximately $8 million of new funding.

It should be further noted that the total amount of funding in the draft TIP for the TPO area exceeds a total of $535 million which exceeds the previous TIP by almost $90 million. In addition, the draft TIP appears to be consistent with the SmartMoves 2045 Long Range Transportation Plan.

At their meetings during the week of May 20th, the TPO Advisory Committees recommended the adoption of the draft FY 2024/25 – FY 2028/29 TIP.

RECOMMENDATION

Based on the recommendations of the TPO Advisory Committees and as the draft FY 2024/25 – FY 2028/29 TIP appears to be consistent with the SmartMoves 2045 Long Range Transportation Plan and the Draft Tentative Work Program that was endorsed by the TPO Board, it is recommended that the draft TIP be adopted.

TRANSPORTATION IMPROVEMENT PROGRAM FY 2024/25 - FY 2028/29

DRAFT

TIP CONTACT INFORMATION

466 SW Port St. Lucie Boulevard
Port St. Lucie, FL 34953

Yi Ding, Program Manager
www.stlucietpo.org

phone: (772) 462-1593
fax: (772) 462-2549

ENDORSEMENT: The Transportation Improvement Program of the St. Lucie Transportation Planning Organization has been developed consistent with Federal regulations 23 U.S.C. 134(j) and 23 CFR 450 and Florida Statute 339.175(8) in cooperation with the Florida Department of Transportation and public transit operators.

ACKNOWLEDGMENT: The preparation of this report has been funded in part through grants from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation (USDOT), under the Metropolitan Planning Program of the U.S. Code (Title 23, Section 104f). The contents of this report do not necessarily reflect the official views or policy of the USDOT.

TITLE VI STATEMENT: 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.

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

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

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A. INTRODUCTION

A.1 HOW TO USE THE TIP

The intent of the Transportation Improvement Program (TIP) is to identify and prioritize the transportation improvement projects over the next five years that are receiving State and Federal funding and are located within the Metropolitan Planning Area (MPA) of the St. Lucie Transportation Planning Organization (St. Lucie TPO). The St. Lucie TPO MPA is identified on the map on page A-7.

To use the TIP:

- Locate the project in the Project Index in Section A.2 or on either of the Project Location Maps in Section A.3 to identify the Project Number or Project Name.
- Using the Project Name, reference directly the alphabetically-listed projects in the Detailed Project Listing pages or, by using the Project Number, identify the TIP Page Number for the project from the Project Index.
- Refer to the corresponding TIP Page Number to obtain information regarding the project in the Detailed Project Listings pages.
- Refer to the corresponding LRTP Page Number in the Project Index or in the Detailed Project Listings pages to cross-reference the project, if applicable, in the SmartMoves 2045 Long Range Transportation Plan (LRTP).
- Refer to Section A.4 for a Glossary of Abbreviations and Phase/Funding Codes.
- Refer to Section B for information on Federal and State requirements for development of the TIP.
- Refer to Section C for the Detailed Project Listings which include whether the project is located on the Florida Strategic Intermodal System (SIS) and the Total Project Cost.
- Refer to Section D for the TPO List of Priority Projects.
- Refer to Section E for an evaluation of project and system performance
- Refer to the Appendices for an Example Public Comment Notice and for information on locally-funded projects and TIP amendments that have been adopted.
- Refer to the contact information on the cover of the TIP if you have any questions or comments.

Explanations of the SIS and Total Project Costs

SIS: The SIS is a network of high priority transportation facilities in Florida which includes the State's largest and most significant commercial service airports, spaceport, deep-water seaports, freight and passenger rail terminals, intercity bus terminals, rail corridors, waterways and highways. All projects on the SIS will have a SIS identifier in the top right corner of the Detailed Project Listings pages in Section C of the TIP.

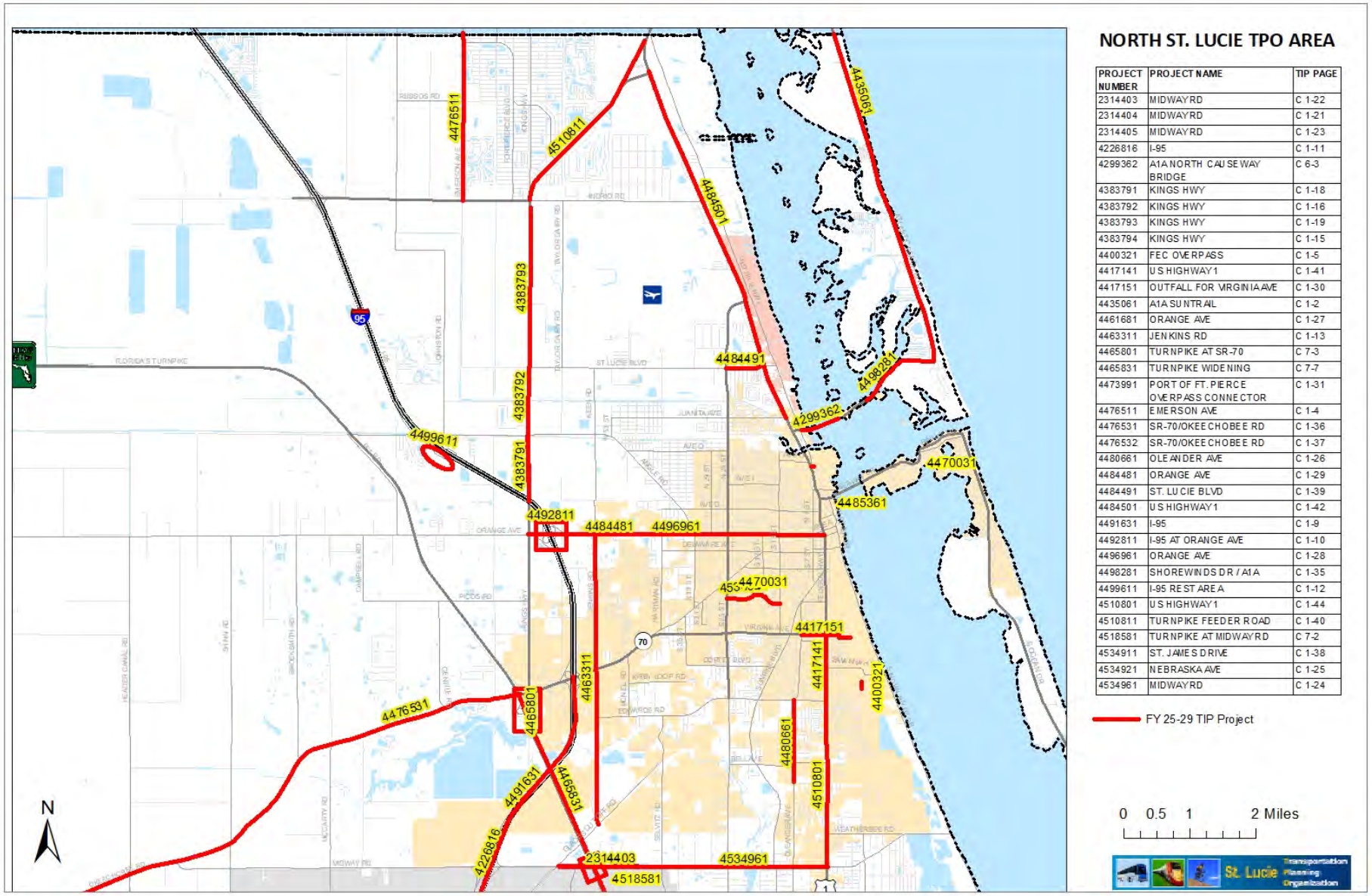
Total Project Costs: A typical project production sequence is to have a Project Development and Environment (PD&E) phase, followed by a Design (PE) phase, a Right of Way (ROW) phase and a Construction (CST) phase. Some projects may not include a ROW phase if land acquisition is not needed to complete the project. Costs in the Detailed Project Listing pages in Section C of the TIP may include the historical costs (Prior Year Cost), the costs in the five years of the current TIP, the costs in the years beyond the current TIP (Future Year Cost), and the sum of all of these costs which is the Total Project Cost. For some projects such as resurfacing, safety, or operational projects, there may not be a Total Project Cost identified, but additional details on that program will be included.

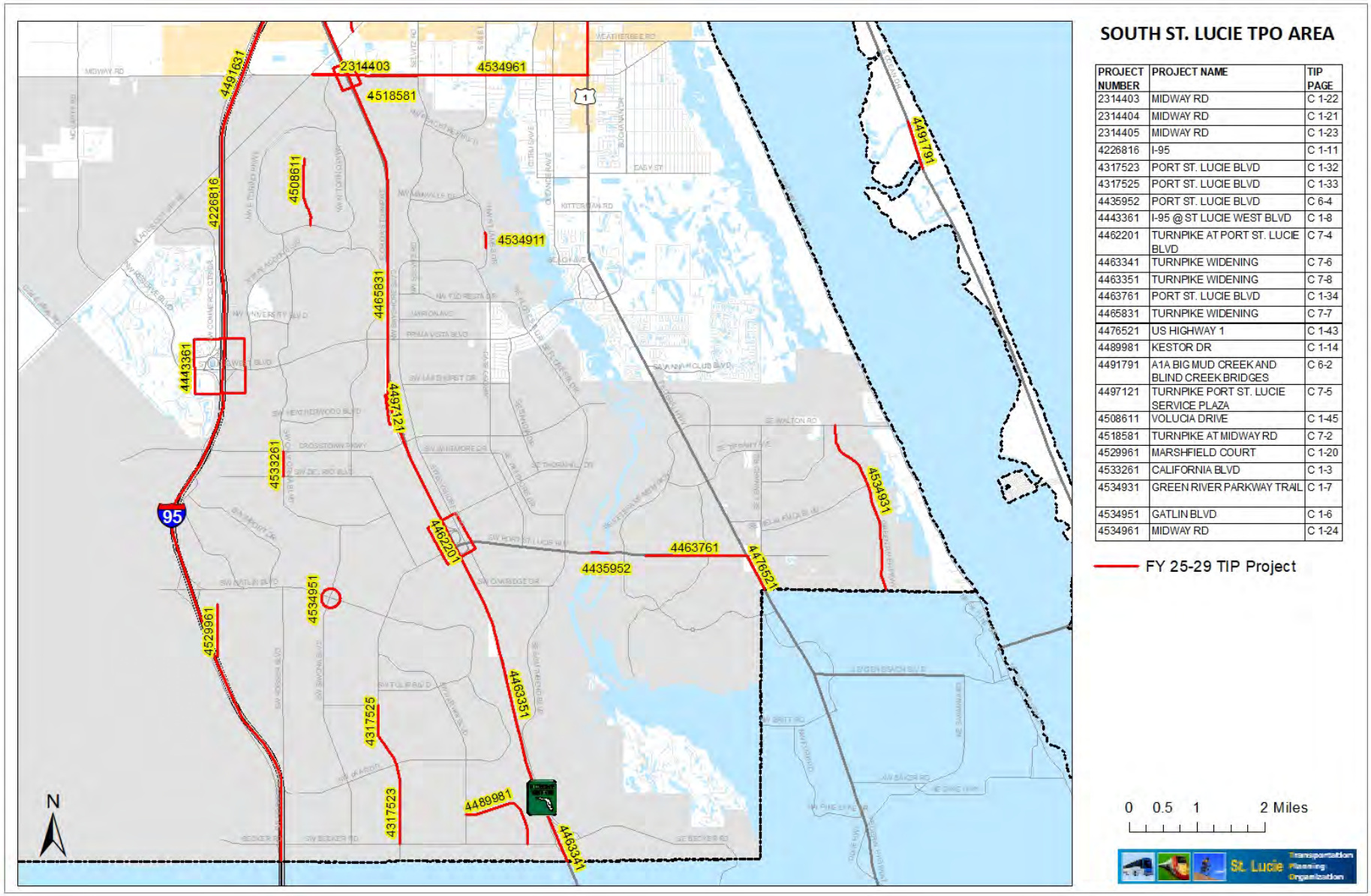
A.2 PROJECT INDEX AND TIP/RLRTP CROSS REFERENCE

PROJECT NAME	PROJECT LIMITS FROM	PROJECT LIMITS TO	DESCRIPTION	PROJECT NUMBER	LRTP PAGE	TIP PAGE	TIP MAP PAGE
4491791	A1A BIG MUD CREEK AND BLIND CREEK BRIDGES	BIG MUD CREEK BRIDGE	BLIND CREEK BRIDGE	BRIDGE REPLACEMENT	3-9	C 6-2	A-5
4299362	A1A NORTH CAUSEWAY BRIDGE	ENTIRE BRIDGE	ENTIRE BRIDGE	BRIDGE REPLACEMENT	8-3	C 6-3	A-4
4435061	A1A SUNTRAIL	FT PIERCE INLET STATE PARK	SLC/INDIAN RIVER COUNTY LINE	BIKE PATH/TRAIL	8-2	C 1-2	A-4
4533261	CALIFORNIA BLVD	DEL RIO BLVD	CROSSTOWN PARKWAY	ADD LANES & RECONSTRUCT	8-11	C 1-3	A-5
4476511	EMERSON AVE	INDRIO RD	25TH ST	RESURFACING	3-9	C 1-4	A-4
4400321	FEC OVERPASS	SAVANNAS RECREATION AREA	SOUTH OF SAVANNAH RD.	BIKE PATH/TRAIL	8-2	C 1-5	A-4
4534951	GATLIN BLVD	@ SAVONA BLVD	@ SAVONA BLVD	ADD TURN LANE(S)	3-9	C 1-6	A-5
4534931	GREEN RIVER PARKWAY TRAIL	WALTON RD	MARTIN COUNTY LINE	BIKE PATH/TRAIL	3-9	C 1-7	A-5
4226816	I-95	SLC/MARTIN COUNTY LINE	SR-70/OKEECHOBEE RD	PD&E/EMO STUDY	8-3	C 1-11	A-4, 5
4443361	I-95 @ ST LUCIE WEST BLVD	@ ST LUCIE WEST BLVD	@ ST LUCIE WEST BLVD	LANDSCAPING	8-2	C 1-8	A-5
4491631	I-95	N OF GLADES CUT-OFF RD	N OF FLORIDA TURNPIKE	RESURFACING	3-9	C 1-9	A-4
4492811	I-95 AT ORANGE AVE	NB EXIT RAMP TO WB ORANGE AVE	NB EXIT RAMP TO WB ORANGE AVE	SKID HAZARD OVERLAY	3-9	C 1-10	A-4
4499611	I-95 REST AREA	ST. LUCIE SB REST AREA	ST. LUCIE SB REST AREA	REST AREA	3-9	C 1-12	A-4
4463311	JENKINS RD	MIDWAY RD	ORANGE AVENUE	PD&E/EMO STUDY	8-3	C 1-13	A-4
4489981	KESTOR DR	DARWIN BOULEVARD	BECKER RD	SIDEWALK	8-11	C 1-14	A-5
4383794	KINGS HWY	N OF I-95 OVERPASS	SOUTH OF ANGLE	ADD LANES & RECONSTRUCT	8-2	C 1-15	A-4
4383792	KINGS HWY	NORTH OF COMMERCIAL CIR	ST LUCIE BLVD	ADD LANES & RECONSTRUCT	8-2	C 1-16	A-4
4383791	KINGS HWY	N OF I-95 OVERPASS	N OF COMMERCIAL CIR	ADD LANES & RECONSTRUCT	8-2	C 1-18	A-4
4383793	KINGS HWY	N OF ST. LUCIE BLVD	INDRIO ROAD	ADD LANES & RECONSTRUCT	8-2	C 1-19	A-4
4529961	MARSHFIELD COURT	SW DREYFUSS BLVD	SW HAYWORTH AVE	BIKE PATH/TRAIL	3-9	C 1-20	A-5
2314404	MIDWAY RD	GLADES CUT OFF RD	JUST WEST OF JENKINS RD	ADD LANES & RECONSTRUCT	8-11	C 1-21	A-4, 5
2314403	MIDWAY RD	GLADES CUT OFF RD	SELVITZ RD	ADD LANES & RECONSTRUCT	8-2	C 1-22	A-4, 5
2314405	MIDWAY RD	JENKINS RD	SELVITZ RD	ADD LANES & RECONSTRUCT	8-11	C 1-23	A-4, 5
4534961	MIDWAY RD	SELVITZ RD	US-1	ATMS - ARTERIAL TRAFFIC MGMT	3-9	C 1-24	A-4, 5
4534921	NEBRASKA AVE	SOUTH LAWNWOOD CIRCLE	SOUTH 13TH ST	SIDEWALK	3-9	C 1-25	A-4
4480661	OLEANDER AVE	SOUTH MARKET AVE	EDWARDS RD	SIDEWALK	3-9	C 1-26	A-4

4461681	ORANGE AVE	KINGS HWY	E OF I-95 SB RAMP	INTERCHANGE - ADD LANES	8-3	C 1-27	A-4
4496961	ORANGE AVE	KINGS HWY	US-1	ATMS - ARTERIAL TRAFFIC MGMT	8-11	C 1-28	A-4
4484481	ORANGE AVE	LAMONT RD	N 32ND ST	RESURFACING	3-9	C 1-29	A-4
4417151	OUTFALL FOR VIRGINIA AVE	OLEANDER BLVD	INDIAN HILLS DR	DRAINAGE IMPROVEMENTS	3-9	C 1-30	A-4
4473991	PORT OF FT. PIERCE SUNTRAIL CONNECTOR	PORT OF FT. PIERCE	PORT OF FT. PIERCE	BIKE PATH/TRAIL	3-9	C 1-31	A-4
4317523	PORT ST. LUCIE BLVD	BECKER RD	PAAR DRIVE	ADD LANES & RECONSTRUCT	8-2	C 1-32	A-5
4317525	PORT ST. LUCIE BLVD	SOUTH OF PAAR DR	SOUTH OF ALCANTARRA BLVD	ADD LANES & RECONSTRUCT	8-2	C 1-33	A-5
4435952	PORT ST. LUCIE BLVD	LONG CREEK	N FORK ST LUCIE RIVER	BRIDGE-REPAIR/REHABILITATION	3-9	C 6-4	A-5
4463761	PORT ST. LUCIE BLVD	SHELTER DR	US-1	RESURFACING	3-9	C 1-34	A-5
4498281	SHOREWINDS DR / A1A	0.2 MILES W OF BR 940046	ATLANTIC BEACH BLVD	RESURFACING	3-9	C 1-35	A-4
4476531	SR-70/OKEECHOBEE RD	IDEAL HOLDING RD	W OF KINGS HWY	RESURFACING	3-9	C 1-36	A-4
4476532	SR-70/OKEECHOBEE RD	MEDIAN CROSSING AT BMP 6.351	IDEAL HOLDING RD	RESURFACING	3-9	C 1-37	A-4
4534911	ST. JAMES DRIVE	NE LAZY RIVER PARKWAY	NE ROYCE AVE	SIDEWALK	3-9	C 1-38	A-4
4484491	ST. LUCIE BLVD	EAST OF N 25 ST	WEST OF US-1	RESURFACING	3-9	C 1-39	A-4
4518581	TURNPIKE AT MIDWAY RD	SOUTHERN RAMPS INTERCHANGE	SOUTHERN RAMPS INTERCHANGE	NEW INTERCHANGE RAMP	3-9	C 7-2	A-4, 5
4465801	TURNPIKE @ SR-70	INTERCHANGE	INTERCHANGE	INTERCHANGE IMPROVEMENT	3-9	C 7-3	A-4
4462201	TURNPIKE AT PORT ST. LUCIE BLVD	INTERCHANGE	INTERCHANGE	INTERCHANGE IMPROVEMENT	3-9	C 7-4	A-5
4510811	TURNPIKE FEEDER ROAD	INDRIO ROAD	US-1	LIGHTING	3-9	C 1-40	A-4
4497121	TURNPIKE PORT ST. LUCIE SERVICE PLAZA	SERVICE PLAZA	SERVICE PLAZA	PARKING IMPROVEMENTS	3-9	C 7-5	A-5
4463341	TURNPIKE WIDENING	MARTIN C/L	BECKER RD	ADD LANES & RECONSTRUCT	3-9	C 7-6	A-5
4465831	TURNPIKE WIDENING	CROSSTOWN PKWY	SR70	ADD LANES & RECONSTRUCT	3-9	C 7-7	A-4, 5
4463351	TURNPIKE WIDENING	BECKER RD	CROSSTOWN PKWY	ADD LANES & RECONSTRUCT	3-9	C 7-8	A-5
4417141	US HIGHWAY 1	EDWARDS RD	TENNESSEE AVE	DRAINAGE IMPROVEMENTS	3-9	C 1-41	A-4
4484501	US HIGHWAY 1	SOUTH OF JUANITA AVE	NORTH OF KINGS HWY	RESURFACING	3-9	C 1-42	A-4
4476521	US HIGHWAY 1	MARTIN/ST. LUCIE COUNTY LINE	PORT ST. LUCIE BLVD	RESURFACING	3-9	C 1-43	A-5
4510801	US HIGHWAY 1	MIDWAY ROAD	SOUTH OF EDWARDS ROAD	LIGHTING	3-9	C 1-44	A-4
4508611	VOLUCIA DRIVE	EAST TORINO PARKWAY	WEST BLANTON BOULEVARD	SIDEWALK	3-9	C 1-45	A-5

A.3 TIP PROJECT LOCATION MAPS



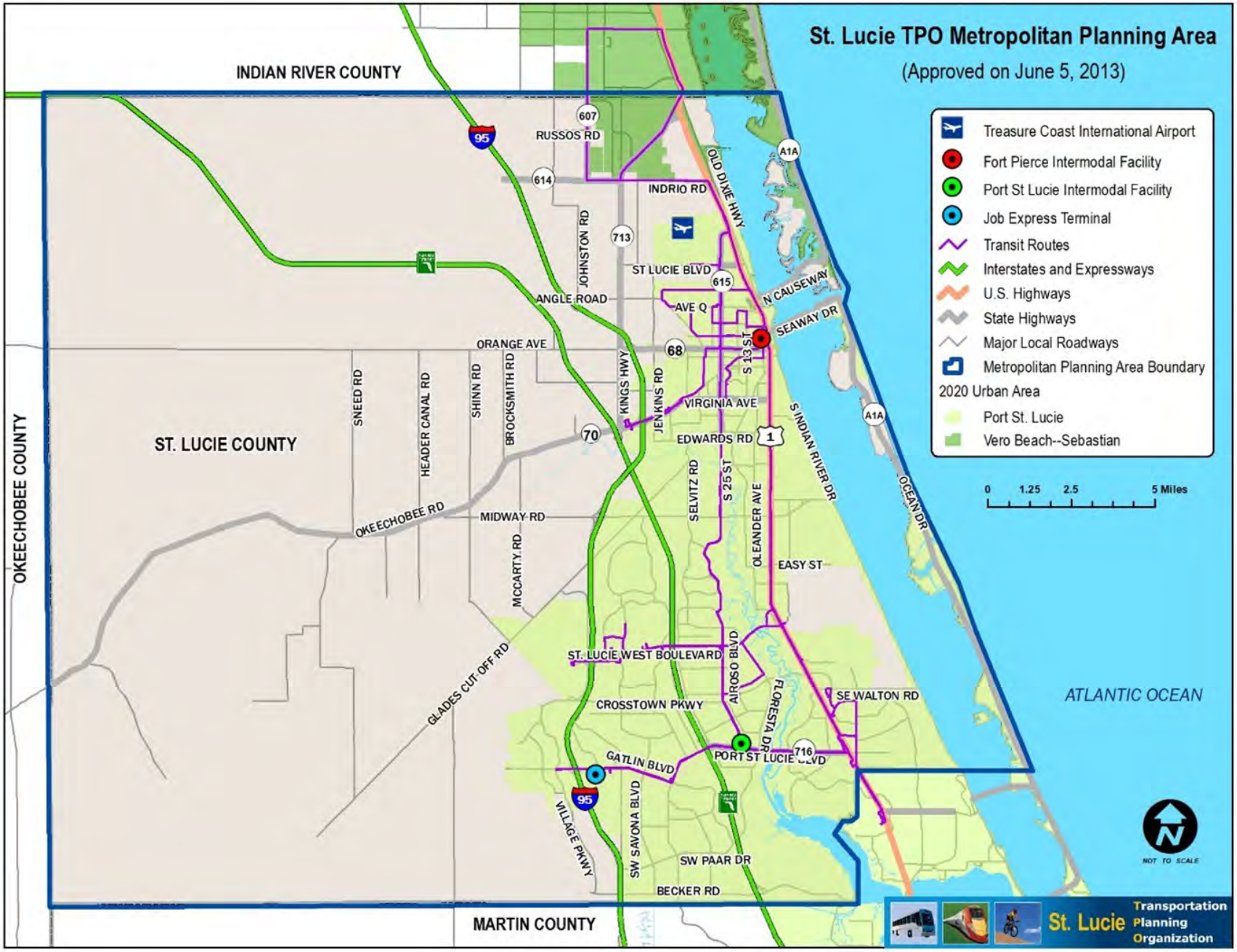


PROJECT NUMBER	PROJECT NAME	TIP PAGE
2314403	MIDWAY RD	C 1-22
2314404	MIDWAY RD	C 1-21
2314405	MIDWAY RD	C 1-23
4226816	I-95	C 1-11
4317523	PORT ST. LUCIE BLVD	C 1-32
4317525	PORT ST. LUCIE BLVD	C 1-33
4435952	PORT ST. LUCIE BLVD	C 6-4
4443361	I-95 @ ST LUCIE WEST BLVD	C 1-8
4462201	TURNPIKE AT PORT ST. LUCIE BLVD	C 7-4
4463341	TURNPIKE WIDENING	C 7-6
4463351	TURNPIKE WIDENING	C 7-8
4463761	PORT ST. LUCIE BLVD	C 1-34
4465831	TURNPIKE WIDENING	C 7-7
4476521	US HIGHWAY 1	C 1-43
4489981	KESTOR DR	C 1-14
4491791	A1A BIG MUD CREEK AND BLIND CREEK BRIDGES	C 6-2
4497121	TURNPIKE PORT ST. LUCIE SERVICE PLAZA	C 7-5
4508611	VOLUCIA DRIVE	C 1-45
4518581	TURNPIKE AT MIDWAY RD	C 7-2
4529961	MARSHFIELD COURT	C 1-20
4533261	CALIFORNIA BLVD	C 1-3
4534931	GREEN RIVER PARKWAY TRAIL	C 1-7
4534951	GATLIN BLVD	C 1-6
4534961	MIDWAY RD	C 1-24

A.4 GLOSSARY OF ABBREVIATIONS AND PHASE/FUNDING SOURCE CODES

ADM	Administration	MNT	Contract Maintenance
BPAC	Bicycle Pedestrian Advisory Committee	MPO	Metropolitan Planning Organization
BRDG	Bridge	MSC	Grant to Local Government
CAC	Citizens Advisory Committee	OPS	Operations
CAP	Capital	PD&E	Project Development and Environmental
CEI	Construction, Engineering, & Inspection	PE	Preliminary Engineering
CIP	Capital Improvements Program	PIP	Public Involvement Program
CLV	Culvert	PLN	Planning
CMP	Congestion Management Process	PST	DES Post Design
CST	Construction	PTO	Public Transportation Office
CTC	Community Transportation Coordinator	RELOC	Right of Way Relocation
DCA	Department of Community Affairs	RLRTP	Regional Long Range Transportation Plan
DSB	Design Build	ROW	Right of Way Support
E/D	Engineering & Design	ROW LND	Right of Way Land
ENV	Environmental	RR	CST Railroad Construction
EPA	Environmental Protection Agency	RRX	Railroad Crossing
FAA	Federal Aviation Administration	RRU	Railroad/Utilities Construction
FDOT	Florida Department of Transportation	SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act–a Legacy for Users
FHWA	Federal Highway Administration	SLC	St. Lucie County
FTA	Federal Transit Administration	SRA	Senior Resource Association, Inc.
INC	Construction Incentive	TAC	Technical Advisory Committee
IRC	Indian River County	TD	Transportation Disadvantaged
LAR	Local Agency Reimbursement	TDC	Transportation Disadvantaged Commission
LCB	Local Coordinating Board	TIP	Transportation Improvement Program
LOPP	List of Priority Projects	TMA	Transportation Management Area
MAP - 21	Moving Ahead for Progress in the 21st Century	TPO	Transportation Planning Organization
MC	Martin County	UPWP	Unified Planning Work Program
MIT	Mitigation	UTL	Utility Coordination

A.5 TPO METROPOLITAN PLANNING AREA MAP



B. NARRATIVE

B.1 PURPOSE

The purpose of the TIP is to identify and prioritize transportation improvement projects receiving Federal and State funding over a five-year period that are located within the St. Lucie TPO MPA. In addition, the TIP is used to coordinate the transportation improvement projects of the U.S. Department of Transportation (USDOT), the Florida Department of Transportation (FDOT), and the local governments located within the MPA. Projects in the TIP are presented in Year of Expenditure (YOE), which takes into account the inflation rate over the five years in the TIP. Therefore the programmed cost estimate for each project is inflated to the year that the funds are expended based on reasonable inflation factors developed by the State and its partners. The TIP is also used to identify all regionally significant transportation projects for which Federal action is required, whether or not the projects receive Federal funding. As the St. Lucie TPO is in an air quality attainment area, there are no regionally significant air quality-related transportation improvement projects in the TIP.

B.2 Financial Plan

The Financial Plan of the TIP is based upon the FDOT District 4 Tentative Work Program for FY 2024/25 – FY 2028/29; the previous year's TIP; the SmartMoves Long Range Transportation Plan (LRTP); and information provided by St. Lucie County, the City of Port St. Lucie, and the City of Fort Pierce. The Financial Plan includes Federal, State, and local transportation funding sources which are identified in the following tables based on the type of transportation improvement:

B.2 FINANCIAL PLAN

HIGHWAY/ROADWAY/SIDEWALK FUNDING SOURCES

FUND CODE DESCRIPTION	FUND	2025	2026	2027	2028	2029	TOTAL
AC FREIGHT PROG (NFP)	ACFP	406,809	-	-	-	-	406,809
ADVANCE CONSTRUCTION NHPP	ACNP	2,110,000	9,277,647	-	-	7,362,043	18,749,690
AC NAT HWY PERFORM RESURFACING	ACNR	799,951	-	1,701,218	8,665,014	-	11,166,183
AC - PROTECT GRANT PGM	ACPR	1,008,420	-	14,224,592	2,317,855	-	17,550,867
ADVANCE CONSTRUCTION (SS,HSP)	ACSS	-	1,704,738	2,238,159	-	-	3,942,897
ADVANCE CONSTRUCTION (SU)	ACSU	1,772,083	-	-	-	-	1,772,083
CARBON REDUCTION GRANT PGM	CARB	-	-	2,506,627	-	-	2,506,627
CARB FOR URB. AREA > THAN 200K	CARU	562,116	589,129	558,830	78,214	-	1,788,289
CONGRESS GF EARMARKS HIP 2023	CD23	2,000,000	-	-	-	-	2,000,000
COUNTY INCENTIVE GRANT PROGRAM	CIGP	5,548,619	7,094,463	-	-	-	12,643,082
CONGESTION MITIGATION - AQ	CM	-	380,000	-	718,692	-	1,098,692
DISTRICT DEDICATED REVENUE	DDR	27,024,515	10,647,208	15,475,129	27,648,361	42,750	80,837,963
STATE IN-HOUSE PRODUCT SUPPORT	DIH	341,740	432,820	973,621	707,535	95,439	2,551,155
REST AREAS - STATE 100%	DRA	-	2,630,000	1,200,000	-	28,900,000	32,730,000
STATE PRIMARY HIGHWAYS & PTO	DS	9,519,819	18,217	9,584,292	8,991,617	-	28,113,945
FINANCING CORP	FINC	-	100,000	57,818,774	-	-	57,918,774
LOCAL FUNDS	LF	2,058,186	487,673	135,013	-	-	2,680,872
LOCAL FUNDS FOR PARTICIPATING	LFP	3,548,619	-	-	-	-	3,548,619
LOCAL FUNDS/REIMBURSABLE	LFR	-	18,594,737	-	-	-	18,594,737
STP, ANY AREA	SA	7,964,330	4,210,864	11,048,038	12,069,687	-	35,292,919
STP, MANDATORY NON-URBAN <= 5K	SN	91,599	-	-	-	-	91,599
SAFE ROUTES - TRANSFER	SR2T	5,000	-	-	-	-	5,000
STP, URBAN AREAS > 200K	SU	5,088,816	5,515,921	4,273,986	4,431,700	1,000,000	20,310,423
TRANSPORTATION ALTS- <200K	TALL	5,000	-	-	-	-	5,000
TRANSPORTATION ALTS- ANY AREA	TALT	502,046	183,882	1,237,758	-	-	1,923,686
TRANSPORTATION ALTS- >200K	TALU	268,446	810,293	476,416	-	-	1,555,155
SB2514A-TRAIL NETWORK 2015	TLWR	1,160,000	-	4,833,108	7,523,726	-	13,516,834
TRANS REGIONAL INCENTIVE PROGM	TRIP	2,214,712	4,434,962	-	1,403,873	-	8,053,547
SB2514A-TRAN REG INCT PRG 2015	TRWR	1,475,727	1,438,937	-	2,466,127	-	5,380,791
GRAND TOTAL							**386,736,238**

AVIATION FUNDING SOURCES

FUND CODE DESCRIPTION	FUND	2025	2026	2027	2028	2029	TOTAL
STATE - PTO	DPTO	1,320,000	3,360,475	1,280,000	-	-	5,960,475
FEDERAL AVIATION ADMIN	FAA	-	368,550	-	-	-	368,550
LOCAL FUNDS	LF	330,000	855,475	320,000	-	-	1,505,475
GRAND TOTAL							**7,834,500**

TRANSIT OPERATIONS FUNDING SOURCES

FUND CODE DESCRIPTION	FUND	2025	2026	2027	2028	2029	TOTAL
DISTRICT DEDICATED REVENUE	DDR	1,590,467	991,520	817,389	841,911	841,911	5,083,198
STATE - PTO	DPTO	572,174	300,000	-	-	-	872,174
STATE PRIMARY/FEDERAL REIMB	DU	81,206	85,029	89,038	93,058	93,058	441,389
FEDERAL TRANSIT ADMINISTRATION	FTA	2,695,000	2,695,000	2,695,000	2,695,000	2,695,000	13,475,000
LOCAL FUNDS	LF	1,043,847	1,076,549	906,427	934,969	934,969	4,896,761
GRAND TOTAL							**24,768,522**

MISCELLANEOUS FUNDING SOURCES

FUND CODE DESCRIPTION	FUND	2025	2026	2027	2028	2029	TOTAL
UNRESTRICTED STATE PRIMARY	D	1,755,000	1,755,000	1,835,000	2,811,946	2,819,238	10,976,184
DISTRICT DEDICATED REVENUE	DDR	160,123	242,938	353,661	-	-	756,722
STATEWIDE ITS - STATE 100%.	DITS	521,485	479,566	412,193	-	-	1,413,244
PRIMARY/FIXED CAPITAL OUTLAY	FCO	175,000	325,000	410,000	80,000	25,000	1,015,000
GRAND TOTAL							**14,161,150**

PLANNING FUNDING SOURCES

FUND CODE DESCRIPTION	FUND	2025	2026	2027	2028	2029	TOTAL
ADVANCE CONSTRUCTION (SU)	ACSU	400,000	-	-	-	-	400,000
METRO PLAN (85% FA; 15% OTHER)	PL	803,048	812,581	812,581	812,581	812,581	4,053,372
STP, URBAN AREAS > 200K	SU	-	400,000	400,000	400,000	400,000	1,600,000
GRAND TOTAL							**6,053,372**

BRIDGE FUNDING SOURCES

FUND CODE DESCRIPTION	FUND	2025	2026	2027	2028	2029	TOTAL
ADVANCE CONSTRUCTION (BRT)	ACBR	1,129,000	16,447,497	-	-	-	17,576,497
STATE BRIDGE REPAIR & REHAB	BRRP	3,210,276	-	-	-	-	3,210,276
UNRESTRICTED STATE PRIMARY	D	40,000	40,000	40,000	40,000	-	160,000
STATE IN-HOUSE PRODUCT SUPPORT	DIH	12,605	-	-	-	-	12,605
GEN FUND BRIDGE REPAIR/REPLACE	GFBR	8,676,339	-	-	-	-	8,676,339
GRAND TOTAL							**29,635,717**

TURNPIKE ENTERPRISE FUNDING SOURCES

FUND CODE DESCRIPTION	FUND	2025	2026	2027	2028	2029	TOTAL
TURNPIKE IMPROVEMENT	PKYI	18,572,271	29,983,654	17,301,911	270,000	-	66,127,836
GRAND TOTAL							**66,127,836**

FINANCIAL PLAN GRAND TOTAL 535,317,335

The TIP is financially constrained each year with the project cost estimates equal to the funding source estimates as demonstrated in the Financial Summary below:

PROJECT FUNDING SOURCE ESTIMATES	2025	2026	2027	2028	2029	Total Program
Highway/Roadway/Sidewalk	75,476,553	68,551,491	128,285,561	77,022,401	37,400,232	386,736,238
Aviation	1,650,000	4,584,500	1,600,000	0	0	7,834,500
Transit Operations	5,982,694	5,148,098	4,507,854	4,564,938	4,564,938	24,768,522
Miscellaneous	2,611,608	2,802,504	3,010,854	2,891,946	2,844,238	14,161,150
Planning	1,203,048	1,212,581	1,212,581	1,212,581	1,212,581	6,053,372
Bridge	13,068,220	16,487,497	40,000	40,000	0	29,635,717
Turnpike Enterprise	18,572,271	29,983,654	17,301,911	270,000	0	66,127,836
						535,317,335

PROJECT COST ESTIMATES	2025	2026	2027	2028	2029	Total Program
Highway/Roadway/Sidewalk	75,476,553	68,551,491	128,285,561	77,022,401	37,400,232	386,736,238
Aviation	1,650,000	4,584,500	1,600,000	0	0	7,834,500
Transit Operations	5,982,694	5,148,098	4,507,854	4,564,938	4,564,938	24,768,522
Miscellaneous	2,611,608	2,802,504	3,010,854	2,891,946	2,844,238	14,161,150
Planning	1,203,048	1,212,581	1,212,581	1,212,581	1,212,581	6,053,372
Bridge	13,068,220	16,487,497	40,000	40,000	0	29,635,717
Turnpike Enterprise	18,572,271	29,983,654	17,301,911	270,000	0	66,127,836
						535,317,335

FUND SOURCE	2025	2026	2027	2028	2029	Total Program
Federal	34,369,209	43,481,131	42,262,243	32,281,801	12,362,682	164,757,066
Federal Earmark	2,000,000	0	0	0	0	2,000,000
Local	6,980,652	21,014,434	1,361,440	934,969	934,969	31,226,464
State 100%	56,642,262	34,291,106	95,033,167	52,515,096	32,724,338	271,205,969
Toll/Turnpike	18,572,271	29,983,654	17,301,911	270,000	0	66,127,836
GRAND TOTAL FROM ALL JURISDICTIONS	118,564,394	128,770,325	155,958,761	86,001,866	46,021,989	35,317,335
						535,317,335

Note: See Section A-8 for Fund Code Source and Fund Code Description

B.12 TRANSPORTATION REGIONAL INCENTIVE PROGRAM (TRIP)

In 2005, the Florida Legislature enacted the Florida TRIP through Senate Bill 360. The stated purpose of the program is to encourage regional planning by providing state matching funds for improvements to regionally-significant transportation facilities identified and prioritized by regional partners. According to FDOT, two primary program requirements are as follows:

- Eligible recipients must be a partner, through an Interlocal Agreement, to a regional transportation planning entity; and,
- The partners must represent a regional transportation planning area and develop a plan that identifies and prioritizes regionally significant facilities.

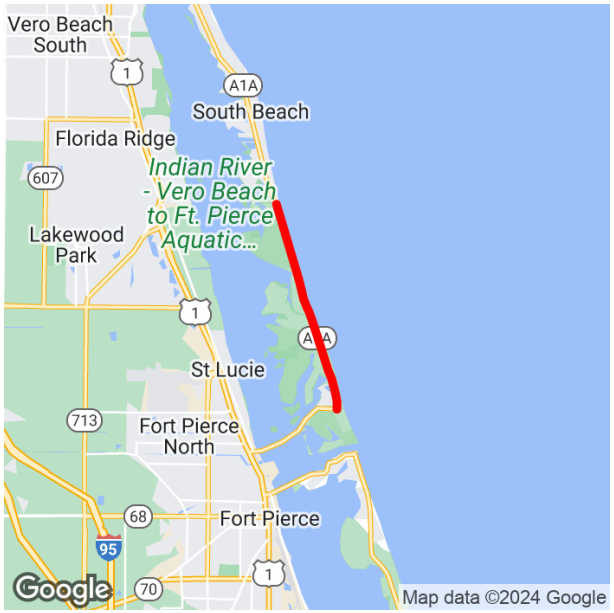
To satisfy the application requirements for TRIP funding, an Interlocal Agreement was executed by the St. Lucie TPO, Martin MPO, and Indian River MPO to create a regional transportation planning entity known as the Treasure Coast Transportation Council (TCTC). The TCTC subsequently adopted a plan to identify and prioritize regionally significant facilities for the selection of projects for TRIP funding. This plan subsequently was updated in 2023.

St. Lucie TPO projects currently programmed in this TIP include $8,053,547 of TRIP funding. The MIDWAY RD project (#2314405) is receiving $3,276,644 in TRIP funding, and the PORT ST. LUCIE BLVD projects (#4317523 and #4317525) is receiving $4,776,903.

C. DETAILED PROJECT LISTINGS

C.1 HIGHWAY/ROADWAY/SIDEWALK

A1A SUNTRAIL
4435061 Non-SIS

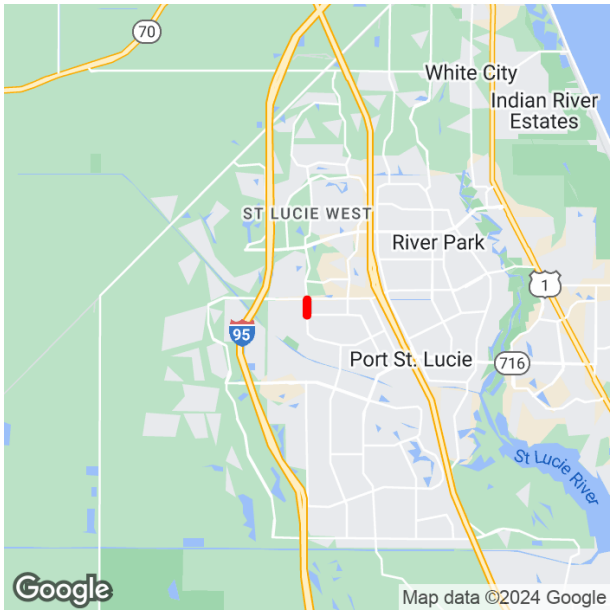


Project Description: BIKE PATH/TRAIL
Extra Description: SUNTRAIL: ST. LUCIE COUNTY NORTH A1A INDIAN RIVER LAGOON TRAIL IMPROVEMENT
Lead Agency: MANAGED BY FDOT
From: FT PIERCE INLET STATE PARK
County: ST. LUCIE
To: SLC/INDIAN RIVER COUNTY LINE
Length: 5.193
Phase Group: P D & E, PRELIMINARY ENGINEERING, CONSTRUCTION, ENVIRONMENTAL

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	TLWR	0	0	0	7,523,726	0	7,523,726
					7,523,726		**7,523,726**

Prior Year Cost: 1,656,005
Future Year Cost: 0
Total Project Cost: 9,179,731
LRTP: Page 8-2

CALIFORNIA BLVD FROM DEL RIO TO CROSSTOWN PARKWAY
4533261 Non-SIS

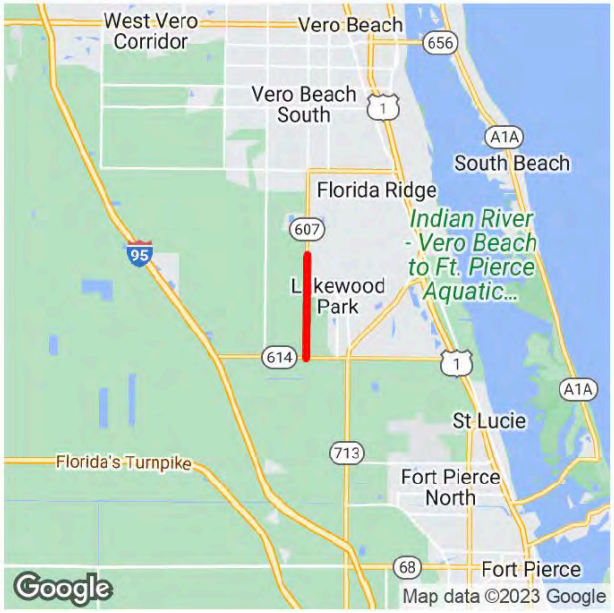


Project Description: ADD LANES & RECONSTRUCT
Extra Description: 2024 TPA PRIORITY # 7 ADD 2 LANES AND SHARED-USE PATHS
Lead Agency: MANAGED BY FDOT
From: DEL RIO
Length: 2.476
To: CROSSTOWN PARKWAY
Phase Group: P D & E

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PDE	SU	0	0	0	0	500,000	500,000
						500,000	**500,000**

Prior Year Cost: 0
Future Year Cost: 0
Total Project Cost: 500,000
LRTP: Page 8-11

EMERSON AVE FROM NORTH OF INDRIO RD TO SOUTH OF 25TH ST SW
4476511 Non-SIS

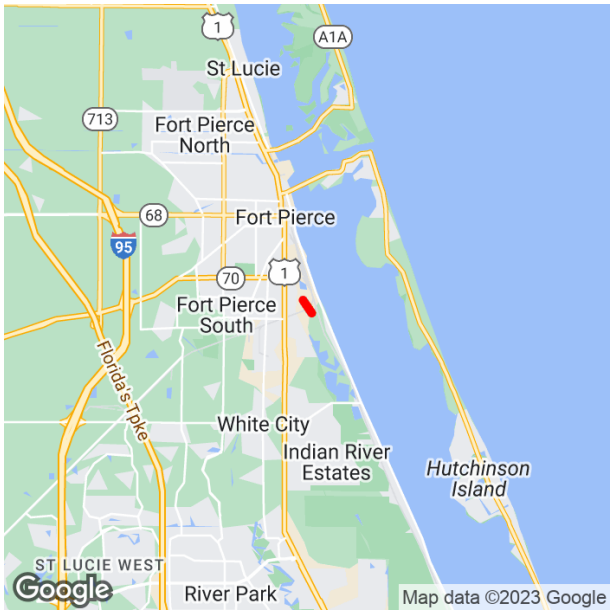


Project Description: RESURFACING
Lead Agency: MANAGED BY FDOT
County: ST. LUCIE
Length: 2.238
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION, ENVIRONMENTAL
From: NORTH OF INDRIO RD
To: SOUTH OF 25TH ST SW

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	ACPR	1,008,420	0	0	0	0	1,008,420
CST	DDR	2,185,414	0	0	0	0	2,185,414
CST	DS	658,619	0	0	0	0	658,619
CST	DS	1,316,012	0	0	0	0	1,316,012
CST	SA	2,184,187	0	0	0	0	2,184,187
		7,352,652					**7,352,652**

Prior Year Cost: 679,686
Future Year Cost: 0
Total Project Cost: 8,032,338
LRTP: Page 3-9

FEC OVERPASS FROM SAVANNAS RECREATION AREA TO SOUTH OF SAVANNAH RD
4400321 Non-SIS

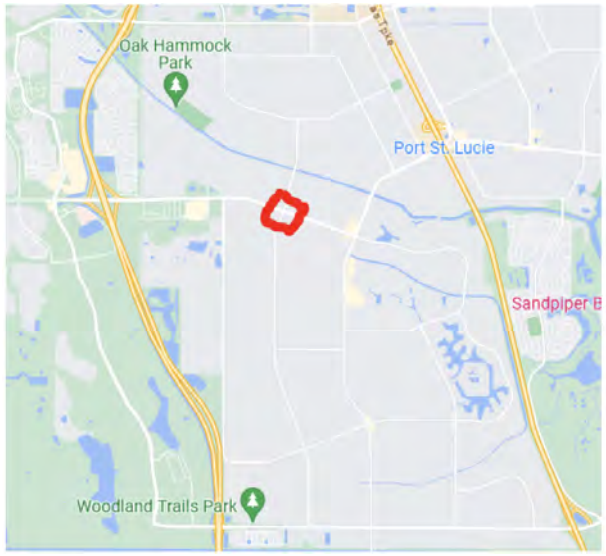


Project Description: BIKE PATH/TRAIL
Extra Description: SUNTRAIL
Lead Agency: MANAGED BY FDOT
From: SAVANNAS RECREATION AREA
County: ST. LUCIE
To: SOUTH OF SAVANNAH RD
Length: 0
Phase Group: P D & E, PRELIMINARY ENGINEERING, RIGHT OF WAY, RAILROAD & UTILITIES, CONSTRUCTION, ENVIRONMENTAL

Phase	Fund Code	2025	2026	2027	2028	2029	Total
ROW	DS	25,000	18,217	0	0	0	43,217
RRU	TLWR	60,000	0	0	0	0	60,000
CST	DIH	0	0	104,312	0	0	104,312
CST	TLWR	0	0	4,833,108	0	0	4,833,108
		85,000	**18,217**	**4,937,420**			**5,040,637**

Prior Year Cost: 821,924
Future Year Cost: 0
Total Project Cost: 5,862,561
LRTP: Page 8-2

GATLIN BLVD @ SAVONA BLVD
4534951 Non-SIS

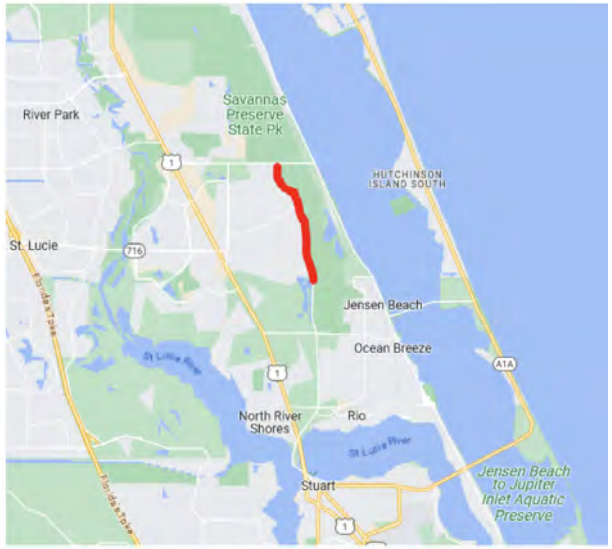


Project Description: ADD TURN LANE(S)
Extra Description: 2024 TPO PRIORITY 2 CARBON REDUCTION PROGRAM 2024 TPA CARBON REDUCTION PRIORITY #2 EXTEND EASTBOUND & WESTBOUND LEFT-TURN LANES ON GATLIN BLVD & INSTALL DEDICATED NORTHBOUND & SOUTHBOUND RIGHT-TURN LANES
Lead Agency: MANAGED BY FDOT
From: GATLIN BLVD
County: ST. LUCIE
To: SAVONA BLVD
Length: 0.12
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	CARU	562,116	0	0	0	0	562,116
CST	LF	61,769	0	0	0	0	61,769
		623,885					**623,885**

Prior Year Cost: 5,000
Future Year Cost: 0
Total Project Cost: 628,885
LRTP: Page 8-11

GREEN RIVER PARKWAY TRAIL FROM WALTON RD TO MARTIN COUNTY LINE
4534931 Non-SIS

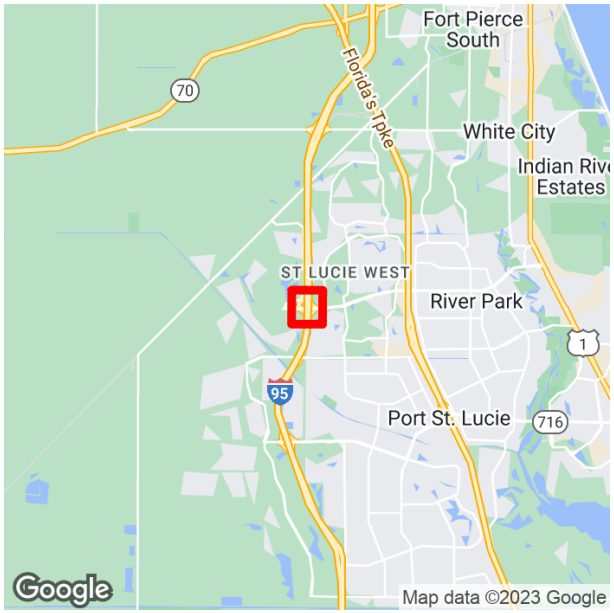


Project Description: BIKE PATH/TRAIL
Extra Description: 2024 TPA CARBON REDUCTION PRIORITY #3 RESURFACING OF MULTI-USE PATH: 2.5 MILES
Lead Agency: MANAGED BY FDOT
From: WALTON RD
County: ST. LUCIE
To: MARTIN COUNTY LINE
Length: 2.648
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	CARU	0	239,151	0	0	0	239,151
CST	LF	0	20,000	0	0	0	20,000
			259,151				**259,151**

Prior Year Cost: 5,000
Future Year Cost: 0
Total Project Cost: 264,151
LRTP: Page 3-9

I-95 @ ST LUCIE WEST BLVD
4443361 SIS

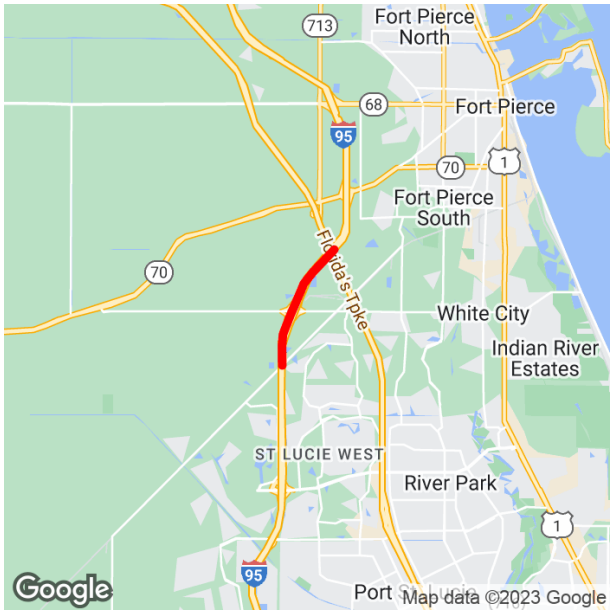


Project Description: LANDSCAPING
Lead Agency: MANAGED BY FDOT
From: I-95
County: ST. LUCIE
To: ST. LUCIE WEST BLVD
Length: 1.42
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	DIH	12,705	0	0	0	0	12,705
CST	DDR	1,030,803	0	0	0	0	1,030,803
CST	DIH	39,220	0	0	0	0	39,220
		1,082,728					**1,082,728**

Prior Year Cost: 157,298
Future Year Cost: 0
Total Project Cost: 1,240,026
LRTP: Page 8-2

I-95 FROM N OF GLADES CUT-OFF RD TO N OF FLORIDA TURNPIKE
4491631 SIS

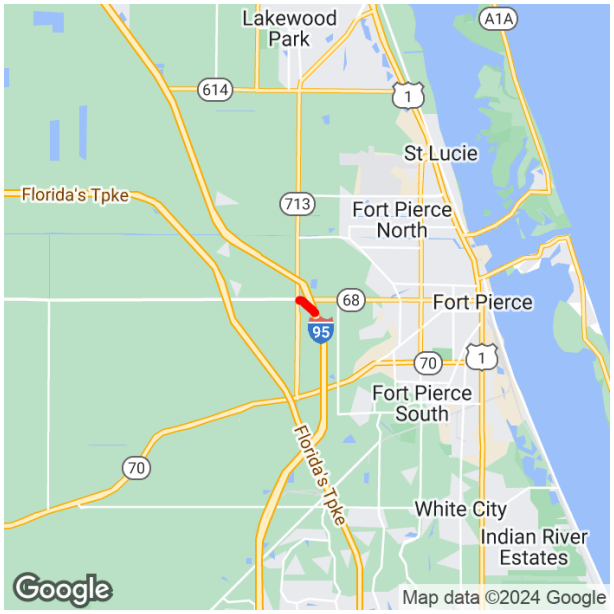


Project Description: RESURFACING
Lead Agency: MANAGED BY FDOT
From: N OF GLADES CUT-OFF RD
County: ST. LUCIE
To: N OF FLORIDA TURNPIKE
Length: 2.756
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	ACNP	0	9,277,647	0	0	0	9,277,647
CST	DDR	0	1,309,230	0	0	0	1,309,230
CST	DIH	0	114,013	0	0	0	114,013
			10,700,890				**10,700,890**

Prior Year Cost: 907,853
Future Year Cost: 0
Total Project Cost: 11,608,743
LRTP: Page 3-9

I-95 FROM NB EXIT RAMP TO WB ORANGE AVE
4492811 SIS

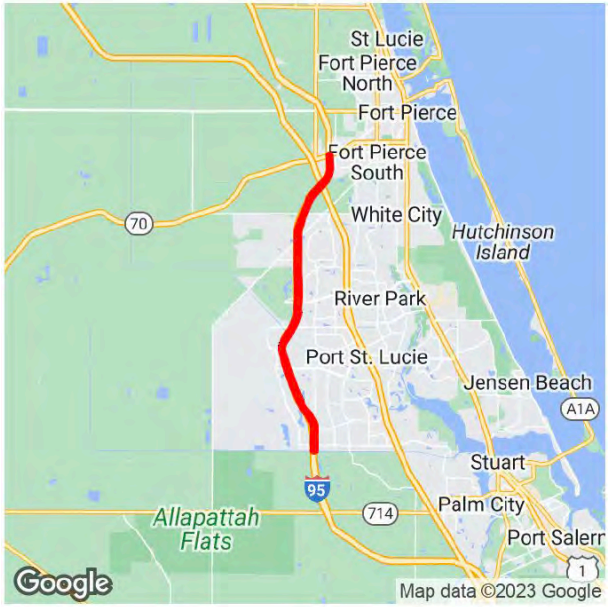


Project Description: SKID HAZARD OVERLAY
Extra Description: SYSTEMATIC LOOP RAMPS SAFETY ASSESSMENT- NPV=1,508,527; B/C=3.5; WIDEN THE OUTSIDE PAVED SHOULDER ALONG THE RAMP MILL AND RESURFACE THE RAMP WITH HIGH FRICTION SURFACE ENHANCE EXISTING LIGHTING ALONG THE RAMP (BY RE-LAMPING WITH LED LIGHTS) SHSP EMPHASIS AREA- LANE DEPARTURE CRASHES
Lead Agency: MANAGED BY FDOT **From:** NB EXIT RAMP TO WB ORANGE AVE
Length: 0.583 **To:** NB EXIT RAMP TO WB ORANGE AVE
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	ACSS	0	661,343	0	0	0	661,343
CST	SA	0	29,045	0	0	0	29,045
			690,388				**690,388**

Prior Year Cost: 203,764
Future Year Cost: 0
Total Project Cost: 894,152
LRTP: Page 3-9

I-95 FROM SLC/MARTIN TO SR-70
4226816 SIS



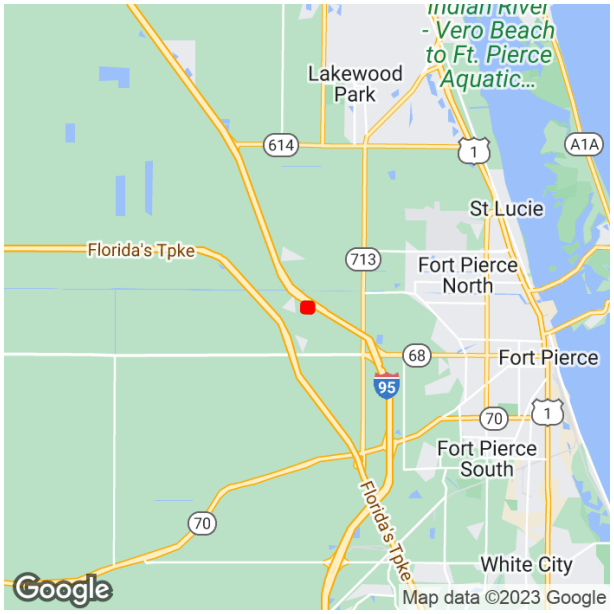
Project Description: PD&E/EMO STUDY
Extra Description: R/W NEEDED
Lead Agency: MANAGED BY FDOT
County: ST. LUCIE
Length: 15.499
Phase Group: P D & E

From: SLC/MARTIN
To: SR-70

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PDE	ACNP	2,110,000	0	0	0	0	2,110,000
		2,110,000					**2,110,000**

Prior Year Cost: 1,821,960
Future Year Cost: 0
Total Project Cost: 3,931,960
LRTP: Page 8-3

I-95 ST LUCIE SOUTHBOUND REST AREA
4499611 SIS



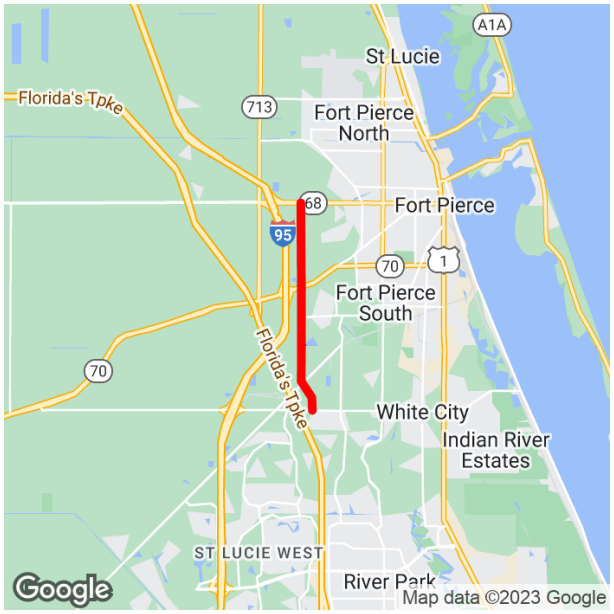
Project Description: REST AREA
Lead Agency: MANAGED BY FDOT
County: ST. LUCIE
Length: 0.54
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

From: ST. LUCIE SB REST AREA
To: ST. LUCIE SB REST AREA

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	DDR	0	930,917	0	0	0	930,917
PE	DIH	0	122,833	0	0	0	122,833
PE	DRA	0	2,630,000	1,200,000	0	0	3,830,000
CST	DIH	0	0	0	0	95,439	95,439
CST	DRA	0	0	0	0	28,900,000	28,900,000
			3,683,750	**1,200,000**		**28,995,439**	**33,879,189**

Prior Year Cost: 0
Future Year Cost: 0
Total Project Cost: 33,879,189
LRTP: Page 3-9

JENKINS RD FROM MIDWAY RD TO ORANGE AVE
4463311 Non-SIS



Project Description: PD&E/EMO STUDY
Extra Description: 2024 TPO PRIORITY #6 LFA WITH ST. LUCIE COUNTY R/W IS NEEDED 22-02 WIRE TRANSFER RECEIVED 11/13/23 $1M ST. LUCIE COUNTY
Lead Agency: MANAGED BY FDOT
From: MIDWAY RD
County: ST. LUCIE
To: ORANGE AVE
Length: 5.104
Phase Group: P D & E

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PDE	ACSU	811,624	0	0	0	0	811,624
PDE	SU	828,376	0	0	0	0	828,376
		1,640,000					**1,640,000**

Prior Year Cost: 5,182,865
Future Year Cost: 0
Total Project Cost: 6,822,865
LRTP: Page 8-3

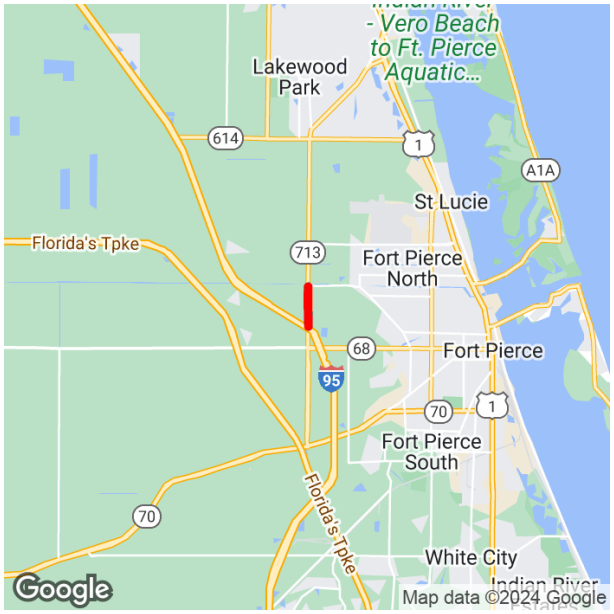
KESTOR DRIVE FROM SW DARWIN BLVD TO SW BECKER RD
4489981 Non-SIS

Project Description: SIDEWALK
Extra Description: 2022 TAP PRIORITY #1
Lead Agency: MANAGED BY FDOT
From: SW DARWIN BLVD
County: ST. LUCIE
To: SW BECKER RD
Length: 1.389
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	LF	187,148	0	0	0	0	187,148
CST	TALT	497,046	0	0	0	0	497,046
CST	TALU	268,446	0	0	0	0	268,446
		952,640					**952,640**

Prior Year Cost: 5,000
Future Year Cost: 0
Total Project Cost: 957,640
LRTP: Page 8-11

KINGS HIGHWAY FROM NORTH OF I-95 OVERPASS TO SOUTH OF ANGLE RD
4383794 Non-SIS

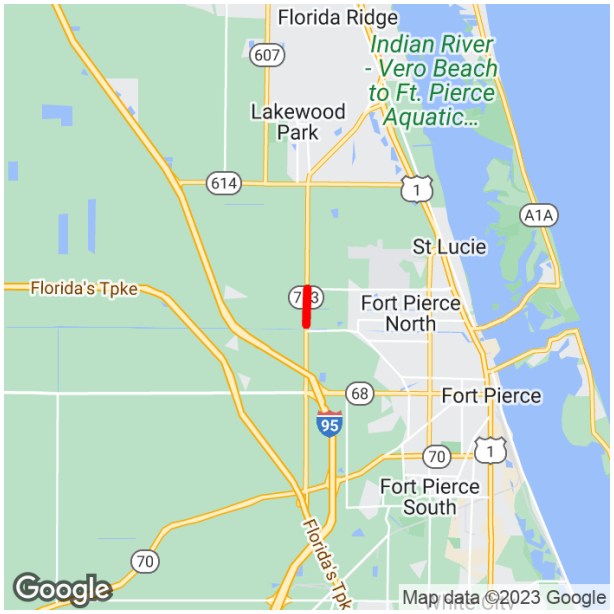


Project Description: ADD LANES & RECONSTRUCT
Extra Description: 2017 TPO PRIORITY #4 WIDENING 2 TO 4 LANES, PD&E UNDER 230256-5, DESIGN & ROW UNDER FM# 438379.1
Lead Agency: MANAGED BY FDOT
From: NORTH OF I-95 OVERPASS
Length: 0.97
To: SOUTH OF ANGLE RD
Phase Group: CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	DDR	0	0	11,893,027	1,972,725	0	13,865,752
CST	DIH	0	0	127,248	131,323	0	258,571
CST	DS	0	0	8,525,536	0	0	8,525,536
CST	SA	0	0	2,833,692	0	0	2,833,692
CST	SU	0	0	4,159,002	0	0	4,159,002
				27,538,505	**2,104,048**		**29,642,553**

Prior Year Cost: 21,404,740
Future Year Cost: 0
Total Project Cost: 67,751,867
LRTP: Page 8-2

KINGS HWY FROM NORTH OF COMMERCIAL CIRCLE TO NORTH OF ST LUCIE BLVD
4383792 Non-SIS

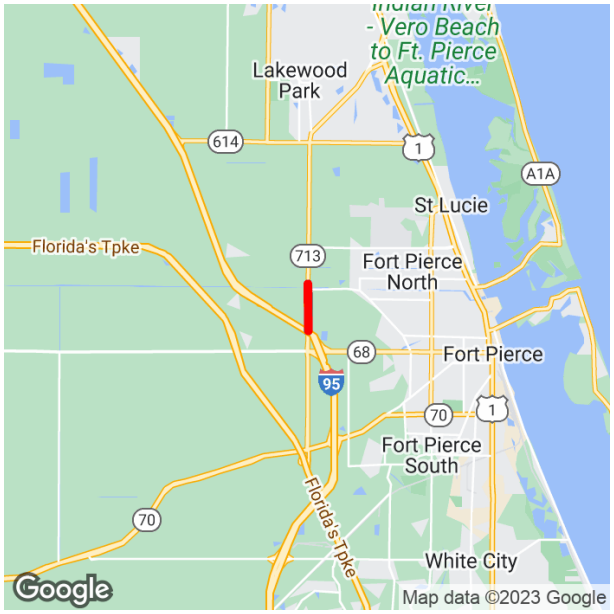


Project Description: ADD LANES & RECONSTRUCT
Extra Description: 2017 TPO PRIORITY #4 WIDENING FROM 2 TO 4 LANES; PD&E UNDER 230256-5 G/W 438379-5
Lead Agency: MANAGED BY FDOT
County: ST. LUCIE
Length: 1.21
From: NORTH OF COMMERCIAL CIRCLE
To: NORTH OF ST LUCIE BLVD
Phase Group: PRELIMINARY ENGINEERING, RIGHT OF WAY, ENVIRONMENTAL

Phase	Fund Code	2025	2026	2027	2028	2029	Total
ROW	CM	0	380,000	0	0	0	380,000
ROW	DDR	0	4,432,414	0	0	0	4,432,414
ROW	SA	2,805,455	0	0	0	0	2,805,455
ROW	SU	1,000,000	0	0	0	0	1,000,000
		3,805,455	**4,812,414**				**8,617,869**

Prior Year Cost: 21,404,740
Future Year Cost: 0
Total Project Cost: 67,751,867
LRTP: Page 8-2

KINGS HWY FROM NORTH OF I-95 OVERPASS TO NORTH OF COMMERCIAL CIRCLE
4492911 Non-SIS

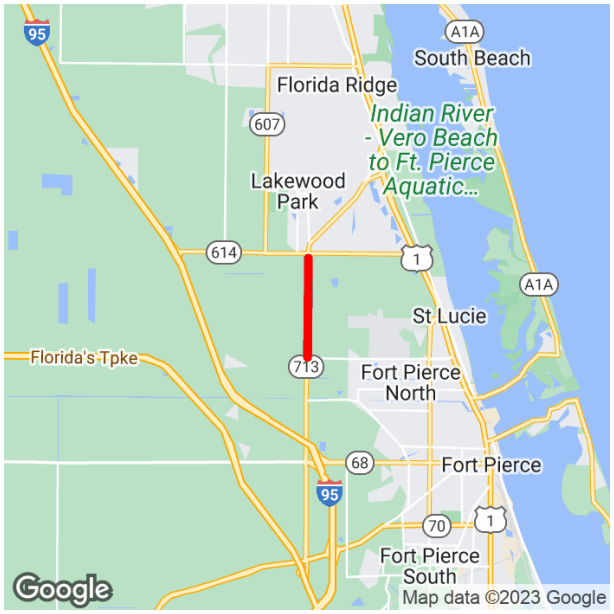


Project Description: LANDSCAPING
Extra Description: STANDALONE LANDSCAPE
Lead Agency: MANAGED BY FDOT
From: NORTH OF I-95 OVERPASS
County: ST. LUCIE
To: NORTH OF COMMERCIAL CIRCLE
Length: 1.4
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	DDR	0	141,293	0	0	0	141,293
PE	DIH	0	11,303	0	0	0	11,303
CST	DDR	0	0	0	890,792	0	890,792
CST	DIH	0	0	0	33,484	0	33,484
			152,596		**924,276**		**1,076,872**

Prior Year Cost: 0
Future Year Cost: 0
Total Project Cost: 1,076,872
LRTP: Page 8-2

KINGS HWY FROM NORTH OF ST LUCIE BLVD TO INDRIO ROAD
4383793 Non-SIS

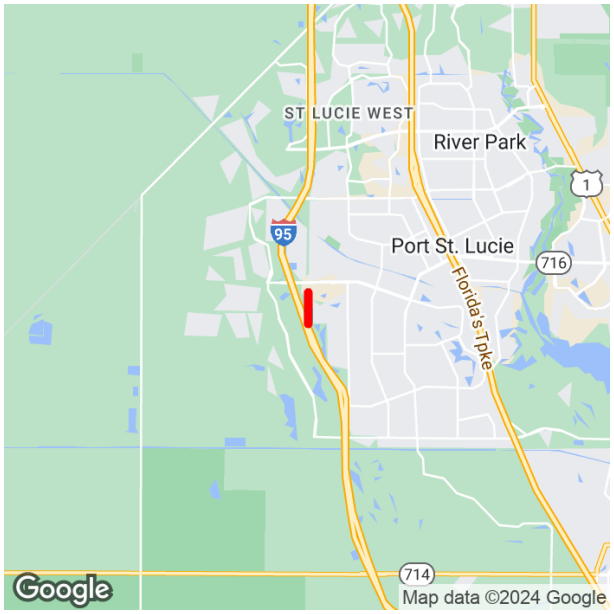


Project Description: ADD LANES & RECONSTRUCT
Extra Description: 2022 TPO PRIORITY #5 WIDENING FROM 2 TO 4 LANES; PD&E UNDER 230256-5 R/W REQUIRED
Lead Agency: MANAGED BY FDOT
From: NORTH OF ST LUCIE BLVD
County: ST. LUCIE
To: INDRIO ROAD
Length: 2.19
Phase Group: PRELIMINARY ENGINEERING, RIGHT OF WAY, ENVIRONMENTAL

Phase	Fund Code	2025	2026	2027	2028	2029	Total
ROW	DDR	0	0	2,128,890	0	42,750	2,171,640
ROW	DIH	0	0	552,000	0	0	552,000
ROW	DS	0	0	500,000	0	0	500,000
ROW	SU	0	0	0	0	500,000	500,000
				3,180,890		**542,750**	**3,723,640**

Prior Year Cost: 21,404,740
Future Year Cost: 0
Total Project Cost: 67,751,867
LRTP: Page 8-2

MARSHFIELD COURT FROM SW DREYFUSS BLVD TO SW HAYWORTH AVE
4529961 Non-SIS



Project Description: BIKE PATH/TRAIL
Lead Agency: MANAGED BY FDOT
From: SW DREYFUSS BLVD
Length: 0
To: SW HAYWORTH AVE
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	TALT	5,000	0	0	0	0	5,000
CST	LF	0	0	55,000	0	0	55,000
CST	TALT	0	0	1,237,758	0	0	1,237,758
CST	TALU	0	0	376,416	0	0	376,416
		5,000		**1,669,174**			**1,674,174**

Prior Year Cost: 0
Future Year Cost: 0
Total Project Cost: 1,674,174
LRTP: Page 3-9

MIDWAY RD FROM GLADES CUT OFF RD TO JUST WEST OF JENKINS RD
2314404 Non-SIS

Project Description: ADD LANES & RECONSTRUCT
Extra Description: 2024 TPO PRIORITY #3/4 WIDENING FROM 2 TO 4 LANES. BASED ON PD&E COMPLETED UNDER PROJECT FM 231440-3 DESIGN AND RIGHT OF WAY ON 231440-3
Lead Agency: MANAGED BY FDOT **From:** GLADES CUT OFF RD
Length: 0.725 **To:** JUST WEST OF JENKINS RD
Phase Group: RAILROAD & UTILITIES, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
RRU	FINC	0	100,000	0	0	0	100,000
CST	FINC	0	0	57,818,774	0	0	57,818,774
			100,000	**57,818,774**			**57,918,774**

Prior Year Cost: 40,050,052
Future Year Cost: 0
Total Project Cost: 117,904,125
LRTP: Page 8-11

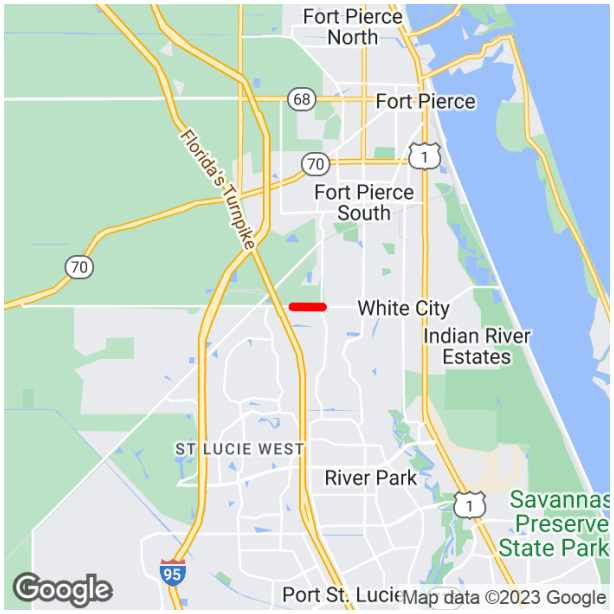
MIDWAY RD FROM GLADES CUT OFF RD TO SELVITZ RD
2314403 Non-SIS

Project Description: ADD LANES & RECONSTRUCT
Extra Description: 2022 TPO PRIORITY #2 WIDENING FROM 2 TO 4 LANES LFA WITH ST LUCIE COUNTY FOR PD&E AND DESIGN CK #09828620 RECD FR ST LUCIE CO BCC FOR 1.65M ON 10/7/14 FOR PD&E THIS IS A CAT2 CHECK RECD 1/25/2017 FROM ST.LUCIE CO $2,108,000 PH32/37
Lead Agency: MANAGED BY FDOT
From: GLADES CUT OFF RD
County: ST. LUCIE
To: SELVITZ RD
Length: 1.577
Phase Group: P D & E, PRELIMINARY ENGINEERING, RIGHT OF WAY, RAILROAD & UTILITIES, ENVIRONMENTAL

Phase	Fund Code	2025	2026	2027	2028	2029	Total
ROW	SA	6,200	80,188	468,500	0	0	554,888
ROW	SU	0	10,018	0	0	0	10,018
		6,200	**90,206**	**468,500**			**564,906**

Prior Year Cost: 40,050,052
Future Year Cost: 0
Total Project Cost: 117,904,125
LRTP: Page 8-2

MIDWAY RD FROM JENKINS RD TO SELVITZ RD
2314405 Non-SIS



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 56-02: UWHCA WITH CITY OF PORT ST. LUCIE 66-01: UWHCA CEI FOR UTILITIES PROJECT ADVANCEMENT TO FY 24 PER AGREEMENT WST LUCIE COUNTY
Lead Agency: MANAGED BY FDOT
From: JENKINS RD
County: ST. LUCIE
To: SELVITZ RD
Length: 0.785
Phase Group: RAILROAD & UTILITIES, CONSTRUCTION, LOCAL ADVANCE REIMBURSE

Phase	Fund Code	2025	2026	2027	2028	2029	Total
LAR	CIGP	0	7,094,463	0	0	0	7,094,463
LAR	SA	0	3,643,102	0	0	0	3,643,102
LAR	SU	0	3,917,247	0	0	0	3,917,247
LAR	TRIP	0	3,276,644	0	0	0	3,276,644
LAR	TRWR	0	1,438,937	0	0	0	1,438,937
			19,370,393				**19,370,393**

Prior Year Cost: 40,050,052
Future Year Cost: 0
Total Project Cost: 117,904,125
LRTP: Page 8-11

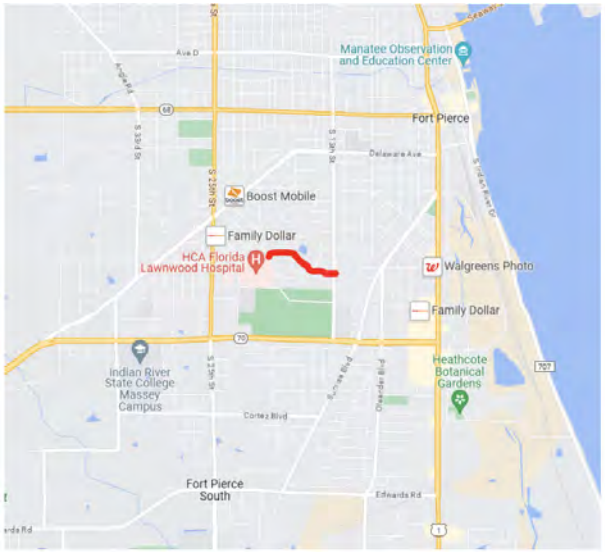
MIDWAY RD FROM SELVITZ RD TO US HIGHWAY 1
4534961 Non-SIS

Project Description: ATMS - ARTERIAL TRAFFIC MGMT
Extra Description: 2024 TPO PRIORITY 1 CARBON REDUCTION PROGRAM LAP WITH ST. LUCIE COUNTY. INSTALL FIBER OPTIC CABLE ALONG MIDWAY ROAD & TRAFFIC CAMERAS/VIDEO DETECTORS & ADAPTIVE SIGNAL CONTROL AT THE SIGNALIZED INTERSECTION. INSTALL 2.5 MILES OF FIBER OPTIC CABLE ALONG MIDWAY RD FROM SELVITZ RD TO SR-5/US 1, INTERCONNECT FIVE (5) SIGNALIZED INTERSECTIONS, & UPGRADE
Lead Agency: MANAGED BY FDOT **From:** SELVITZ RD
Length: 2.524 **To:** US HIGHWAY 1
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	CARU	0	349,978	269,448	0	0	619,426
CST	LF	0	143,190	0	0	0	143,190
			493,168	**269,448**			**762,616**

Prior Year Cost: 5,000
Future Year Cost: 0
Total Project Cost: 767,616
LRTP: Page 3-9

NEBRASKA AVE FROM SOUTH LAWNWOOD CIRCLE TO SOUTH 13TH ST
4534921 Non-SIS

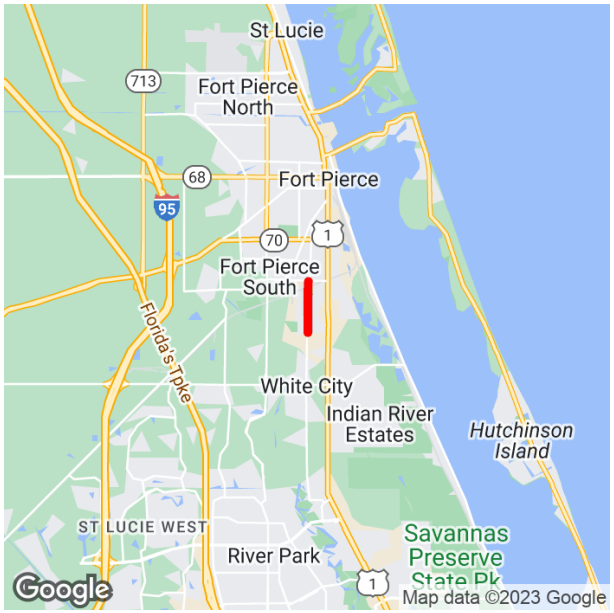


Project Description: SIDEWALK
Extra Description: 2024 TPO CARBON REDUCTION PRIORITY #5 SIDEWALKS, 6 FEET IN WIDTH, 1 MILE IN LENGTH, ON BOTH SIDES OF STREET
Lead Agency: MANAGED BY FDOT
From: SOUTH LAWNWOOD CIRCLE
County: ST. LUCIE
To: SOUTH 13TH ST
Length: 0.49
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	LF	0	134,800	0	0	0	134,800
CST	TALU	0	217,101	100,000	0	0	317,101
			351,901	**100,000**			**451,901**

Prior Year Cost: 5,000
Future Year Cost: 0
Total Project Cost: 456,901
LRTP: Page 3-9

OLEANDER AVE FROM SOUTH MARKET AVE TO EDWARDS RD
4480661 Non-SIS

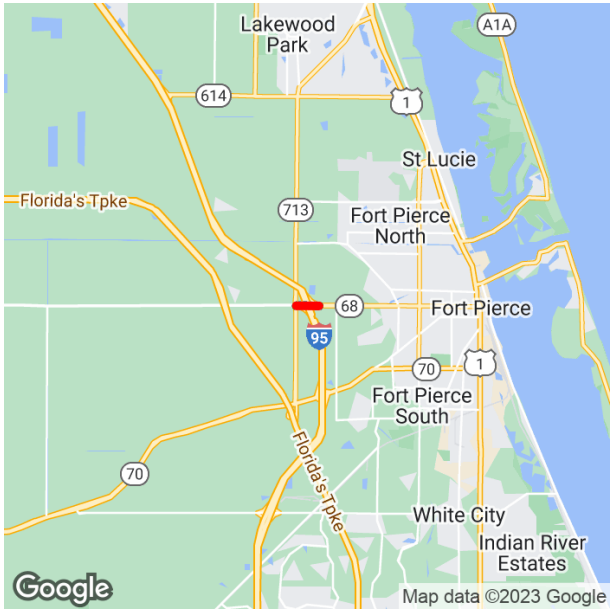


Project Description: SIDEWALK
Extra Description: FOREST GROVE MIDDLE SCHOOL SAFE ROUTES TO SCHOOL; LAP WITH ST LUCIE COUNTY
Lead Agency: MANAGED BY FDOT
County: ST. LUCIE
Length: 1.326
Phase Group: PRELIMINARY ENGINEERING
From: SOUTH MARKET AVE
To: EDWARDS RD

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	SR2T	5,000	0	0	0	0	5,000
		5,000					**5,000**

Prior Year Cost: 0
Future Year Cost: 0
Total Project Cost: 5,000
LRTP: Page 3-9

ORANGE AVE FROM KINGS HWY TO EAST OF I-95 SB RAMP
4461681 SIS

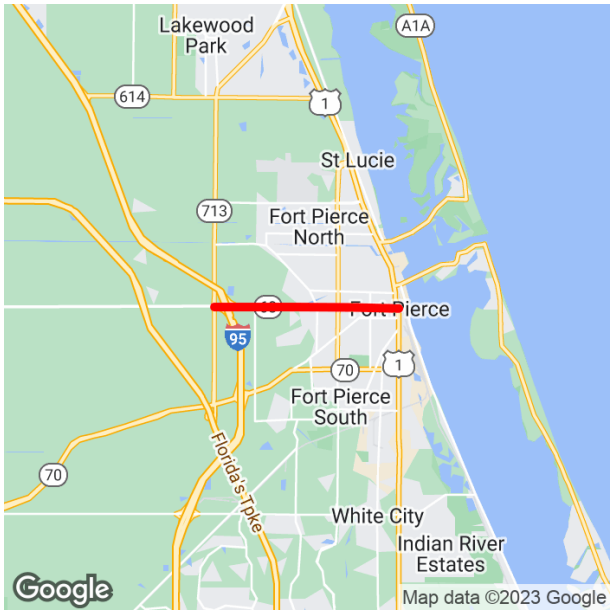


Prior Year Cost: 805,014
Future Year Cost: 0
Total Project Cost: 8,825,234
LRTP: Page 8-3

Project Description: INTERCHANGE - ADD LANES
Extra Description: ADD EB RIGHT TURN LANE FROM ORANGE AVE/SR-68 TO I-95 SB ON-RAMP & ADD WB RIGHT-TURN LANE FR ORANGE AVE/SR-68 TO NB KINGS HWY/SR-713 NB & WB PROTECTED RIGHT TURN PHASES TO BE ADDED AT INTERSECTION OF ORANGE AVE/SR-68 AND KINGS HWY/ SR-713 EB TO SB ON-RAMP ENTRANCE TO BE RELOCATED TO THE EXISTING SIGNALIZED INTERSECTION FOR THE WB TO SB (SEE WP45)
Lead Agency: MANAGED BY FDOT
From: KINGS HWY
County: ST. LUCIE
To: EAST OF I-95 SB RAMP
Length: 0.646
Phase Group: P D & E, PRELIMINARY ENGINEERING, RIGHT OF WAY, CONSTRUCTION, ENVIRONMENTAL

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	ACFP	24,423	0	0	0	0	24,423
ROW	ACFP	382,386	0	0	0	0	382,386
ROW	DDR	56,000	195,368	0	0	0	251,368
CST	ACNP	0	0	0	0	7,362,043	7,362,043
		462,809	**195,368**			**7,362,043**	**8,020,220**

ORANGE AVE FROM KINGS HWY TO US HIGHWAY 1
4496961 Non-SIS

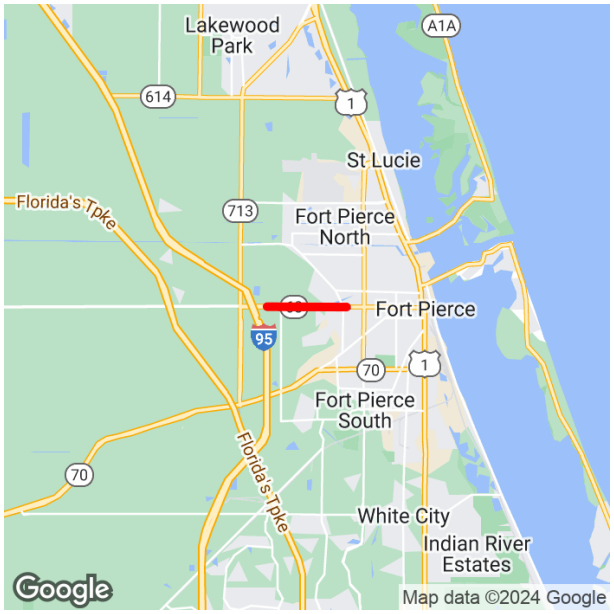


Project Description: ATMS - ARTERIAL TRAFFIC MGMT
Extra Description: 2022 TPO CMP PRIORITY #3 INCLUDES SOUTH 7TH STREET FROM SR-68/ORANGE AVE TO AVE A INSTALL FIBER OPTIC CABLE, TRAFFIC CAMERAS/VIDEO DETECTORS AND ADAPTIVE SIGNAL CONTROL AT SIGNALIZED INTERSECTIONS NO R/W NEEDED
Lead Agency: MANAGED BY FDOT
From: KINGS HWY
County: ST. LUCIE
To: US HIGHWAY 1
Length: 4.187
Phase Group: PRELIMINARY ENGINEERING

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	CARB	0	0	320,627	0	0	320,627
PE	DIH	0	0	25,650	0	0	25,650
				346,277			**346,277**

Prior Year Cost: 0
Future Year Cost: 0
Total Project Cost: 346,277
LRTP: Page 8-11

ORANGE AVE FROM LAMONT RD TO N 32ND ST
4484481 Non-SIS



Project Description: RESURFACING
Lead Agency: MANAGED BY FDOT
From: LAMONT RD
Length: 1.948
To: N 32ND ST
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	DDR	527,215	0	0	0	0	527,215
PE	DIH	24,896	0	0	0	0	24,896
CST	DDR	0	0	0	3,303,884	0	3,303,884
CST	DIH	0	0	0	132,155	0	132,155
CST	DS	0	0	0	446,024	0	446,024
		552,111			**3,882,063**		**4,434,174**

Prior Year Cost: 0
Future Year Cost: 0
Total Project Cost: 4,434,174
LRTP: Page 3-9

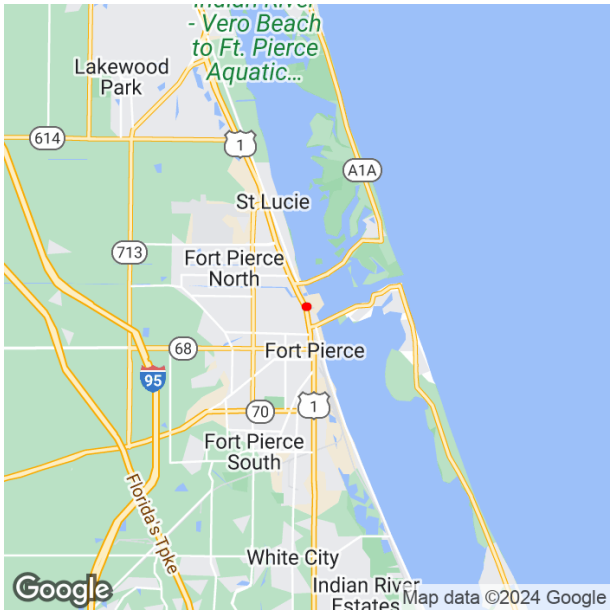
OUTFALL FOR VIRGINIA AVE
4417151 SIS

Project Description: DRAINAGE IMPROVEMENTS
Extra Description: OUTFALL WILL BE ROUTED FROM CANAL 7D (CITY CANAL EAST OF OLEANDER BLVD) ALONG VIRGINIA AVE, SOUTH ON SR-5/US HIGHWAY 1 AND THEN EAST THROUGH INDIAN HILLS DR TO ULTIMATELY OUTFALL INTO THE SAND MINE LAKE G/W 441714-1(LEAD)
Lead Agency: MANAGED BY FDOT
From: OLEANDER BLVD
County: ST. LUCIE
To: INDIAN HILLS DR
Length: 0.177
Phase Group: PRELIMINARY ENGINEERING, RIGHT OF WAY, CONSTRUCTION, ENVIRONMENTAL

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	ACPR	0	0	3,580,198	0	0	3,580,198
CST	DIH	0	0	107,305	30,653	0	137,958
CST	DS	0	0	558,756	0	0	558,756
CST	SA	0	0	5,665,458	0	0	5,665,458
				9,911,717	**30,653**		**9,942,370**

Prior Year Cost: 1,026,664
Future Year Cost: 0
Total Project Cost: 10,969,034
LRTP: Page 3-9

PORT OF FT. PIERCE SUN TRAIL CONNECTOR
4473991 Non-SIS

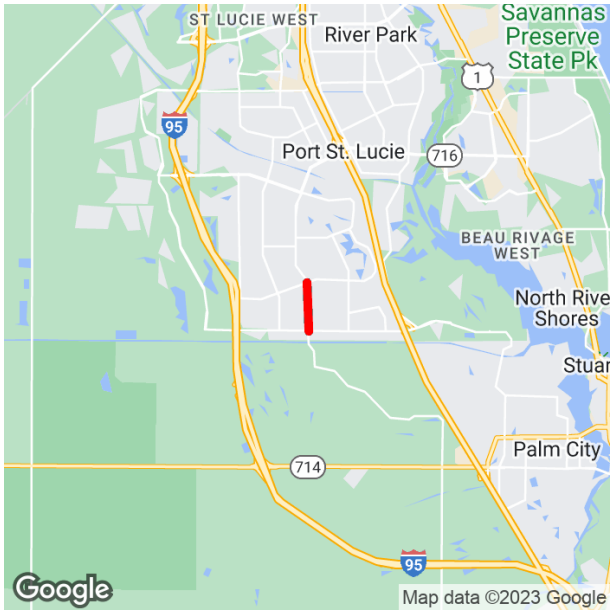


Project Description: BIKE PATH/TRAIL
Extra Description: A SEGMENT OF THE HISTORIC FT. PIERCE DOWNTOWN PROJECT FROM DIXIE HIGHWAY TO 2ND STREET AT FISHERMANS WHARF
Lead Agency: RESPONSIBLE AGENCY NOT AVAILABLE
From: PORT OF FT. PIERCE
To: PORT OF FT. PIERCE
Length: 0
Phase Group: PLANNING, PRELIMINARY ENGINEERING

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	TLWR	1,100,000	0	0	0	0	1,100,000
		1,100,000					**1,100,000**

Prior Year Cost: 250,000
Future Year Cost: 0
Total Project Cost: 1,350,000
LRTP: Page 3-9

PORT ST. LUCIE BLVD FROM BECKER RD TO PAAR DRIVE
4317523 Non-SIS

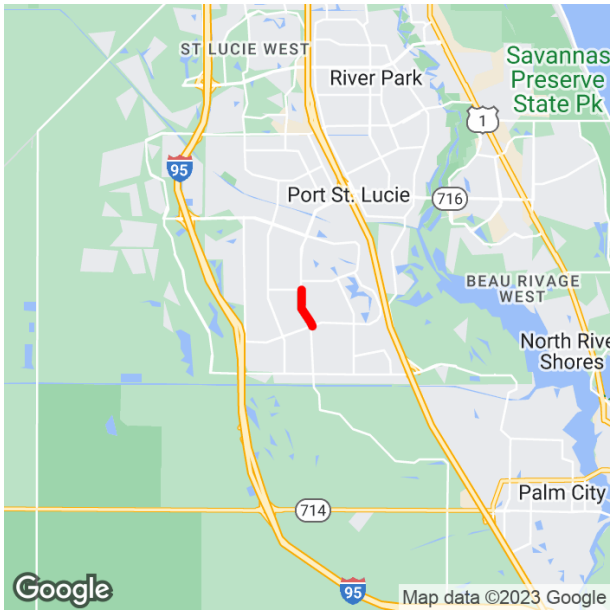


Prior Year Cost: 3,097,063
Future Year Cost: 0
Total Project Cost: 63,964,544
LRTP: Page 8-2

Project Description: ADD LANES & RECONSTRUCT
Extra Description: 2022 TPO PRIORITY #3. WIDENING FROM 2 TO 4 LANES.
Lead Agency: MANAGED BY FDOT **From:** BECKER RD
County: ST. LUCIE **To:** PAAR DRIVE
Length: 1.119
Phase Group: PRELIMINARY ENGINEERING, RIGHT OF WAY, RAILROAD & UTILITIES, CONSTRUCTION, ENVIRONMENTAL, LOCAL ADVANCE REIMBURSE

Phase	Fund Code	2025	2026	2027	2028	2029	Total
ROW	SU	0	272,744	14,984	0	0	287,728
RRU	SU	0	0	100,000	0	0	100,000
CST	LFR	0	18,594,737	0	0	0	18,594,737
CST	SU	0	1,315,912	0	0	0	1,315,912
CST	TRIP	0	1,158,318	0	0	0	1,158,318
LAR	ACPR	0	0	0	2,317,855	0	2,317,855
LAR	CARU	0	0	0	78,214	0	78,214
LAR	CM	0	0	0	718,692	0	718,692
LAR	SA	0	0	0	7,178,276	0	7,178,276
LAR	SU	0	0	0	4,431,700	0	4,431,700
LAR	TRIP	0	0	0	1,403,873	0	1,403,873
LAR	TRWR	0	0	0	2,466,127	0	2,466,127
			21,341,711	**114,984**	**18,594,737**		**40,051,432**

PORT ST. LUCIE BLVD FROM SOUTH OF PAAR DR TO SOUTH OF ALCANTARRA BLVD
4317525 Non-SIS

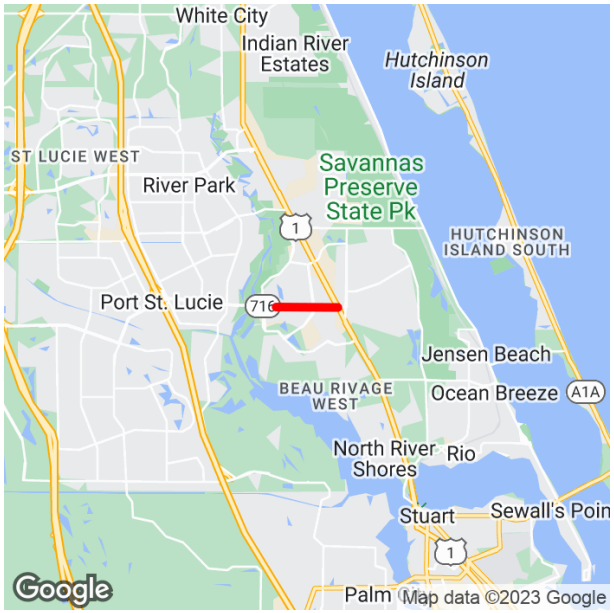


Prior Year Cost: 3,097,063
Future Year Cost: 0
Total Project Cost: 63,964,544
LRTP: Page 8-2

Project Description: ADD LANES & RECONSTRUCT
Extra Description: 2020 TPO PRIORITY #2; WIDENING FROM 2 TO 4 LANES. DESIGN AND RIGHT OF WAY ON 431752-2 DENING FROM 2 TO 4 LANES LFA WITH CITY OF PORT ST. LUCIE. 56-01 LF UWHCA 62-03 LF FOR CEI FOR UWHCA CITY OF PORT ST. LUCIE --NEW SEQUENCE 52-02 WAS CREATED TO PULL FROM APPROPRIATE BUDGET CATEGORY (NON-PROGRAM 87)
Lead Agency: MANAGED BY FDOT
From: SOUTH OF PAAR DR
County: ST. LUCIE
To: SOUTH OF ALCANTARRA BLVD
Length: 1.076
Phase Group: RAILROAD & UTILITIES, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
RRU	LF	1,807,473	0	0	0	0	1,807,473
CST	ACSU	960,459	0	0	0	0	960,459
CST	CD23	2,000,000	0	0	0	0	2,000,000
CST	CIGP	5,548,619	0	0	0	0	5,548,619
CST	LFP	3,548,619	0	0	0	0	3,548,619
CST	SU	3,260,440	0	0	0	0	3,260,440
CST	TRIP	2,214,712	0	0	0	0	2,214,712
CST	TRWR	1,475,727	0	0	0	0	1,475,727
		20,816,049					**20,816,049**

PORT ST. LUCIE BLVD FROM WEST OF SE SHELTER DRIVE TO US HIGHWAY 1
4463761 Non-SIS

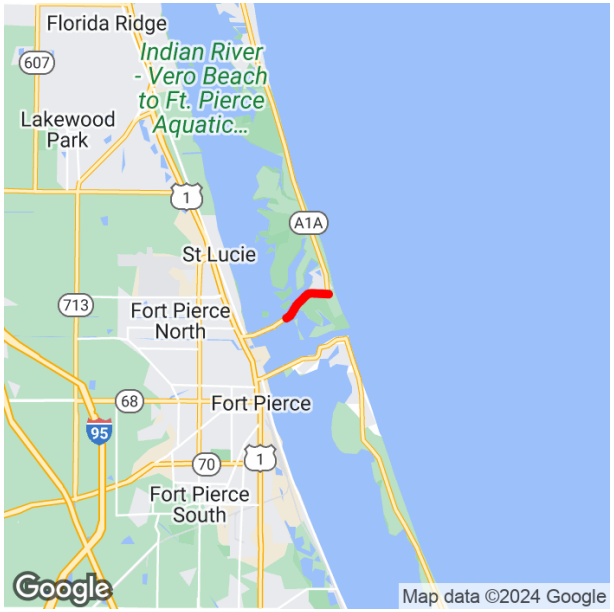


Project Description: RESURFACING
Extra Description: G/W 447652-1 52-02-UWHCA WITH THE CITY OF PORT ST. LUCIE FOR MINOR ADJUSTMENTS
Lead Agency: MANAGED BY FDOT
From: WEST OF SE SHELTER DRIVE
County: ST. LUCIE
To: US HIGHWAY 1
Length: 1.555
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	ACNR	799,951	0	0	0	0	799,951
CST	DDR	2,596,163	0	0	0	0	2,596,163
CST	DIH	0	114,396	0	0	0	114,396
CST	DS	822,337	0	0	0	0	822,337
CST	LF	1,344	0	0	0	0	1,344
		4,219,795	**114,396**				**4,334,191**

Prior Year Cost: 469,892
Future Year Cost: 0
Total Project Cost: 4,804,083
LRTP: Page 3-9

SHOREWINDS DR/A1A
4498281 Non-SIS

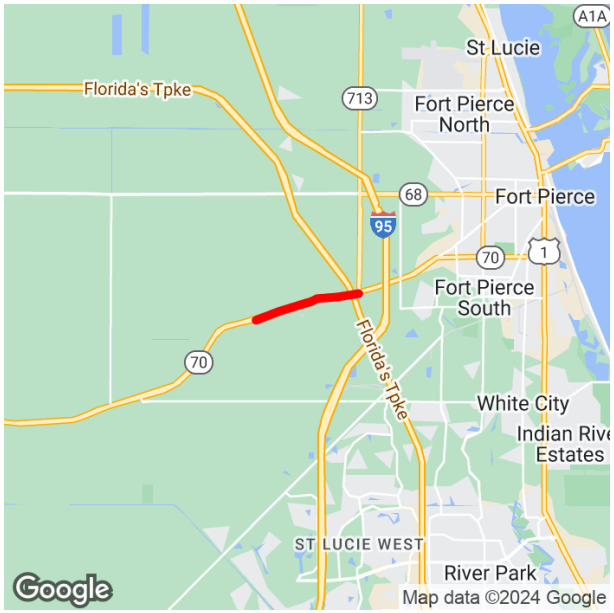


Project Description: RESURFACING
Lead Agency: MANAGED BY FDOT
From: 0.2 MILES W OF BR 940046
Length: 1.301
To: ATLANTIC BEACH BLVD
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	DDR	0	0	0	3,393,110	0	3,393,110
CST	DIH	0	0	0	92,030	0	92,030
					3,485,140		**3,485,140**

Prior Year Cost: 678,555
Future Year Cost: 0
Total Project Cost: 4,163,695
LRTP: Page 3-9

SR-70/OKEECHOBEE ROAD FROM IDEAL HOLDING RD TO W OF KINGS HWY
4476531 SIS



Project Description: RESURFACING
Lead Agency: MANAGED BY FDOT
From: IDEAL HOLDING RD
Length: 7.984
To: W OF KINGS HWY
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	DDR	1,175,538	825,049	0	0	0	2,000,587
CST	DDR	16,796,284	0	0	0	0	16,796,284
CST	DIH	65,115	70,275	0	0	0	135,390
CST	DS	3,351,995	0	0	0	0	3,351,995
CST	SA	2,968,488	0	0	0	0	2,968,488
		24,357,420	**895,324**				**25,252,744**

Prior Year Cost: 1,448,966
Future Year Cost: 0
Total Project Cost: 45,074,338
LRTP: Page 3-9

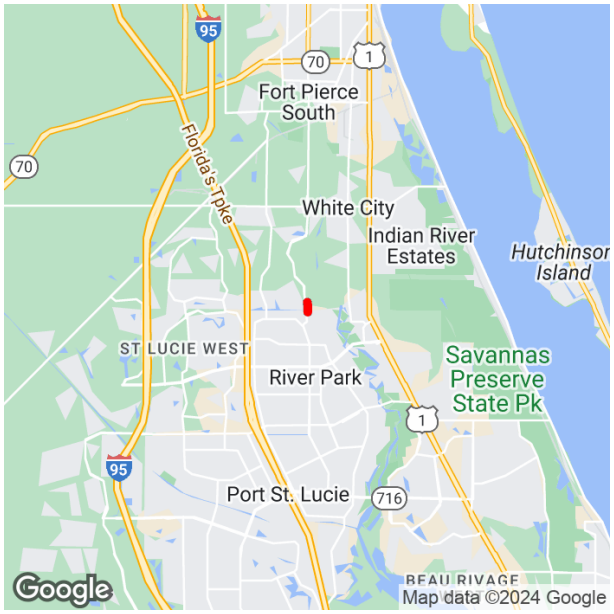
SR-70/OKEECHOBEE ROAD FROM MEDIAN CROSSING AT BMP 6.351 TO IDEAL HOLDING RD
4476532 SIS

Project Description: RESURFACING
Lead Agency: MANAGED BY FDOT
County: ST. LUCIE
Length: 6.149
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION
From: MEDIAN CROSSING AT BMP 6.351
To: IDEAL HOLDING RD

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	DDR	1,657,098	0	0	0	0	1,657,098
PE	DIH	108,349	0	0	0	0	108,349
CST	ACNR	0	0	0	8,665,014	0	8,665,014
CST	DDR	0	0	0	7,798,382	0	7,798,382
CST	DIH	0	0	0	143,785	0	143,785
		1,765,447			**16,607,181**		**18,372,628**

Prior Year Cost: 1,448,966
Future Year Cost: 0
Total Project Cost: 45,074,338
LRTP: Page 3-9

ST. JAMES DRIVE FROM NE LAZY RIVER PARKWAY TO NE ROYCE AVE
4534911 Non-SIS

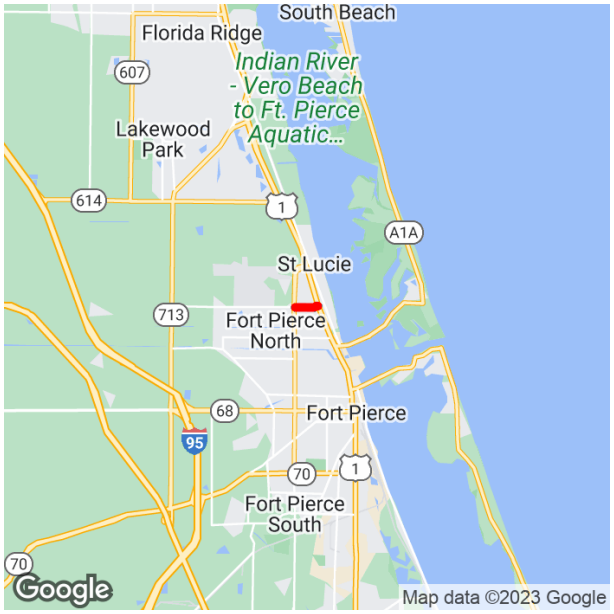


Project Description: SIDEWALK
Extra Description: 2024 TPO CARBON REDUCTION PRIORITY #4 SIDEWALK, 6-8 FEET IN WIDTH, 0.25 MILE IN LENGTH
Lead Agency: MANAGED BY FDOT
From: NE LAZY RIVER PARKWAY
Length: 0.245
To: NE ROYCE AVE
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	TALL	5,000	0	0	0	0	5,000
CST	CARU	0	0	289,382	0	0	289,382
CST	LF	0	0	80,013	0	0	80,013
		5,000		**369,395**			**374,395**

Prior Year Cost: 0
Future Year Cost: 0
Total Project Cost: 374,395
LRTP: Page 3-9

ST. LUCIE BLVD FROM EAST OF N 25 ST TO WEST OF US HIGHWAY 1
4484491 Non-SIS

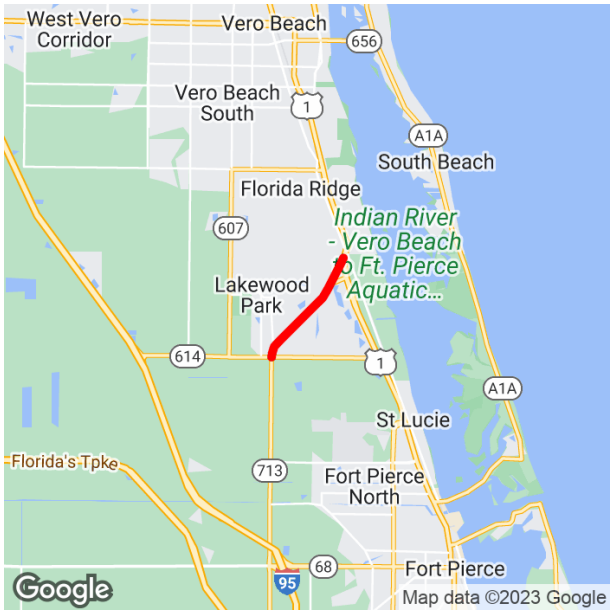


Project Description: RESURFACING
Extra Description: G/W 448450.1(LEAD)
Lead Agency: MANAGED BY FDOT
From: EAST OF N 25 ST
County: ST. LUCIE
To: WEST OF US HIGHWAY 1
Length: 0.523
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	DDR	0	0	0	107,780	0	107,780
CST	DIH	0	0	0	35,054	0	35,054
CST	DS	0	0	0	856,608	0	856,608
					999,442		**999,442**

Prior Year Cost: 270,906
Future Year Cost: 0
Total Project Cost: 1,270,348
LRTP: Page 3-9

TURNPIKE FEEDER RD FROM INDRIO RD TO US-1
4510811 Non-SIS

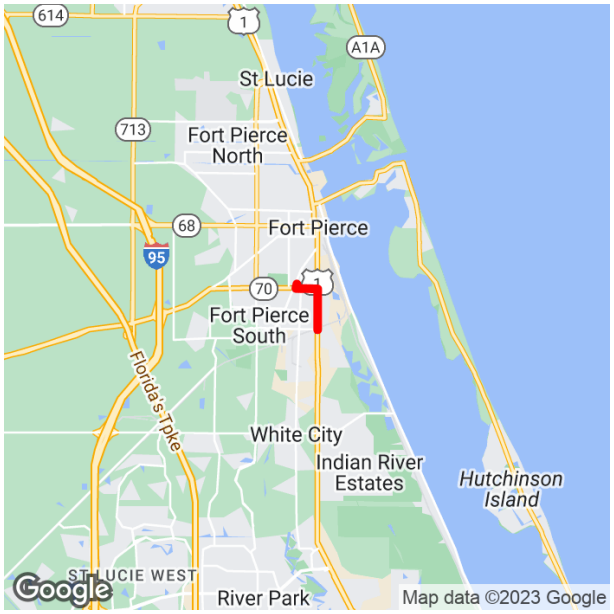


Project Description: LIGHTING
Extra Description: B/C RATIO= 2.5 NPV $2,646,838 SHSP EMPHASIS AREA(S): INTERSECTION & VULNERABLE ROAD USER CRASHES SEGMENT 1 (FROM INDRIO ROAD TO STA 136+80, 540 FT NORTH OF INDRIO ROAD):PROPOSED LIGHTING CONSISTS OF LED LIGHT FIXTURES ON THE WEST SIDE AND EAST SIDE OF SR 713 SEGMENT 2 (FROM STA 136+80 TO S OF PALOMAR PKWY):PROPOSED...SEE WP45
Lead Agency: MANAGED BY FDOT
From: INDRIO RD
County: ST. LUCIE
To: US-1
Length: 2.741
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	ACSS	0	0	2,238,159	0	0	2,238,159
CST	CARB	0	0	2,186,000	0	0	2,186,000
CST	SA	0	0	70,902	0	0	70,902
				4,495,061			**4,495,061**

Prior Year Cost: 283,467
Future Year Cost: 0
Total Project Cost: 4,778,528
LRTP: Page 3-9

US HIGHWAY 1 FROM EDWARDS RD TO TENNESSEE AVE
4417141 SIS

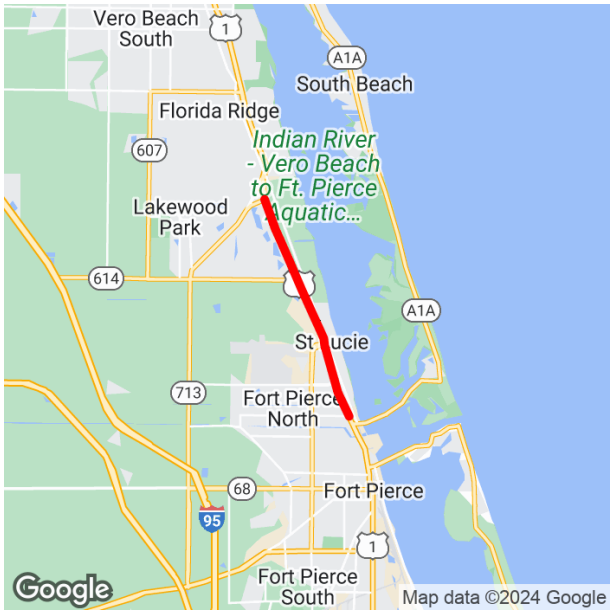


Prior Year Cost: 1,836,965
Future Year Cost: 0
Total Project Cost: 17,702,381
LRTP: Page 3-9

Project Description: DRAINAGE IMPROVEMENTS
Extra Description: DRAINAGE/STORM WATER UPGRADES RESURFACING ON PHASE 52-02 INCLUDING: INTERSECTION LIGHTING RETROFIT. UPGRADE PEDESTRIAN SIGNALS TO COUNTDOWN AT THE FOLLOWING INTERSECTIONS: EDWARDS ROAD, EMIL AVE. GARDENIA AVE. AND VIRGINIA AVE
Lead Agency: MANAGED BY FDOT
From: EDWARDS RD
County: ST. LUCIE
To: TENNESSEE AVE
Length: 1.124
Phase Group: PRELIMINARY ENGINEERING, RIGHT OF WAY, RAILROAD & UTILITIES, CONSTRUCTION, ENVIRONMENTAL

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	ACNR	0	0	1,701,218	0	0	1,701,218
CST	ACPR	0	0	10,644,394	0	0	10,644,394
CST	DDR	0	0	1,453,212	0	0	1,453,212
CST	DIH	0	0	57,106	0	0	57,106
CST	SA	0	0	2,009,486	0	0	2,009,486
				15,865,416			**15,865,416**

US HIGHWAY 1 FROM JUANITA AVE TO NORTH OF KINGS HWY
4484501 Non-SIS

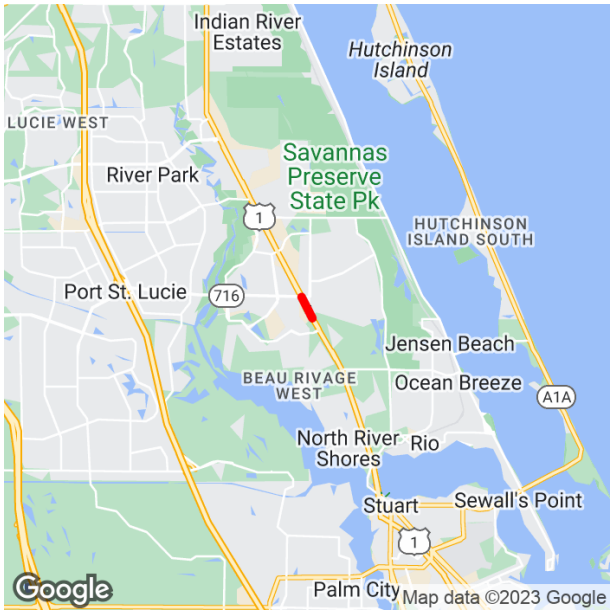


Project Description: RESURFACING
Extra Description: G/W 448449-1
Lead Agency: MANAGED BY FDOT
From: JUANITA AVE
Length: 5.836
To: NORTH OF KINGS HWY
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	DDR	0	0	0	10,181,688	0	10,181,688
CST	DIH	0	0	0	109,051	0	109,051
CST	DS	0	0	0	7,688,985	0	7,688,985
CST	SA	0	0	0	4,891,411	0	4,891,411
					22,871,135		**22,871,135**

Prior Year Cost: 2,247,207
Future Year Cost: 0
Total Project Cost: 25,118,342
LRTP: Page 3-9

US HIGHWAY 1 FROM MARTIN/ST LUCIE COUNTY LINE TO SE PORT ST LUCIE BLVD
4476521 Non-SIS

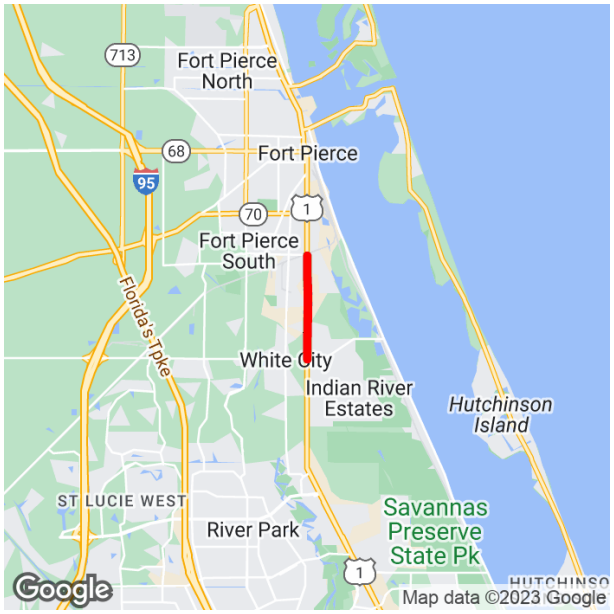


Project Description: RESURFACING
Extra Description: G/W 446376-1 (LEAD)
Lead Agency: MANAGED BY FDOT
From: MARTIN/ST LUCIE COUNTY LINE
County: ST. LUCIE
To: SE PORT ST LUCIE BLVD
Length: 0.669
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	DIH	91,455	0	0	0	0	91,455
CST	DS	3,345,856	0	0	0	0	3,345,856
CST	LF	452	0	0	0	0	452
		3,437,763					**3,437,763**

Prior Year Cost: 470,160
Future Year Cost: 0
Total Project Cost: 3,907,923
LRTP: Page 3-9

US HIGHWAY 1 FROM MIDWAY RD TO SOUTH OF EDWARDS RD
4510801 Non-SIS



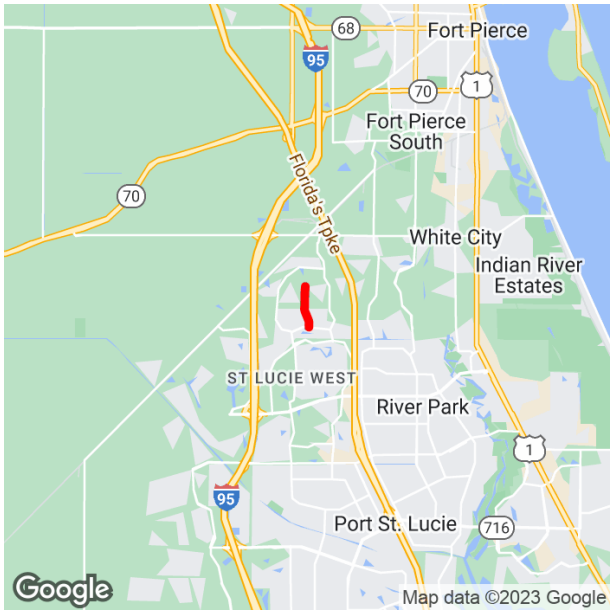
Project Description: LIGHTING
Extra Description: B/C RATIO = 2.8 NPV $4,153,539 SHSP EMPHASIS AREA(S): INTERSECTION & VULNERABLE ROAD USER CRASHES RETROFIT TWO (2) DECORATIVE LIGHT POLES ON THE WEST SIDE OF W. MIDWAY RD; ONLY STREET LIGHTING LUMINAIRES. RETROFIT 38 EXISTING LUMINARIES ATTACHED TO EXISTING UTILITIES POLES. PROPOSED 119 LUMINARIES BRACKET ON EXISTING ...SEE WP45

Lead Agency: MANAGED BY FDOT
From: MIDWAY RD
County: ST. LUCIE
To: SOUTH OF EDWARDS RD
Length: 2.513
Phase Group: PRELIMINARY ENGINEERING, RAILROAD & UTILITIES

Phase	Fund Code	2025	2026	2027	2028	2029	Total
RRU	ACSS	0	1,043,395	0	0	0	1,043,395
			1,043,395				**1,043,395**

Prior Year Cost: 270,849
Future Year Cost: 0
Total Project Cost: 1,314,244
LRTP: Page 3-9

VOLUCIA DRIVE FROM EAST TORINO PARKWAY TO WEST BLANTON BLVD
4508611 Non-SIS



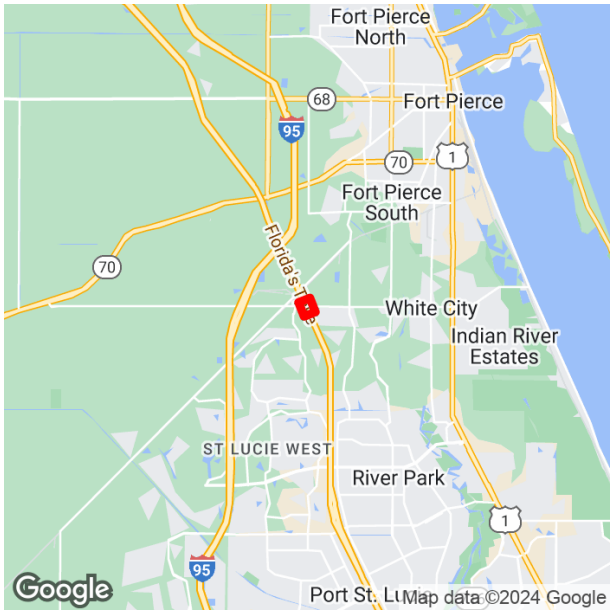
Project Description: SIDEWALK
Extra Description: 2023 TA PRIORITY #1 LAP W/ CITY OF PORT ST. LUCIE
Lead Agency: MANAGED BY FDOT
From: EAST TORINO PARKWAY
County: ST. LUCIE
To: WEST BLANTON BLVD
Length: 1.003
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
CST	LF	0	189,683	0	0	0	189,683
CST	TALT	0	183,882	0	0	0	183,882
CST	TALU	0	593,192	0	0	0	593,192
			966,757				**966,757**

Prior Year Cost: 5,000
Future Year Cost: 0
Total Project Cost: 971,757
LRTP: Page 3-9

C.7 TURNPIKE ENTERPRISE PROJECTS

TURNPIKE @ MIDWAY RD SOUTHERN RAMPS INTERCHANGE (MP 150)
4518581 SIS

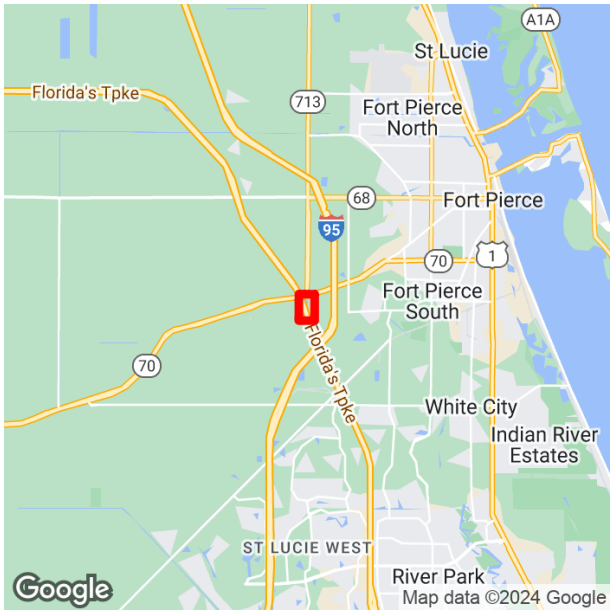


Project Description: INTERCHANGE RAMP (NEW)
Extra Description: THIS RELATES TO A DISTRICT 4 PROJECT (231440-4) TO WIDEN MIDWAY ROAD FROM 2-LANES TO 4-LANES. G/W 231440-4 (LEAD)
Lead Agency: MANAGED BY FDOT **From:** INTERCHANGE
Length: 1.476 **To:** INTERCHANGE
Phase Group: PRELIMINARY ENGINEERING, RIGHT OF WAY, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
ROW	PKYI	5,770,000	8,679,799	0	0	0	14,449,799
CST	PKYI	0	0	17,301,911	0	0	17,301,911
		5,770,000	**8,679,799**	**17,301,911**			**31,751,710**

Prior Year Cost: 1,511,111
Future Year Cost: 0
Total Project Cost: 33,262,821
LRTP: Page 3-9

TURNPIKE INTERCHANGE IMPROVEMENTS AT SR-70 (MP 152)
4465801 SIS

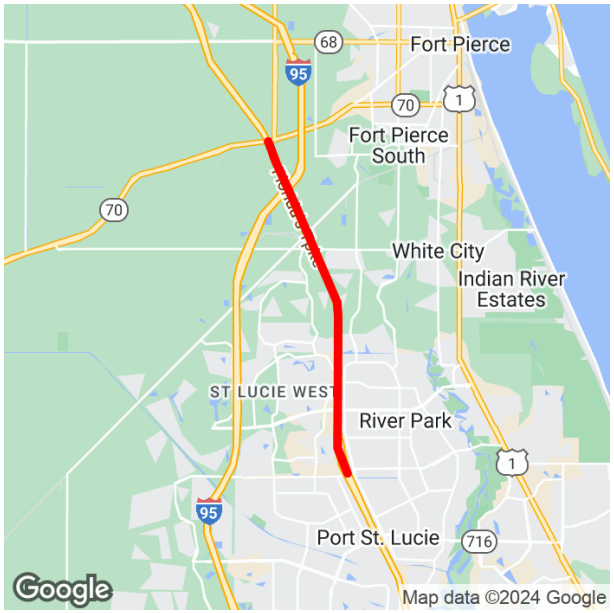


Project Description: INTERCHANGE IMPROVEMENT
Lead Agency: MANAGED BY FDOT
From: INTERCHANGE
Length: 0.8
To: INTERCHANGE
Phase Group: PRELIMINARY ENGINEERING

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	PKYI	0	2,643,562	0	0	0	2,643,562
			2,643,562				**2,643,562**

Prior Year Cost: 19,870
Future Year Cost: 0
Total Project Cost: 2,663,432
LRTP: Page 3-9

TURNPIKE INTERCHANGE IMPROVEMENTS AT SW PORT ST LUCIE BLVD
4462201 SIS



Project Description: INTERCHANGE IMPROVEMENT
Lead Agency: MANAGED BY FDOT
From: INTERCHANGE
Length: 0.294
To: INTERCHANGE
Phase Group: PRELIMINARY ENGINEERING

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	PKYI	4,302,271	0	0	0	0	4,302,271
		4,302,271					**4,302,271**

Prior Year Cost: 5,649
Future Year Cost: 0
Total Project Cost: 4,307,920
LRTP: Page 3-9

TURNPIKE PORT ST. LUCIE SERVICE PLAZA
4497121 SIS

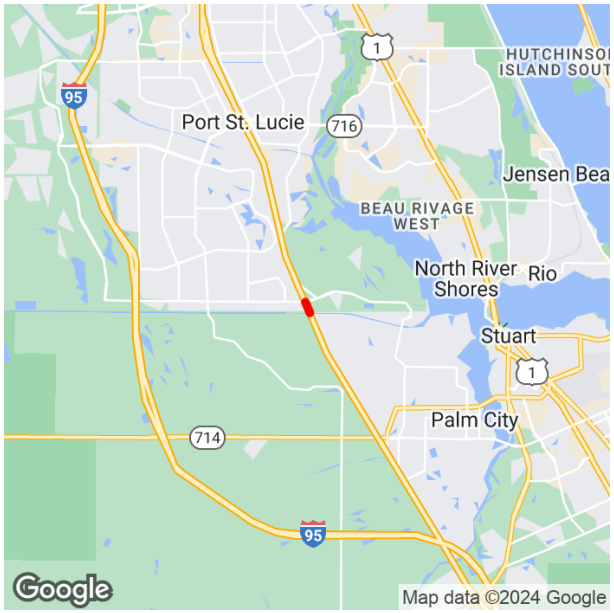
Project Description: REST AREA
Lead Agency: MANAGED BY FDOT
Length: 0.493
Phase Group: PRELIMINARY ENGINEERING

From:
To:

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	PKYI	0	0	0	270,000	0	270,000
					270,000		**270,000**

Prior Year Cost: 1,500
Future Year Cost: 0
Total Project Cost: 271,500
LRTP: Page 3-9

TURNPIKE WIDEN FROM MARTIN C/L TO BECKER RD
4463341 SIS

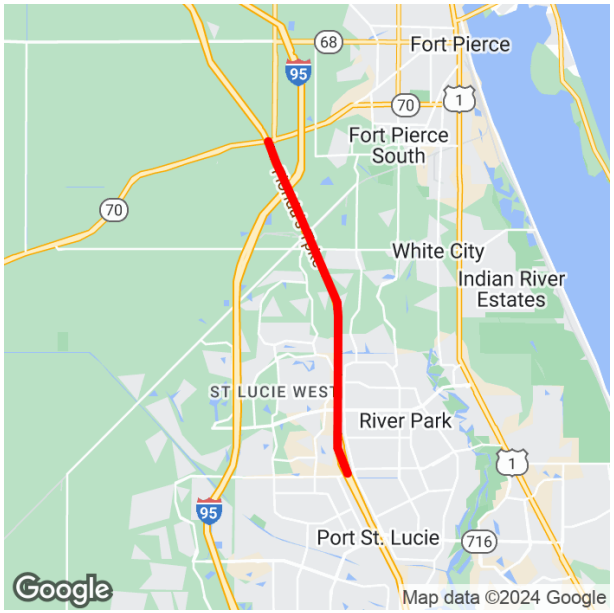


Project Description: ADD LANES & RECONSTRUCT
Lead Agency: MANAGED BY FDOT **From:** MARTIN C/L
Length: 0.404 **To:** BECKER RD
Phase Group: PRELIMINARY ENGINEERING, RIGHT OF WAY, CONSTRUCTION

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	PKYI	2,500,000	0	0	0	0	2,500,000
		2,500,000					**2,500,000**

Prior Year Cost: 2,096,578
Future Year Cost: 83,685,498
Total Project Cost: 88,282,076
LRTP: Page 3-9

TURNPIKE WIDENING FROM CROSSTOWN PKWY TO SR70
4465831 SIS

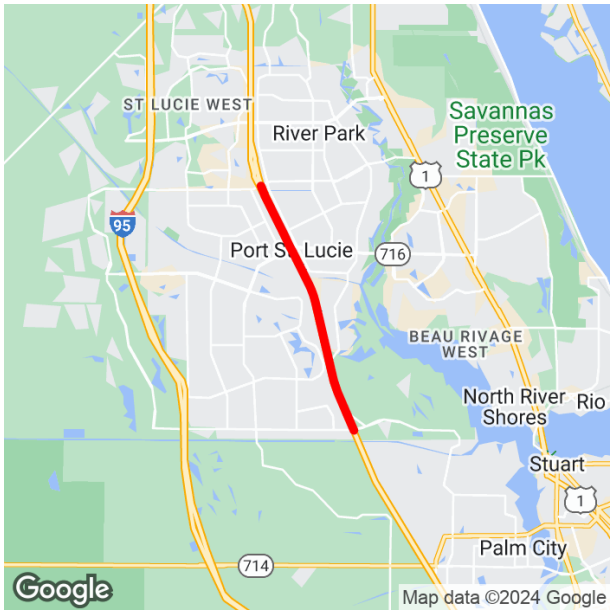


Project Description: ADD LANES & RECONSTRUCT
Lead Agency: MANAGED BY FDOT **From:** CROSSTOWN PKWY
Length: 8.412 **To:** SR70
Phase Group: PRELIMINARY ENGINEERING, RIGHT OF WAY

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	PKYI	0	18,660,293	0	0	0	18,660,293
			18,660,293				**18,660,293**

Prior Year Cost: 864,449
Future Year Cost: 0
Total Project Cost: 19,524,742
LRTP: Page 3-9

TURNPIKE WIDENING FROM SW BECKER RD TO CROSSTOWN PKWY
4463351 SIS



Project Description: ADD LANES & RECONSTRUCT
Lead Agency: MANAGED BY FDOT **From:** CROSSTOWN PKWY
Length: 6.227 **To:** SR70
Phase Group: PRELIMINARY ENGINEERING, RIGHT OF WAY

Phase	Fund Code	2025	2026	2027	2028	2029	Total
PE	PKYI	6,000,000	0	0	0	0	6,000,000
		6,000,000					**6,000,000**

Prior Year Cost: 5,212,678
Future Year Cost: 0
Total Project Cost: 11,212,678
LRTP: Page 3-9

E.1 PERFORMANCE MANAGEMENT

Even before Federal legislation such as the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation (FAST) Act required Metropolitan Planning Organizations (MPOs) and State Departments of Transportation (DOTs) to implement transportation performance management, the St. Lucie TPO and the Florida Department of Transportation (FDOT) were using performance management to connect investment and policy decisions to help achieve performance goals. Performance measures are quantitative criteria used to evaluate progress toward meeting those goals, and performance measure targets are the benchmarks against which the data collected for the criteria are compared to evaluate the progress. Consistent with MAP-21 and the FAST Act, the St. Lucie TPO conducts performance-based planning, tracks performance measures, and establishes data-driven targets to evaluate the progress.

Performance-based planning ensures the most efficient investment of Federal transportation funds by increasing accountability, transparency, and providing for better investment decisions that focus on key outcomes related to the following seven national goals:

- Improving Safety;
- Maintaining Infrastructure Condition;
- Reducing Traffic Congestion;
- Improving the Efficiency of the System and Freight Movement;
- Protecting the Environment; and,
- Reducing Delays in Project Delivery.

According to MAP-21 and the FAST Act, State DOTs are required to establish Statewide performance targets, and MPOs have the option to support the Statewide targets or adopt their own targets. In addition to the Federally-required performance targets, the St. Lucie TPO has established targets for local performance measures in the SmartMoves 2045 Long Range Transportation Plan (LRTP) related to local goals. The performance targets adopted to date by the St. Lucie TPO and the FDOT are identified in the TIP/LRTP System Performance Report. The St. Lucie TOP recognizes the FDOT Highway Safety Improvement Program (HSIP) Implementation Plan 2022 which demonstrates Florida's progress toward meeting its annual safety performance targets as required by the Federal Highway Administration (FHWA).

The TIP reflects the investment priorities established by the St. Lucie TPO in the SmartMoves 2045 LRTP by including projects that support the goals and objectives of the SmartMoves 2045 LRTP. By using the prioritization and project selection process described in Section B.3, the TIP has the anticipated effect of contributing toward the progress in meeting the performance targets. For example, the TPO will make progress toward achieving the adopted performance targets of the Safety Performance Measures by selecting and supporting the implementation of projects which address safety issues such as sidewalk and bicycle lane construction and intersection improvements. Likewise, the TPO will make progress toward achieving performance targets upon adoption in the Florida Freight Mobility and Trade Plan, dated April 2020, by selecting and supporting freight projects in the TPO area which address freight issues such as freight bottlenecks. This anticipated effect and the progress toward meeting the performance targets are confirmed annually by the TIP/LRTP System Performance Report which also demonstrates the linking of the investment priorities to the targets.

The TIP/LRTP System Performance Report is presented as follows:

TIP/LRTP System Performance Report

SmartMoves 2045 LRTP Goals	SmartMoves 2045 LRTP Objectives	SmartMoves 2045 and/or FAST Act Performance Measures	Federal Requirement	Data				FDOT Performance Target		County Target	St. Lucie TPO Performance Target	Progress Towards Meeting Target
				2020	2021	2022	2023	2 Year	4 Year	1 Year		
SUPPORT ECONOMIC ACTIVITIES	Enable the efficient movement of people and goods on the roadway network	% of person miles traveled on the Interstate that are Reliable	√	100% (1)	100% (1)	100% (1)	100% (1)	75%	70%		70%	+
		% of person miles traveled on the non Interstate NHS that are Reliable	√	96.8% (1)	96.8% (1)	96.8% (1)	96% (1)	50%	50%		50%	+
		The Travel Time Reliability (TTTR) index - the average of the maximum TTTR calculated for each reporting segment on the Interstate	√	1.10 (1)	1.11 (1)	1.11 (1)	1.14 (1)	1.75	2		2	+
	Optimize the management and operations of the transportation system	TSM&O Strategic Network / ATMS Network Deployment		34% (2)	34% (2)	35.8% (2)	37.2% (2)				100%	+
	Maximize the efficiency and effectiveness of the current transit system and improve access to destinations that support economic growth	% population within ¼ mile of Major Activity Centers (MACs)		10.9% (3)	10.9% (3)	11.5% (3)	12.1% (3)				16%	+
		Transit routes providing access to MACs		8 (4)	8 (4)	8 (4)	8 (4)				10	+
PROVIDE TRAVEL CHOICES	Encourage walking, cycling, and other micromobility options	% of roadways with sidewalks and bike lanes		29% (2)	30% (2)	30.5% (2)	31.2% (2)				43%	+
	Improve transit accessibility	% of transit stops with sidewalk access		90% (2)	90% (2)	90% (2)	91% (2)				100%	+
		Miles of fixed route transit service		206 (4)	206 (4)	206 (4)	206 (4)				300	+
MAINTAIN THE TRANSPORTATION SYSTEM	Maintain condition of existing transportation assets	% of Interstate pavement in good condition	√	82.3% (1)	84% (1)	89.4% (1)	coming soon	60%	60%		60%	+
		% of Interstate pavement in poor condition	√	0% (1)	0% (1)	0% (1)	coming soon	5%	5%		5%	+
		% of non-Interstate National Highway System pavement in good condition	√	n/a	48.6% (1)	51.3% (1)	coming soon	40%	40%		40%	+
		% of non-Interstate National Highway System pavement in poor condition	√	n/a	1.1% (1)	1.1% (1)	coming soon	5%	5%		5%	+
		% of National Highway System bridges classified as in good condition	√	83.4% (1)	83.6% (1)	75.3% (1)	coming soon	50%	50%		50%	+
		% of National Highway System bridges classified as in poor condition	√	0% (1)	0% (1)	0% (1)	coming soon	10%	10%		10%	+
	Maintain condition of existing transit assets	Equipment - % of non-revenue, support-service and maintenance vehicles that have met or exceeded their useful life benchmark	√	57% (4)	57% (4)	57% (4)	57% (4)			71%	0%	+
		Rolling Stock - % of revenue vehicles within a particular asset class that have either met or exceeded their useful life benchmark (fixed route)	√	0% (4)	0% (4)	61% (4)	69% (4)			36%	0%	
		% of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	√	4.5% (4)	4.5% (4)	4.5% (4)	4.3% (4)			4.1%	0%	
PROVIDE EQUITABLE, AFFORDABLE, AND SUSTAINABLE URBAN MOBILITY	Support healthy living strategies, programs, and improvements to create more livable communities	Walking modal share		1.9% (3)	1.4% (3)	1.3% (3)	coming soon				Maintain or Increase	
		Bike modal share		0.3% (3)	0.3% (3)	0.4% (3)	coming soon				Maintain or Increase	+
		Transit modal share		0.4% (3)	0.3% (3)	0.2% (3)	coming soon				Maintain or Increase	
	Ensure community participation is representative	Opportunities for engagement in traditionally underserved areas		7 (2)	7 (2)	7 (2)	7 (2)				Maintain or Increase	+
	Provide for transportation needs of transportation disadvantaged	% of low income, older adults, persons with disabilities within ¼ mile of transit route		27.1% (3)	27.3% (3)	27.9% (3)	coming soon				30%	+
	Make transportation investments that minimize impacts to natural environment and allocate resources toward mitigation	Number of additional roadway lane miles of impacting environmentally sensitive areas		0 (2)	0 (2)	0 (2)	0 (2)				0	+
	Improve transportation system's stability/resiliency in event of climate change, emergencies, or disasters	% of roadway lane miles subject to climate change impacts		0% (5)	0% (5)	0% (5)	0% (5)				0%	+
IMPROVE SAFETY AND SECURITY	Improve safety and security in the Highway System	Number of fatalities	√	41 (6)	44 (6)	44 (6)	coming soon	0	0		38/0 (7)	
		Fatality rate per 100 million vehicle miles traveled	√	1.18 (6)	1.25 (6)	1.24 (6)	coming soon	0	0		1.09/0 (7)	+
		Number of serious injuries	√	145 (6)	148 (6)	147 (6)	coming soon	0	0		148/0 (7)	+
		Serious injury rate per 100 million vehicle miles traveled	√	4.21 (6)	4.23 (6)	4.12 (6)	coming soon	0	0		4.04/0 (7)	+
	Improve safety and security in the Non-Motorized System	Number of non-motorized fatalities and serious injuries combined	√	28 (6)	32 (6)	31 (6)	coming soon	0	0		26/0 (7)	+
	Improve safety and security in the Transit System	Total number of reportable fatalities (fixed route)	√	0 (4)	0 (4)	0 (4)	0 (4)			0	SupportCounty Target	+
		Rate of reportable fatalities per total vehicle revenue miles by mode (fixed route)	√	0 (4)	0 (4)	0 (4)	0 (4)			0	SupportCounty Target	+
		Total number of reportable injuries (fixed route)	√	0 (4)	3 (4)	2 (4)	2 (4)			1	SupportCounty Target	
		Rate of reportable injuries per total vehicle revenue miles by mode (fixed route)	√	0 (4)	0.51 (4)	0.38 (4)	0.16 (4)			0.14	SupportCounty Target	+
		Total number of reportable safety events (fixed route)	√	0 (4)	3 (4)	1 (4)	0 (4)			0	SupportCounty Target	+
		Rate of reportable safety events per total vehicle revenue miles by mode (fixed route)	√	0 (4)	0.51 (4)	0.18 (4)	0 (4)			0	SupportCounty Target	+
		Mean distance between major mechanical failures by mode (fixed route)	√	10,410 (4)	9,639 (4)	6,613 (4)	9,509 (4)			10,460	SupportCounty Target	+

1- FDOT Data; 2 - St. Lucie TPO; 3- ACS 5-year estimates; 4 - St. Lucie County Community Service Department Transit Division; 5 - Results from Florida Sea Level Scenario Sketch Planning Tool, based on NOAA High projections in 2040; 6 - FDOT 5-year rolling average; 7 - Interim Benchmark/Target.

St. Lucie Transportation Planning Organization

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

AGENDA ITEM SUMMARY

Board/Committee:	St. Lucie TPO Board
Meeting Date:	June 5, 2024
Item Number:	9b
Item Title:	City of Fort Pierce Passenger Rail Station/Mobility Hub Concepts Plan
Item Origination:	Unified Planning Work Program (UPWP)
UPWP Reference:	Task 3.2 – Transit Planning
Requested Action:	Accept the Concepts Plan, accept with conditions, or do not accept.
Staff Recommendation:	Based on the recommendations of the TPO Advisory Committees and because the identification and analysis of potential sites for a passenger rail station in downtown Fort Pierce would position the City of Fort Pierce to take advantage of future funding opportunities, it is recommended that the City of Fort Pierce Passenger Rail Station/Mobility Hub Concepts Plan be accepted by the TPO Board.

Attachments

- Staff Report
- Fort Pierce Passenger Rail Station/Mobility Hub & Station Concept Plan

St. Lucie Transportation Planning Organization

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Port St. Lucie, Florida 34953
772-462-1593 www.stlucietpo.org

MEMORANDUM

TO: St. Lucie TPO Board

THROUGH: Peter Buchwald
Executive Director

FROM: Marceia Lathou
Transit/ACES Program Manager

DATE: May 29, 2024

SUBJECT: City of Fort Pierce Passenger Rail Station/Mobility Hub Concepts Plan

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BACKGROUND

Downtown Fort Pierce is strategically located to support passenger rail service. The downtown offers history, art, vibrant retail, and scenic views, all within walking distance of the Florida East Coast (FEC) railroad corridor. Adjacent to the FEC tracks are vacant, undeveloped properties suitable for the development of a passenger rail station.

Passenger rail service could be provided by several sources. Tri-Rail, South Florida's commuter rail service, could extend to the Treasure Coast. Amtrak, the nation's intercity rail service, could re-establish a route along Florida's east coast. The explosive population and employment growth being experienced by St. Lucie County underscores the need for regional connectivity by passenger rail.

The City of Fort Pierce has garnered substantial support for a passenger rail station in downtown Fort Pierce. The support comes from the public and from municipal and private organizations throughout St. Lucie, Indian River, and Okeechobee counties. These stakeholders recognize the potential of a downtown Fort Pierce station as an economic, tourism, and cultural asset for the entire region.

At its April 12, 2023 meeting, the TPO Board amended Task 3.2 Transit Planning of the FY 2022/23 – FY 2023/24 Unified Planning Work Program

(UPWP) to add Fort Pierce Passenger Rail Station Planning as a project to develop initial site plans and conceptual designs for a passenger rail station in downtown Fort Pierce. The scope of this project also incorporated the concept of mobility hubs which provide seamless integration with all modes of ground transportation as outlined in the TPO's Sustainable Transportation Plan. A mobility hub could be implemented in advance of a rail station to continue building synergy for passenger rail service by being designed with an envelope for station operations and a passenger platform.

ANALYSIS

MARLIN Engineering Inc., with subconsultants Zyscovich Architects, developed the attached Concepts Plan. The plan includes conceptual station area planning, traffic engineering, architectural design, and roadway design evaluations for three alternative sites for a rail station/mobility hub in downtown Fort Pierce. A summary of each proposed site is provided below:

Audubon Development/H.D. King's Landing Site

- The 7.2-acre parcel is part of the H.D. King Plant Site, a Mixed-Use Development by Audubon Development
- Located on waterfront property across from the Fort Pierce City Marina in Downtown Fort Pierce
- Located adjacent to the FEC railroad
- Zoning was former Light Industrial, now Approved Planned Development

Boston Avenue Site

- Located on a 7.02-acre parcel
- Situated on the western side of the FEC rail right of way, just south of Orange Avenue
- Owned by FEC and adjacent to the FEC railroad
- Parcel is currently zoned C-4 - General Commercial Zoning and PD - Planned Development

Depot Drive Site

- Located on a 0.90-acre parcel fronting FEC that is expanded to 2.47 acres with County and private property
- Situated on the eastern side of the FEC rail right of way, directly behind the Sunrise Theatre
- Owned by the City of Fort Pierce, St. Lucie County, and private property owner
- It is currently utilized for surface parking, however, a large portion of it is undeveloped
- Parcel is currently zoned C-4, Central Commercial Zoning

The plan includes concepts of what the stations would look like, how they would connect to the rest of Fort Pierce, and the benefits of each location. The plan was coordinated with the City of Fort Pierce and related municipal departments and agencies during the planning process. A representative from MARLIN Engineering, Inc. will present the highlights of the plan.

At their meetings during the week of May 20th, the TPO Advisory Committees recommended the acceptance of the City of Fort Pierce Passenger Rail Station/Mobility Hub Concepts Plan.

RECOMMENDATION

Based on the recommendations of the TPO Advisory Committees and because the identification and analysis of potential sites for a passenger rail station in downtown Fort Pierce would position the City of Fort Pierce to take advantage of future funding opportunities, it is recommended that the City of Fort Pierce Passenger Rail Station/Mobility Hub Concepts Plan be accepted by the TPO Board.

ST. LUCIE TPO

Fort Pierce Passenger Rail Station/ Mobility Hub & Station Concept Plan

St. Lucie Transportation Planning Organization

APRIL 2024 | Draft Final

PREPARED BY

MARLIN

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Executive Summary

Background

The St. Lucie Transportation Planning Organization (TPO) has initiated this study as a next step in its goal to bring intercity and regional passenger rail service to St. Lucie County. The study addresses well documented opportunities such as regional connectivity, development, and population and employment growth that support a plan for a passenger rail station in Downtown Fort Pierce. Potential station locations in Downtown have been identified and architectural renderings of a candidate location are also provided. Downtown Fort Pierce is the focus of this effort as it has been consistently documented in TPO Planning documents as the preferred location for a regional passenger rail station in St. Lucie County and the study was performed in close coordination with the City.

The St. Lucie TPO also recently prepared the Autonomous, Connected, Electric and Shared Use (ACES) Sustainable Transportation Plan to facilitate a countywide energy-efficient transportation network. The plan involves developing strategically placed Mobility Hubs to provide the county, including Downtown Fort Pierce, with transportation infrastructure facilitating public/private sustainable transport modes such as electric bus, electric, autonomous vehicles, ride-sharing, micromobility, and pedestrian/bicycle connectivity. This study approached the development of the passenger rail station as an ACES mobility hub. The mobility hub element is critically important as it will create a centralized node for pedestrian, bicycle and trails; transit; parking; microtransit and micromobility at a high-profile location. The downtown hub is ranked as Priority #1 in the ACES plan and the mobility hub could be implemented in advance of a rail station to continue building synergy for passenger rail by being designed with an envelope for station operations and a passenger platform.

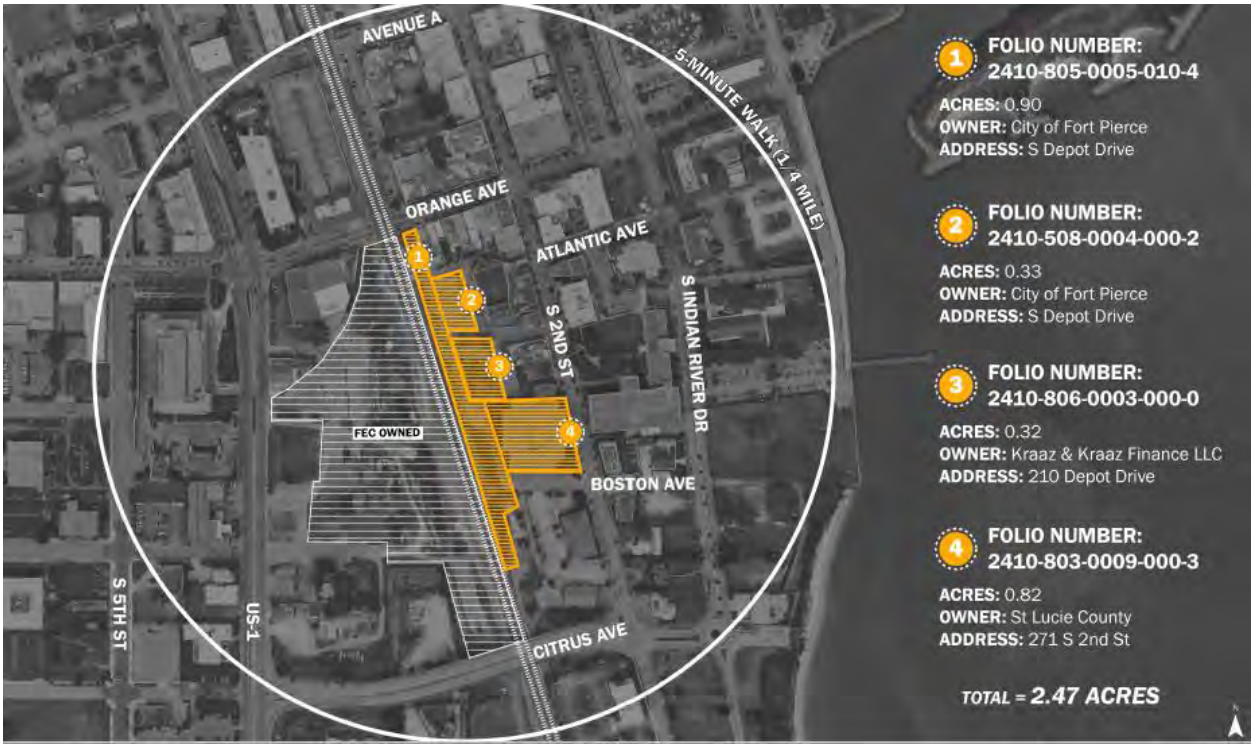
Fort Pierce is a city primed for growth, holding massive economic potential with a new Downtown Master Plan that is inspiring, creative and open to welcoming new businesses. The TPO and City leaders have proactively pursued the prospect of establishing a train station within the Downtown, exploring partnerships with Amtrak, Tri-Rail, and Brightline. The city has garnered substantial support and commitment from St. Lucie County, various municipal and private organizations, as well as regional partners in Okeechobee and Indian River County. These stakeholders recognize the potential of the station as an economic, tourist, and cultural asset for the entire region.

Opportunity

On October 26, 2023 Brightline announced that it is seeking proposals from public and private entities to identify a station location for their Treasure Coast station. The RFP identified specific criteria that must be met for an application to be competitive including a requirement that only proposals from current property owners and those that have property under contract will be considered. Brightline was not interested in receiving proposals from persons, firms, entities, or organizations that do not control the property as defined in the RFP. The RFP also had a short timeline, due by December 22, 2023.

At this point, the Project Team pivoted to take advantage of an immediate opportunity to land a passenger rail station with intercity service in Fort Pierce. As a result, the Depot Drive Site was selected as the best opportunity because the City and the County owned a majority of the land for the station area.

Depot Drive Site is located on the Eastern side of the FEC rail right-of-way south of Orange Avenue. Two (2) City of Fort Pierce parcels total 1.23 acres and are dedicated to the development of the station, platforms, circulation, and station access. A private partner owns the third parcel and has provided a willing seller letter to the City. Should a rail operator select the City's proposed site for the Station, the City of Fort Pierce will acquire the privately owned 0.32 acre parcel and seamlessly integrate it into the station plan.



Parcel Layout and Ownership

St. Lucie County owns the 4th parcel at .82 acres which includes a public parking garage that is proposed to be expanded and made available to passenger rail patrons.

Station Area and Layout and ACES Mobility Hub Design

A station layout was prepared for the Depot Drive Site, but it must be noted that the site design and architectural renderings for a train station are very similar no matter where they are located. The renderings and concepts developed for the station are, for the most part, transferable to any site selected for the Fort Pierce Passenger Rail Station Mobility Hub. The station layout is designed in a linear fashion

along the east side of FEC Right-of-Way to accommodate a passenger platform and station. Note that a new rail side track is necessary to serve the station and not obstruct mainline rail activity. The layout is provided in the graphic below.

Station, Platform and Rail layout

The site circulation has been designed as a mobility hub facilitating seamless integration with all modes of ground transportation. The main station entrance is designed in a pedestrian-friendly environment designed for very slow traffic, a pick-up and drop-off traffic circle for rideshare and ART bus, Fort Pierce Tram shelter and a bike share rack located directly at the main entrance to the station. The site design also includes electric vehicle charging stations at parking stalls, Electric Vehicle (EV) bike-share racks, and EV scooter stations near the main entrance of the station. Various renderings depicting a potential station and ACES are provided below.

North Station Paseo Entrance, Platform and Rail layout

Station Area View from the South

Pedestrian Friendly Station Main Entrance with Transit and Bike Share

EV Parking Spaces in Close Proximity to Station Main Entrance

North End of Station Paseo Connection to Orange Avenue

Chapter 1. Introduction

Background

The St. Lucie Transportation Planning Organization (TPO) has initiated this study as a next step in its goal to bring intercity and regional passenger rail service to St. Lucie County that will complement the transportation network and provide a more efficient and sustainable mode of travel for residents, businesses and visitors. This study identifies the regional need for passenger rail and the opportunities that the City of Fort Pierce provides as the station location. Potential station locations in Downtown Fort Pierce have been identified and architectural renderings of a candidate location are also provided. Downtown Fort Pierce is the focus of this effort as it has been consistently documented in TPO Planning documents as the preferred location for a regional passenger rail station in St. Lucie County and the study was performed in close coordination with the City of Fort Pierce.

Downtown Fort Pierce is strategically located to support regional passenger rail as it lies in the center of the Treasure Coast region and is proximate to major markets to the north and to the south. Distances to major business districts and tourism hot spots include - Orlando Central Business (CBD) – 120 miles; West Palm Beach CBD – 63 miles; Fort Lauderdale CBD – 100 miles and Miami CBD – 125 miles.

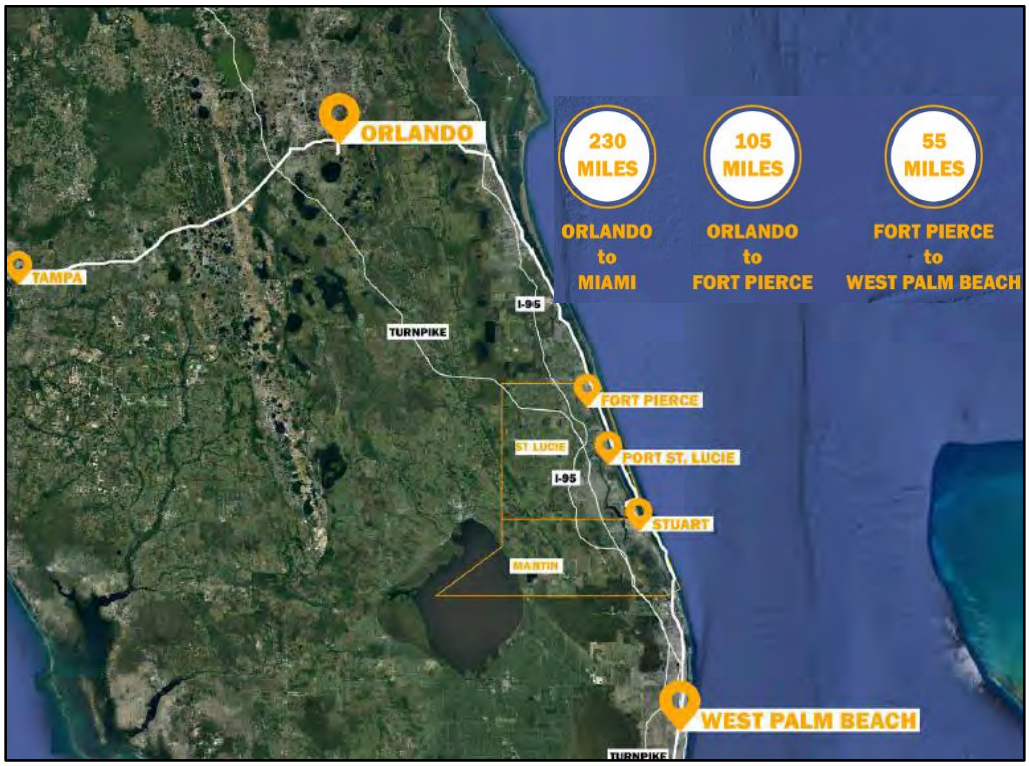


Figure 1: Fort Pierce Regional Location

Fort Pierce boasts a unique blend of natural beauty, rich cultural heritage, immense economic potential and a robust history tied to railroad, seaport and airport trade and transportation. The City was populated in the latter part of the 19th Century as a direct result of Henry Flagler's Florida East Coast Railroad (FEC) arrival in Fort Pierce in 1894. Many of the citizens descend from railroad workers and travelers. FEC made Fort Pierce a major stop precisely because it was approximately halfway between Jacksonville and St. Augustine to the North, and Miami to the South. Fort Pierce's geographic location is also ideal for intercity passenger rail service as the proposed station is equidistant between Orlando and Miami.

For many years, the TPO, County Stakeholders and City Leaders have actively advocated for a railroad station in Fort Pierce, including AMTRAK, South Florida Regional Transit Authority Tri-Rail (TriRail) and, most recently, Brightline. The City also supports railroad industry development including a concrete railroad tie plant and other industrial projects that contribute to, and benefit from, railroad commerce.

Downtown Fort Pierce is ideal for a regional rail station for many reasons including:

- **Business-Friendly:** Fort Pierce is a progressive and supportive local government that is business-friendly and working to ensure it remains relevant and attractive. The City is committed to accommodating interested businesses and developers throughout the application and permitting process to ensure appropriate projects can proceed efficiently.
- **Financial Stability:** In times of economic volatility, the City of Fort Pierce increased its general fund budget year-over-year with a 6.1 percent increase in the taxable value of properties in the city bringing in approximately $2.7 million in additional revenues.
- **Undeveloped Land:** Unlike metro areas to the south, Fort Pierce has large parcels of vacant and undeveloped land available for development.
- The recently completed **Fort Pierce Downtown Master Plan** promotes mixed-use opportunities for a large section of the downtown business area. In addition, it identifies a potential location for a passenger rail station as a Transit Oriented Development (TOD). The improvement of the central business district offers a massive opportunity for the City of Fort Pierce to complete the vision to develop it as a transit-oriented, mixed-use thriving core and to generate substantial property tax returns, as well as indirect economic benefits.
- The City of Fort Pierce has been proactive in supporting retail activity through a **Comprehensive Market and Retail Feasibility Study (Phase I)** and a **Retail Strategy Plan (Phase II).** City leadership recognized the need to work strategically to evaluate its retail profile and evolve the shopping and dining offerings through a comprehensive market and retail feasibility analysis, and the development of a retail strategic plan for the Community Redevelopment Area and other commercial districts.
- **Accessibility:** Fort Pierce is located near the junction of I-95 and Florida's Turnpike (Turnpike) on the west side of the City making it an ideal "milepost" for tourists or commuters. It is also served

by the Treasure Coast International Airport which is just 3.5 miles north of the Fort Pierce Redevelopment Area (FPRA), and the Port of Fort Pierce is located within the FPRA. Passengers stepping off the train would be within walking distance of transportation options, employment centers, recreation, and the waterfront.

- **Entertainment:** Fort Pierce features contemporary shopping, dining, great fishing, and a range of entertainment and activities from the Farmers Market, Bike Night, Friday Fest, and Jazz Market to the city-owned and operated historic, 1,200-seat Sunrise Theatre for the Performing Arts.
- **Education:** Fort Pierce is home to several educational and research facilities, like the top-ranked Indian River State College (IRSC), Smithsonian Marine Station, Manatee Observation and Education Center and Harbor Branch Oceanographic Institution at Florida Atlantic University.
- **Amenities:** With the close proximity to the Atlantic Ocean via the Fort Pierce inlet, it affords numerous fishing opportunities for both recreational and commercial fishermen and is a short distance to the Bahamas. Fishing and boating are a major part of the local economy with several boat companies and marinas located in the area.
- **Low Cost of Living:** Housing is affordable for Fort Pierce residents. The median household income in Fort Pierce is $35,572 and the median home value is approximately $172,000 according to Zillow. However, home values are steadily increasing at 6.1 percent year-over-year as of October 2020
- **Diversity:** Fort Pierce is a diverse and neighborly community. According to Niche, Fort Pierce ranks as the most diverse place to live in St. Lucie County.

Candidate Sites

The study is phased to first present the potential of the Downtown Fort Pierce area to support a passenger rail station and then to evaluate three (3) alternative sites located along the FEC corridor. One (1) site will then be selected for the development of a station area plan that includes mobility hub options that connect the station to the greater area. The alternative sites were identified by the TPO and City Staff (Project Team) as part of scoping this effort. The sites will be evaluated for a regional passenger rail station/mobility hub based on multiple factors including parcel size and redevelopment potential. The mobility hub aspect holds significant importance as it will establish a centralized node for pedestrian, bicycle, and trail access, as well as for motorized, Autonomous, Connected, Electric, and Shared (ACES) technologies, and micro-transit, all situated at a prominent location. In fact, the mobility hub could be implemented in advance of a rail station to continue building synergy for passenger rail by being designed with an envelope for station operations and a passenger platform. The proposed three (3) locations, identified by the City of Fort Pierce and the TPO, for evaluation include:

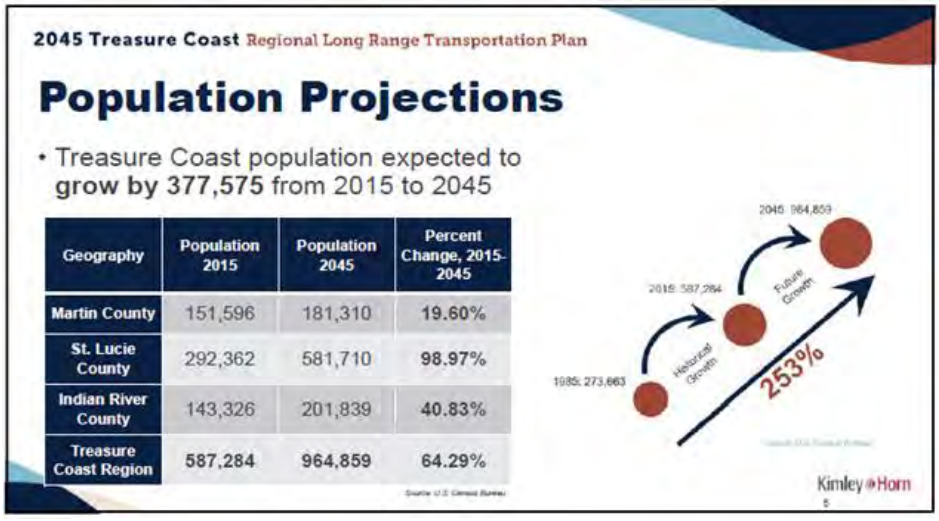
- **Audubon Development Inc./H.D. Kings Landing**: Parcel #2410-503-0034-000-6 plus the adjoining parcels also owned by Audubon Development Inc.

- **Boston Avenue:** Parcel #2410-701-0002-000-1 plus the adjoining parcels also owned by FEC. These are south of Orange Avenue between the tracks and US 1.
- **Depot Drive:** Parcel #2410-805-0005-010-4 which is south of Orange Avenue, on the east side of the tracks, and is owned by the City of Fort Pierce.

Guiding Documents

Treasure Coast Regional Transportation Plan

The 2045 Treasure Coast Regional Long Range Transportation Plan (2045 RLRTP) establishes a regional transportation network and combines the regional projects from the local transportation plans for Martin, St. Lucie and Indian River Counties to create a long term transportation plan for the regional transportation network. The Treasure Coast has experienced a large influx of people over the past 30 years. From 1985 to 2015, the Treasure Coast more than doubled in population growing from 273,663 people to a population of 587,284, according to data from the U.S. Census Bureau. The Treasure Coast is expected to grow by an additional 377,575 people for a total population of 964,859 residents and a percent growth of 64.29% between 2015 to 2045. This growth will increase demand for a comprehensive and efficient multimodal transportation network including regional and intercity passenger rail.



Further, population growth is not uniform throughout the region as St. Lucie County houses approximately one-half of the population of the region, while Martin County and Indian River County each contain about one-quarter of the population. This is primarily the result of a higher percentage of population growth in St. Lucie County since 1985 (152%) than in Indian River County (89%) or Martin County (85%). The trend

Chapter 3. Station Area Planning

As indicated in Chapter 1. Introduction, three (3) alternative sites were identified by the Project Team for evaluation of a regional passenger rail station/mobility hub based on factors including size and redevelopment potential. The mobility hub aspect holds significant importance as it will establish a centralized node for pedestrian, bicycle, and trail access, as well as for motorized, Autonomous, Connected, Electric, and Shared (ACES) technologies, and micro-transit, all situated at a prominent location.. The mobility hub could also be implemented in advance of a rail station to continue building synergy for passenger rail by being designed with an envelope for station operations and a passenger platform.

The proposed three (3) locations, identified by the City of Fort Pierce and the TPO, for evaluation include:

- **Audubon Development Inc./H.D. Kings Landing Site**: Parcel #2410-503-0034-000-6 plus the adjoining parcels also owned by Audubon Development Inc.
- **Boston Avenue Site:** Parcel #2410-701-0002-000-1 plus the adjoining parcels also owned by FEC. These are south of Orange Avenue between the tracks and US 1.
- **Depot Drive Site:** Parcel #2410-805-0005-010-4 which is south of Orange Avenue, on the east side of the tracks, and is owned by the City of Fort Pierce.

The sites were selected as early candidates for a passenger rail station; however, these selections do not preclude future consideration of other site(s) in Fort Pierce. A brief summary of each proposed site is provided below and shown on **Figures 13 and 14**.

Audubon Development/H.D. King's Landing Site

- The 7.2 acre parcel is part of the H.D. King Plant Site a Mixed-Use Development by Audubon Development
- Waterfront property across from Fort Pierce City Marina in Downtown Fort Pierce
- Located adjacent to the FEC railroad
- Zoning - former Light Industrial, now Approved Planned Development

Boston Avenue Site

- 7.02 acres parcel
- Situated on the western side of the FEC rail right of way, just south of Orange Avenue
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- 0.90 acres parcel fronting FEC, expanded to 2.47 acres with County and private property
- Situated on the eastern side of the FEC rail right of way directly, behind the Sunrise Theatre
- Owned by the City of Fort Pierce, St. Lucie County and Private Property owner

- It is currently utilized for surface parking, however, a large portion of it is undeveloped
- Parcel is currently zoned C-4, Central Commercial Zoning

Figure 13: Audubon Development Site

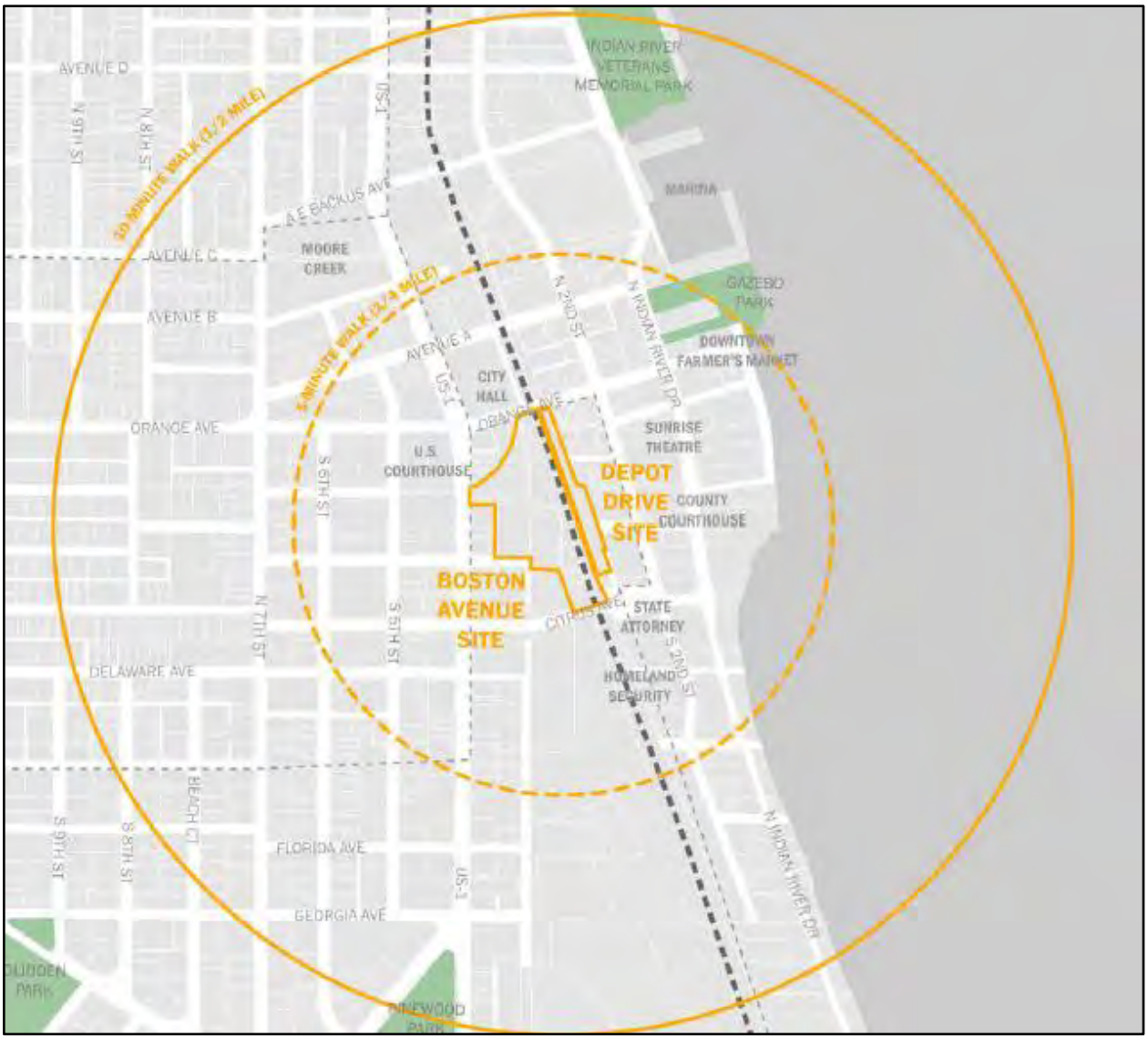

Figure 14: Boston Avenue and Depot Drive Sites

Audubon Development/King's Landing Site

Nestled within downtown Fort Pierce, Florida, lies the Former H.D. King Plant Site, a 7.2-acre parcel with the potential to undergo a transformation into a pivotal nexus of mobility and community engagement. As part of the ambitious King's Landing mixed-use development by Audubon Development, this site, once zoned for light industrial use, is now an Approved Planned Development, and holds the potential of becoming a dynamic passenger rail station and mobility hub. The site has been approved for 232

residential units, 140 hotel rooms, and 52,000 square feet of retail space, and its waterfront location across from the Fort Pierce City Marina presents an enticing prospect for travelers, businesses and residents alike. Situated along the FEC tracks, the station capitalizes on existing infrastructure, fostering seamless connectivity within the city and beyond. Moreover, its strategic proximity to the Indian River Veterans Memorial Park and Gazebo Park, as well as the Moore's Creek Linear Park and Greenway, ensures accessibility and integration with surrounding recreational spaces. Additionally, the City's plan for a linear greenway along the rail corridor promises to enhance pedestrian and bicycle connectivity, bridging disparate neighborhoods and fostering a sense of cohesion within the community. Despite the inherent challenges of repurposing former industrial land, the development of this mobility hub represents a unique opportunity to not only revitalize the urban landscape but also to cultivate a more sustainable and interconnected future for Fort Pierce.

In preparation for the Brightline proposal advertisement, Indian River State College (IRSC) was coordinating with site owners for a potential public-private partnership with IRSC and its foundation. In correspondence to the FEC, the IRSC Office of the President was promoting a collaboration including a station, a new Culinary School, dining facilities with a kitchen highlighting IRSC's culinary program, a museum featuring the art and history of the Treasure Coast, and luxury apartments. A conceptual layout of the proposal provided in **Figure 15,** and **Figure 16** shows the proposed full development including the King's Landing concept.

Opportunities:

- 7.2 acres available for development
- Located adjacent to the FEC tracks
- Waterfront property across from Fort Pierce City Marina in Downtown Fort Pierce
- Approved private development: King's Landing Mixed-Use Development
- Strategic proximity to the Indian River Veterans Memorial Park, Gazebo Park, and the Moore's Creek Linear Park and Greenway
- Ability to enhance pedestrian connectivity by connecting the station to the neighborhoods by a potential linear greenway
- Potential Collaboration with IRSC for a Culinary School and Treasure Coast Museum

Challenges:

- Repurposing former industrial land can have environmental concerns
- Platform length
- Proximity of site to Moore's Creek present environmental regulations, flood risk, and habitat protection concerns.

- The City of Fort Pierce tapped Audubon in June 2019 to develop the site, but there has been limited progress in the development of the site.

Passenger platform length and the impacts of trains closing streets when boarding and alighting passengers will be critical factors in site selection. The Kings Landing site can only accommodate a 500' max platform length. Note that bridging over the existing canal to the north is challenging and costly and would need to address issues related to waterway rights and approvals through the Army Corps and other owners (or city or county ownership). This location may also require a standalone track next to the new platform and therefore would need a new 'spur' alignment which is challenging to accommodate at this location. The issue is more complex when considering what passenger rail service will be provided as Brightline, Tri-Rail, and Amtrak operate different types of trains, and as a result, their platform lengths can vary:

- Brightline operates high-speed trains. The typical platform length for Brightline is around 600 feet however they requested 500 to 1000 feet in the recent RFP.
- Tri-Rail operates commuter trains in South Florida. Tri-Rail platform lengths vary but are typically around 400 to 500 feet long.
- Amtrak operates various types of trains, including high-speed, long-distance, and commuter trains. The platform lengths for Amtrak vary greatly depending on the station and the type of service it provides. For long-distance trains, Amtrak platform lengths can range from 600 to 1,000 feet or even longer. For commuter trains like those operating on the Northeast Corridor, Amtrak platform lengths are generally around 800 feet long.

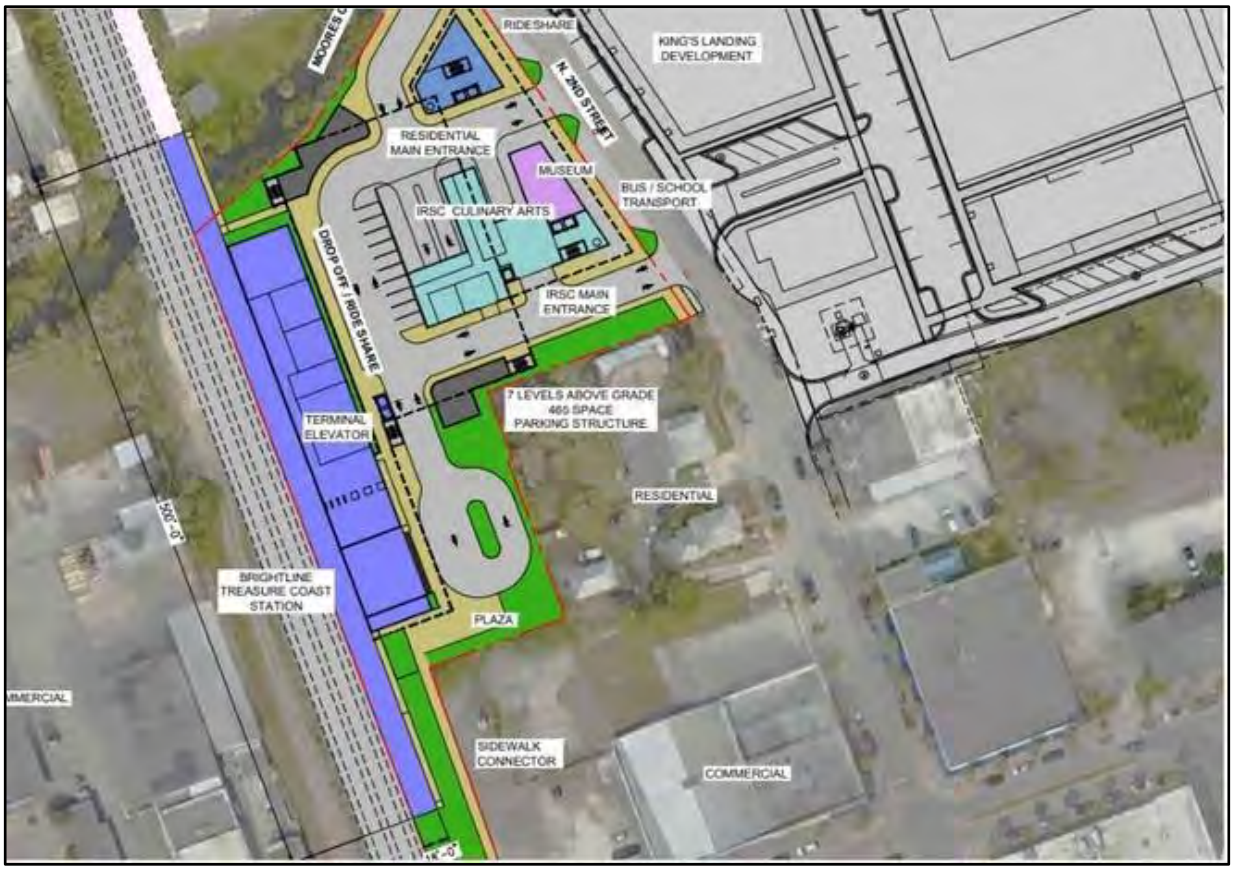

Figure 15: IRSC Rendering of Passenger Rail Station and Culinary School

Figure 16: Potential Audubon Development/King's Landing Development Concept

Boston Avenue Site

On the Western side of the FEC rail right of way, and South of Orange Avenue, the Boston Avenue Site emerges as another option for a passenger rail station and mobility hub in Fort Pierce. Boasting a sprawling 7.02-acre parcel owned by FEC and currently zoned for General Commercial and Planned Development, this site harbors the potential for transformation into a hub of connectivity and community engagement. With plans for a Transit-Oriented Development (TOD) offering 182 residential units, alongside substantial office and retail space, the site stands as a potential for integrated urban development. The envisioned Civic District, bolstered by nearby Gazebo Park and Marina Park, increases its attraction even further by encouraging a thriving mix of business and civic engagement. The site would also connect the City's planned linear greenway along the rail corridor, as planned in the Downtown Master Plan, to seamlessly integrate surrounding residential areas, as well to the future ambitious Audubon Development/King's Landing. The most significant differentiator for this site is direct access and visibility from US 1, the most heavily trafficked corridor in Downtown. One primary challenge with this site is that it is owned by FEC, which is unwilling to engage in negotiations for the purchase of the property.

The Downtown Master Plan shows a Vision Plan including the development of a Passenger Train Station at the Boston Avenue site shown in **Figure 17.**

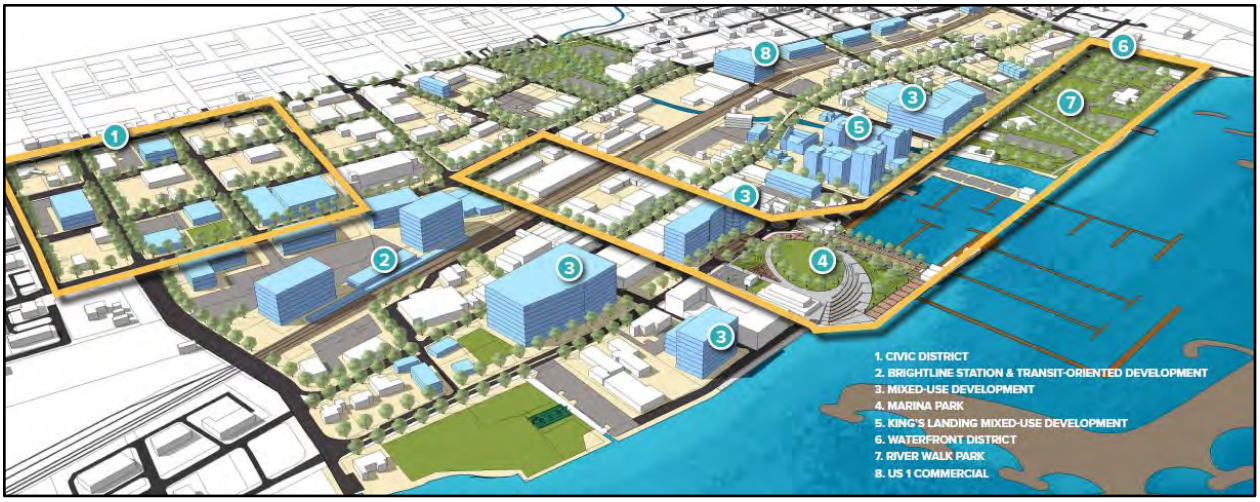

Figure 17: Downtown Master Plan 10+ Years Development - Brightline Station (#2) at Boston Ave Site

Opportunity Characteristics are that the Boston Avenue site has high visibility with 24,609 AADT on US 1 and approximately 350 linear feet along US 1 and is adjacent to the FEC railroad tracks. The site also has benefits including flexible retail zoning in place, TOD opportunities and Potential Retail Uses including; neighborhood center, single tenant freestanding retail, strip & convenience center and mixed use/commercial. The site would require multiple parcel assemblages and the Boston Avenue intersection at US 1 is unsignalized.

Opportunities:

- 7.02 acres available for development.
- Located on FEC tracks.
- Owned by FEC
- Direct access from US 1
- Parcel is zoned as C-4 and Planned Development.
- FEC Owned TOD Potential Opportunity
- Gazebo Park and Marina Park within a 5-minute walk.
- Enhance pedestrian connectivity by connecting the station to the neighborhoods by a potential linear greenway.
- Located close to the Festival Streets.

Challenges:

- Has an irregularly shaped lot
- The owner is an unwilling participant

Depot Drive Site

Depot Drive Site is located on the Eastern side of the FEC rail right-of-way, adjacent to the iconic Sunrise Theatre, and is a 1.55-acre parcel with the potential to serve as a transformative passenger rail station and mobility hub in Fort Pierce. The site is owned by the City of Fort Pierce and currently serves as surface parking. The current zoning is C-4 Central Commercial, and a significant portion lies undeveloped. Gazebo Park and Marina Park are both within a five-minute walk, and the site benefits from a strategic location primed for synergy with the city's vibrant recreational and cultural spaces. Furthermore, the adjacent County-owned site provides for additional redevelopment opportunities. The County site is envisioned in Fort Pierce's Downtown Master Plan as a catalyst site to be redeveloped with 92 residential units and extensive office and retail space. Festival Streets initiatives aimed at enhancing connectivity and walkability along key corridors, including 2nd Street, underscore the city's commitment to fostering a conducive environment for redevelopment. Moreover, plans for a linear greenway along the rail corridor promise to bolster connectivity with residential areas, as well to the future King's Landing mixed-use development by Audubon Development, amplifying accessibility and community integration. Though beset with the challenges inherent in repurposing urban land, the Depot Drive Site represents a beacon of opportunity, poised to catalyze sustainable growth and connectivity within Fort Pierce's urban fabric.

A green promenade is planned to connect pedestrians from Citrus Avenue along Depot Drive up to Backus Avenue towards the north. This Promenade/Paseo is a crucial public space improvement for the area that will allow pedestrians and bike users to connect and mobilize safely around the downtown area. **Figure 18** shows the Downtown conceptual layout.

Opportunities:

- Located on FEC tracks
- Owned by the City of Fort Pierce and adjacent to County owned land
- Gazebo Park and Marina Park within a 5-minute walk
- Enhance pedestrian connectivity by connecting the station to the neighborhoods with a potential linear greenway
- Located close to the Festival Streets

Challenges:

- Small/narrow site
- Access to local streets

Figure 18: Downtown Fort Pierce Green Promenade (Paseo)

Downtown Fort Pierce Development Potential

Looking ahead, St. Lucie County continues to experience robust development, marked by the construction of 985 multifamily rental units, 210,000 square feet of retail space, and 30,000 square feet of office space.

Amidst this ongoing growth and demand for development in St. Lucie County, the City of Fort Pierce has strategically positioned itself for expansion, particularly in its Downtown core. Guided by the Downtown Master Plan, the city envisions comprehensive infrastructure improvements, capital investments, enhanced mobility, and vibrant place-making initiatives to support substantial investments in large-scale mixed-use projects.

This new development will complement and support the development of a passenger rail station and mobility hub within a TOD area along the FEC corridor including the three (3) sites selected for this study. **Figures 19, 20, and 21** show existing mid and longer-term development scenarios from the Downtown Master Plan in proximity to the sites.

Figure 19: Three Sites & Existing Development Scenario

Figure 20: Three Sites & Mid-Range (Present to 10 Years) Development Scenario

Figure 21: Three Sites & Long-Range (10 Plus Years) Development Scenario

Chapter 4. Station Area Concept

Brightline RFP

On October 26, 2023, Brightline announced that it was seeking proposals from public and private entities to identify a station location for its Treasure Coast station. The RFP identified specific criteria that needed to be met for an application to be competitive including a requirement that only proposals from current property owners and those that have property under contract will be considered. The RFP also had a short timeline, due by December 22, 2023.

At this point, the Project Team pivoted to take advantage of an immediate opportunity to land a passenger rail station with intercity service in Fort Pierce. As a result, the Depot Drive Site was selected as the best opportunity because the City and the County owned the land for the station area. **Figure 22** shows photos of existing conditions at the site.

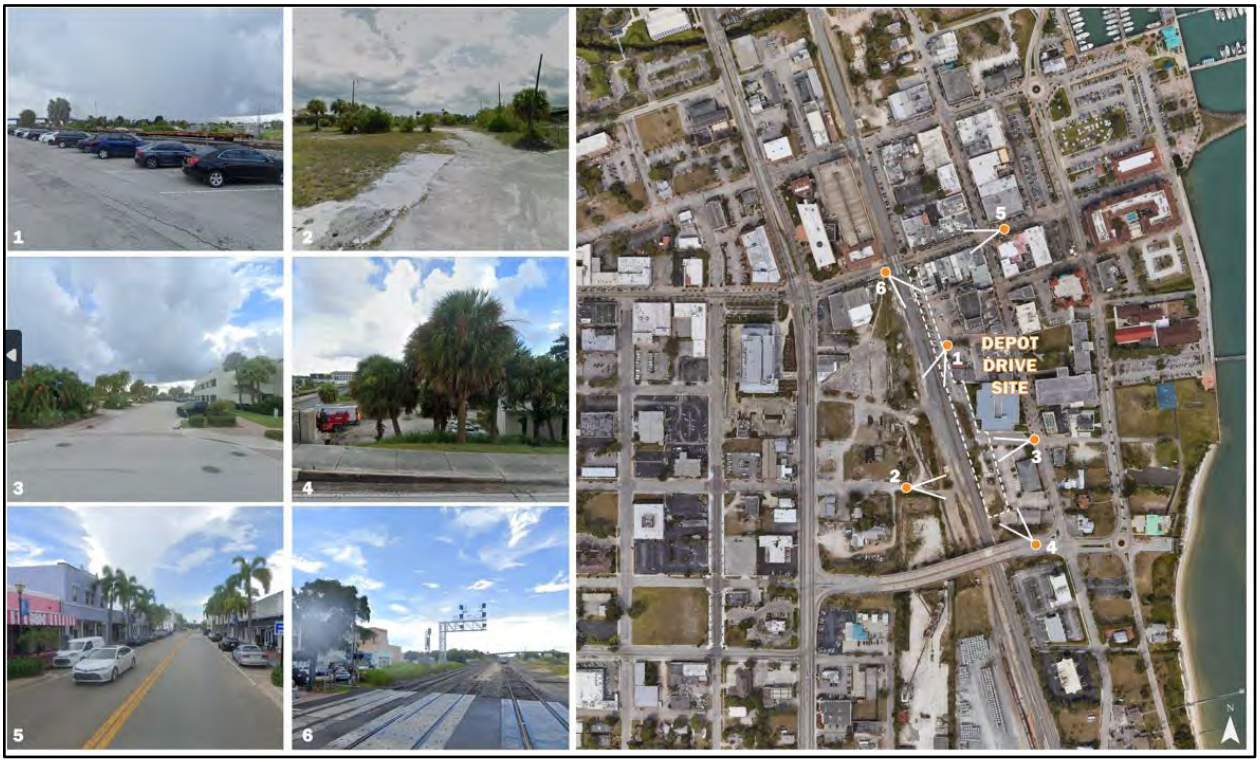

Figure 22: Depot Drive Existing Conditions Photos

The Depot Drive Site currently serves multiple purposes, including a surface parking area situated at the rear of the historic Sunrise Theatre, in addition to two single-story retail buildings and the County parking garage. The proposed plan involved relocating the public surface parking in addition to preserving and expanding the County parking garage as a crucial component of the site's upcoming redevelopment. Once the Team began to lay out the station area site plan, it became necessary that the site would have to

include a small privately owned parcel to make the internal traffic circulation work. **Figure 23** shows the parcel layout, size, and ownership.

Two(2) City of Fort Pierce parcels total 1.23 acres and are dedicated to the development of the station, platforms, circulation, and station access. A private partner owns the third parcel and has provided a willing seller letter to the City **(Appendix B)**. The City of Fort Pierce committed to acquiring the privately owned 0.32-acre parcel and seamlessly integrating it into the station plan.

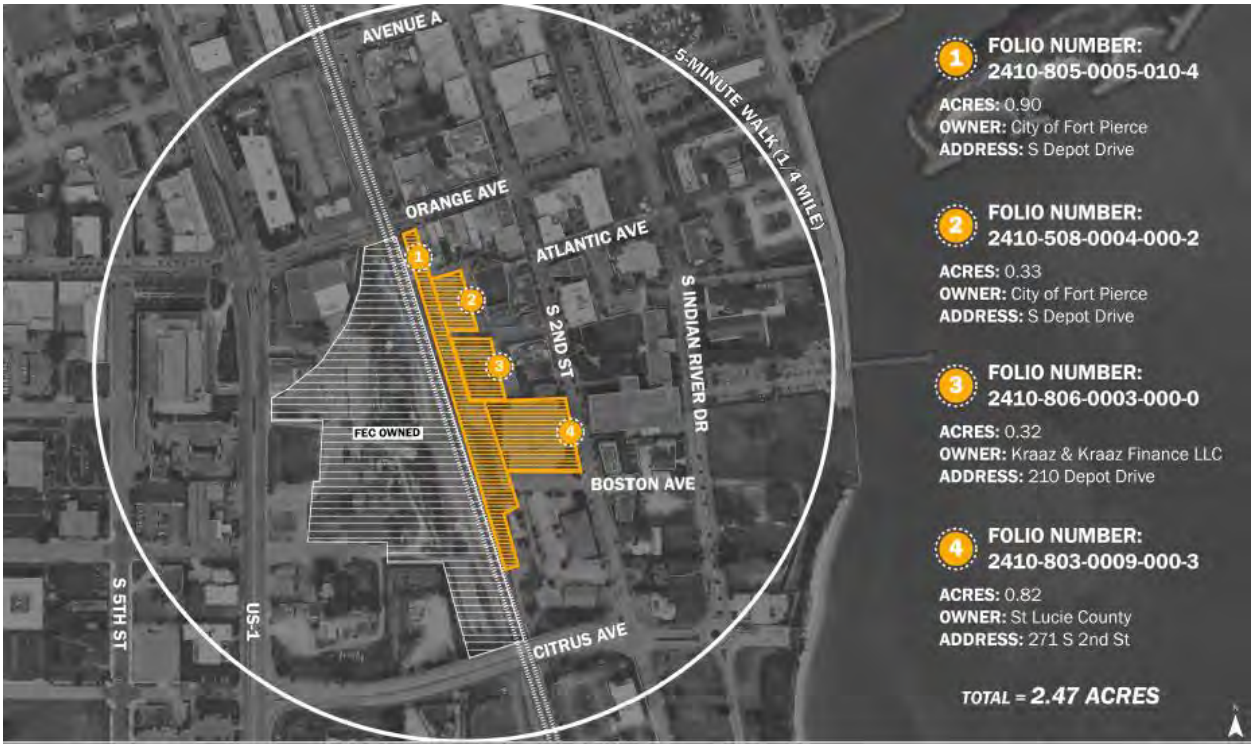

Figure 23: Parcel Layout and Ownership

St. Lucie County owns the 4th parcel which includes a public parking garage, which is proposed to be expanded and made available to Brightline patrons. Evidence of this commitment is provided through the St. Lucie County's Board of County Commission letter attached to this proposal **(Appendix B)**. Although owned by the County, the City is committing to be responsible for any costs associated with making the 200 spaces in the garage or on adjacent surface parking available on an on-going basis.

Zoning

The Depot Drive Site is within the Central Business District of the City, which has Industrial and Commercial zoning. In December 2023, the City submitted a proposal to Brightline for a new train station. The proposed station, located at this same location, required revising the zoning code to allow the construction of Railway Passenger Stations and facilities in all commercial and industrial zoning districts.

The Planning Board approved the proposed changes, which remove setback, lot size, and landscape buffer requirements for Railway Passenger Stations. Code amendments were being revised to allow these changes which would additionally raise threshold limits for administrative approval of site plans for buildings with less than 10,000 square feet of floor space area. **Figure 24** shows the site on the City Zoning Map.

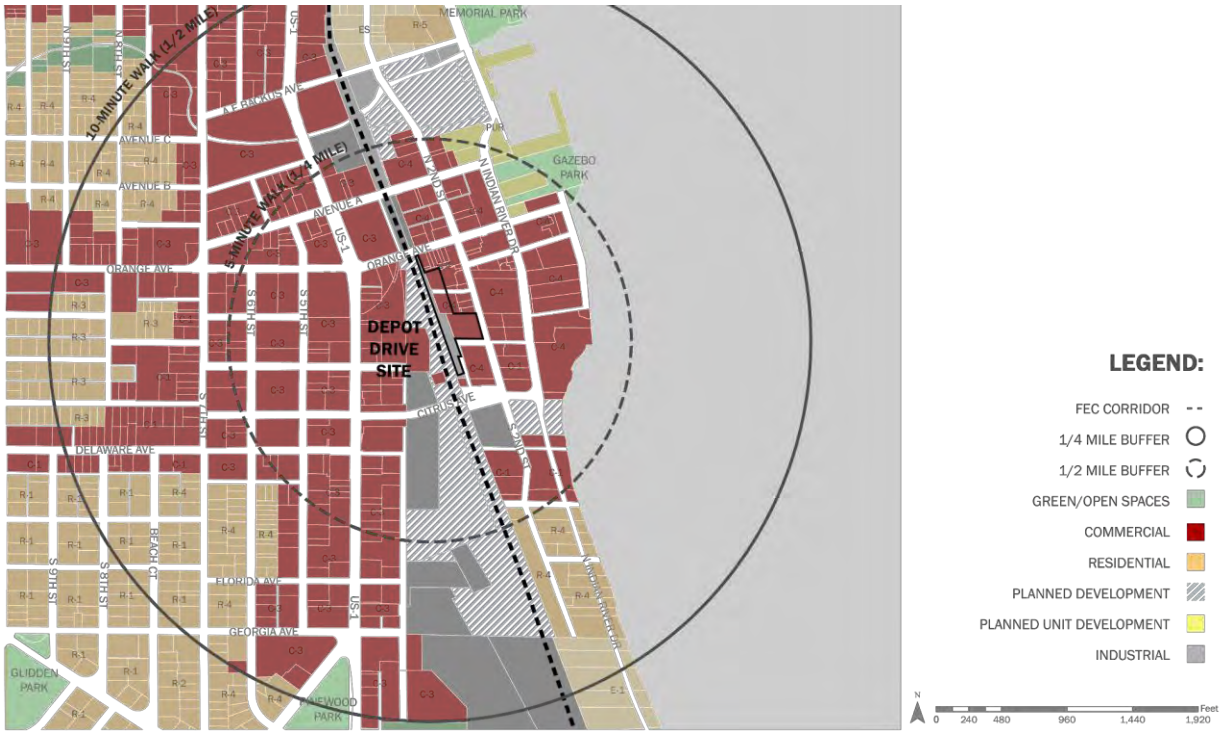

Figure 24: Site Location and Zoning

Station Layout

A station layout was prepared for the Depot Drive Site, but it must be noted that the site design and architectural renderings for a train station are very similar no matter where they are located. The renderings and concepts developed for the station are, for the most part, transferable to any site. The station layout is designed in a linear fashion along the east side of FEC Right-of-Way to accommodate a passenger platform and station. Note that a new rail side track is necessary to serve the station and not obstruct mainline rail activity. Figure 25 shows the station and platform layout with a new side track.

Figure 25: Station, Platform and Rail layout

Figure 26 provides a floor plan of the station and a larger, detailed image is included in **Appendix D**. The main entry to the station is located at the south end of the building where passengers will enter a lobby for train ticketing before moving north through the security gates into a baggage check area. Once passenger baggage has been screened and checked in the security area, passengers can move on to either the standard lounge or the premium lounge depending on the ticket purchased. Located in between these two lounges are public restrooms, an electrical room, and an area with table seating with laptop, tablet, phone charging, and power stations. This seating area could also accommodate vending machines.

Located at the north end of the station is the back-of-house area for staff and storage that would include an office, breakroom, storage, fire control room, and staff restrooms. There is an enclosed outdoor service yard located just north of the Back-of-House area for staff entry, loading, trash/recycling, standpipes, and the generator for the building. The building HVAC equipment will be located in a recess in the roof to shield the equipment from public view.

In all, the station building will consist of an elevated entry plaza of 1,000 SF (30’ x 33’), a 6,400 SF of air conditioned space (214’ x 30’) and a 1,300 SF open-air service yard (60’ x 32’) for a total building size of 8,700 SF.

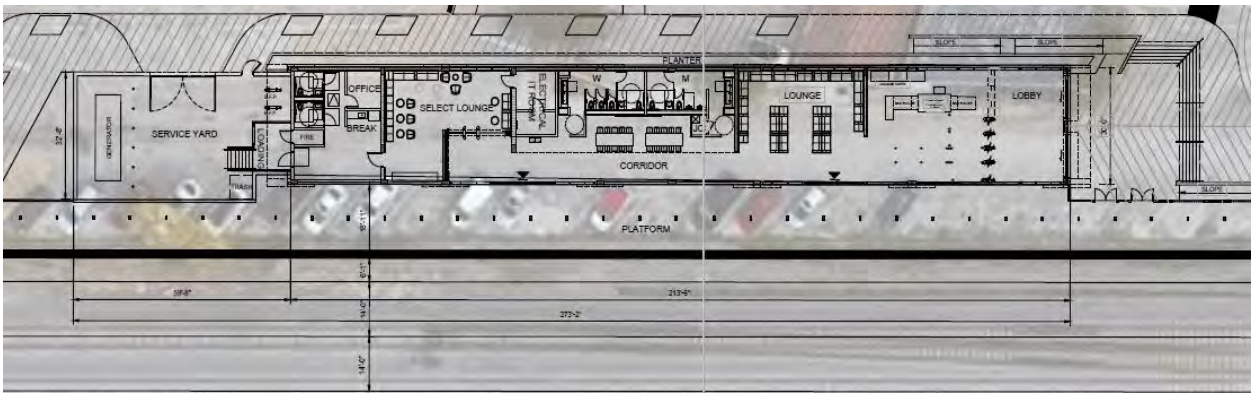

Figure 26: Station Floor Plan

Site Access

The site circulation has been designed as a mobility hub facilitating seamless integration with all modes of ground transportation. The main station entrance, **Figure 27,** will be designed in a pedestrian-friendly environment designed for very slow traffic, with a pick-up and drop-off traffic circle for rideshare and ART bus, Fort Pierce Tram shelter and a bike share rack located directly at the main entrance to the station. The site design also includes electric vehicle charging stations at parking stalls, Electric Vehicle (EV) bike-share racks, and EV scooter stations near the main entrance of the station as shown in **Figure 28.**

Figure 27: Pedestrian Friendly Station Main Access with Transit and Bike Share

Figure 28: EV Parking Spaces in Close Proximity to Station Main Entrance

The site will also have excellent pedestrian and bicycle access within the station area and access to the downtown area and be connected to the proposed Paseo Green Promenade that will connect from Orange Avenue to the proposed Culinary School and King's Landing Development. **Figure 29** shows a Paseo that connects to Orange Avenue that will also serve as a station service road for deliveries and maintenance.

Parking

The Brightline Station RFP identified a need to accommodate 200 parking spaces. The Depot Drive Site design exceeded that requirement with a total of 210 parking spaces on-site which could be dedicated for passengers, employees and rail operator shared-use vehicles. The plan, as depicted below, includes a convenient and simple access and circulation plan with parking located just steps away from the station. **Figure 30** shows the proposed on-site parking.

Design plans for a vertical expansion of the St. Lucie County Parking garage have been initiated, with 124 additional spaces. The expansion will be done through an interlocal agreement between the City and St. Lucie County, and it is anticipated that the responsibility will be outlined in the Development Agreement as an obligation of the City.

Figure 29: North End of Station Paseo Connection to Orange Avenue

Figure 30: Proposed Parking

The City has been proactive about planning for parking in the Downtown area and almost any site selected would have readily available parking in structured facilities or utilizing on-street parking to support curbside management and parking for a passenger rail station/mobility hub. **Figure 31** is a graphic taken from the City's Downtown parking studies showing an inventory of 1,658 parking spaces including 1,208 off-street spaces and 450 on-street spaces.

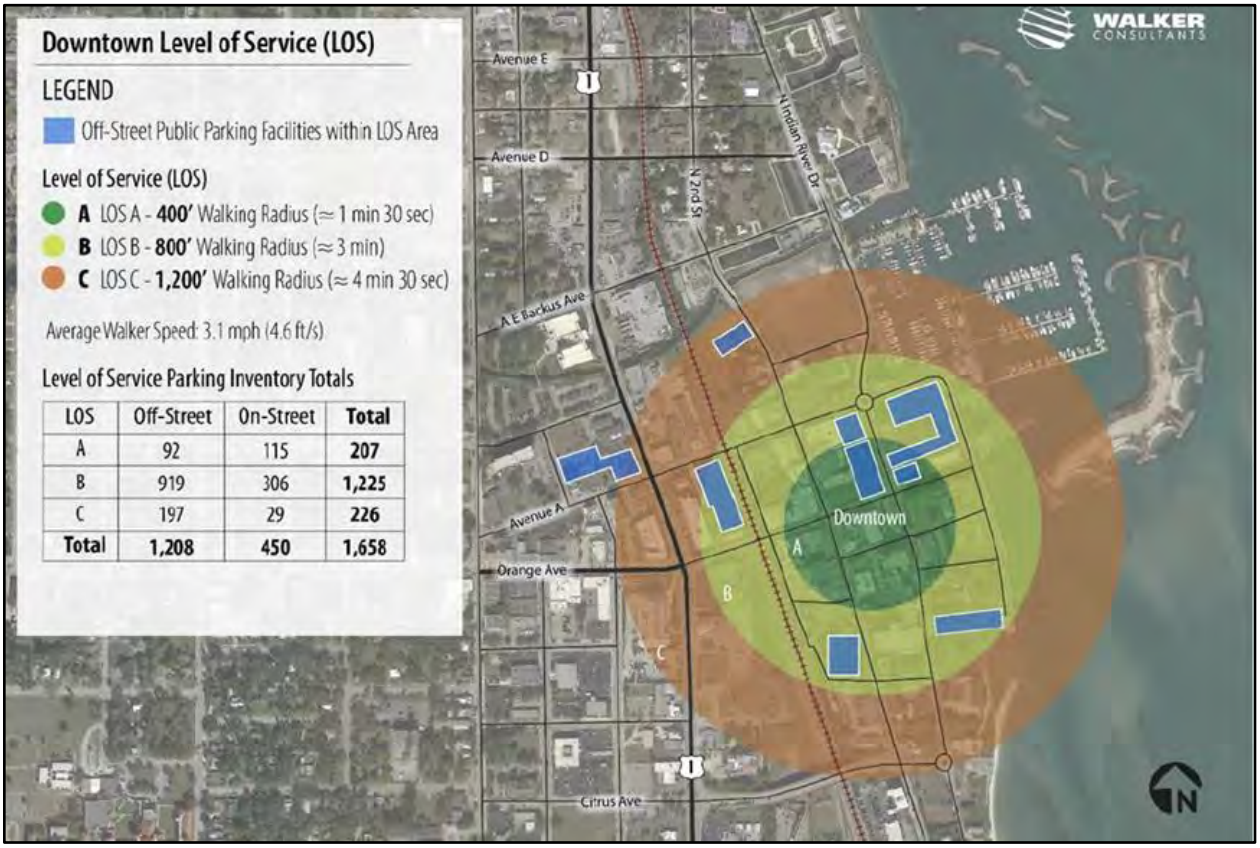

Figure 31: Downtown Parking Inventory

Chapter 5. Partners

The effort of bringing a new passenger rail station to Downtown Fort Pierce, taken by the TPO and the City of Fort Pierce, has received enormous support from different Regional Partners, local County and Municipal Agencies, and various private organizations representing multiple stakeholders and interests. These potential partners provided the City with numerous Letters of Support and Commitment in December 2023 for the potential construction of a Brightline Station in downtown Fort Pierce; copies of these letters is included in **Appendix B**. and summarized as follows:

- The St. Lucie County Board of County Commissioners supports the proposal. It suggests the inclusion of a county-owned parking garage to enhance functionality, highlighting benefits such as identifying a $250,000 tourist tax-funded ridership commitment over three years, emphasizing St. Lucie County's attractions, tourism potential, and exceptional location within the Treasure Coast.
- The City of Port St. Lucie expressed excitement about partnering with Fort Pierce to bring a passenger rail station to Downtown Fort Pierce, emphasizing economic benefits and convenience for residents and businesses.
- Two different resolutions provide significant support for the development of a rail station in Downtown Fort Pierce:

  RESOLUTION 23·R133: Provides Support from the City of Port St. Lucie: With over 240,000 residents, the City of Port St. Lucie expresses its support for locating a Brightline passenger rail station in Downtown Fort Pierce. Intercity passenger rail service is recognized as a major economic benefit for residents and businesses, indicating the potential for job creation and economic development. The resolution acknowledges Downtown Fort Pierce as an ideal location for the station, a sentiment supported by the City since October 2018.

  RESOLUTION NO. 23-05: The Board of the St. Lucie Transportation Planning Organization reaffirms its support for locating a passenger rail station in Downtown Fort Pierce. Representing over 370,000 residents, the Board identifies passenger rail service as a need in its long-range transportation plans, emphasizing the importance of rail infrastructure. A Station in Downtown Fort Pierce is seen as beneficial for mobility, job creation, economic development, and tourism. The TPO has provided the funds to the City of Fort Pierce Passenger Rail Station planning.

  Overall, both resolutions underline the strong support for developing a rail station in Downtown Fort Pierce, highlighting the economic, transportation, and community benefits associated with the project.

- The property owner located at Depot Drive provided a consent to negotiate the property with the city to facilitate the construction of the planned station and associated improvements,

emphasizing the potential for economic transformation and willingness to contribute to the project.

- Indian River State College expresses excitement about the prospect of a rail passenger station on the Treasure Coast and commits to securing financial investment for student passes, highlighting the benefits of increased transportation access.
- The New York Mets, who train during the Spring in Port St. Lucie, and Derecktor Shipyards express enthusiastic support for the proposed station in Fort Pierce, emphasizing economic growth, improved connectivity, and enhanced accessibility for visitors and employees.
- The Economic Development Council of St. Lucie County supports the proposal, highlighting economic growth, job creation, reduced traffic congestion, and enhanced transportation infrastructure. Main Street Fort Pierce and Lincoln Park Main Street express enthusiastic support for the proposal, highlighting the economic growth, vibrant atmosphere, and cultural enrichment it would bring to Downtown Fort Pierce and the wider community.
- The Fort Pierce Redevelopment Agency and St Lucie Chamber of Commerce emphasized their support for the train station and included how the city has several capital improvement projects already planned that will seamlessly integrate with the station, such as the restoration of historical buildings, creating pedestrian networks, and the expansion of green spaces, transforming the downtown area. These integrated efforts will secure Fort Pierce as a central hub for transportation, commerce, and culture.

The project gathered support from regional partners, including the Cities of Sebastian, Fellsmere, Vero Beach, and Okeechobee, as well as from Indian River County MPO, and Okeechobee County Commissioners. All expressed support for the proposal, highlighting its economic benefits, improved transportation, and enhanced connectivity for residents and visitors.

Overall, the support from these potential partners emphasizes the significant benefits and opportunities associated with constructing a passenger rail station in Downtown Fort Pierce.

St. Lucie Transportation Planning Organization

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

AGENDA ITEM SUMMARY

Board/Committee:	St. Lucie TPO Board
Meeting Date:	June 5, 2024
Item Number:	9c
Item Title:	Transit Development Plan (TDP) Major Update
Item Origination:	Unified Planning Work Program (UPWP)
UPWP Reference:	Task 3.2 – Transit Planning
Requested Action:	Endorse the draft TDP Major Update, endorse with conditions, or do not endorse.
Staff Recommendation:	Based on the recommendations of the TPO Advisory Committees and because the TDP Major Update supports the operation and growth of St. Lucie County's transit system to meet the identified transit needs over the next 10 years, it is recommended that the TDP Major Update be endorsed.

Attachments

- Staff Report
- Draft TDP Major Update

St. Lucie Transportation Planning Organization

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

MEMORANDUM

TO: St. Lucie TPO Board

FROM: Peter Buchwald
Executive Director

Marceia Lathou
Transit/ACES Program Manager

DATE: May 29, 2024

SUBJECT: Transit Development Plan (TDP) Major Update

BACKGROUND

A Transit Development Plan (TDP) is required by the Florida Department of Transportation (FDOT) for the receipt of funding through the State Public Transit Block Grant Program. A TDP is the public transportation provider's planning, development, and operational guidance document and is based on a 10-year planning horizon. A Major Update is required every five years. Annual updates in the form of progress reports on the 10-Year Implementation Program of the TDP are also required.

In St. Lucie County, the Board of County Commissioners (BOCC) contracts with MV Transportation for public transportation services. The TDP Major Update is adopted by the BOCC after endorsement by the TPO Board.

Task 3.2 of the St. Lucie TPO FY 2022/23 - 2023/24 Unified Planning Work Program (UPWP) includes activities related to the provision of technical and planning assistance to the BOCC to maintain the BOCC's eligibility for the continued receipt of Federal and state transit funds. These activities include supporting the TDP Major Update and Annual Progress Reports.

ANALYSIS

As the intent of the TDP Major Update is to reimagine the current transit system in the TPO area, the Update is branded *Reimagine Transit*. The County

Transit Department and consultants have conducted extensive public outreach, trend and peer analyses, and data collections efforts over the past year. These efforts identified and prioritized the transit needs for the TPO area and after the evaluation of the projected revenues, the following transit services and projects are proposed to be implemented over the next 10 years:

Transit Improvements	Implementation Year (FY)	Annual Operating Cost (2025$)	Total Capital Cost (2025$)	Potential Revenue Source
Central Fort Pierce ART On Demand	2025	$368,269	$224,691	Local/FDOT Serv. Dev.
Port St. Lucie Express	2025	$1,100,000	N/A	FDOT Corridor Dev./Palm Tran
30-minute Frequency on Route 1	2025	$702,979	N/A	Local
Streamline Route 7	2025	$0	N/A	Local
Extended Route 8	2025	$182,351	N/A	Local
Establish Vanpool	2025	$100,000	N/A	Local
South St. Lucie ART On Demand	2029	$694,620	$224,691	Local/FDOT Serv. Dev.
Add Sun. Service on Routes 1, 2, 3, and 4	2030	$132,538	N/A	Local
Indian River Estates ART On Demand	2031	$694,620	$224,691	Local/FDOT Serv. Dev.
Add Saturday Service on Route 8	2031	$79,523	N/A	Local
30-minute Frequency on Route 3	2033	$351,450	$600,000	Local
North St. Lucie ART On Demand	2033	$694,620	$224,691	Local/FDOT Serv. Dev.
Extend Weekday Service Span to 10 PM	2034	$343,918		Local
Dual Enrollment Shuttle	2034	$343,918	$1,200,000	Local
Downtown/Passenger Rail Station/Beach Shuttle	2034	$414,605	$600,000	Local
Bus Stop/Shelter Improvements	2025	N/A	$100,000	FTA
Port St. Lucie Intermodal	2025-2027	N/A	$5,000,000	Local/FTA
Operations and Maintenance Facility	2025-2029	N/A	$30,000,000	Local/FTA
Fare Policy/Structure Evaluation Study	2026	N/A	$300,000	Local
Expand Transit Marketing/ Education Program	2026	N/A	$100,000	Local
TSP	2026-2033	N/A	$25,000	Local/FTA
Queue Jumps	2026-2033	N/A	$150,000	Local/FTA
Wi-Fi on Buses	2027-2034	$25,000	$100,000	Local

Additional details will be presented on the year-long efforts and the corresponding results including identification of the transit needs and the proposed transit services and projects to address those needs over the next 10 years.

At their meetings during the week of May 20th, the TPO Advisory Committees recommended the endorsement of the TDP Major Update.

RECOMMENDATION

Based on the recommendations of the TPO Advisory Committees and because the TDP Major Update supports the operation and growth of St. Lucie County's transit system to meet the identified transit needs over the next 10 years, it is recommended that the TDP Major Update be endorsed.

Reimagine TRANSIT

Transit Development Plan

Transit Development Plan

May 2024

Draft Report

art area regional transit

St. Lucie County Florida

St. Lucie Transportation Planning Organization

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Section 1. Introduction

This effort was initiated by the St. Lucie Transportation Planning Organization (TPO) in collaboration with Area Regional Transit (ART) to prepare a major update of the 10-Year Transit Development Plan (TDP), also dubbed "*Reimagine Transit* TDP."

This TDP represents the reimagined vision for transit in St. Lucie County from 2024 to 2033, functioning as the strategic guide for public transportation for the community. This TDP update allows the transit and planning agencies in St. Lucie County to outline actions to be taken in the following year and set transit goals for subsequent years. As a strategic plan, the TDP will also identify needs in an unconstrained fashion and for which currently there is no funding. As a development plan for local transit services, the plan will be consistent with community goals, reflect the priorities that leadership has established, and integrate the various community characteristics and development patterns that influence decisions and growth within St. Lucie County and its municipalities.

Preparing and submitting a TDP major update that complies with Florida Administrative Code (F.A.C.) Rule 14-73.001 (commonly called the TDP Rule) every five years is required by the Florida Department of Transportation (FDOT) as a prerequisite to of receiving State Public Transit Block Grant funds. According to Rule 14-73.001, F.A.C. – Public Transportation, "The TDP shall be the applicant's planning, development and operational guidance document to be used in developing the Transportation Improvement Program and the Department's Five-year Work Program."

The most recent 10-year TDP major update for ART was adopted in July 2019 for Fiscal Years (FY) 2020–2029. This current major update for FY 2025–2034 is due to FDOT by September 1, 2024.

TDP Requirements

FDOT requires that recipients of state Public Transit Block Grant funds prepare a major update of their TDP every five years to ensure that the provision of ART's public transportation system in St. Lucie County is consistent with the mobility needs of local communities. Current TDP requirements were formally adopted by FDOT on February 20, 2007. Major requirements of the Rule in:

- Major updates must be completed every 5 years, covering a 10-year planning horizon.
- A Public Involvement Plan must be developed and approved by FDOT or consistent with the approved Metropolitan/Transportation Planning Organization (MPO) Public Involvement Plan.
- FDOT, the Regional Workforce Development Board, and the MPO must be advised of all public meetings at which the TDP is presented and discussed, and these entities must be given the opportunity to review and comment on the TDP during the development of the mission, goals, objectives, alternatives, and 10-year implementation program.
- Estimation of the community's demand for transit service (10-year annual projections) must use the planning tools provided by FDOT or another demand estimation technique approved by FDOT.

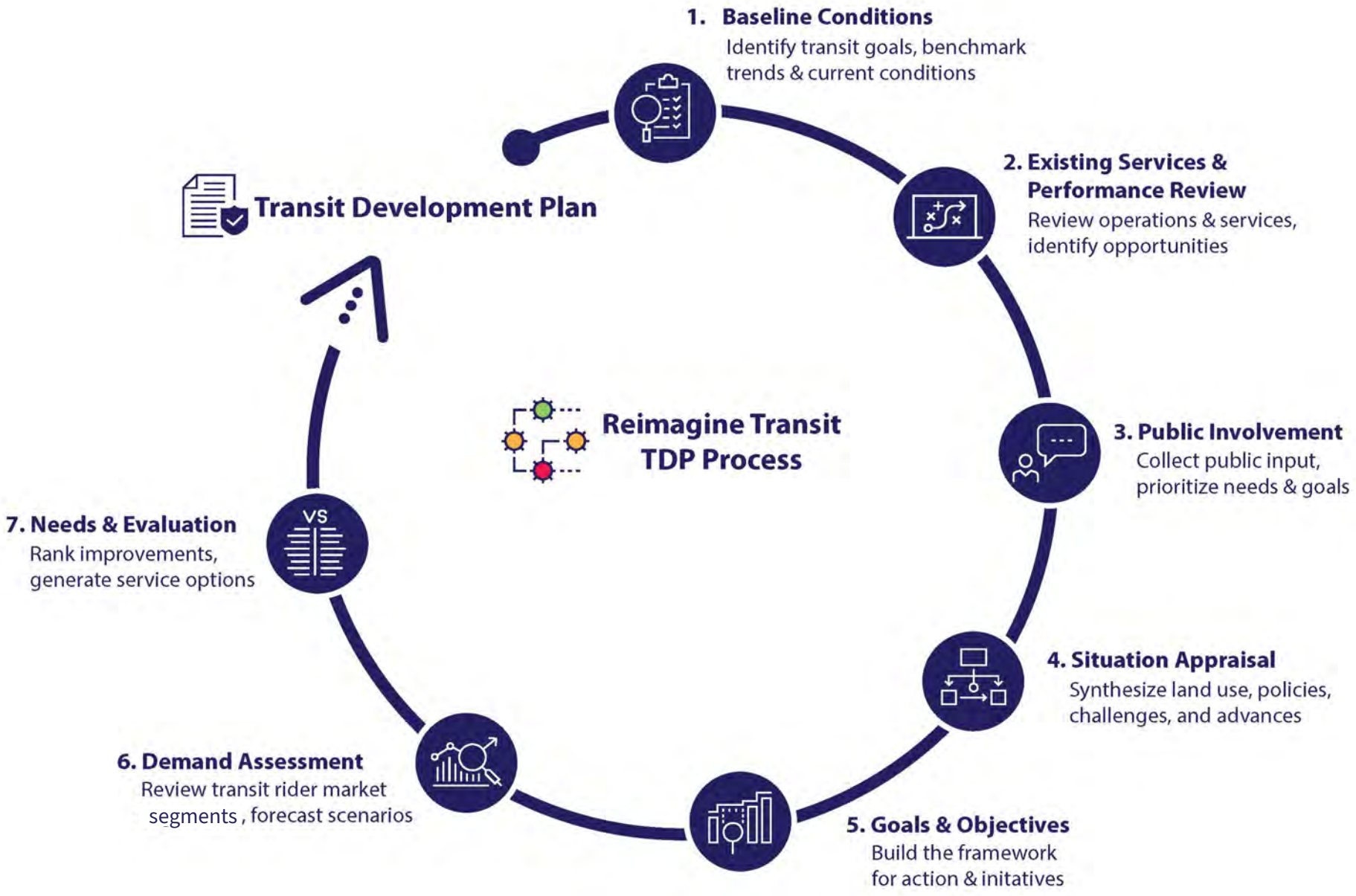
Reimagine Transit TDP Process

The process to develop the *Reimagine Transit* TDP is consistent with FDOT's *Guidance for Preparing & Reviewing Transit Development Plans*, Ver. III (2022) known as the "TDP Handbook." As shown in Figure 1-1, this includes a series of seven discrete yet interrelated tasks to provide a full picture of the current transit operating environment and existing/future transit needs in St. Lucie County and its immediate region.

TDP Checklist

This TDP meets the requirements for a major update per Rule Chapter 14-73, F.A.C. Table 1-1 lists each is these requirements and where found in the *Reimagine Transit* TDP.

Figure 1-1: Reimagine Transit TDP Process



Section 4. Public Involvement Summary

Public involvement input provides critical information for developing the 10-year transit needs in the community. With various avenues to gather public input, it helps to obtain information to ascertain community perceptions on and expectations for transit services locally and regionally. This section summarizes the public involvement process and related activities conducted for the *Reimagine Transit* TDP. Key findings from each of the completed events are also analyzed and discussed.

Prior to initiating any activities, ART, in partnership with the St. Lucie TPO, prepared a Public Involvement Plan (PIP) to guide the TDP public involvement process. The PIP was submitted for review and approval by FDOT District Four before implementing it. As shown in Appendix D, the PIP includes a wide range of activities to provide numerous opportunities for involvement by the public and key stakeholders representing local and regional public or private agencies and organizations.

Public Involvement Techniques

To engage a full range of community stakeholders and facilitate active participation during the *Reimagine Transit* TDP development process, activities categorized as direct or indirect were used.

Indirect involvement techniques use materials or methods to inform the public and stakeholders about the project, including branding, social media outreach, website content, emails, and other materials such as fact sheets, flyers, display boards, and media releases.

Direct involvement techniques directly engage the public and stakeholders “hands-on” in forums such as public workshops, stakeholder interviews, discussion groups, rider and non-rider surveys (in person or online), and presentations to elected officials.

Summary of *Reimagine Transit* Public Involvement Activities

Several direct and indirect public involvement activities were used to ensure adequate opportunities for ART’s riders, community stakeholders, and the public to actively participate in the TDP development process. Table 4-1 summarizes the public involvement activities conducted for the *Reimagine Transit* TDP that engaged over 1,000 people.

Table 4-1: TDP Public Involvement Summary

Outreach Activity	Date	# Engaged
Project Review Meetings	July 2023– March 2024	7
Stakeholder Interviews	August – October 2023	25
Bus Operator Interviews & Survey	August 2023	11
Discussion Group Workshops		
Bus Rider	August 23, 2023	12
Social Services	September 7, 2023	9
Business and Education	September 7, 2023	6
Phase I Public Workshops		
Port St. Lucie	August 22, 2023	21
Fort Pierce	August 23, 2023	6
Phase II Public Workshops		
Port St. Lucie	February 13, 2024	55
Fort Pierce	February 13, 2024	22
Surveys		
Transit Needs Survey	August – November 2023	136
Transit Priorities Survey	February – March 2024	170
Other Outreach		
Email	July 2023– May 2024	96
Web/Social Media	August 2023– March 2024	404
TPO Committees & grassroots efforts	July 2023– May 2024	34
Total		**1,014**

Source: Benesch

Project Review Committee Meetings

One goal of the *Reimagine Transit* TDP is to ensure that it is developed with necessary oversight, quality control, and transparency. To support this, a Project Review Committee (PRC) was established to guide the TDP process and to facilitate project coordination among the various members.

The PRC was established based on guidance from ART and the St. Lucie TPO and included representatives/staff from ART, the TPO, and the Regional Workforce Board. The following is a summary of the key coordination activities.

- Project Kick-off/PRC Meeting #1—In July 2023, a virtual meeting was held with the PRC to discuss the TDP goals and objectives, review project tasks and deliverables, discuss the planned public involvement strategies, examine the coordination of the TDP with other local and regional plans, and review the project schedule.
- PRC Meeting #2—On November 2, 2023, the PRC met virtually to discuss the completed public outreach events, expectations for upcoming public outreach events, and development of the alternatives for the 10-year plan.
- PRC Meeting #3—On December 19, 2023, the PRC met virtually and reviewed the draft 10-year service and capital needs. Key findings from data analyses and the latest public outreach efforts were presented followed by a discussion about the 10-year TDP needs.
- PRC Meeting #4—On May 1, 2024, the PRC met virtually and reviewed the 10-year plan. The recommended service and capital improvements along with the latest public outreach efforts were presented followed by a discussion.
- Additional Virtual Meetings—Additional phone conversations/meetings were conducted to discuss applicable items or obtain direction from the staff.

TDP Branding

To uniquely identify it from other local and regional planning efforts and to increase awareness of this process, the TDP was branded as "*Reimagine Transit*" based on input from the PRC. While branding can make TDP public participation more engaging and user-friendly during the development process, its continued use post-adoption provides a consistent theme and message when promoting the TDP in the years to come.

Stakeholder Interviews

Stakeholder interviews are one-on-one meetings to gather input from policy, agency, or community leaders regarding the future of ART and transit needs in the community. This input enhances the understanding of local conditions for transit as assessed through the perceptions and attitudes of stakeholders representing members of the broader community. For the *Reimagine Transit* TDP, 25 stakeholders were interviewed from August to December 2023 (Table 4-2).

Interview Methodology and Technique

A uniform list of questions and discussion topics was developed and provided to each stakeholder ahead of the interview. The script for the interviews is included in Appendix D. The input received during these interviews was reviewed and major themes were identified and summarized. Overall, interviewees indicated the need for more transit options in St. Lucie County, including increased access to key employment, education, and commercial hubs and expanding transit services for everyone. A more detailed summary is provided following the table.

Table 4-2: Stakeholder Information

Stakeholder	Organization	Title
Robert Driscoll	Council on Aging	Transit Director
Robert Dadiomoff	Veteran's Community	Representative
Jack Kelly	St. Lucie Public Schools	Board Member
George Landry	St. Lucie County BOCC	County Admin.
Mayte Santamaria	St. Lucie County BOCC	Dept. County Admin.
Peter Tesch	Economic Dev. Council	President
Cathy Townsend	St. Lucie County BOCC	Commissioner
Chris Dzadovsky	St. Lucie County BOCC	Commissioner
Larry Leet	St. Lucie County BOCC	Commissioner
Linda Bartz	St. Lucie County BOCC	Commissioner
Jamie Fowler	St. Lucie County BOCC	Commissioner
Shannon Martin	City of Port St. Lucie	Mayor
Jolien Caraballo	City of Port St. Lucie	Vice Mayor
Stephanie Morgan	City of Port St. Lucie	Council Member
David Pickett	City of Port St. Lucie	Council Member
Anthony Bonna	City of Port St. Lucie	Council Member
Linda Hudson	City of Fort Pierce	Mayor
Arnold Gaines	City of Fort Pierce	Commissioner
Curtis Johnson Jr.	City of Fort Pierce	Commissioner
Jeremiah Johnson	City of Fort Pierce	Commissioner
Michael Broderick	City of Fort Pierce	Commissioner
Nicholas Mimms	City of Fort Pierce	City Manager
Jesus Merejo	City of Port St. Lucie	City Manager
Dr. Timothy Moore	Indian River State College	President
William G. Theiss	Town of St. Lucie Village	Mayor

Section 6. Goals and Objectives

This section summarizes the transit goals and objectives for the *Reimagine Transit* TDP, providing the policy direction to guide ART to achieve the community's vision for transit over the next 10 years.

The goals and objectives were developed by updating the adopted TDP goals/objectives following a review and assessment of existing conditions, feedback received from the public involvement process, findings in the Situation Appraisal, and discussions with staff. The updated goals and objectives for the *Reimagine Transit* TDP are presented below.

Goal 1: Provide an effective, efficient, safe, and convenient public transit service that meets the mobility needs of the County.

Objective 1.1 Increase the number of one-way, fixed-route passenger trips by an average of 5% annually.

Strategy 1.1.1 Implement capital and service improvements and expansions consistent with the priorities identified in the *Reimagine Transit* TDP.

Strategy 1.1.2 Expand opportunities for regional travel, including express bus services, park-and-ride facility access, and feeder services for any potential regional rail connections.

Strategy 1.1.3 Meet at least once quarterly with regional partners, such as GoLine, The Marty, Palm Tran, and FDOT, to coordinate on the pursuit and implementation of regional transit opportunities.

Strategy 1.1.4 Improve frequency on high performing routes to 30-minute headways or better.

Strategy 1.1.5 Expand weekday service hours and add weekend service based on transit demand.

Strategy 1.1.6 Expand app-based on-demand microtransit services in suitable areas utilizing vans or smaller bus vehicles.

Strategy 1.1.7 Develop the current route network to accommodate potential addition of a passenger rail station in St. Lucie County.

Objective 1.2 Maintain service reliability and on-time performance.

Strategy 1.2.1 Maintain state of good repair targets consistent with the Transit Asset Management (TAM) Plan for revenue vehicles.

Strategy 1.2.2 Ensure no less than 10,000 miles between roadcalls.

Strategy 1.2.3 Achieve on-time performance of 90% or better for fixed-route services.

Strategy 1.2.4 Operate a fixed-route fleet of vehicles with an average age of less than seven years.

Objective 1.3 Develop a system-wide performance monitoring program.

Strategy 1.3.1 Implement a performance monitoring program-that provides a threshold for determining individual route performance and when improvements are to be considered.

Strategy 1.3.2 Evaluate and modify fixed-route bus service that falls below 75% of the system-wide average for passenger trips per revenue hour.

Strategy 1.3.3 Incorporate measures from the performance monitoring program-and create quarterly reports on fixed-route and paratransit services.

Strategy 1.3.4 Integrate TAM targets and other desired standards into an overall performance monitoring program, adopted by the Board of County Commissioners.

Strategy 1.3.5 Track rider complaints and review quarterly.

Objective 1.4 Form partnerships with public and private entities to develop innovative services and technology programs and pilot projects.

Strategy 1.4.1 Identify and engage at least two potential public and private partners annually.

Strategy 1.4.2 Develop at least one action plan annually with identified partners to pursue and identify potential microtransit pilot projects and possible funding sources. Pursue and implement at least one additional pilot project by FY 2027.

Strategy 1.4.3 Develop at least one action plan annually with identified partners to pursue and identify potential alternative fuel vehicle applications, best practices, and possible grant resources.

Strategy 1.4.4 Coordinate with FDOT and South Florida Commuter Services to identify and approach major employers and initiate employee commuter programs, introduce new routes, and/or other commute options to improve access to current and emerging jobs.

Strategy 1.4.5 Explore the possibility of implementing and/or expanding autonomous vehicle transit in Tradition and/or other applicable such areas.

Objective 1.5 Improve accessibility to transit services and facilities.

Strategy 1.5.1 Work with St. Lucie County and its municipalities to develop an inventory of sidewalks and gaps within a ½-mile of each bus stop, outlining a transit-related accessible path needs plan by FY 2026.

Strategy 1.5.2 Enhance sidewalk development and accessibility to bus stops and transit stations by annually identifying gaps in accessible paths and working with the TPO, School

Board, and other local jurisdictions to incorporate accessibility into their project evaluation and prioritization process for funding.

Strategy 1.5.3 Systematically improve infrastructure including benches, shelters, signage, and overall accessibility at bus stops by utilizing the Transit Facility Needs and ADA Transition Plan; update the ADA Transition Plan no less than every three years.

Strategy 1.5.4 By FY 2027, integrate the Transit Facility Needs and ADA Transition Plan into the development review process to ensure that developers are contributing to the funding of vital transit infrastructure and accessibility.

Goal 2: Offer financially-efficient and affordable transit services.

Objective 2.1 Maintain cost efficiencies and financial stability.

Strategy 2.1.1 Maintain funding levels for fixed-route bus service consistent with the *Reimagine Transit* TDP-financial plan.

Strategy 2.1.2 Implement efficiency improvements and operational adjustments that will prevent an increase in operating costs per revenue mile of more than 5% annually.

Objective 2.2 Identify and evaluate additional opportunities to enhance revenues.

Strategy 2.2.1 At a minimum, submit three annual grant applications/requests for capital and/or operating funds available through federal, state, and local grant programs.

Strategy 2.2.2 Meet annually with the St. Lucie County Planning Division to jointly develop improved and/or development regulations that support increased contributions from developers for transit facilities or new services.

Strategy 2.2.3 No less than annually, review the new or emerging developments for private/partner contributions to support enhanced or new transit services.

Goal 3: Enhance visibility of ART in the community through marketing and education efforts.

Objective 3.1 Achieve regional and local support of transit initiatives.

Strategy 3.1.1 Reach out to at least three major employers and institutions annually to assess marketing and educational opportunities and develop partnerships for implementation of enhanced public transportation services.

Strategy 3.1.2 Develop and maintain a contact database and distribution list for use in notifying customers and potential customers about system improvements and changes.

Strategy 3.1.3 Develop an action plan and a series of public awareness resources that describe the benefits of transit service and outline transit as an attractive and cost-effective travel option.

Strategy 3.1.4 Implement the action plan to increase public awareness of the benefits of transit service by marketing transit as an attractive and cost-effective travel option, reviewing the effectiveness and updating at least annually.

Strategy 3.1.5 Communicate through newsletter or presentation to at least 10 audiences, including governmental bodies, community groups, transit passengers, neighboring transit agencies, on the state of transit in St. Lucie County on an annual basis.

Objective 3.2 Implement a marketing plan.

Strategy 3.2.1 Annually review schedules and rider information to ensure they are easily accessible to customers.

Strategy 3.2.2 Annually review and update the marketing plan.

Strategy 3.2.3 Implement the marketing plan and pursue annual advertisement opportunities; develop marketing resources and materials as outlined in the plan.

Strategy 3.2.4 Annually review and update electronic communications (web site, social media, etc.) to ensure user-friendly formats.

Strategy 3.2.5 Coordinate marketing strategies outlined in the marketing plan with the South Florida Commuter Services program on targeting commuters within and commuting to and from St. Lucie County.

Strategy 3.2.6 Utilize strategies that strengthen transit brand identity, aligning with transit agency and County goals and initiatives.

Objective 3.3 Support and participate in local and regional economic development and transportation planning efforts.

Strategy 3.3.1 Continue developing local partnerships to ensure long-term viability of public transportation options in St. Lucie County.

Strategy 3.3.2 Coordinate with other County Departments including Community Development, Planning and Development Services, Veteran Services, Parks and Recreation, and the Visitor and Convention Bureau to align strategies and advance efforts that support transit.

Goal 4: Promote transit supportive land use and policies.

Objective 4.1 Review/update local development codes to enhance the ability to fund and develop new transit options in growing areas.

Strategy 4.1.1 Meet at least annually with appropriate County departments and the municipal jurisdictions to identify strategies that will encourage and foster the development community to provide/build transit-supportive development.

Strategy 4.1.2 Coordinate with the St. Lucie County Planning Department to support the use of development incentives for developers and major employers to support and promote public transportation.

Strategy 4.1.3 Meet annually with local municipalities to develop, approve, and support the use of development incentives for developers and major employers to support and promote public transportation.

Strategy 4.1.4 Coordinate with County departments to encourage a mix of residential, commercial, higher-density development around transit nodes and corridors.

Goal 5: Minimize the environmental impacts of public transportation and advocate for sustainable community values.

Objective 5.1 Reduce ART's carbon footprint and fuel costs.

Strategy 5.1.1 Investigate converting transit fleet to no/low emission alternative fuel bus vehicles as existing vehicles reach their useful life benchmark.

Strategy 5.1.2 Evaluate the fuel and maintenance cost of the existing fleet and compare to projected costs of no/low emission alternative fuel vehicle capital and maintenance cost.

Strategy 5.1.3 Explore federal grants to fund fleet replacement with no/low emission alternative fuel vehicles.

Objective 5.2 Evaluate bicycle storage at major transfer centers/park-and-ride facilities and ensure all bicycle racks on buses are able to carry the maximum capacity.

Strategy 5.2.1 Implement a policy to allow foldable bicycles on board or allow all bicycles on board if the vehicle is less than 50% capacity.

Strategy 5.2.3 Evaluate bicycle storage capacity at all ART stops annually and consider implementing secured covered bicycle storage at major transfer stations.

Section 8. Transit Needs Development

This section summarizes the development and evaluation of potential transit improvements for the *Reimagine Transit* TDP. The primary objective of this component is to leverage the data analysis and outreach completed thus far to develop potential service improvements and supporting capital projects to fulfill the unmet transit demand and mobility needs. Developed without consideration of funding constraints, the proposed improvements or alternatives, represent ART's transit needs for the next 10 years.

The identified improvement needs will be prioritized using an evaluation process that considers public input and other qualitative and quantitative criteria, as discussed in this section. The resulting list of improvements will then be used to develop the 10-year implementation and financial plans for the TDP. Prioritized transit needs will assist in selecting and implementing service improvements as funding becomes available and as the demand for ART continues to grow.

Development of Transit Needs

The *Reimagine Transit* needs for the next 10 years in St Lucie County were developed through the following methods.

- *Community Direction and Vision* – Many public outreach techniques were used throughout the *Reimagine Transit* TDP planning process to obtain public input on desired vision and direction for public transportation and the corresponding needs. Surveys, public workshops, interviews with community stakeholders, riders, and even bus operators were held. In addition, small group discussion workshops with key stakeholders were also conducted to gather input from the local or regional leaders, elected officials, riders, and ART employees regarding the direction/vision for transit in the next 10 years.
- *Situation Appraisal*—Major updates to 10-year TDPs must include an appraisal of the environment in which the transit agency operates. This unique assessment helps to better understand ART's operating environment within the context of numerous key elements, as specified in the TDP Rule. The implications from the situation appraisal findings were considered in identifying potential transit alternatives.
- *Goals and Objectives*—Objectives and policies often provide insight into transit needs within the community and the potential means with which to meet them. ART's TDP goals and objectives, updated as part of this effort, emphasize or enhance many of the broader community goals and support transit as a viable choice of travel and a practical option for residents and visitors in the next 10-years.
- *Transit Demand Assessment*—The assessment of transit demand and needs included the use of various GIS-based analyses, software tools, and methodologies to assess

demographic data and land use patterns conducive to transit. These technical analyses, together with the baseline conditions assessment and performance reviews previously conducted, were used to identify areas with transit-supportive characteristics when developing the list of transit alternatives.

10-Year Transit Needs

Based on these methods, transit needs were identified and grouped into three categories: service, capital, and technology/policy improvements. The specific improvements under each category developed for the *Reimagine Transit* TDP to meet the diverse travel needs in St. Lucie County are summarized below and illustrated on Map 8-1.

Service Needs

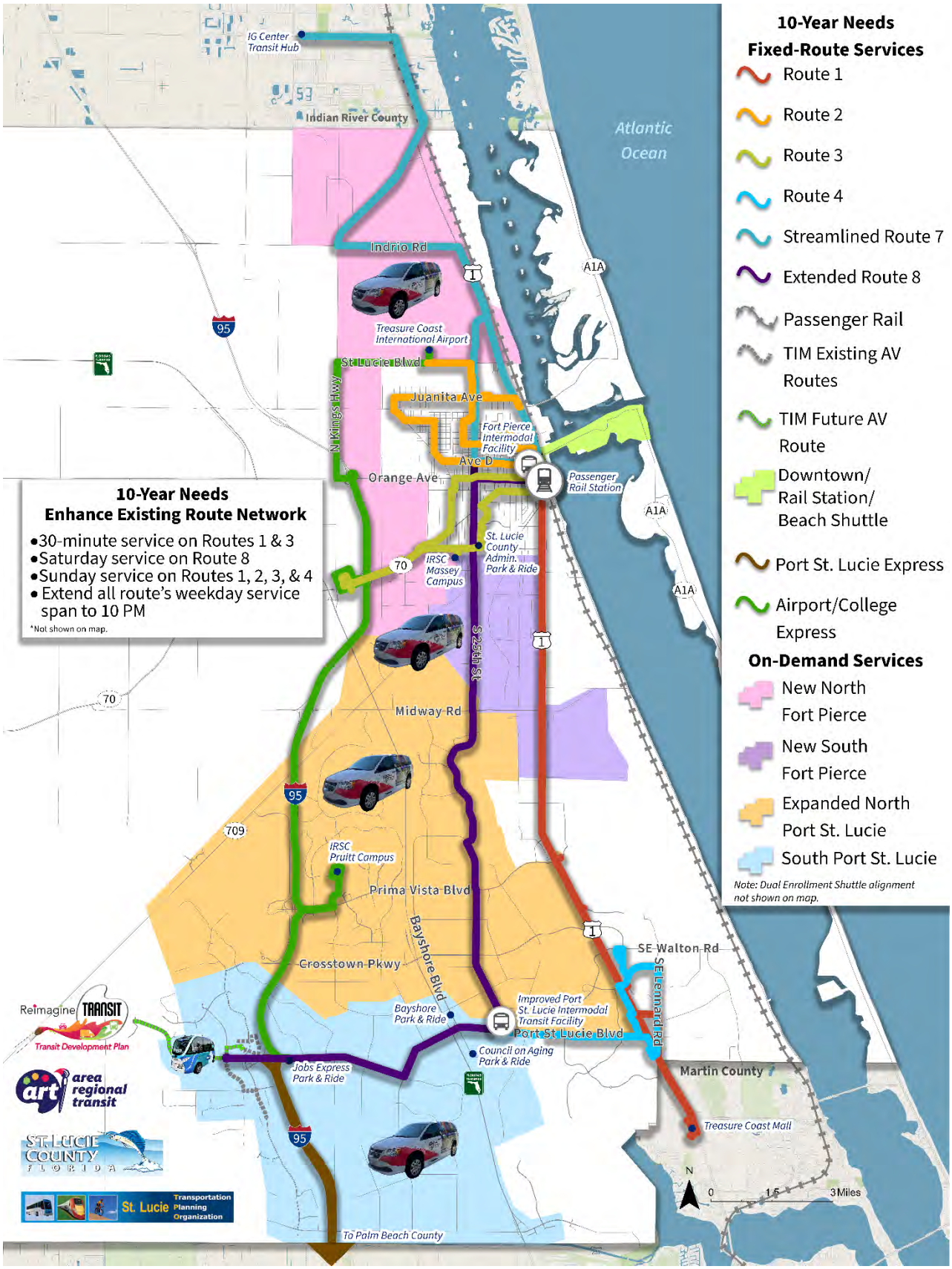
Service needs focus on expanding ART's reach via various technology-based services and quick connections while also making the current system more efficient and useful. Improvements to address these needs include increasing route frequencies, expanding hours/days of service, and repurposing some routes to maximize usefulness to the community. The 10-year service needs also include service expansion improvements to add new routes or expanding premium transit options, such as app-based on-demand microtransit.

Enhance Existing Fixed-Route Bus Route Network

A review of baseline conditions, existing service performance data, and input from the public and bus operators indicated a need to streamline operations by repurposing and/or extending certain routes. This will optimize ART's fixed-route network to better serve the community, enhance rider experience, and provide direct connections to key destinations.

Source: Benesch

Map 8-1: Reimagine Transit TDP 10-Year Needs



- **Streamline Route 7**—Realign Route 7 to operate only on 9th Street in Indian River County, US 1, Turnpike Feeder Road, and Indrio Road.
- **Repurpose Route 5**—Discontinue Route 5 and repurpose resources to extend Route 8.
- **Extended Route 8**—Extend Route 8 from the current terminus at Port St. Lucie Intermodal Center to the Tradition area to provide direct connections between Fort Pierce and Port St. Lucie, including the Tradition area and the new Jobs Express Park & Ride.
- **Repurpose Route 6**—Eliminate Route 6 and repurpose resources into expanding ART On Demand within that area.
- **Expand ART On Demand North**—Expand microtransit zone to cover the eliminated Route 6 service area.
- **Increase Frequency on Route 1 and Route 3**—Increase frequencies to 30 minutes on Routes 1 and 3 to support current demand and attract even more riders to these two best performing ART routes.
- **Add Saturday Service on Route 8**—With expanded Route 8 connecting to Tradition and other activity centers in Port St. Lucie, add Saturday service to provide a direct weekend connection from Fort Pierce to these employment centers and to the former Route 5 service area.
- **Extend Service Span by Two Hours**—Extend hours of bus service until 10 PM on weekdays to increase the convenience of using transit to work or shopping trips.
- **Add Sunday Service on Routes 1, 2, 3, 4**—Add limited Sunday service on selected routes to provide seven day transit network access to key locations and corridors.

Add New Fixed-Route Services

As St. Lucie County's population and employment continues to grow, the need for alternatives modes of transportation mobility options increases. Transit will also continue to be a potential remedy to mitigate worsening traffic congestion resulting from this continued growth. To provide increased network connectivity and expand service coverage, the following new services are recommended for the TDP.

- **Downtown/Rail Station/Beach Shuttle**—Input from the community and stakeholders indicated a need conveniently and quickly connect downtown Fort Pierce to key trip generators/hubs within and adjacent to it. This proposed new shuttle would connect the Fort Pierce downtown area to any future passenger rail station, the beaches on Hutchison Island, and Fort Pierce Intermodal Center. This shuttle service will complement the current FreeBee service, adding another layer of quick and convenient travel option in Fort Pierce, operating all week every 15 minutes.
- **Port St. Lucie Express**—This regional connection to link Port St. Lucie to Palm Beach County and the Palm Tran network via I-95 has already been planned. Regional travel flow data in combination with public input supports a transit connection to Palm Beach County, extending the reach of ART in the region. While the operating characteristics for this express route have

not been finalized, this TDP recommends weekday AM and PM peak hour service for the Port St. Lucie Express.

- **Airport/College Express**—With the anticipated growth, stakeholders and discussion group members indicated a need for transit to connect to the Treasure Coast International Airport. The Port St. Lucie/Airport Express would connect the Jobs Express Park & Ride and the Treasure Coast International Airport via I-95. The route would provide a quick north-south link, while connecting key cities, job centers, airport, and IRSC campuses. Additionally, the route will stop on Kings Highway and provide another connection to Fort Pierce via Route 3.
- **Dual Enrollment Shuttle**—This new shuttle service would connect selected high schools with IRSC campuses in St. Lucie County (and may include locations in Martin County with potential regional funding). The service is primarily focused on helping dual enrollment students travel between school and college campuses. This improvement is expected to be implemented as a pilot program using electric vehicles.
- **Establish Vanpool Program**—Currently there is no established vanpool program in St. Lucie County. ART should coordinate with South Florida Commuter Services to provide this option.
- **Expanded Tradition in Motion (TIM) AV Connector**—This plan assumes the expansion of existing privately-funded AV service currently operating in Tradition. There are two planned routes to expand the autonomous network to new communities and job centers, potentially including Amazon, Cheney Brothers, and FedEx locations. This service connects to extended Route 8.

Expand ART On-Demand Microtransit Services

ART On Demand has become a popular transit option in St. Lucie County. It is also accessible to persons with disabilities who cannot access a fixed route stop and would otherwise rely on ADA paratransit service. The concept promotes transit, provides efficient service in low-density areas, and enhances access to transit beyond current service areas. These services also serve as first/last-mile service for riders of regular fixed-route transit services.

The *Reimagine Transit* plan recommends significantly expanding on-demand transit over the next 10 years to meet localized mobility needs, as described below:

- **Expand ART On Demand North Port St. Lucie**—With the potential repurposing of Route 6, ART On Demand North Zone should be expanded to cover areas previously served by this route. The expanded zone would connect riders in the Port St. Lucie area to Route 1, the Port St. Lucie Intermodal Facility, the IRSC Pruitt campus, and other destinations along US 1. The expanded ART On Demand North Zone would cover areas adjacent to Glades Cut Off Road to US 1 from Port St. Lucie Boulevard to areas south of Edwards Road.
- **New ART On Demand Service in South Fort Pierce**—A new on-demand zone is needed to enhance transit access in south Fort Pierce and the Indian River Estates neighborhood. The proposed zone covers areas south of Virginia Ave east of Selvitz Road, north of Easy Street, and

borders the expanded North Zone. The traditional transit market segments and residents/workers in this zone would be connected to shopping centers within the zone, to neighboring on-demand zones, and to Routes 8 and to Route 1 that provide regional access. This zone would provide on-demand service Monday through Saturday.

- **New ART On Demand Service in North Fort Pierce**—A new on-demand zone is needed south of the Indian River County line and north of St Lucie Boulevard to provide service for neighborhoods and businesses in the growing north Fort Pierce area and connections to Routes 3 and 7, which provides access to Indian River County. Although data show potential demand, especially from traditional rider markets, currently there is no local neighborhood service other than the US 1 corridor. This zone would span from the Indian River County line to the expanded ART On Demand North Port St. Lucie zone bordering I-95 and operate Monday through Saturday.

Table 8-1 summarizes these improvements by route/service type at the end of the 10-Year TDP.

Table 8-1: ART 10-Year Needs Service Characteristics

Route/Service Area	Headway	Weekday Service Span	Days of Service
Fixed-Route			
1	30	6:00 AM–10:00 PM	Monday–Sunday
2	60	6:00 AM–10:00 PM	Monday–Sunday
3	30	6:00 AM–10:00 PM	Monday–Sunday
4	60	6:00 AM–10:00 PM	Monday– Sunday
Streamlined 7	60	6:00 AM–10:00 PM	Monday–Friday
Extended 8	60	6:00 AM–10:00 PM	Monday–Saturday
Downtown/Passenger Rail/Beach Shuttle	15	6:00 AM–10:00 PM	Monday–Saturday
Port St. Lucie Express	Peak	5:00 AM–8:00 AM; 5:30 PM–8:30 PM	Monday–Friday
Airport/College Express	60	6:00 AM–6:00 PM	Monday–Friday
Dual Enrollment Shuttle	60	10:00 AM–6:00 PM	Monday–Friday
Expanded TIM	Varies	10:00 AM–2:00 PM; 5:00 PM–9:00 PM	Monday–Sunday
ART On Demand Microtransit			
North Port St. Lucie	On-demand	6:00 AM–10:00 PM	Monday–Saturday
South Port St. Lucie	On-demand	6:00 AM–10:00 PM	Monday–Saturday
North Fort Pierce	On-demand	6:00 AM–10:00 PM	Monday–Saturday
South Fort Pierce	On-demand	6:00 AM–10:00 PM	Monday–Saturday

Capital/Infrastructure/Technology/Policy Needs

Implementation of these transit services should be supported by necessary capital infrastructure and technology improvements to ensure an enhanced experience for ART users. The following improvements have been identified to support the operational investments summarized previously.

New Port St. Lucie Intermodal Center

This new facility improvement in Port St. Lucie is planned and upon completion will replace the existing transfer center adjacent to the Port St. Lucie Community Center and Airoso Boulevard. Currently, it is estimated to cost $3 million. ART has secured $1.5 million from the FTA for construction and an additional $1.5 million from FDOT. The project is currently in the design phase and will have restroom facilities and crime prevention through environmental design (CPTED) features.

New ART Operations & Maintenance Facility

This new facility is already planned to centralize ART services (Figure 8-1). Located along Selvitz Road, it will consolidate transit operations, administration, maintenance, and vehicle storage.

Figure 8-1: ART Operations & Maintenance Facility Concept

Figure 8-2: High Ridership Bus Stop Concept

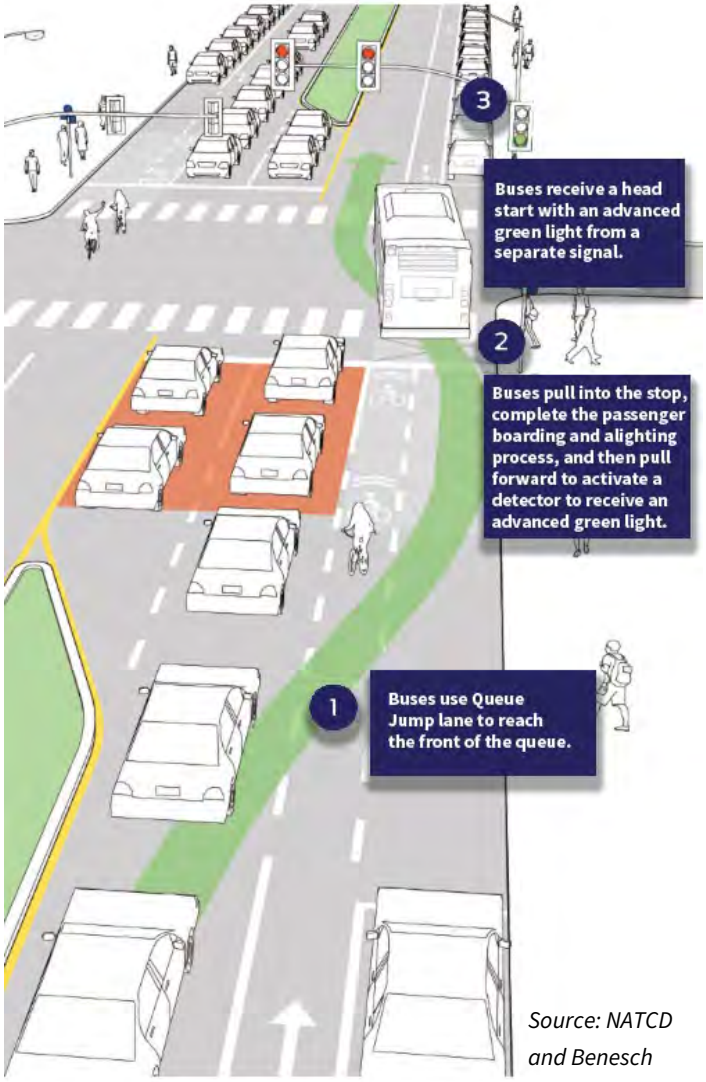
Invest in Bus Stop Infrastructure at High Ridership Stops

ART needs to continue investing in bus stop infrastructure such as shelters, benches, bike racks, and other amenities at its highest ridership stops to support the proposed new routes and enhancements to existing services (Figure 8-2). Installing these amenities may help attract more discretionary riders and provide current riders with a higher quality experience.

Vehicle Replacement/Alternative Fuel Vehicle Fleet Integration Program

ART should work with St. Lucie County, the St. Lucie TPO, and other partners to explore purchasing alternative fuel vehicles when implementing the previously identified service needs, especially with the new proposed services. ART should also consider acquiring alternative fuel buses to replace its current diesel fleet, which may attract discretionary riders and support ART's overall marketing strategy to appeal to a wider population base.

Figure 8-3: TSP with Queue Jump Lane Concept



Source: NATCD and Benesch

Bus Preferential Treatment

Traffic can impact the travel time of transit services operating in mixed traffic, possibly making transit unattractive to potential riders and unreliable for current riders. Bus preferential treatments such as Transit Signal Priority (TSP) and/or queue jumps may help buses to adhere to schedules during congested periods on key corridors such as US 1. Figure 8-3 shows a TSP and queue jump configuration example to help prioritize transit movement at an intersection.

TSP and/or queue jumps are recommended for selected intersections with high traffic volumes to improve transit's appeal over driving on the same corridor. ART should coordinate with FDOT to plan and implement TSP and queue jumps along major transit corridors such as on US 1. Identifying intersections and specific technologies to deploy these measures will require a separate study.

Wi-Fi on Buses and Selected Bus Stops

Adding Wi-Fi on buses and at select high-ridership bus stops will add convenience while offering other practical benefits. Adding Wi-Fi at high-ridership bus stops will assist riders transferring from a fixed-route to ART On Demand or access ART's real-time bus information. Additionally, this feature can allow riders to work or complete schoolwork online while riding. Overall, this new feature will improve the overall rider experience while assisting ART with communication.

Source: Benesch

Enhanced Paratransit Service Eligibility Process

To make the program more efficient and cost feasible, St. Lucie County should improve the current ADA paratransit eligibility process by allowing doctors to certify riders to ensure fair and effective access to transportation.

Fare Policy/Structure Evaluation Study

ART should conduct a review and evaluation of its current fare-free structure within the next three years. With the popularity and potential expansion of ART On Demand services, this is an essential post-TDP need. ART should review the impacts of staying fare-free and the potential for implementing a fare structure and revised policies. This could include an analysis of new fare collection technology, peer system fare structures, and the estimated impact on ridership. It is also an optime time to conduct a fare policy/structure evaluation study in the "new normal" after the pandemic and at a time ART is reimagining its services.

It is recommended that St. Lucie County implements a fare structure, at a minimum, for ART On Demand while complying with all federal rules regarding fare policy changes. The on-demand service will connect to additional destinations quickly, making ART On Demand a premium service.

Expand Transit Marketing/Education Program

Although it is important to make transit more convenient to use and attractive to appeal to new ridership, it is equally important to ensure that the community is aware of where/when these services are available and how they work. Based on input from the public and stakeholders, lack of awareness and education about ART's services and facilities is a major hurdle to making transit a more viable option in St. Lucie County.

A carefully coordinated and multi-year marketing campaign and awareness strategy involving local stakeholders and businesses is recommended. While this TDP keeps the details and scale of this effort open, it strongly emphasizes the need for such a program prior to implementing the proposed *Reimagine Transit* improvements.

Establish Route-Level Performance Monitoring Program

A performance monitoring program tracks and measures the performance and efficiency of routes and the system. ART should continue its monitoring efforts and establish a performance monitoring program, similar to the sample process in Appendix E, for new transit services implemented in the next 10 years.

Source: Benesch

Evaluation of Transit Needs

This section presents the evaluation methodology for the 10-year transit needs to assess the strategies and help ART set meaningful priorities for funding over the next 10 years. The evaluation process is structured to cover a wide spectrum of factors that are qualitative and quantitative to ensure it is comprehensive.

A quantitative-qualitative hybrid methodology was used to evaluate and prioritize the transit needs. By conducting this evaluation, ART can meaningfully prioritize projects and allocate funding using an objective process. The four evaluation categories identified below and the category weights discussed were used to rank the TDP service needs.

- ***Public Support***—A key reason for the success of any improvement is its acceptance and support by the community it serves and impacts. The conclusions from public outreach efforts and input from stakeholders are reviewed to gauge public support.
- ***Potential Demand***—The findings from GIS-based technical analyses conducted as part of the demand/gap assessment and ridership projections are reviewed to assess the potential demand.
- ***Activity Center Connectivity***—Connectivity to key activity centers and hubs plays a critical role as ART focuses on enhancing services for residents and meeting the demands of creating a truly multimodal transportation system for their use.
- ***Financial Feasibility***—Financial feasibility with funding often is one of the most restrictive factors and, therefore, is sometimes a heavily-weighted criterion. The costs of implementation were considered together with the associated funding and policy support.

Table 8-2 lists the evaluation criteria and their associated measures of effectiveness. Each measure and criterion are assigned a weight to relay the relative importance of each among the group of criteria.

Table 8-2: 10-Year TDP Service Needs Evaluation Factors and Weights

Criteria	Measure	Measure Description	Measure Weight	Criteria Weight
Public Support	Public Input	Level of interest in specific alternatives (Very High, High, Moderate, None), gathered via TDP public input surveys	15%	35%
	Stakeholder Input	Level of interest in specific improvements (None, Moderate, High, Very High), gathered via the TDP outreach process	20%	
Ridership Potential	Traditional Market Coverage	Coverage of traditional markets (TOI of "High" or "Very High")	10%	25%
	Discretionary Market Coverage	Coverage of discretionary markets (areas with 4+ jobs or dwelling units per acre from the DTA)	10%	
	Ridership Productivity	TBEST demand model trips per hour simulated 2034 ridership	5%	
Activity Center Connectivity	Connections to Key Destinations	Connections to key population and employment hubs within St. Lucie County and the immediate region	10%	10%
Financial Feasibility	Cost Efficiency	Operating cost per trip	30%	30%
Total			**100%**	**100%**

Improvement Scoring Thresholds

A mix of qualitative and quantitative analyses is used to gain a more comprehensive understanding of priorities for ART. A score is assigned to each proposed improvement. For the quantitative criteria (e.g., traditional market, choice market, trips per hour, and operating cost per trip) the scoring is determined using the average of the entire data set and one standard deviation above or below the average. For the remaining qualitative criteria, the score is based on professional judgment of the information (i.e., collective stakeholder input) compared across the transit alternatives. A higher score is consistent with a higher ranking for a given alternative.

Table 8-3 shows the thresholds and scoring for each criterion used in the transit needs evaluation.

Table 8-3: 10-Year Needs Evaluation—Scoring Thresholds

Measure	Range	Score
Public Input	Less than (Average – 1 SD)	1
	Between (Average – 1 SD) to Average	3
	More than Average to (Average + 1 SD)	5
	More than (Average + 1 SD)	7
Stakeholder Input	None	1
	Moderate	3
	High	5
	Very High	7
Traditional Market Potential	Low (Average – 1 SD)	1
	Average (Average – 1 SD to Average)	3
	High (Average to Average + 1 SD)	5
	Very High (Average to Average + 2 SD)	7
Discretionary Market Potential	Low (Average – 1 SD)	1
	Average (Average – 1 SD to Average)	3
	High (Average to Average + 1 SD)	5
	Very High (Average to Average + 2 SD)	7
Ridership Productivity (Trips per Hour)	Low (Average – 1 SD)	1
	Average (Average – 1 SD to Average)	3
	High (Average to Average + 1 SD)	5
	Very High (Average to Average + 2 SD)	7
Connections to Key Destinations	None	1
	Moderate	3
	High	5
	Very High	7
Cort Efficiency (Operating Cost per Trip)	Low (Average – 1 SD)	1
	Average (Average – 1 SD to Average)	3
	High (Average to Average + 1 SD)	5
	Very High (Average to Average + 2 SD)	7

Note: SD = statistical Standard Deviation

Each criterion is assigned a weight to measure its relative importance among all criteria to be applied. For each transit improvement, a score was determined either through the computation of the selected measure of effectiveness or the educated judgment of the analyst. Potential scores were assigned depending on the relative comparison of a given transit improvement with other transit improvements as it relates to a given criterion. A higher score is consistent with a higher ranking for a given improvement for the criterion being evaluated. The thresholds for computation-based criteria were determined using the average of the entire data set and one standard deviation above or below the average.

Alternatives Evaluation Results Summary

Table 8-2 shows the scores and relative ranking of each TDP service improvement, which identifies the priorities based on the evaluation methodology and are used to develop the 10-year implementation plan.

Table 8-4: 10-Year Service Improvements Evaluation Results

Rank	Improvements	General Public Input	Stakeholder Input	Traditional Market Coverage	Discretionary Market Coverage	Ridership Productivity	Connections to Key Destinations	Cost Efficiency	Score
1	Expanded North Port St. Lucie Microtransit	7	7	5	7	7	7	7	6.8
2	30-minute Frequency on Routes 1 and 3	7	7	5	7	7	7	7	6.8
3	New North Fort Pierce Microtransit	7	7	7	5	7	5	7	6.6
4	Extend Weekday Service Span to 10 PM	7	7	7	7	7	7	5	6.4
5	New South Fort Pierce Microtransit	7	7	3	5	5	7	7	6.3
6	Downtown/Rail Station/Beach Shuttle	7	5	5	5	5	7	7	6.1
7	Add Sun. Service on Routes 1, 2, 3, and 4	5	3	7	7	7	5	7	5.7
8	Extended Route 8	5	7	3	7	5	7	3	5
9	Dual Enrollment Shuttle	5	5	3	3	1	5	7	5
10	Add Saturday Service on Route 8	3	5	3	5	3	5	5	4.4
11	Streamline Route 7	1	1	5	3	7	3	7	3.9
12	Port St. Lucie Express	3	3	1	3	3	5	5	3.6
13	Airport/College Express	3	3	1	1	3	3	1	2

7 Very High 5 High 3 Moderate 1 Low/None

Section 9. Reimagine Transit: 10-Year Plan

This section summarizes the recommended 10-year transit plan for the *Reimagine Transit* TDP. This plan is crafted and derived from extensive data analysis along with input and support from the local community and its key stakeholders to reimagine transit services in St. Lucie County. The plan seeks to increase access and availability of alternative transportation modes within and adjacent to the county.

The recommended transit service, capital, technology, and policy improvements presented in this section are a culmination of the efforts conducted for this TDP, as summarized previously, to provide a road map to reimagine transit in St Lucie County. This includes improvement projects that can be funded or are unfunded. The capital/operating cost and revenue assumptions used to develop these funded and unfunded priorities are summarized before presenting a financial plan for the 10-year TDP. Subsequently, the 10-year implementation plan to reimagine St. Lucie's transit also is detailed.

Reimagine Transit

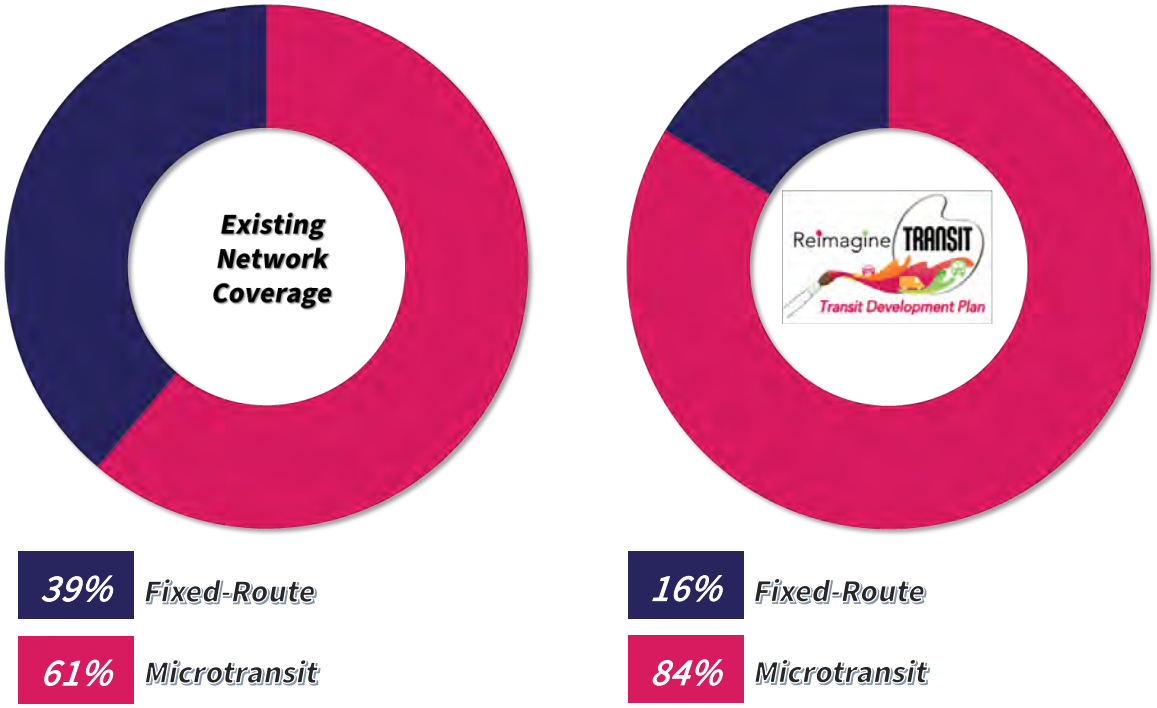
With guidance and direction from St Lucie TPO and St Lucie County, the *Reimagine Transit* TDP was developed to rethink transit options in the county. By reconfiguring and repurposing the traditional fixed-route bus network and expanding technology-based on-demand microtransit services significantly, transit in St Lucie will serve more areas and a greater number of people and trip purposes.

Immediate and sweeping changes to the services currently provided are not intended nor included in the 10-year plan to not disproportionately impact any service area or communities currently served. However, the recommended plan does include a clear shift from providing traditional large-vehicle bus services to more technology-based microtransit services using smaller vehicles.

As shown in Figure 9-1, the geographic coverage area of traditional bus service would see a reduction from 39% to 16%, while on-demand microtransit service would increase from 39% to 84% over the next 10 years. However, the reimagined plan still includes the large-vehicle fixed-route bus service options, especially on major corridors, as they are more efficient in capacity and cost.

With the implementation of this TDP, the transit service coverage in St Lucie County would increase by 96% by 2034, providing the residents and visitors of St Lucie County a mix of transit services to connect locally and regionally, including an app- and phone-based microtransit system, fixed-route bus service on major roadway and in high demand areas, express buses to connect regionally, and a vanpool program.

Figure 9-1: Mode Share | Existing and Reimagine Transit



The recommended 10-year service, capital, and technology improvements for the *Reimagine Transit* plan, presented in the remainder of this section, were derived after examining the previously presented needs with consideration to community direction, an understanding of the unique environment, review of goals and objectives, and demand assessments in conjunction with the projected funding sources. The recommended services are identified under each of the major improvement categories, including service, capital/infrastructure, and policy.

Service Improvements

The *Reimagine Transit* TDP service improvements that support the reconfiguration of service in St. Lucie County include the following.

Enhance Existing Fixed-Route Bus Route Network

- **30-minute Frequency on Routes 1 and 3**—Increase headways on Routes 1 and 3, which are the most productive ART routes today, to 30 minutes to create a high-frequency network.

Routes 1 and 3 will also connect with other ART routes at the Fort Pierce Intermodal Center, extending its reach.

- **Add Sunday Service on Routes 1, 2, 3, 4**—Add limited Sunday service on Routes 1, 2, 3, and 4 to provide riders who utilize these highly productive routes with daily service to key locations and corridors.
- **Repurpose Route 5**—Discontinue Route 5 and repurpose resources to extend Route 8.
- **Repurpose Route 6**—Discontinue Route 6 and repurpose resources into expanding ART On Demand microtransit within the Route 6 service area.
- **Streamline Route 7**—Realign segments of Route 7 to better serve residents in north St. Lucie County by creating north and south connectivity on Turnpike Feeder Road and US 1.
- **Extend Route 8**—Use repurposed resources from Route 5 to extend Route 8 from its current terminus at the Port St. Lucie Intermodal Center to the Tradition area. This route will then provide a one-seat ride between Fort Pierce and Tradition as well as to the Jobs Express Park & Ride, which is served by the new regional bus service from Palm Beach County.
- **Add Saturday Service on Route 8**—Add Saturday service on extended Route 8 will provide a direct weekend connection from Fort Pierce to the Tradition area.
- **Extend Evening Service Span**—The ART fixed-route network will provide service until 10:00 PM to extend transit service/access to later hours on weekdays.

Add New Services

- **Port St. Lucie Express**—A regional connection from Jobs Express Park & Ride in Port St. Lucie to Palm Beach County, linking ART to the Palm Tran bus network.
- **Downtown/Rail Station/Beach Shuttle**—Quick and high-frequency downtown-based service that will connect downtown Fort Pierce to Fort Pierce Intermodal Center, beaches on Hutchison Island, and any future passenger rail station in Fort Pierce (location to be determined).
- **Dual Enrollment Shuttle**—Shuttle service that will connect selected high schools in St. Lucie County to IRSC campuses.
- **Establish Vanpool Program**—A collaborative effort led by ART with South Florida Commuter Services to establish a well-coordinated vanpool program, adding another layer of travel alternatives in St. Lucie County.

Expand On-Demand Microtransit Services

The most significant improvement in the *Reimagine Transit* plan is the expansion of technology-based on-demand microtransit for St. Lucie County in the next 10 years. In addition to continuing the two existing and popular ART On Demand zones in the north and south Port St. Lucie areas, the plan recommends expanding ART On Demand microtransit services to substantially widen transit access in most of the populated areas in St. Lucie County over the next 10 years. The recommended plan expands the microtransit coverage, identified previously in the 10-year needs plan, to even more

areas, based on input from the recent TDP Phase II public outreach efforts, County staff direction, and a review of available and projected revenues. The recommended new microtransit service zones for the *Reimagine Transit* TDP, as summarized below, will offer an additional 121 square miles of transit access in St. Lucie County, compared to 71 square miles today.

- **New ART On Demand Service in Central Fort Pierce**—This zone would add on-demand transit in the area adjacent to the Treasure Coast International Airport/south of Indrio Road and north of St Lucie Boulevard. This service would provide on-demand coverage to neighborhoods and businesses in the Fort Pierce area in addition to the IRSC Massey campus. This zone expands coverage to a growing area while giving access to existing local Routes 2 and 3 and a regional connection to Indian River County, Route 7.
- **New ART On Demand Service in North St. Lucie**—This on-demand transit zone enhances transit access and establishes on-demand service in north St. Lucie County, an area that now only has transit access to regional Route 7. The zone covers areas south of Indian River County and borders the Central Zone while connecting to the Fort Pierce Intermodal Center.
- **New ART On Demand Service in Indian River Estates**—This new on-demand transit zone would connect riders in the Indian River Estates/Port St. Lucie area to Route 1 (which is proposed to operate every 30 minutes) and the extended Route 8, the Fort Pierce Intermodal Facility, and other destinations along US 1 north of Prima Vista Boulevard.
- **New ART On Demand Service in South St. Lucie**—This new on-demand transit zone aims to connect riders in the southeastern part of St. Lucie within the area and to Routes 1 and 4, the Port St. Lucie Intermodal Facility, and various destinations along US 1 and Port St. Lucie Boulevard.
- **Maintain ART On Demand Service in North Port St. Lucie**—The existing ART On Demand North Zone will be maintained, serving south of the Crosstown Parkway to the Midway Road area and west of 25th Street to areas near Glades Cutoff Road. This zone will also be expanded cover areas previously served by Route 6 while connecting riders in the Port St. Lucie area to extended Route 8, the Port St. Lucie Intermodal Facility, and the IRSC Pruitt campus.
- **Maintain ART On Demand Service in South Port St. Lucie**—The existing ART On Demand South Zone in Port St. Lucie would continue to serve areas south of the Crosstown Parkway to the St. Lucie County line from the Tradition area to the St. Lucie River. Like the ART On Demand North Zone, it will connect to the Port St. Lucie Intermodal Facility in addition to the Jobs Express and Bayshore park-and-ride facilities.

Map 9-1 shows the recommended 10-Year plan.

Map 9-1: 2034 Reimagine Transit Network

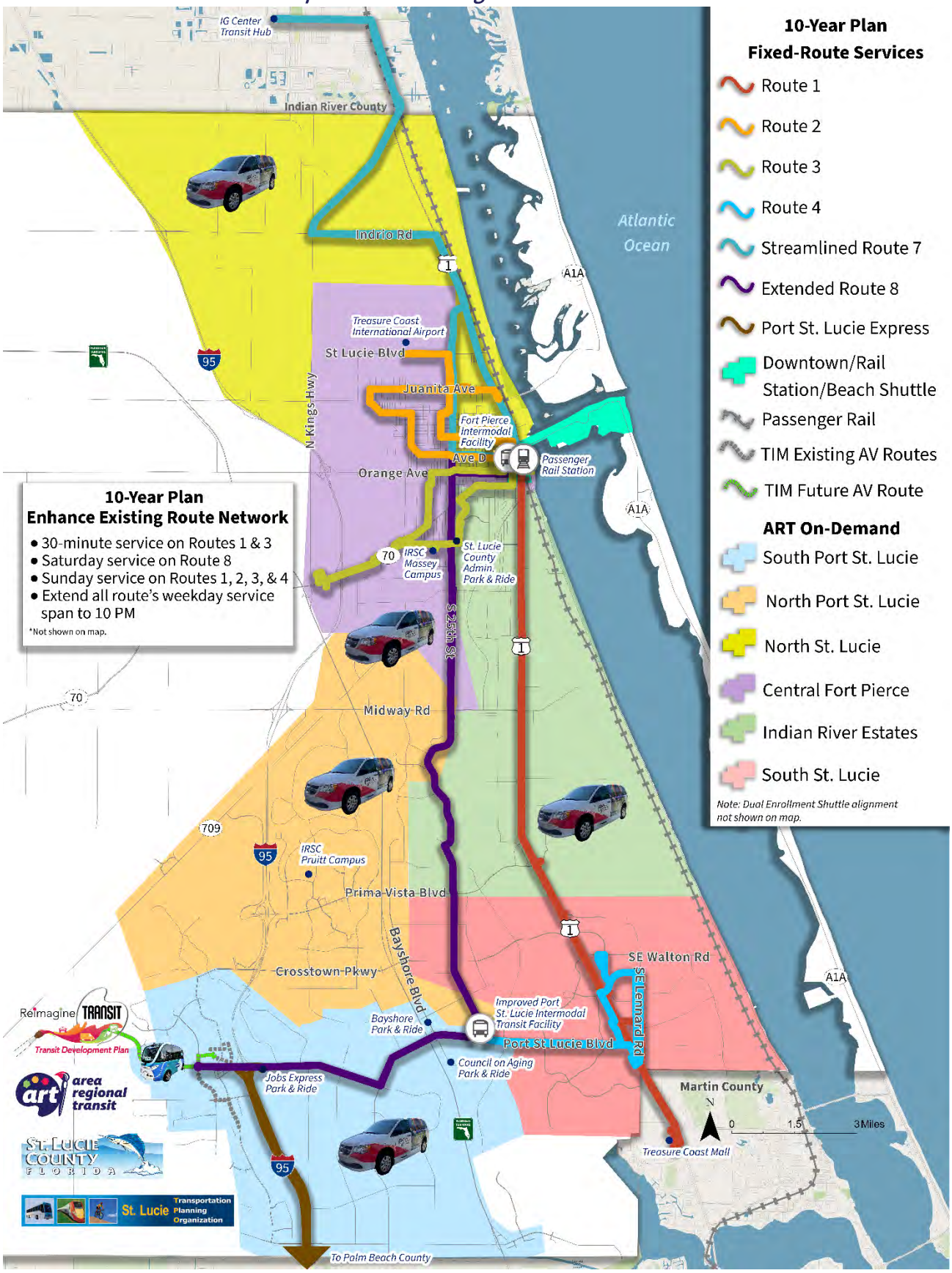


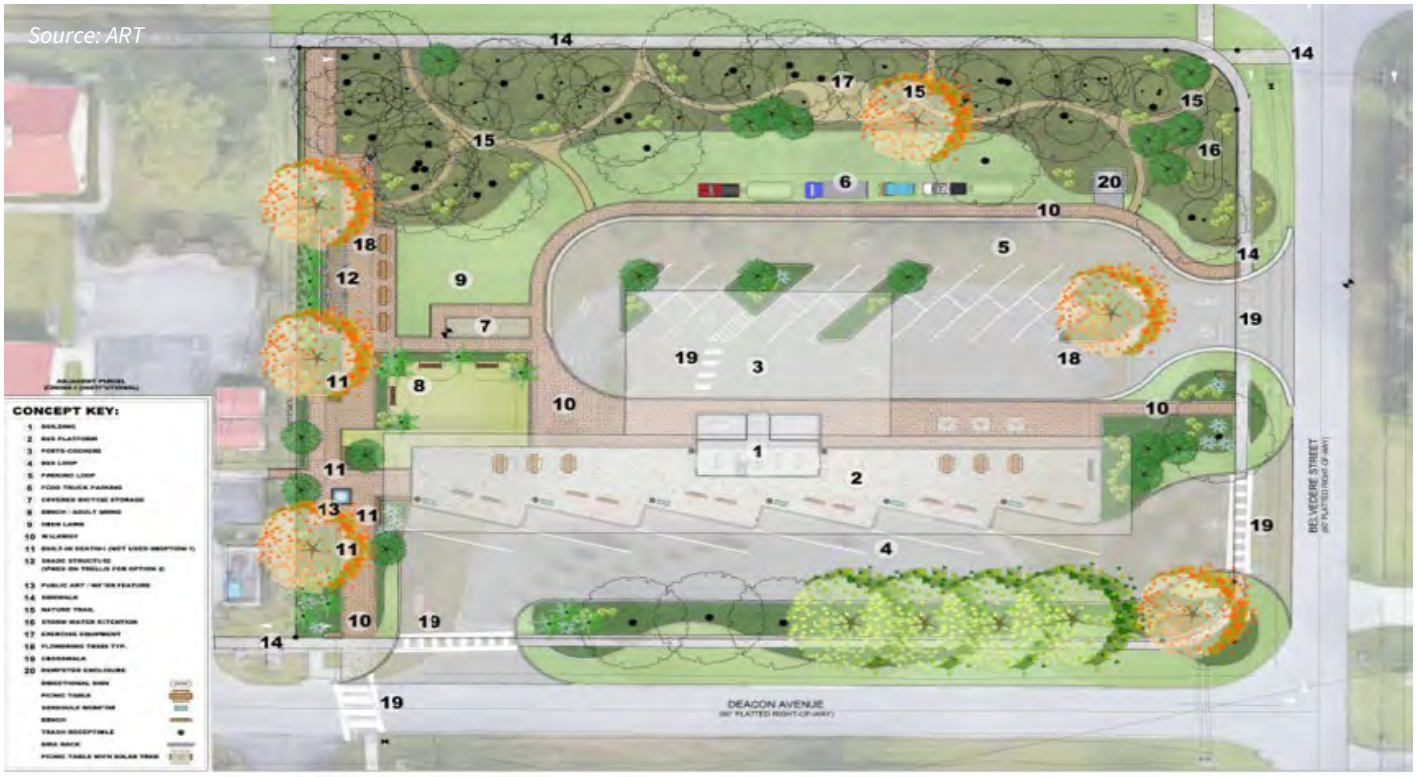
Table 9-1: Recommended ART 10-Year Network Characteristics

Route/Service Area	Headway	Weekday Service Span	Days of Service
Fixed-Route			
1	30	6:00 AM–10:00 PM	Monday–Sunday
2	60	6:00 AM–10:00 PM	Monday–Sunday
3	30	6:00 AM–10:00 PM	Monday–Sunday
4	60	6:00 AM–10:00 PM	Monday–Sunday
Streamlined 7	60	6:00 AM–10:00 PM	Monday–Friday
Extended 8	60	6:00 AM–10:00 PM	Monday–Saturday
Downtown/Passenger Rail Station/Beach Shuttle	15	6:00 AM–10:00 PM	Monday–Saturday
Port St. Lucie Express	N/A	2 trips AM & PM Peak	Monday–Friday
Dual Enrollment Shuttle	60	10:00 AM–6:00 PM	Monday–Friday
Expanded TIM	Varies	10:00 AM–2:00 PM 5:00 PM–9:00 PM	Monday–Sunday
ART On Demand Microtransit			
North Port St. Lucie	On-demand	6:00 AM–10:00 PM	Monday–Saturday
South Port St. Lucie	On-demand	6:00 AM–10:00 PM	Monday–Saturday
Central Fort Pierce	On-demand	6:00 AM–10:00 PM	Monday–Saturday
North St. Lucie	On-demand	6:00 AM–10:00 PM	Monday–Saturday
Indian River Estates	On-demand	6:00 AM–10:00 PM	Monday–Saturday
South St. Lucie	On-demand	6:00 AM–10:00 PM	Monday–Saturday

Capital/Policy/Technology Improvements

- **New ART Operations & Maintenance Facility**– The proposed operations and maintenance facility in St. Lucie County, now in the concept phase and expected to be located along Selvitz Road, will assist in supporting operations and increasing demand for services with the projected growth in the County. The facility will consolidate maintenance, administration, operations, vehicle parking, and vehicle maintenance to one single site for better coordination and efficiency. Partial funding for this facility has already been identified and future competitive grant funding will be pursued for the remaining amount needed.
- **New Port St. Lucie Intermodal Center** – The new Port St. Lucie Intermodal Center, which will be built at the same location ART currently uses as a key transfer point, is currently in the design phase and is soon expected to be advertised for a construction bid. The new and enhanced facility will feature six bus bays and incorporate CPTED design features along with restrooms.

Figure 9-2: Proposed Port St. Lucie Intermodal Center



- **Continue bus stop infrastructure and accessibility program** – ART's transit infrastructure and accessibility program will be continued, allowing ART to improve existing bus stop infrastructure/amenities where the need exists and/or demand warrants. Improving infrastructure can improve the rider experience and comfort at bus stops for existing riders and can help attract new riders.
- **Expand transit marketing and education campaign** – While ART staff tries continuously to reach out to the community to educate them on its services, its efforts have been limited due to limited financial and personnel resources. Therefore, to educate the community and improve awareness, which has been highlighted repeatedly by elected officials, stakeholders, and the public, additional financial resources are included to expand the current marketing/education efforts. Other than using the traditional tools, this would include increased use of social media platforms and other online tools. Emphasis also would be on increasing the awareness of various technologies, such as the real-time bus locater or ride-reservation apps available for the riders.
- **Enhanced performance monitoring program** – The existing performance monitoring of ART's services should be enhanced. A sample performance monitoring program is included in Appendix E for ART's consideration. A performance monitoring program tracks the

performance and efficiency of routes and the system as a whole and provides a convenient tool for ensuring the provision of efficient and effective transit service.

- **Deploy TSP/queue jumps at selected intersections** – TSP technologies and queue jumps will be deployed at applicable intersections on US-1 as part of implementing the enhancement of Route 1 service. Currently, there are 12 signalized intersections along US-1 selected for TSP and 12 selected for queue jumps. However, further evaluations/studies are necessary to determine the actual scale of deployment prior to implementing the technology.
- **Fare Policy/Structure Evaluation Study –** ART has been fare-free since 2017. ART should conduct a study to evaluate potential systemwide changes to fare amount and policy along with the resulting implications.
- **Continue fleet replacement and acquisition program** – As previously noted, ART should continue vehicle replacements and acquisitions to operate the proposed 10-year network.

10-Year TDP Financial Plan

A financial plan was developed and is summarized in this section to help program and facilitate the implementation of TDP improvements in the next 10 years. The cost and revenue assumptions used to develop the financial plan and a summary of cost and revenue projections are presented. The summary includes annual costs for service and capital projects including infrastructure, technology, or policy improvements programmed for implementation within the next 10 years and supporting revenues that are reasonably expected to be available to fund the implementation.

Operating Cost Assumptions

Numerous assumptions were made to forecast transit operating costs from 2025 through 2034. These assumptions are based on data from ART and other transit industry data. Key operating cost assumptions include the following:

- Operating costs for fixed-route services were estimated using an operating cost per revenue hour of $84.96 (2024$), based on an analysis of current and historical performance data provided by ART.
- Operating costs for current and new ART On Demand services were estimated using a per revenue hour cost of $26.23 (2024$) for FY 2025, based information provided by ART. Due to an anticipated new contract, an increase in cost is expected and an estimated revenue hour cost of $50.00 was used subsequently.
- Operating costs for paratransit, Advantage Ride, Direct Connect, and other purchased transportation services and associated software and other expenses are based on information provided by ART.
- Establishing and maintaining a vanpool program is estimated at $100,000 (2025$) annually. The cost was estimated based on the peer review in the St. Lucie Vanpool Assessment.

- As TIM services are privately funded, the operating costs for current or future TIM services are not included in this plan.
- As previously noted, the Dual Enrollment and Downtown/Passenger Rail Station/Beach Shuttles' routing are not yet determined. For cost calculation purposes, the following was assumed:
    - The Dual Enrollment Shuttle is to operate 8 hours a day during weekdays only using 2 vehicles.
    - The Downtown/Passenger Rail Station/Beach Shuttle is to operate 16 hours a day on weekdays and Saturdays using 1 vehicle.
- Based on data from ART, an inflation rate of approximately 2% was assumed. Salaries, which are categorized under "Other Expenses," are inflated at a rate of 3%.

Capital/Infrastructure Cost Assumptions

Several assumptions were made to project costs for infrastructure/technology needs to support implementation of the service alternatives described previously. These capital cost assumptions include the following:

- Based on data from ART an inflation rate of 2% was assumed.
- The cost of the Port St. Lucie Intermodal and Operations and Maintenance Facility architectural and engineering design and construction permitting, provided by ART, is assumed at $1.45 million (2025$) annually for FYs 2025 and Y2026. The construction of the Operations and Maintenance Facility is pending grant funding but is expected to cost $30 million.
- The costs of technology upgrades, bus stop/shelter improvements, and planning studies were based on information provided by ART.
- The cost of deploying TSP at an intersection is assumed to be $25,000 (2024$) and converting existing right-turn lanes to queue jump lanes at an intersection is assumed at $150,000 (2024$) per intersection. These assumptions are based on recent data from studies in the southeast region of the U.S. This plan assumes there will be 12 intersections where TSP and queue jumps will be deployed.
- The cost of Wi-Fi on buses is assumed to be $25,000 (2024$) annually with an initial set-up cost of $100,000 (2024$). This assumption is based on recent data from studies in the southeast region of the U.S.

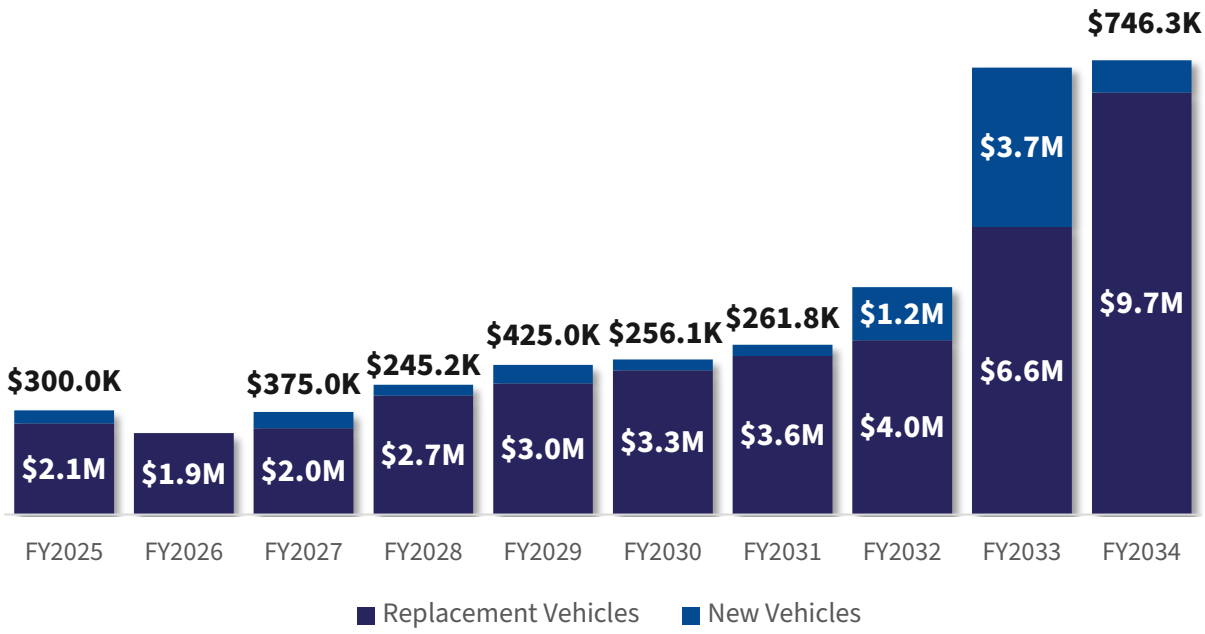
Vehicle Replacement/Acquisition

The vehicle replacement plan is a critical component of the financial plan. Figure 9-3 shows the cost for replacement and new vehicles by year for the TDP. The FTA-standard rate of 20% spare vehicle ratio is assumed for any new vehicle purchases.

The following assumptions were made:

- Vehicle life cycle (in years) assumptions are based on guidance from ART and include 12 years for fixed-route buses and 7 years for paratransit buses.
- Replacement vehicles planned to be purchased include those necessary to replace vehicles within the existing fleet that will reach the end of their useful life within the TDP planning period.
- The cost of a diesel bus is assumed at $600,000 (2024$) and the cost of a microtransit van is assumed at $74,897 (2024$), derived from data provided by ART staff.
- Due to the implementation of the ART On Demand Central Fort Pierce in FY 2025, it was assumed that the vehicles needed to support the service have already been acquired.
- As previously noted, an annual growth rate of 2% is used for capital cost projections, including vehicles.

Figure 9-3: 10-Year Vehicle Replacement and Acquisition Cost Plan



Other Cost Assumptions

When developing capital or operational improvements, it is important to anticipate supporting services such as additional planning resources and education/ marketing campaign costs. The following assumptions were made:

- The cost of expanding the transit marketing/education program is assumed at $100,000 (2024$) annually, beginning in FY 2026.
- The Transit Fare and Financial Study is assumed to be $300,000 (2026$).

Revenue Assumptions

Several revenue-related assumptions were used to project streams of revenue to support the 10-year TDP implementation. Revenue assumptions and projections for ART are based on data from ART staff, and information on transit industry/FDOT funding programs. The basic structure/composition of ART's mix of funding sources today, including federal, state, local, and agency-generated revenues, is expected to continue for the next 10 years.

The following additional key assumptions were used to project *Reimagine Transit* TDP revenues:

- Revenue projections from federal sources, including annual FTA formula grant funds and short-term grants, are based on information from ART.
- Contributions from the FTA 5307 Coronavirus Aid, Relief, and Economic Security (CARES) Act are assumed at $2.7 million (2025$) in FY 2025.
- Projections for existing funds from FDOT, such as Block Grant funding, are assumed to continue, per ART.
- Projections for existing FDOT grants, such as Corridor Development and Service Development funding, are assumed to continue until FY 2026, per ART.
- The Florida CTD trip and equipment funding is expected to continue at $692,800 (2025$) annually.
- Local sources, including MSTU funds, are assumed at $8.4 million annually (2025$). Reserves from MSTU are expected to contribute $4.3 million (2025$) for FY 2025. Contributions from the MSTU for buildings are expected to contribute $53,250 (2025$) in FY 2025.
- Contributions from the General Fund are expected to be $5.5 million (2025$) in FY 2025.
- Other revenues include Clear Channel advertising, $66,105 (2025$) annually, and interest on investments, $20,240 (2025$) annually.
- Capital funds that are expected to roll over from the previous fiscal year are $867,715 (2025$) in FY 2025.
- This plan assumes additional new funding to assist with the implementation of key projects to improve the attractiveness of transit for discretionary riders and increase the quality of service for existing riders locally and regionally.

  - A new federal Section 5310 operating grant is expected to contribute $100,000 (2026$) annually from FYs 2026 to 2034.
  - A new federal Section 5310 travel training grant totaling $803,179 from FYs 2025 to 2034.
  - A new federal Section 5311 grant is assumed for $642,978 in total from FYs 2025 to 2034.
  - A new FDOT Service Development grant would fund partial operating expenses for new microtransit service over three years.
  - A new FDOT Intermodal Grant, assumed at $1.5 million (2025$), would fund some of the Port St. Lucie Intermodal Center.
  - A new FDOT grant would help cover replacement and new vehicles.
  - FDOT Corridor Development funding, in partnership with Palm Tran, will cover operating and capital expenses for the Port St. Lucie Express.
  - South Florida Commuter Services funding for the vanpool services is assumed at $100,000 (2025$) annually.
  - New local or grant funding, totaling $28 million, is needed to fund the new operations and maintenance facility and the Port St. Lucie Intermodal Facility.
- As ART is currently fare-free, the plan assumes no change to the current fare policy and no fare revenues.

10-Year Cost/Revenue Summary

Annual operating and capital costs and supporting revenues for ART are summarized in Table 9-2. As shown, it would cost $186.5 million to operate ART services in the next 10 years, with another $97.0 million in capital costs to support the necessary fleet and capital infrastructure. Operating costs would continue to be funded mainly with a mix of local, state, and federal sources.

Figure 9-4 shows the annual operating and capital costs for the *Reimagine Transit* TDP implementation plan, and Figure 9-5 shows the total costs and revenues by year to support it. Figure 9-6 shows the expected revenues by source.

Table 9-2: 10-Year Financial Plan

Cost/Revenue	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	Total
Operating Costs											
Existing ART Fixed-Route	$3,420,105	$3,488,508	$3,558,278	$3,629,443	$3,702,032	$3,776,073	$3,059,926	$3,121,124	$3,183,547	$3,247,218	**$34,186,253**
Existing ART On-Demand (Zone 1 and 2)	$1,350,320	$3,042,000	$3,102,840	$3,163,680	$3,224,520	$3,285,360	$3,346,200	$3,407,040	$3,467,880	$3,528,720	**$30,918,560**
Paratransit	$4,520,304	$4,429,898	$4,341,300	$4,254,474	$4,211,929	$4,169,810	$4,128,112	$4,086,831	$4,045,962	$4,005,503	**$42,194,123**
Advantage Ride	$152,550	$155,143	$157,781	$160,463	$163,191	$165,965	$168,787	$171,656	$175,089	$178,591	**$1,649,216**
Direct Connect	$459,318	$468,504	$477,874	$487,432	$497,181	$507,124	$517,267	$527,612	$538,164	$548,928	**$5,029,404**
Purchased Transportation Staffing and Maintenance	$2,409,637	$2,323,507	$2,369,977	$2,417,377	$2,465,724	$2,515,039	$2,565,339	$2,616,646	$2,668,979	$2,722,359	**$25,074,584**
Software	$452,032	$219,078	$223,459	$227,928	$246,886	$251,823	$266,051	$278,118	$283,681	$289,354	**$2,738,410**
Other Operating Expenses	$1,373,799	$1,012,038	$1,041,098	$1,071,004	$1,101,780	$1,133,453	$1,166,049	$1,199,594	$1,223,586	$1,248,057	**$11,570,457**
New Vanpool Program	$100,000	$102,000	$104,040	$106,121	$108,243	$110,408	$112,616	$114,869	$117,166	$119,509	**$1,094,972**
New ART On-Demand Microtransit	$368,269	$936,000	$954,720	$973,440	$1,736,280	$1,769,040	$2,574,000	$2,620,800	$3,467,880	$3,528,720	**$18,929,149**
30-minute Frequency on Route 1	$702,979	$717,039	$731,380	$746,007	$760,928	$776,146	$791,669	$807,502	$823,652	$840,125	**$7,697,429**
Extended Route 8	$182,351	$186,373	$190,483	$194,684	$198,978	$203,366	$207,851	$212,435	$217,120	$221,909	**$2,015,549**
Sunday Service on Routes 1, 2, 3, & 4	$0	$0	$0	$0	$0	$151,072	$154,404	$157,809	$161,289	$164,847	**$789,420**
Add Saturday Service on Route 8	$0	$0	$0	$0	$0	$0	$92,642	$94,685	$96,774	$98,908	**$383,009**
30-minute Frequency on Route 3	$0	$0	$0	$0	$0	$0	$0	$0	$427,691	$437,124	**$864,815**
Extend Weekday Service to 10PM	$0	$0	$0	$0	$0	$0	$0	$0	$0	$427,756	**$427,756**
Dual Enrollment Shuttle	$0	$0	$0	$0	$0	$0	$0	$0	$0	$427,756	**$427,756**
Downtown/Rail Station/Beach Shuttle	$0	$0	$0	$0	$0	$0	$0	$0	$0	$515,674	**$515,674**
Total Operating Costs	**$15,491,665**	**$17,080,087**	**$17,253,229**	**$17,432,052**	**$18,417,671**	**$18,814,679**	**$19,150,912**	**$19,416,722**	**$20,898,461**	**$22,551,056**	**$186,506,535**
Capital Costs											
New Vehicles	$300,000	$0	$375,000	$245,178	$425,000	$256,112	$261,761	$1,214,404	$3,650,799	$746,263	**$7,474,517**
Replacement Vehicles	$2,086,458	$1,865,393	$1,974,829	$2,730,000	$3,003,000	$3,303,300	$3,633,630	$3,996,993	$6,595,038	$9,672,723	**$38,861,365**
Vehicles	**$2,386,458**	**$1,865,393**	**$2,349,829**	**$2,975,178**	**$3,428,000**	**$3,559,412**	**$3,895,391**	**$5,211,397**	**$10,245,837**	**$10,418,986**	**$46,335,882**
Planning Studies	$0	$0	$0	$200,000	$0	$0	$0	$300,000	$250,000	$300,000	**$1,050,000**
Transit Fare & Financial Study	$0	$300,000	$0	$0	$0	$0	$0	$0	$0	$0	**$300,000**
Technology Upgrades	$385,000	$500,000	$0	$0	$0	$0	$337,849	$344,606	$351,498	$717,056	**$2,636,008**
New and Existing Bus Stop/Shelter Improvements	$108,704	$221,756	$226,191	$230,715	$235,329	$240,036	$244,837	$374,600	$764,184	$779,468	**$3,425,821**
O+M Facility	$1,207,000	$1,207,000	$0	$15,000,000	$15,000,000	$0	$0	$0	$0	$0	**$32,414,000**
PSL Intermodal Facility	$215,500	$215,500	$4,500,000	$0	$0	$0	$0	$0	$0	$0	**$4,931,000**
Expand Transit Marketing/Education Program	$0	$208,919	$213,527	$218,236	$223,049	$227,968	$232,996	$476,269	$486,773	$995,018	**$3,282,755**
TSP	$0	$104,460	$106,763	$0	$0	$0	$0	$59,534	$60,847	$0	**$331,603**
Queue Jumps	$0	$626,757	$640,580	$0	$0	$0	$0	$357,202	$365,080	$0	**$1,989,619**
Wi-Fi on Buses	$0	$0	$100,000	$27,279	$27,881	$28,496	$29,125	$29,767	$30,423	$31,094	**$304,066**
Other Capital and Policy	**$1,916,204**	**$3,384,392**	**$5,787,061**	**$15,676,231**	**$15,486,260**	**$496,500**	**$844,806**	**$1,941,978**	**$2,308,805**	**$2,822,635**	**$50,664,872**
Total Capital Costs	**$4,302,662**	**$5,249,785**	**$8,136,890**	**$18,651,409**	**$18,914,260**	**$4,055,912**	**$4,740,197**	**$7,153,375**	**$12,554,643**	**$13,241,622**	**$97,000,754**
Revenues											
Local Operating Funds											
MSTU	$8,416,621	$8,584,953	$8,756,652	$8,931,786	$9,110,421	$9,292,630	$9,478,482	$9,668,052	$9,861,413	$10,058,641	**$92,159,652**
MSTU Reserves	$4,336,883	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,336,883**
South Florida Commuter Services	$100,000	$102,000	$104,040	$106,121	$108,243	$110,408	$112,616	$114,869	$117,166	$119,509	**$1,094,972**
Federal Funds											
Supergrant- 5307	$2,447,711	$2,937,253	$3,524,704	$4,229,645	$5,075,574	$6,090,688	$7,308,826	$8,770,591	$10,524,709	$12,629,651	**$63,539,352**
5310 Operating Grant	$0	$100,000	$102,000	$104,040	$106,121	$108,243	$110,408	$112,616	$114,869	$117,166	**$975,463**
5310 Travel Training	$159,456	$0	$75,000	$76,500	$78,030	$79,591	$81,182	$82,806	$84,462	$86,151	**$803,179**
5311	$128,000	$0	$60,000	$61,200	$62,424	$63,672	$64,946	$66,245	$67,570	$68,921	**$642,978**
State Funds											
FDOT Corridor Development	$300,000	$300,000	$0	$0	$0	$0	$0	$0	$0	$0	**$600,000**
FDOT Block Grant	$766,399	$781,727	$797,362	$813,309	$829,575	$846,166	$863,090	$880,352	$897,959	$915,918	**$8,391,855**
FDOT Service Dev- Micro Zone 2	$429,647	$159,098	$0	$0	$0	$0	$0	$0	$0	$0	**$588,745**
FCTD Trip & Equipment Grant	$692,844	$706,701	$720,835	$735,252	$749,957	$764,956	$780,255	$795,860	$811,777	$828,013	**$7,586,448**
FDOT Service Development- New Micro Zones	$0	$0	$0	$0	$432,515	$440,744	$839,693	$465,336	$873,940	$889,453	**$3,941,681**
Other Revenues											
Clear Channel Advertising	$66,105	$67,427	$68,776	$70,151	$71,554	$72,985	$74,445	$75,934	$77,453	$79,002	**$723,831**
Interest on Investments	$20,340	$20,747	$21,162	$21,585	$22,017	$22,457	$22,906	$23,364	$23,832	$24,308	**$222,717**
Total Operating Revenues	**$17,864,006**	**$13,759,906**	**$14,230,530**	**$15,149,587**	**$16,646,430**	**$17,892,541**	**$19,736,850**	**$21,056,024**	**$23,455,148**	**$25,816,733**	**$185,607,757**
Capital Revenues											
Local Funds- taken from operations	$390,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$390,000**
General Fund 316	$4,248,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$4,248,000**
General Fund 316 Reserves	$1,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,000,000**
General Fund 001 (Building - 562000)	$230,564	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$230,564**
MSTU Buildings 130 (552200)	$53,250	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$53,250**
FTA Super Grant (5307 + 5339)	$2,287,752	$2,745,302	$3,294,363	$3,953,235	$4,743,883	$5,692,659	$6,831,191	$8,197,429	$9,836,915	$11,804,298	**$59,387,027**
FTA/FDOT 5310 Vehicle grant	$593,409	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$593,409**
FDOT Intermodal Grant	$1,500,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$1,500,000**
FTA 5307 CARES Act Grant (130138)	$2,724,971	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$2,724,971**
Capital Funds Rolled Over	$867,715	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$867,715**
New Local or Grant Funds Needed	$0	$1,900,000	$26,000,000	$0	$0	$0	$0	$0	$0	$0	**$27,900,000**
Total Capital Revenues	**$13,895,661**	**$4,645,302**	**$29,294,363**	**$3,953,235**	**$4,743,883**	**$5,692,659**	**$6,831,191**	**$8,197,429**	**$9,836,915**	**$11,804,298**	**$98,894,936**
All Revenues	**$31,759,667**	**$18,405,209**	**$43,524,893**	**$19,102,823**	**$21,390,313**	**$23,585,200**	**$26,568,040**	**$29,253,453**	**$33,292,063**	**$37,621,031**	**$284,502,692**
10-Year Cost & Revenue Summary											
Total Revenues	**$31,759,667**	**$18,405,209**	**$43,524,893**	**$19,102,823**	**$21,390,313**	**$23,585,200**	**$26,568,040**	**$29,253,453**	**$33,292,063**	**$37,621,031**	**$284,502,692**
Total Costs	**$19,794,327**	**$22,329,872**	**$25,390,120**	**$36,083,461**	**$37,331,931**	**$22,870,592**	**$23,891,109**	**$26,570,096**	**$33,453,104**	**$35,792,677**	**$283,507,289**
Revenues Minus Costs	**$11,965,340**	**-$3,924,663**	**$18,134,773**	**-$16,980,638**	**-$15,941,618**	**$714,608**	**$2,676,932**	**$2,683,357**	**-$161,040**	**$1,828,354**	
Rollover from Prev. Year	**$0**	**$11,965,340**	**$8,040,676**	**$26,175,450**	**$9,194,811**	**-$6,746,807**	**-$6,032,199**	**-$3,355,267**	**-$671,910**	**-$832,950**	
Surplus/Shortfall	**$11,965,340**	**$8,040,676**	**$26,175,450**	**$9,194,811**	**($6,746,807)**	**($6,032,199)**	**($3,355,267)**	**($671,910)**	**($832,950)**	**$995,404**	**$995,404**

Figure 9-4: Total Costs—Operating and Capital

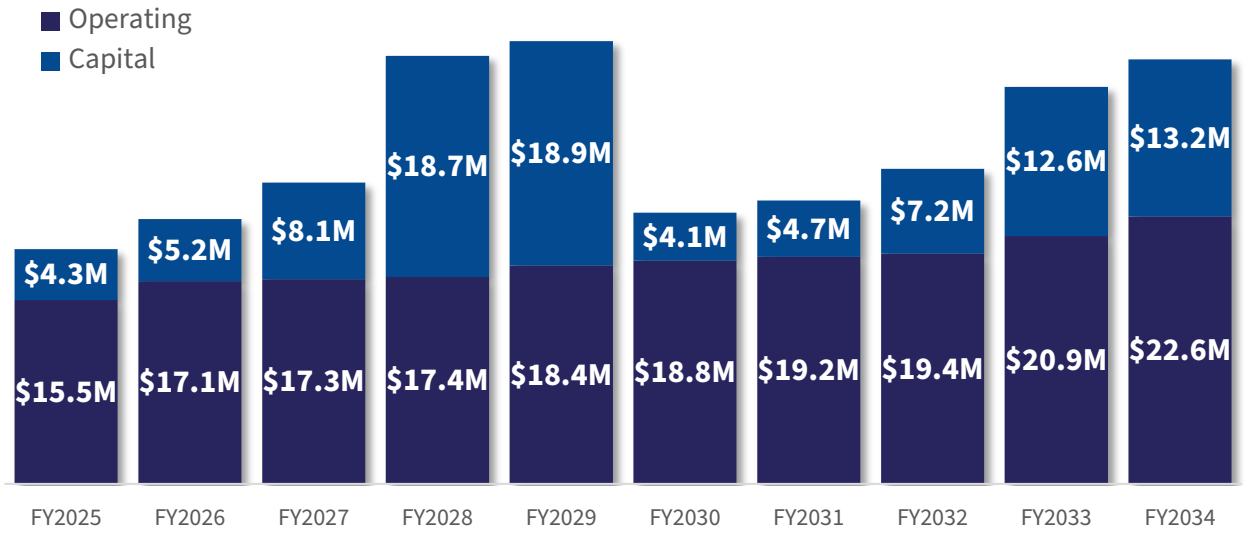


Figure 9-5: Total Costs and Revenues

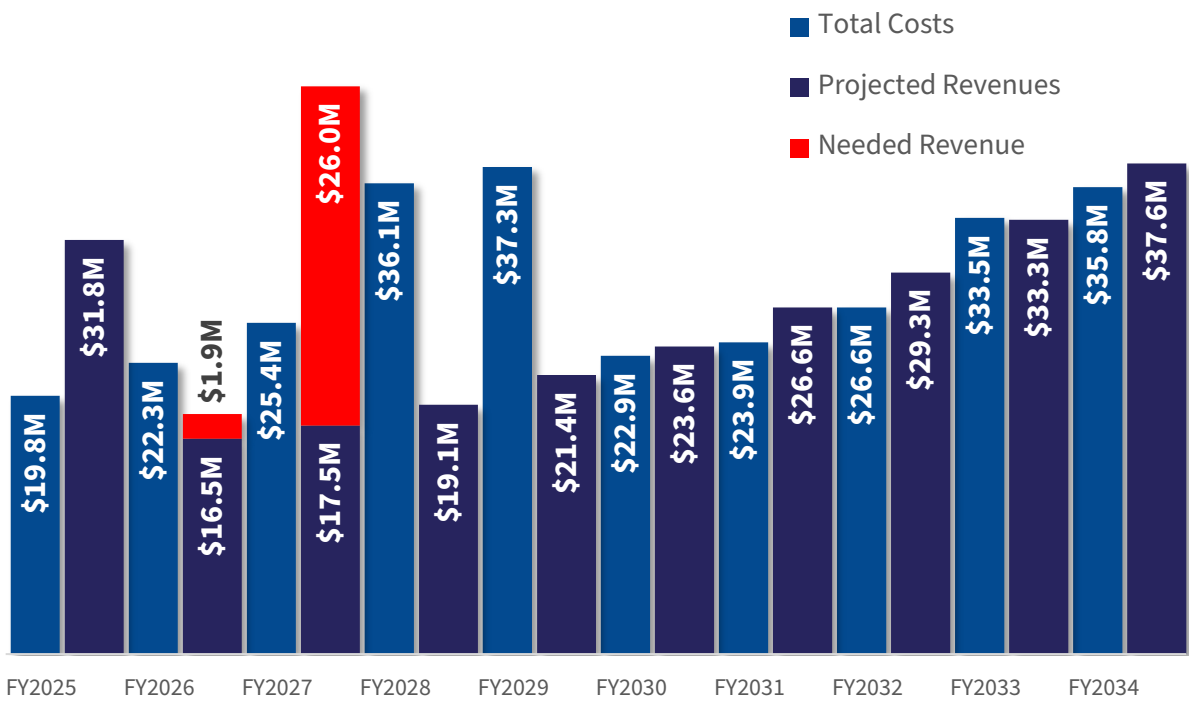
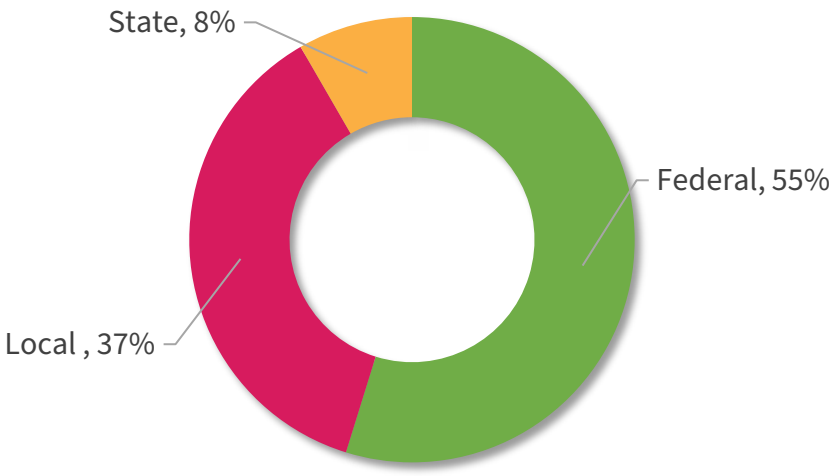


Figure 9-6: 10-Year Revenue Distribution



10-Year TDP Implementation Plan

The implementation plans presented in Tables 9-3 and 9-4, respectively, outline operating and capital improvements that are funded in the 10-Year TDP, as well as unfunded needs. The tables also show the implementation years, operating and capital costs associated with the improvements, and the type of anticipated funding sources for the plan.

It should be noted that the schedule shown in the table does not preclude the opportunity to delay or advance any projects. As priorities change, funding assumptions do not materialize, and/or more funding becomes available, this project implementation schedule can and should be adjusted.

Table 9-3: Reimagine Transit TDP Implementation Plan and Unfunded Needs | Service

Improvements	Funding Status	Implementation Year (FY)	Annual Operating Cost (2025$)	Total Capital Cost (2025$)	Potential Revenue Source	TDP Goal/Objective
Central Fort Pierce ART On Demand	Funded	2025	$368,269	$224,691	Local/FDOT Service Dev.	1 2 5
Port St. Lucie Express	Funded	2025	$1,100,000	N/A	FDOT Corridor Dev./Palm Tran	1 2 3 5
30-minute Frequency on Route 1	Funded	2025	$702,979	N/A	Local	1 2 5
Streamline Route 7	Funded	2025	$0	N/A	Local	1 2 5
Extended Route 8	Funded	2025	$182,351	N/A	Local	1 2 5
Establish Vanpool	Funded	2025	$100,000	N/A	Local	1 2 5
South St. Lucie ART On Demand	Funded	2029	$694,620	$224,691	Local/FDOT Service Dev.	1 2 5
Add Sun. Service on Routes 1, 2, 3, and 4	Funded	2030	$132,538	N/A	Local	1 2 5
Indian River Estates ART On Demand	Funded	2031	$694,620	$224,691	Local/FDOT Service Dev.	1 2 5
Add Saturday Service on Route 8	Funded	2031	$79,523	N/A	Local	1 2 5
30-minute Frequency on Route 3	Funded	2033	$351,450	$600,000	Local	1 2 5
North St. Lucie ART On Demand	Funded	2033	$694,620	$224,691	Local/FDOT Service Dev.	1 2 5
Extend Weekday Service Span to 10 PM	Funded	2034	$343,918		Local	1 2 5
Dual Enrollment Shuttle	Funded	2034	$343,918	$1,200,000	Local	1 2 5
Downtown/Passenger Rail Station/Beach Shuttle	Funded	2034	$414,605	$600,000	Local	1 2 5
Airport/College Express	Unfunded	Unfunded	$257,939	$600,000	Unfunded	1 2 5

Table 9-4: Reimagine Transit TDP Implementation Plan and Unfunded Needs | Capital

Improvements	Funding Status	Implementation Year (FY)	Annual Operating Cost (2025$)	Total Capital Cost (2025$)	Potential Revenue Source	TDP Goal/Objective
Bus Stop/Shelter Improvements	Funded	2025	N/A	$100,000	FTA	1 2 3 4 5
Port St. Lucie Intermodal	Partially Funded	2025-2027	N/A	$5,000,000	Local/FTA	1 2 3 4 5
Operations and Maint. Facility	Partially Funded	2025-2029	N/A	$30,000,000	Local/FTA	1 2 3 4 5
Fare Policy/Structure Evaluation Study	Funded	2026	N/A	$300,000	Local	1 2
Expand Transit Marketing/ Education Program	Funded	2026	N/A	$100,000	Local	1 2 3 5
TSP	Funded	2026-2033	N/A	$25,000	Local/FTA	1 2 3 4 5
Queue Jumps	Funded	2026-2033	N/A	$150,000	Local/FTA	1 2 3 4 5
Wi-Fi on Buses	Funded	2027-2034	$25,000	$100,000	Local	1 2 3 5

St. Lucie Transportation Planning Organization

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AGENDA ITEM SUMMARY

Board/Committee:	St. Lucie TPO Board
Meeting Date:	June 5, 2024
Item Number:	9d
Item Title:	Advanced Air Mobility (AAM) Study Phase 2
Item Origination:	UPWP
UPWP Reference:	Task 3.6- Freight Planning
Requested Action:	Accept Phase 2 of the AAM Study, accept with conditions, or do not accept.
Staff Recommendation:	Based on the recommendations of the TPO Advisory Committees and because the proposed AAM concept aligns with the goals of the SmartMoves 2045 Long Range Transportation Plan, and the Study further advances the AAM effort by providing a comprehensive evaluation and analysis of the potential vertiports in the TPO area, it is recommended that Phase 2 of the AAM Study be accepted.

Attachments
- Staff Report
- Draft AAM Phase 2 Study

St. Lucie Transportation Planning Organization

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MEMORANDUM

TO: St. Lucie TPO Board

THROUGH: Peter Buchwald
Executive Director

FROM: Yi Ding
Transportation Systems Manager

DATE: May 29, 2024

SUBJECT: Advanced Air Mobility (AAM) Study Phase 2

BACKGROUND

Advanced Air Mobility (AAM) is an air transportation system that moves people and cargo between places not currently or easily served by surface transportation or existing aviation modes. At a mature state, AAM will integrate revolutionary aircraft including Electrical Vertical Take-Off and Landing Vehicles (eVTOL) and Unmanned Aircraft Systems (UAS) into highly automated networks.

The emerging AAM technology is outpacing the development of the regulatory framework. Currently, there is limited AAM-related guidance at the Federal, State, and local levels. In 2022, the St. Lucie TPO retained Kimley-Horn and Associates (KHA), one of the TPO's General Planning Consultants, to conduct a Drone Port/AAM Study Phase 1 which provided a preliminary review of the AAM industry and recommended potential opportunities for the TPO to integrate AAM into the future planning activities. To continue the effort, the AAM Study Phase 2 was included in Task 3.6, Freight Planning, of the FY 022/23 – FY 2023/24 Unified Planning Work Program (UPWP).

ANALYSIS

The attached AAM Study Phase 2 was again conducted by KHA. The first task of the study involved analyzing local consumer demand for AAM transportation. This analysis utilized the most up-to-date census data to

identify census tracts that exhibit the highest demand for AAM transportation and to gain a comprehensive understanding of the potential demand for AAM in the TPO area.

The second task included a preliminary site review of the Treasure Coast International Airport property as part of a preliminary vertiport site review and identified potential vertiport locations on Airport property.

The final step of the study consolidated the findings of the first two evaluations and developed a visualization of AAM operations in the TPO area. Two specific locations, Southern Groves Development Area and the Treasure Coast International Airport, for vertiport integration were identified to generate basic travel metrics to provide context of how AAM integration could potentially benefit or impact the current transportation network in the TPO area.

The proposed AAM concept aligns with the goals of the SmartMoves 2045 Long Range Transportation Plan including Supporting Economic Activities and Providing Travel Choices.

At their meetings during the week of May 20th, the TPO Advisory Committees recommended acceptance of the Phase 2 of the AAM Study.

RECOMMENDATION

Based on the recommendations of the TPO Advisory Committees and because the proposed AAM concept aligns with the goals of the SmartMoves 2045 Long Range Transportation Plan, and the Study further advances the AAM effort by providing a comprehensive evaluation and analysis of the potential vertiports in the TPO area, it is recommended that Phase 2 of the AAM Study be accepted.

St. Lucie Transportation Planning Organization

May 2024

St. Lucie TPO AAM Phase II Study

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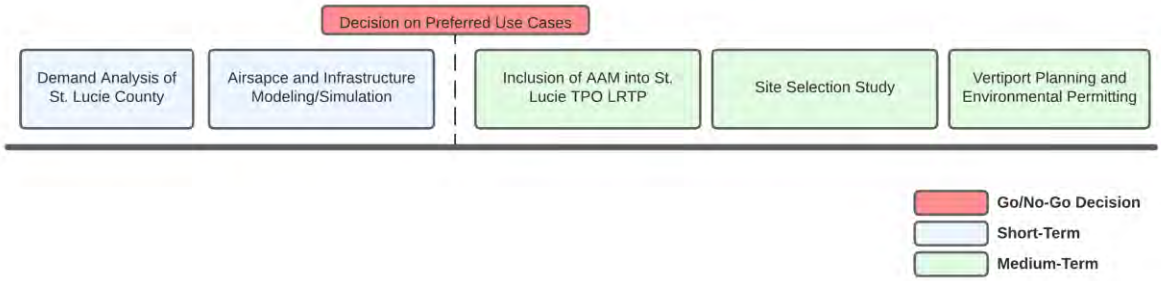
Chapter 1. Introduction

1.1. Background on Advanced Air Mobility and Prior Studies from Port St. Lucie Transportation Planning Organization (TPO)

Advanced Air Mobility (AAM) is an air transportation system that moves people and cargo between local, regional, intraregional, and urban places previously served or underserved by aviation. At a mature state, AAM will integrate revolutionary aircraft including Electrical Vertical Take-Off and Landing (eVTOL) aircraft, Short Take-Off and Landing (STOL) aircraft, Unmanned Aircraft Systems (UAS) or drones, fixed-wing aircraft, and helicopters into highly automated networks. Currently, the new AAM technology is outpacing the development of the regulatory framework with limited AAM-related guidance at the federal, state, and local levels. As such, the St. Lucie Transportation Planning Organization (TPO) is independently seeking to learn more about this emerging industry and explore the possible integration of AAM into the region.

Prior to this study, the TPO has undertaken an initiative as part of its FY 2022/23 Unified Planned Work Program (UPWP) to gain a deeper understanding of the emerging industry. This effort has resulted in the creation of the ***Drone Port/Advanced Air Mobility Preliminary Review***, completed in 2022. This study provides recommendations and outlines potential opportunities for TPO to support the integration of AAM into the TPO area as depicted in **Figure 1** below.

Figure 1 – St. Lucie TPO AAM Integration Roadmap



Source: Drone Port/Advanced Air Mobility Preliminary Review, St. Lucie TPO 2022

To further advance the AAM effort, TPO has taken the initiative as part of its FY 2023/24 UPWP to make progress on the short-term action items identified in **Figure 1** above**,** specifically the demand analysis of St. Lucie County and airspace/infrastructure modeling (the blue cells in the above figure). These studies will now be referred to as Phase 2 studies going forward and this technical memorandum provides a summary of the findings from Phase 2. As this technical memorandum does not include general information regarding AAM, readers are encouraged to refer to the TPO's ***Drone Port/Advanced Air Mobility Preliminary Review*** for a better understanding of the AAM system.

1.2. Purpose of the Study

The purpose of this study was to conduct a short-term evaluation as outlined in the roadmap. This evaluation included analyzing potential vertiport locations in the TPO area, assessing the suitability of on-

airport locations at Treasure Coast International Airport (FPR), and modeling and simulating airspace in the St. Lucie County based on the findings of the first two evaluations.

It is important to note that this study does not consider cargo use cases for vertiports, as companies like Amazon Prime Air and Wisk have expressed their intention to deliver goods directly from warehouses to customers' homes. Therefore, location of the cargo use case vertiport would primarily be driven by the existing or planned warehouse locations of delivery and Ecommerce companies. Conversely, the passenger use case requires a last-mile connection to consumers' final destinations. Indicating that location of the destination vertiport is crucial for the users as it impacts the cost of last-mile transportation, time savings, and overall convenience for users of AAM.

The initial task of the study involved analyzing off-site demand to assess local consumer demand in AAM transportation. This analysis utilized anonymous location-based primary trip data and the most up-to-date census data (2020)—such as average commute time to work, median household income, and population density—to identify two census tracts that exhibit the highest demand for AAM transportation, and to gain a comprehensive understanding of the potential demand for AAM in the TPO area.

The second task included a preliminary site review of the Treasure Coast International Airport property as part of a preliminary vertiport site review. The analyses listed below were performed as part of this study, and three (3) potential vertiport location on Airport property were identified as a result of these analyses. Given the limited scope of the study, it is important to acknowledge that the findings generated were preliminary. Therefore, it is recommended that a comprehensive review be conducted by the TPO or the Airport Sponsors prior to integrating a vertiport infrastructure into the FPR.

1. Integration into airspace/airport operations: performed cursory airspace analysis to identify clearance requirements and potential obstacles (e.g., buildings, towers, vegetation) to future vertiport imaginary surfaces, including obstacle clearance surfaces and Part 77 surfaces. This analysis utilized obstacle data provided by the Airport (if applicable), the Airport' s most recent FAA-approved airport layout plan (ALP), data from the FAA' s Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) database, and/or the Consultant' s knowledge of the project area. As part of this analysis, the vertiport approach, departure, and transitional surfaces, as published in Engineering Brief (EB) 105 and Title 14 Code of Federal Regulations (CFR) Part 77, respectfully, were evaluated to determine eVTOL ingress/egress clearance requirements, and potential obstacles. A review of the Airport's approach and departure procedures, traffic flow, and the surrounding airspace was also included.
2. FAA separation standards: reviewed FAA separation standards for aircraft operations, utilizing guidance published in EB 105, FAA Advisory Circular (AC) 150/ 5300-13B – Airport Design, and FAA Order JO 7110. 65 – Air Traffic Control.
3. Potential for future vertiport infrastructure and expansion possibilities: reviewed Airport property to identify three (3) area that may be used for future vertiport and related development.

The final step of the project consolidated the findings of the first two evaluations and developed a visualization of AAM operations in the TPO area. Two specific locations for a vertiport integration were identified to generate basic travel metrics to provide context of how AAM integration could potentially benefit or impact the current transportation network in the TPO region.

1.3. Goals and Objectives

The goals and objectives of this study integrated the goals of the Federal, State, and the TPO's Long Range Transportation Plan (LRTP), ***SmartMoves 2045***, which aims to provide the public with a safe and efficient multimodal transportation system. The LRTP goals are as follows:

1. Support Economic Activities
2. Provide Travel Choices
3. Maintain the Transportation system
4. Provide Equitable, Affordable, and Sustainable Urban Mobility
5. Improve Safety and Security

Source: SmartMoves 2045, St. Lucie TPO 2021

While no specific performance measures were considered in this analysis, the above LRTP goals guided the decision-making process throughout the study in order to establish an outcome that promotes a safe and efficient transportation system while also preserving equity of the community members in the TPO area.

1.4. Technical Advisory Committee (TAC)

A Technical Advisory Committee (TAC) was established to provide ongoing guidance and support throughout the project. These members offered local, regional, statewide, and national insights on various issues affecting the AAM industry. Throughout the process, the TAC members were consulted and engaged, providing feedback on the usefulness and effectiveness of each study task. The TAC consisted of stakeholders with extensive knowledge and experience in traditional aviation, AAM, transportation, and related fields. The following organizations were represented by the TAC:

- Federal Aviation Administration (FAA)
- Florida Department of Transportation (FDOT)
- St. Lucie Transportation Planning Organization
- City of Fort Pierce
- City of St. Lucie
- Treasure Coast International Airport

Chapter 2. Off-Site Demand Analysis

The off-site suitability analysis identified two (2) sites for vertiport integration in the TPO area that exhibit the highest demand for passenger use. This analysis utilized the most up-to-date census data (2020) — such as average commute time to work, median household income, and population density—to identify two census tracts that exhibit the highest demand for AAM transportation, and to gain a comprehensive understanding of the potential demand for AAM in the TPO area. Various data sources evaluated as part of the analysis are discussed below.

2.1. American Community Survey

The U.S. Census Bureau conducts the American Community Survey (ACS) annually to gather demographic information. This survey collects data that was previously only included in the long form of the decennial census, such as ancestry, citizenship, education, income, language proficiency, migration, disability, employment, and housing characteristics. Data generated from the survey are widely utilized by various stakeholders in the public, private, and nonprofit sectors for purposes such as funding allocation, tracking demographic changes, emergency planning, and transportation planning. The survey is sent to approximately 295,000 addresses each month, making it the largest household survey administered by the U.S. Census Bureau. In the context of this study, the ACS data provided metrics that were identified as a proxy towards transportation demand for each census tract in the TPO area.

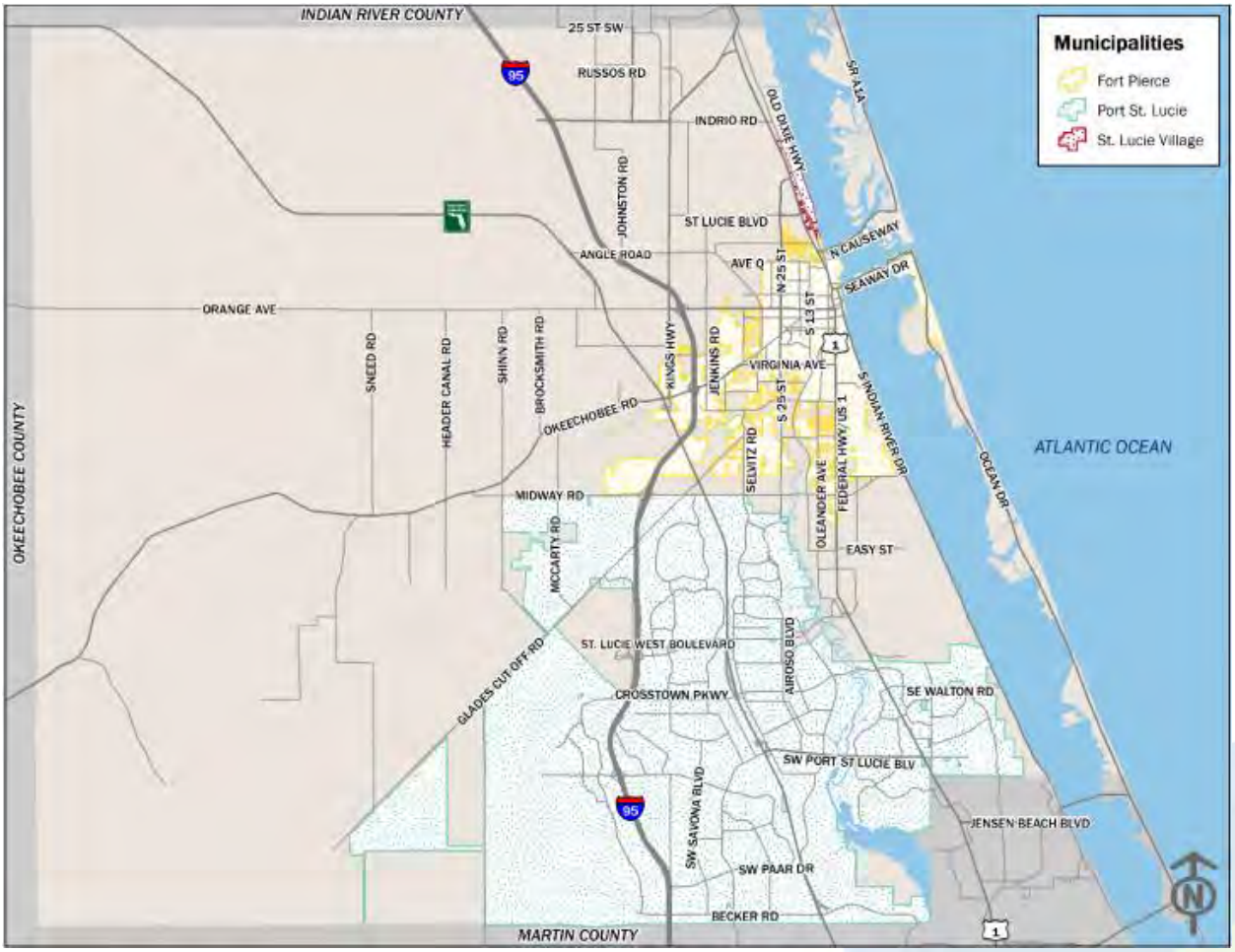
2.2. Replica© Data

In addition to the ACS survey, this project utilized Replica© data to gain a better understanding of existing travel patterns in the TPO area. Replica© is a tool that utilizes credit card transactions and other anonymous location-based sources, providing primary trip data for market and transit assessments. Data from September 2022 to January 2024 was collected and provided insights into various aspects of trips such as purpose, length, duration, mode of transportation, and start and end times. Replica© also provided anonymized data on trip takers, including household income, age, race and ethnicity, approximate home, work, and school locations, and employment status; it also differentiated between trips taken by visitors and full-time residents in TPO area. In the context of this study, data variables such as origin and destination pairing, trip purpose, and other data sets were utilized to help better understand the travel trends and emerging market opportunities for AAM in the TPO area.

2.3. Study Boundary

Started after the 1980 Census, the St. Lucie TPO is a Metropolitan Planning Organization (MPO) responsible for the planning and programming of State and Federal funding for transportation improvements for the City of Fort Pierce, City of Port St. Lucie, St. Lucie Village, and the unincorporated areas of St. Lucie County. Therefore, the AAM study boundary is the same as TPO's jurisdiction boundary as depicted below.

Figure 2 – St. Lucie TPO Boundary



Source: SmartMoves 2045, St. Lucie TPO 2021

2.3.1. U.S. Census Tract in St. Lucie

Establishing a common boundary is crucial to the assignment of unique variables that are associated with each boundary, and there are multiple geographic units available for the purpose of tabulating data. While there are numerous ways to delineate a region, presented below are geographic units that are commonly used in this type of study.

U.S. Census Tract (Recommended) – A small, relatively permanent statistical subdivision of a county delineated by a local committee of census data users for the purpose of presenting data. Census tract boundaries normally follow visible features but may follow governmental unit boundaries and other non-visible features. Census tracts always nest within counties. Designed to be relatively homogeneous units with respect to population characteristics, economic status, and living conditions at the time of

establishment, census tracts average about 4,000 inhabitants. They may be split by any sub-county geographic entity.

U.S. Census Block – A subdivision of a census tract (or, prior to 2000, a block numbering area), a block is the smallest geographic unit for which the Census Bureau tabulates 100-percent data. Many blocks correspond to individual city blocks bounded by streets, but blocks – especially in rural areas – may include many square miles and may have some boundaries that are not streets. The U.S. Census Bureau established blocks covering the entire nation for the first time in 1990. Previous censuses back to 1940 had blocks established only for part of the nation. Over 8 million blocks are identified for Census 2000.

When leveraging census tract data, it is important to acknowledge that each census tract varies in size, thereby resulting in disparities in data concentration. Therefore, some metrics evaluated need to be divided into a standardized format such as per square mile.[1]

2.4. Inventory of Existing Data

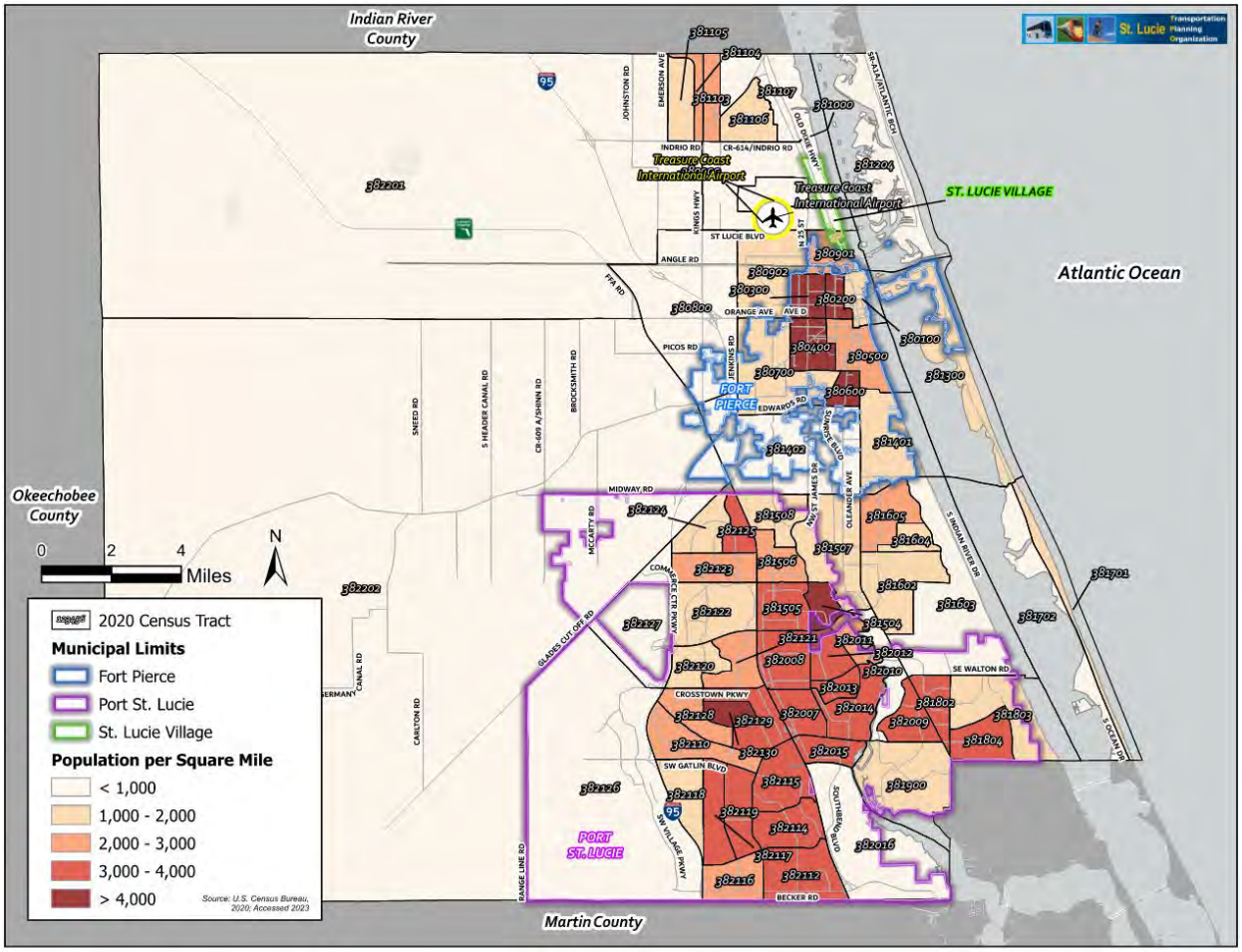
This section provides an overview of the variables that were assessed for each census tract in the TPO area. The purpose of this inventory was to establish an individual understanding of each data variable that was evaluated comprehensively in section 2.5 using GIS-based suitability analysis. It is important to acknowledge that these variables may not be the sole factors influencing the demand for a vertiport facility. Other factors—such as land availability, airspace regulations, and local patterns that could not be measured/quantified at the time data was collected for this report—may need to be considered in the future when defining a more specific location beyond a census tract level.

2.4.1. Population Density/Sq Mile

Population density is an important variable to consider when determining the suitability of a vertiport location in a region. The number of people residing within a given area is often indicative of the demand for transportation services. Higher population density typically corresponds to a greater concentration of transportation service demand. In addition to being a demand proxy, selecting a vertiport location in an area with high population density ensures that it will be easily accessible to a large number of individuals. It is important to note that when analyzing population data, it is necessary to account for disparities in data concentration. As such, population count for each census tract are divided by the corresponding census tract's area to generate population density that is defined per square mile. **Figure 3** depicts population density of each census tract within the St. Lucie TPO boundary where values range from below 1,000 to over 4,000 people per square mile.

[1] *For instance, consider block group A, which encompasses an area of 10 square miles with a population of 10 inhabitants. This would yield a 1 population density per square mile, which is the same population density value for block group B, which spans an area of 20 square miles with a population of 20 inhabitants.*

Figure 3 – Population Density



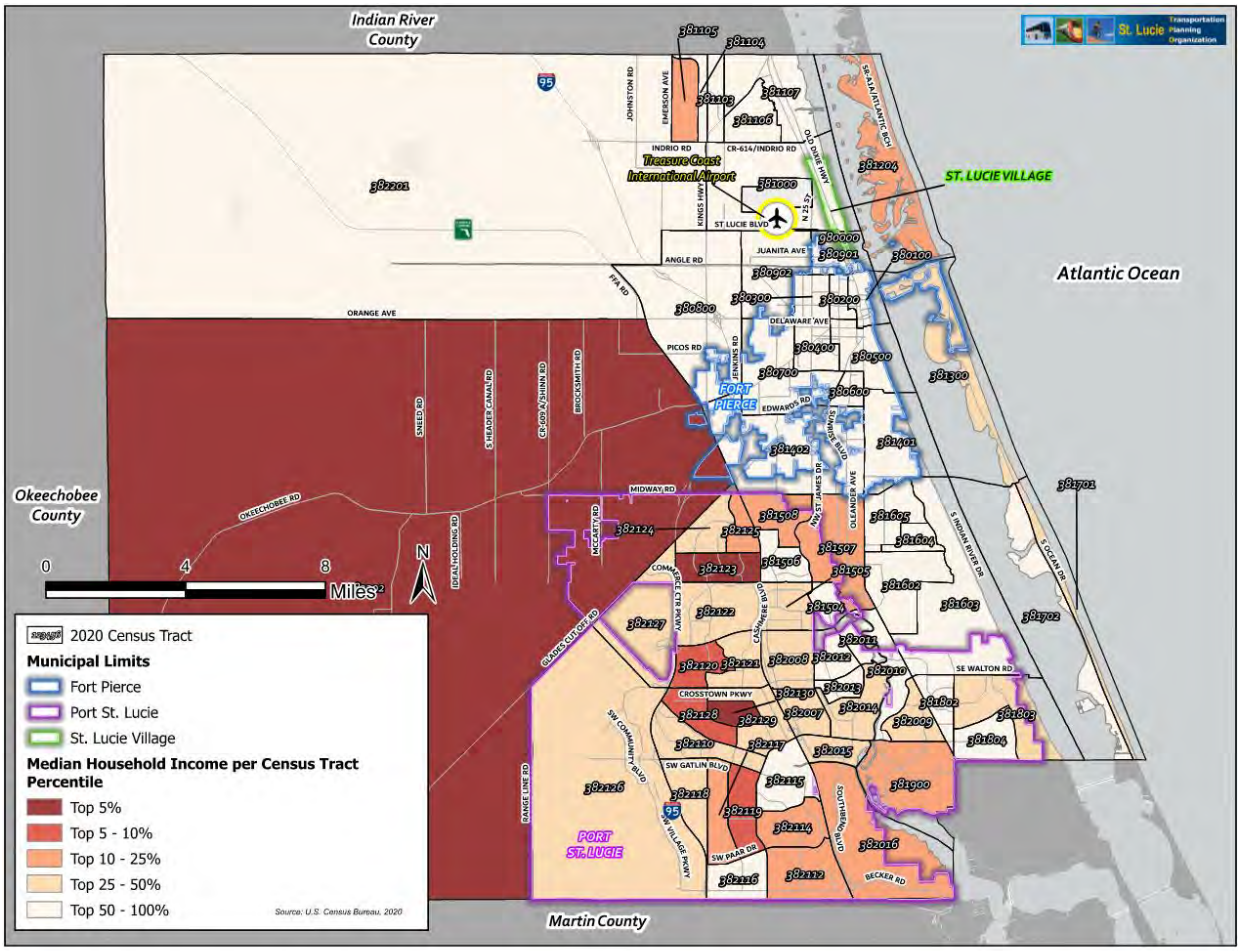
Source: U.S. Census Bureau, 2020

Figure 3 indicates that there are concentrated areas (Census Tract# 380200, 380400, and 380600) of high population density in downtown Fort Pierce and in the residential areas (Census Tract# 382130 381504) of the City of Port St. Lucie. The census tract in Fort Pierce near the downtown region is the most dense with 4,905 of inhabitants per square mile, while the non-incorporated regions and St. Lucie Village generally reported a lower population density compared to the region's average.

2.4.2. Median Household Income

Median household income can serve as a proxy for AAM transportation demand. A higher average income suggests that households have more disposable income to spend on convenience and time saving benefits. Being a new mode of travel, AAM is expected to have a higher cost during its infancy compared to traditional transportation alternatives. Households with higher incomes are more likely to be the early adopters of AAM services. **Figure 4** depicts relative percentile groups of median household incomes for each census tract within the St. Lucie TPO boundary. The median household income value ranged from below $20,000 to slightly above $100,000 in the past 12 months.

Figure 4 – Median Household Income



Source: U.S. Census Bureau, 2020

The median household income in the past 12 months is evenly distributed throughout the region, with lower than average incomes reported in the tracts located along the eastern part of the City of Fort Pierce, particularly in the downtown area. The highest median highest household income in the top 5% percentile was reported as $102,000 in Census Tract# 382123.

2.4.3. Points of Interests – Pedestrian Shed

Points of interest (POI) can serve as a reliable proxy for transportation demand when determining the placement of vertiport infrastructure. These locations—such as commercial developments, tourist attractions, sports stadiums, entertainment venues, etc.—attract a significant concentration of people, indicating a high potential for transportation needs for users of these facilities to get to and from these points of interests. Transportation planning strategically places transit facilities near these points of interest to be able to capture the demand generated by these areas and provide convenient access through AAM transportation services.

Additionally, highly accessed locations often have well-established transportation infrastructure, including roads, highways, and public transit stations. Leveraging this existing infrastructure can enhance last-mile connectivity between the vertiports and other modes of transportation, creating a seamless and efficient transportation network. By capitalizing on the accessibility and central location of points of interest in the

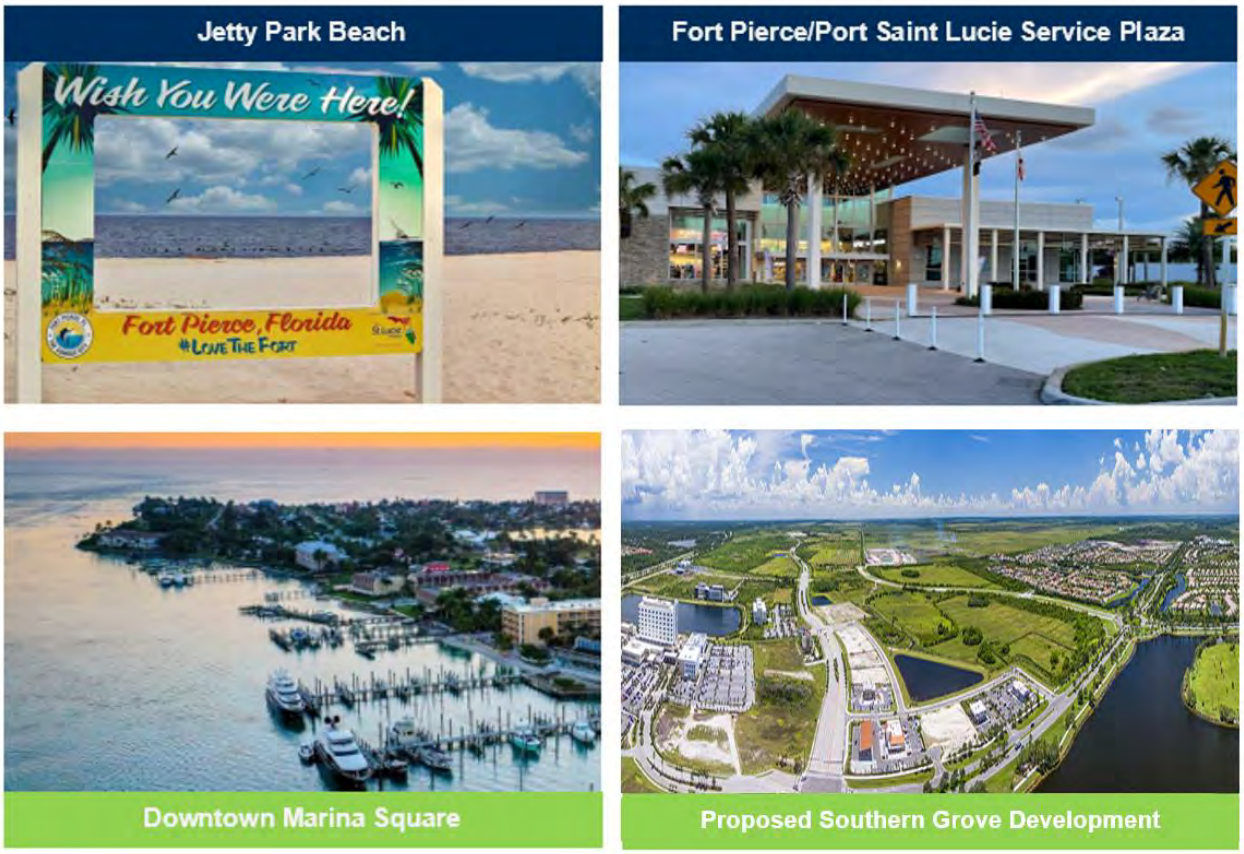
TPO area, AAM can efficiently serve the transportation needs of both residents and visitors, further improving the time saving benefits and the overall passenger experience.

For this evaluation, a preliminary list of the 30 most popular points of interest (POIs) within the study boundary was collected through published sources such as VISIT Florida, St. Lucie website, and the SmartMoves 2045 Long Range Transportation Plan (LRTP). This list was then reviewed and refined by the TAC members during the first committee meeting on February 28, 2024. The final POIs include city centers, beaches, intercity bus facilities, parks, museums, entertainment venues, lodging options, golf courses, stadiums, as well as proposed job opportunity areas for large-scale manufacturing, logistics and retail development (Southern Grove Development). **Table 1** below presents the complete list of POIs utilized as part of this analysis.

Table 1 – Points of Interests in St. Lucie County

Facility Name	Jurisdiction	Type
Blind Creek Beach	Fort Pierce	Beach
Downtown Marina Square	Fort Pierce	City Center
Fort Pierce Inlet State Park	Fort Pierce	Beach
Fort Pierce Station "Dunkin Donuts"	Fort Pierce	Intercity Bus Facility
Fort Pierce Station "Loves Travel Stop"	Fort Pierce	Intercity Bus Facility
Frederick Douglass Memorial Park	Fort Pierce	Beach
Heathcote Botanical Gardens	Fort Pierce	Park
Jetty Park	Fort Pierce	Beach
Navy Seal Museum	Fort Pierce	Museum
Pepper Park Beach	Fort Pierce	Beach
South Beach Park	Fort Pierce	Beach
South Causeway Beach	Fort Pierce	Beach
Sunrise Theater	Fort Pierce	Entertainment
Surfside Park	Fort Pierce	Park
Fairwinds Golf Club	Fort Pierce	Lodging/Golf
Clover Park	Port St. Lucie	Stadium
Fort Pierce/Port Saint Lucie Service Plaza	Port St. Lucie	Intercity Bus Facility
Hilton Garden Inn PGA Village	Port St. Lucie	Entertainment
MIDFLORIDA Event Center	Port St. Lucie	Venue
PGA Village	Port St. Lucie	Entertainment
Port Saint Lucie Station "Shell Gas Station"	Port St. Lucie	Intercity Bus Facility
Port Saint Lucie Station "Sunoco Gas Station"	Port St. Lucie	Intercity Bus Facility
Port St. Lucie Botanical Gardens	Port St. Lucie	Park
Sandpiper Bay Resort	Port St. Lucie	Lodging/Golf
Savannas Preserve State Park	Port St. Lucie	Park
The Saints of Port St. Lucie	Port St. Lucie	Entertainment
Tradition Village Center	Port St. Lucie	Entertainment
Port District	Port St. Lucie	Entertainment
McCarty Ranch Preserve	Port St. Lucie	Park
Florida Sports Hall of Fame	Port St. Lucie	Museum
Oxbox Eco-Center	Port St. Lucie	Park
River Lilly Cruises	Port St. Lucie	Park
Indian River State College	Port St. Lucie	School
Southern Grove – Industrial Area	Port St. Lucie	Industrial Area
Southern Grove – Cultural Arts/Entertainment	Port St. Lucie	Cultural Arts /Entertainment
Southern Grove – Main Street/Office	Port St. Lucie	Main Street/Office

Figure 5 – Points of Interest in St. Lucie County



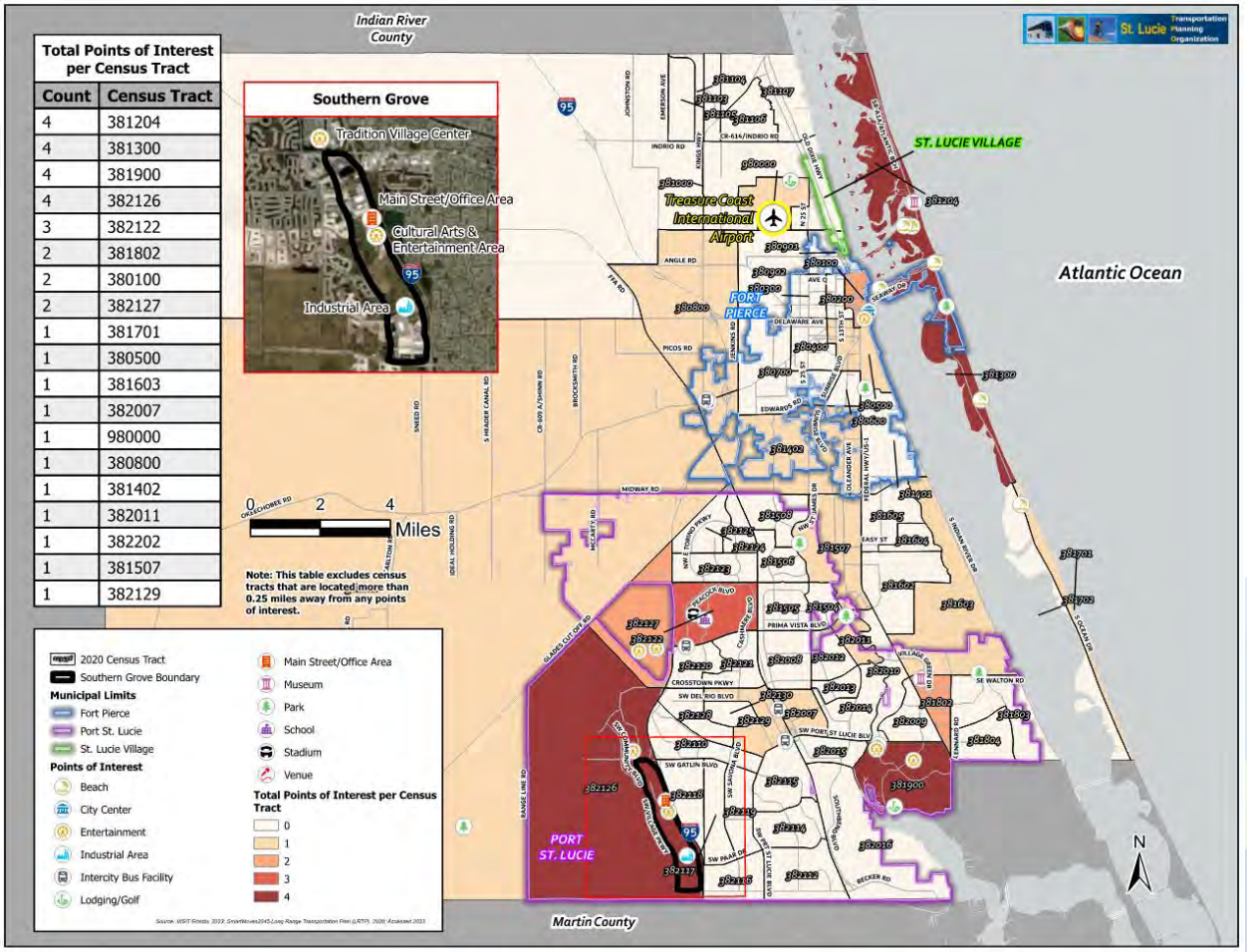
In addition to the attraction POIs that generate transportation demands to the region, there are also POIs such as transit facility that relieve transportation demands to and from the region and can be a suitable vertiport location. These transit facilities would enhance multi-modality and provide convenient last-minute connections to and from the vertiport. Furthermore, there are proposed developments that do not currently exist, but were taken into consideration. These developments indicate a potential shift in transportation demand; they also provide opportunity for better coordination and integration of the vertiport infrastructure and amenities to ensure that the vertiport is seamlessly woven into the fabric of the overall development, which would create a more cohesive and functional environment. Two specific locations in St. Lucie TPO region—the Fort Pierce/Port Saint Lucie Service Plaza and the proposed Southern Grove Development—are explored further below.

- **Fort Pierce/Port Saint Lucie Service Plaza -** Florida's Turnpike Mainline has eight service plazas located approximately every 40 miles. These plazas are open 24/7 and offer various dining options, gift shops, ATMs, public telephones, travel information, dog walks, and other amenities. The main advantages of hosting a vertiport facility in the vicinity of a service plaza are its amenities, the proximity to the turnpike, and the open space nearby that may be more suitable for vertiport's airspace and land use integration.
- **Southern Grove Development -** Southern Grove is one of Florida's unique job opportunity areas for large-scale manufacturing, logistics and retail development. It has the largest swath of development-ready vacant land in all South Florida that fronts over four miles of Interstate 95, with interchanges at both Tradition Parkway and Becker Road. Port St. Lucie has a talent-ready labor market with a central location between several major metro areas, including international airports located in Orlando and West Palm Beach. It is an

opportunity for development with the city of Port St. Lucie with over 10 million square feet of office, industrial, warehouse, and retail space. Parcel sizes are flexible to allow opportunities for large-footprint users. Potential development include manufacturing, distribution, warehousing, corporate office, medical office, research and development, retail, multi-family residential, hospitality and educational uses.

The analysis applied a pedestrian "Shed" with a radius of ¼-mile to each of the POIs.[2] This is because simply counting the number of POIs in each census tract may not provide an accurate representation of their proximity to surrounding tracts. It is possible that a POI may be more easily accessible from a different census tract rather than from the opposite end of the tract it is located within. **Figure 6** presents the ranking of each census tract based on the number of POI pedestrian shed are contained within them.

Figure 6 – Points of Interests



Source: U.S. Census Bureau, 2020

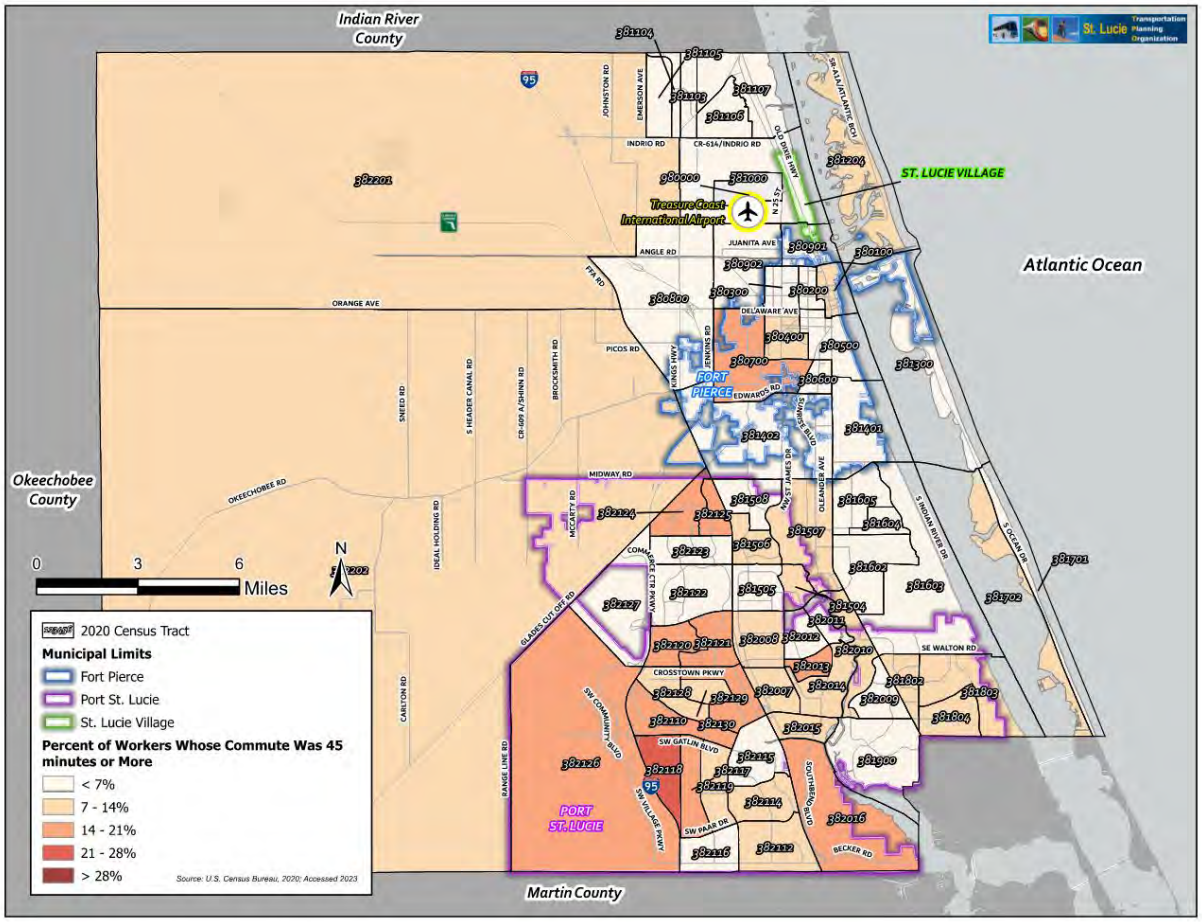
Figure 6 indicates that there are several census tracts that have a high concentration of POIs.

[2] ¼ mile is what is commonly accepted as the typical distance people are willing to walk.

2.4.4. High Commute Time to Work

High commute time to work serves as a valuable indicator of passenger demand towards transportation and time-saving benefits. When commuters experience long commute times, it often can be tied to a stronger desire to explore alternative transportation options to reduce travel time. AAM has the potential to significantly decrease commute times by bypassing traditional road congestion and utilizing direct flight paths. Therefore, areas with above-average commute times can be considered potential hotspots for AAM services, as individuals in these locations are likely to be motivated to seek alternative transportation to shorten their commutes. Additionally, high commute times can also be attributed to inadequate transportation infrastructure in a particular area, further contributing to the potential demand for AAM services to enhance transportation efficiency. In the context of AAM, this suitability analysis focuses on the percentage of workers whose commute exceeds 45 minutes within a census tract. Any commute time less than 45 minutes is not considered an appropriate proxy for AAM, as the time-saving benefits yielded from AAM are not expected to be significant. **Figure 7** depicts the percent of workers whose commute was 45 minutes or more per census tract within the study boundary.

Figure 7 – Commute Time to Work



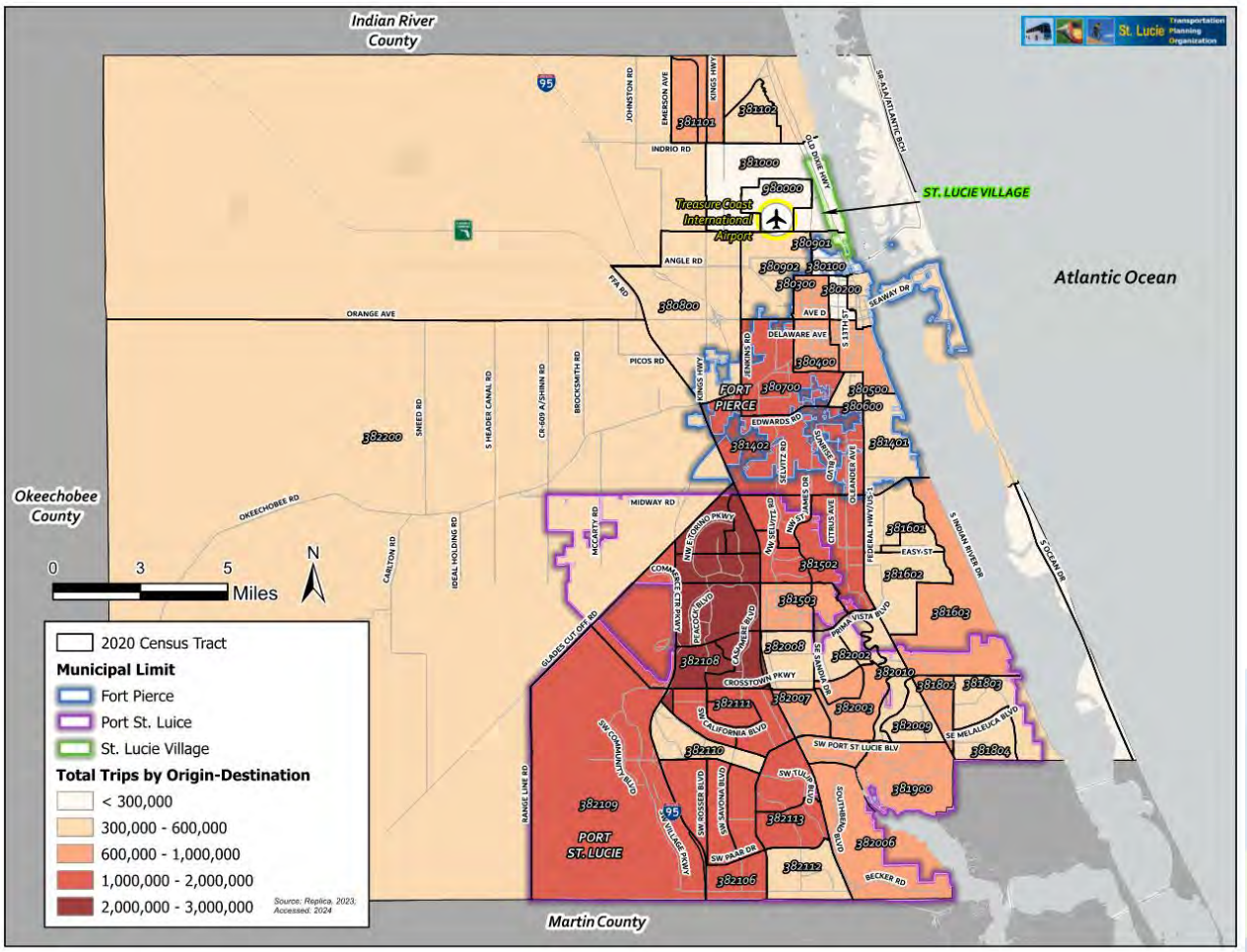
Source: U.S. Census Bureau, 2020

Figure 7 indicates that the percentage of workers whose commute was 45 minutes or more is higher in southern Port St. Lucie area compared to other areas within the study boundary; census tract# 382118 has the highest percentage at 25% of workers with commute times over 45 minutes.

2.4.5. Origin-Destination Trip Count

Origin and destination (O&D) trip count is a direct indication of transportation demand, which accounts for all transportation related activities in each census tract. This data utilizes credit card transactions and other anonymous location-based sources, and provides primary trip data for market and transit assessments. For this project, this data is sourced from Thursdays and Saturdays in the fall of 2023, and provides insights into various aspects of trips such as purpose, length, duration, mode of transportation, and start and end times.

Figure 8 – Origin-Destination Trip Count



Source: U.S. Census Bureau, 2020

Figure 8 indicates that the highest concentration of O&D trip count was recorded in the region of Port St. Lucie West.

2.5. Evaluation of Data – GIS-based Demand Analysis

The final step of the analysis involved assigning a score to each census tract based on a scoring system developed for each of the variables. The scoring system ranged from 1 – 5 points for a specific variable—depending on how a given census tract performed when compared to other census tracts in the TPO area—with a score of 5 being more favorable than a score of 1. For instance, a census tract with a top 5% median

household income received 5 points, while a lower census tract in the bottom percentile received a lower score. The purpose of developing this scoring system was to incorporate the scores into a comprehensive suitability analysis that combined all the variables' associated scores in order to calculate a comprehensive ranking. In addition, the Analytical Hierarchy Process (AHP) was utilized to incorporate the community's vision into the overall process. The AHP process involves surveying participants using pairwise comparisons to quantify individual opinions and establish measurable numeric relationships/prioritization between each of the variables. This process ultimately defined specific weights that were applied to each of the variables used for the GIS-based demand analysis. The TAC members were presented with the individual variables discussed in the previous section, and surveyed using the AHP process.[3] The AHP survey results of the TAC members were averaged to determine the collective prioritization of variables for analyzing AAM transportation demand in the TPO area. **Table 2** below depicts the average weights each of the variable, which contributed to the final suitability analysis.

Table 2 – AHP Survey Result

Population Density	Average Commute Time to Work	Median Household Income	Trip Counts	Points of Interests
14%	20%	38%	19%	9%

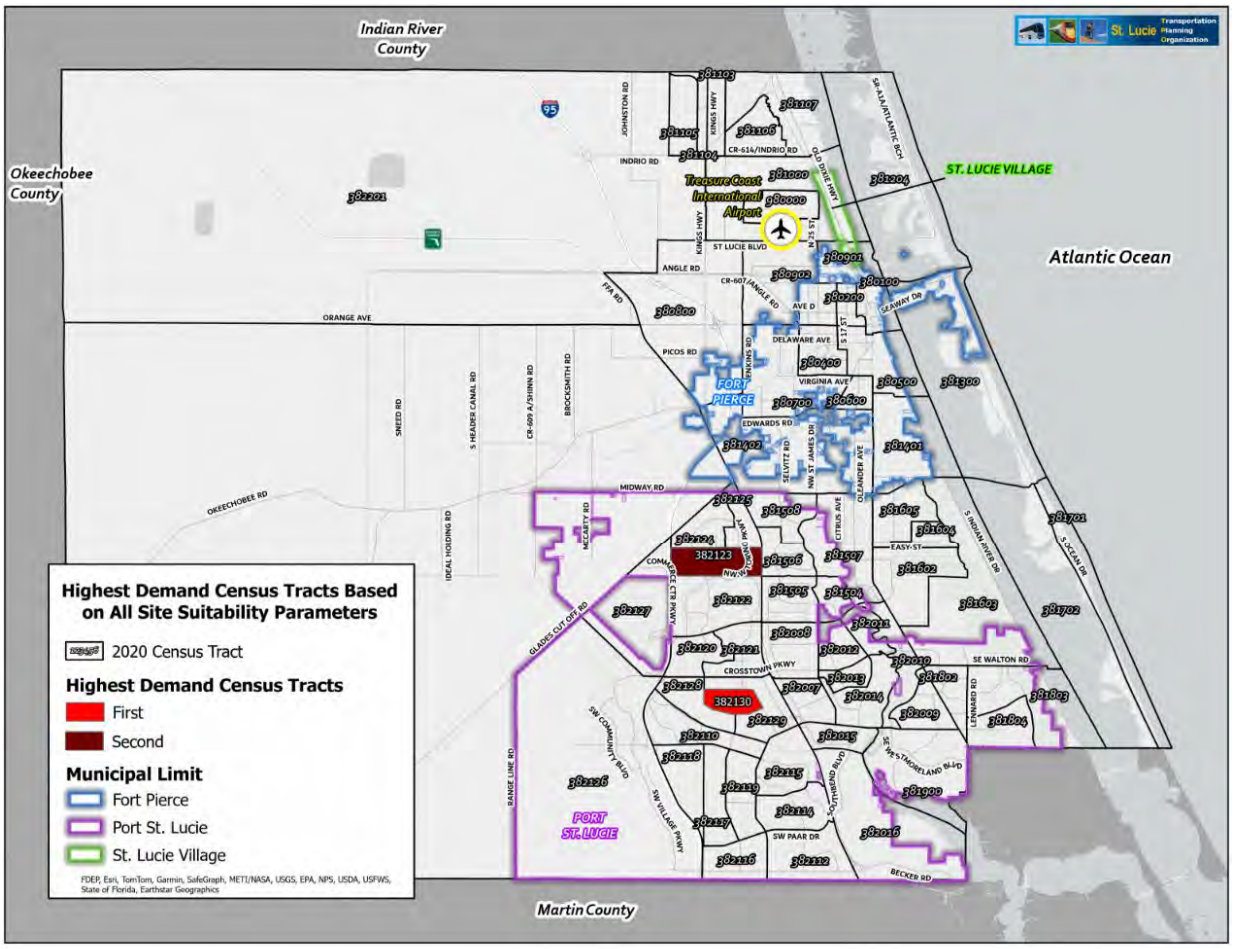
Note: *The AHP Survey result represents the average opinions of all seven TAC members. This survey was conducted during the first committee meeting on February 28, 2024.*

2.5.1. Findings Summary

Figure 9 indicates that Census Tract# 382123 and 382130 are the two census tracts that exhibited the highest AAM Demand in the TPO area. The subsequent section provides more in-depth analytics of these two census tracts.

[3] *An example AHP survey can be accessed from the following link. https://bpmsg.com/ahp/ahp-calc.php?n=5&c%5B0%5D=Population+Density&c%5B1%5D=Average+Commute+Time+to+Work&c%5B2%5D=Median+Household+Income&c%5B3%5D=Trip+Counts&c%5B4%5D=Points+of+Interests*

Figure 9 – Two Highest Demand Census Tracts



Source: U.S. Census Bureau, 2020

#1 - Census Tract # 382130 – Located in the central area of Port St. Lucie, this census tract exhibited high demand in terms of population density and median household income. Although there were no points of interest directly located within, there are various types of entertainment, retail, industrial, and transit facility POIs in close proximity to the census tract within the 3-mile buffer.

- **Population Density** – 5 out of 5 points with 4,196 person per square mile
- **Average Commute Time to Work** – 2 out of 5 points with 11.4% of workers whose commute was 45 minutes or more
- **Median Household Income** – 5 out of 5 points with $95,443 median household income.
- **Trip Counts –** 4 out of 5 points with 1.8 million origin and destination trips.

Points of Interests – 0 out of 5 points with 0 POIs located inside the census tract.

#2 – Census Tract # 382123 – Located in the northern area of Port St. Lucie, this census tract exhibited high demand in terms of median household income and trip counts. Although there were no points of interest directly located within, there are various type of entertainment, retail, industrial, and transit facility POIs located north of the census tract within the 3-mile buffer. Furthermore, the census tract is in close proximity to the future Southern Grove development area.

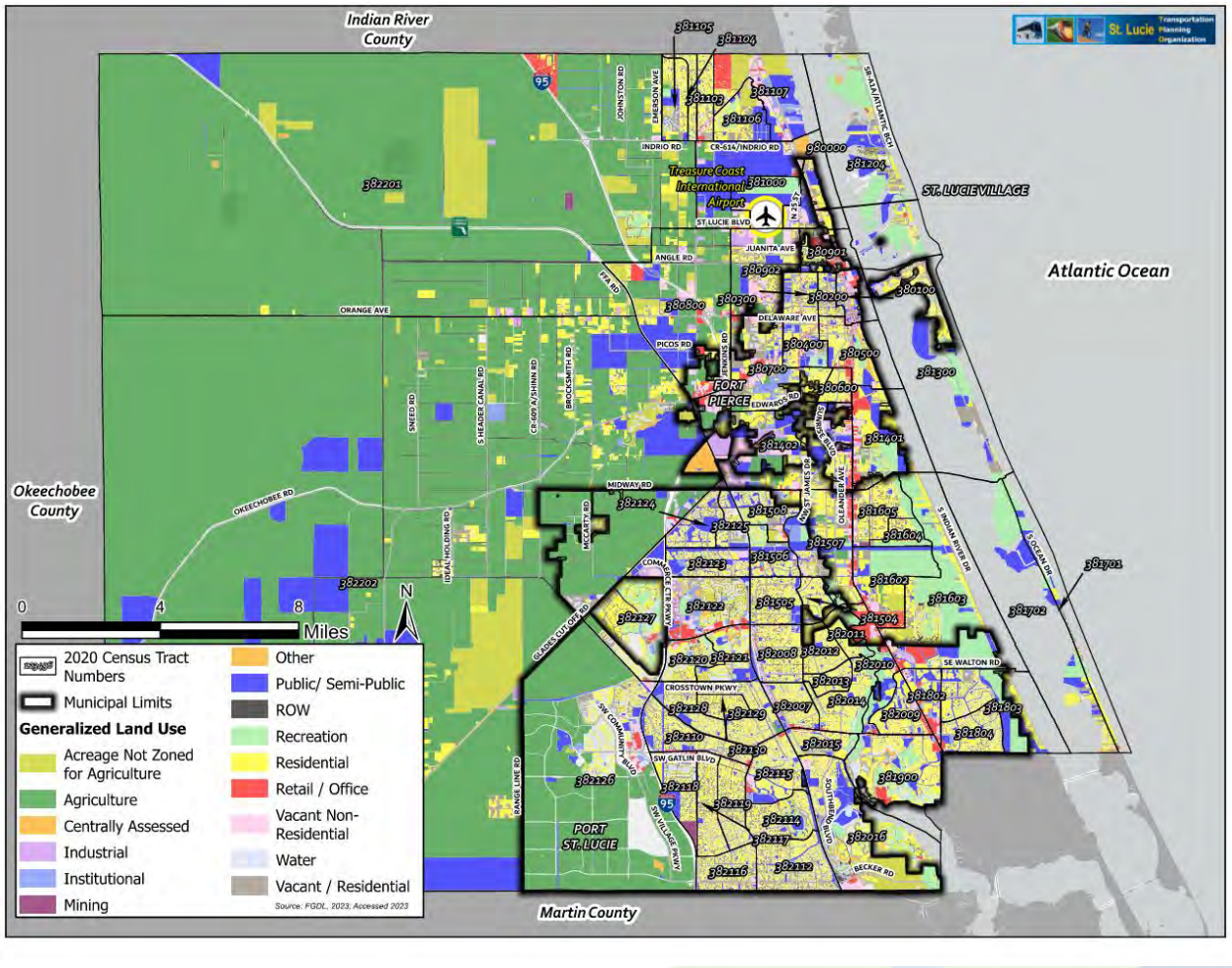
- **Population Density** – 3 out of 5 points with 2,247 person per square mile

- **Average Commute Time to Work** – 1 out of 5 points with 6.3% of workers whose commute was 45 minutes or more
- **Median Household Income** – 5 out of 5 points with $102,646 median household income.
- **Trip Counts –** 5 out of 5 points with 2.7 million origin and destination trips.

Points of Interests – 0 out of 5 points with 0 POIs located inside the census tract.

While these census tracts exhibited the highest AAM demand, it is important to acknowledge that they may not be the most suitable in terms of the composition of land use. **Figure 10** depicts the land use composition of each census tract within the study boundary.

Figure 10 – Generalized Land Use

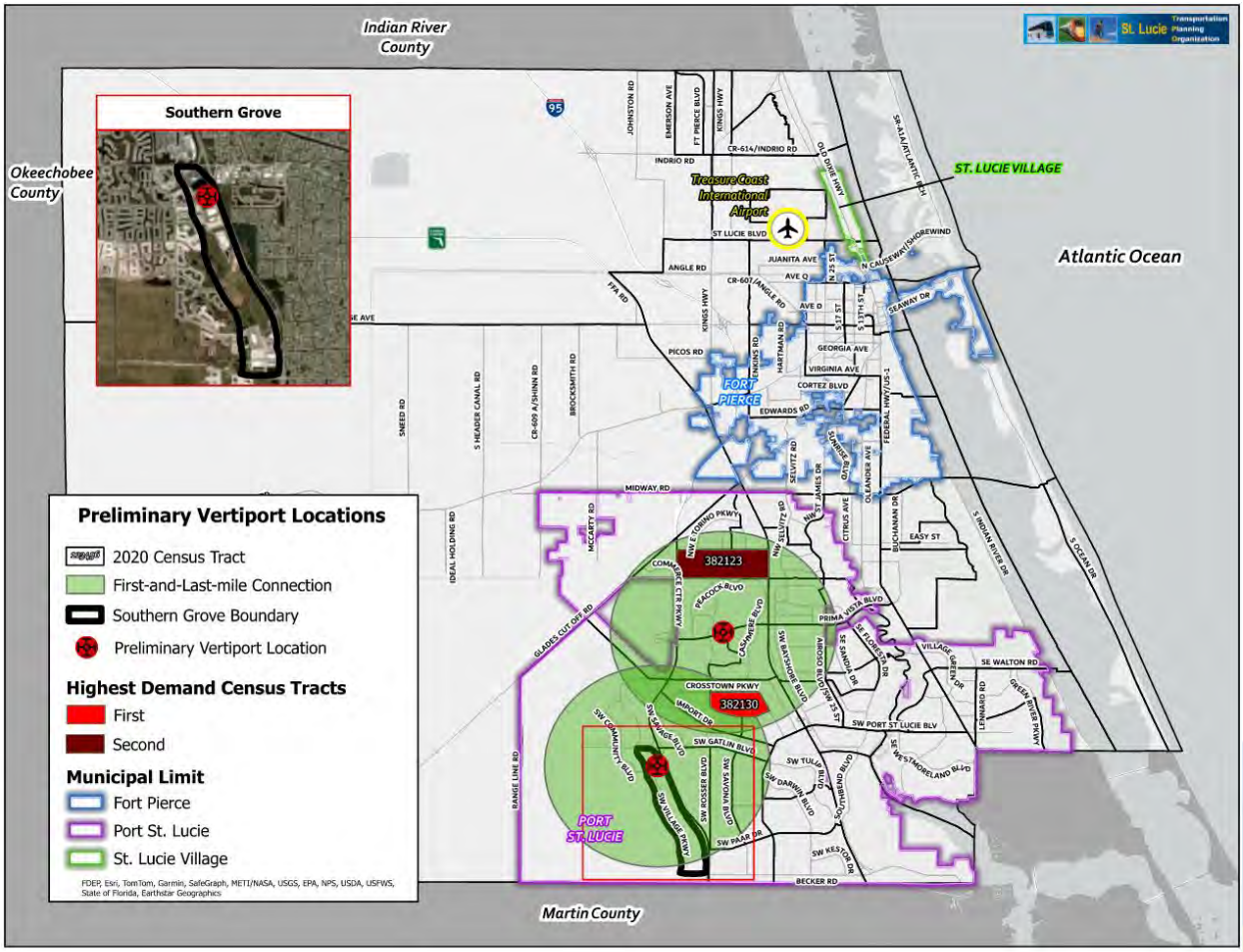


Source: Florida Geographic Data Library (FGDL), 2023

As can be seen from **Figure 10**, the presence of heavy residential land use in the two identified census tracts may amplify the perception of AAM impacts (such as noise, privacy, and safety) to the surrounding communities of the vertiport. Therefore, it is recommended that land use compatibility with the vertiport infrastructure be considered when determining a specific location of the vertiport. To achieve this, a 3-mile threshold (three to ten minutes of driving depending on the area and local speed limit) is established to identify vertiport locations that are more suitable in terms of land use compatibility perspective but also still accessible to the identified high demand census tracts through first- and last-mile connections.

Figure 11 depicts two potential locations for vertiports in the TPO area. The first vertiport is located in St. Lucie West – a commercial/retail area. This location provides convenient access to both census tracts, as it falls within the overlapping area of the two highest demand tracts within a 3-mile radius. The second location is south of census tract # 382130, which is proposed to be developed inside the Southern Grove development. This provides an opportunity for concurrent planning and development of the vertiport infrastructure to ensure that the vertiport is seamlessly woven into the fabric of the overall development.

Figure 11 – Vertiport Locations



Source: U.S. Census Bureau, 2020

Based on existing transportation indicators, two preliminary vertiport locations have been identified as part of the study. However, discussions with the stakeholders and evaluation of the surrounding land use have indicated that the Port St. Lucie West location may not be feasible for vertiport integration due to foreseen impacts from the AAM corridor. Unlike the Southern Grove development location, which is designated for large-scale manufacturing, logistics, and retail development, the St. Lucie West is in close proximity to existing residential land uses. For these reasons, it is important to consider the vertiport feasibility in relation to the AAM corridors that aircraft will need to traverse to reach the vertiport location.

Although the St. Lucie West vertiport location is still included as a preliminary recommendation, it will further be evaluated in **Chapter 4 – Airspace and Infrastructure Modeling**, which will consider the placement

and impact of AAM corridors to determine the suitability of the identified locations. If deemed unsuitable, the identified locations may be removed/adjusted for the final vertiport recommendation of the study.

Chapter 3. Preliminary Site Review – Treasure Coast International

3.1. Treasure Coast International Airport

Existing aviation assets—airports and heliports—are expected to be the first operating locations for eVTOL aircraft due to the infrastructure in place both on the ground and in the air. As the industry matures, AAM is anticipated to provide air connectivity between airports, mobility hubs, and other locations not traditionally served by aviation in urban, suburban, and rural areas. Given the complexity and long lead times of airport infrastructure projects, it is prudent that airports proactively incorporate AAM considerations into infrastructure, investment, and business planning.

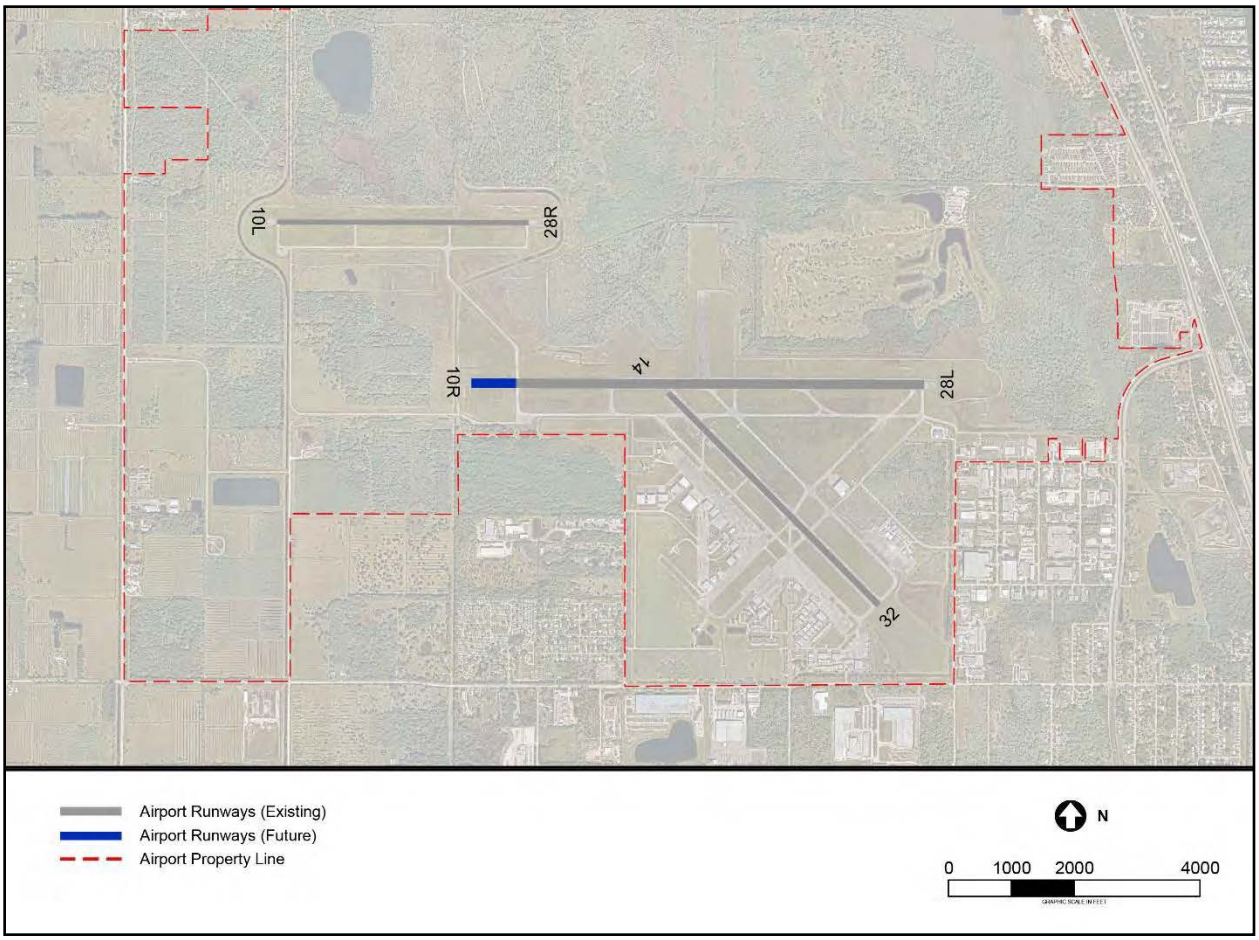
FPR is a public, general aviation (GA) airport sited on 3,660 acres in northeast St. Lucie County, approximately three miles northwest of downtown Fort Pierce and four miles west St. Lucie's coastline. The Airport is owned and operated by St. Lucie County. As a key economic driver for the region, FPR is well positioned to support the County's mobility goals through AAM operations.

Existing conditions at the Airport provide a foundation from which a vertiport site review may be based. This section summarizes various facilities and areas at FPR that may impact or be impacted by a vertiport sited at the Airport.

3.1.1. Runways

FPR has three runways. Runway 10R/28L is oriented in an east/west direction and serves as the Airport's primary runway, measuring 6,492 feet long by 150 feet wide. Notably, a 708-foot western runway extension is noted on FPR's airport layout plan (ALP), with an ultimate runway length of a minimum of 7,200 feet. Runway 10L/28R is a parallel runway located northwest of 10R/28L. This runway measures 4,000 feet long by 75 feet wide, primarily serves small (i.e., less than or equal to 12,500 pounds) single-engine piston aircraft, and hosts extensive flight training operations. A third runway, designated Runway 14/32 and measuring 4,755 feet long by 100 feet wide, is oriented in a northwest/southeast direction and serves as the Airport's crosswind runway. Runway 14/32 is located immediately south of Runway 10R/28L and intersects Taxiway A. **Figure 12** illustrates FPR's runway facilities, including the planned extension to Runway 10R/28L.

Figure 12 – FPR Runways



Source: Kimley-Horn, 2024.
Image Source: Nearmap, accessed March 2024.

3.1.2. FPR's Airspace and Operating Procedures

This section provides an inventory of standard aircraft operating procedures and airspace at FPR. This review helps identify potential constraints to future eVTOL operations and preliminary vertiport sites at the Airport. A vertiport located at FPR would represent new aircraft approach and departure paths, in addition to the paths associated with the Airport's existing runways. It is crucial that the site of a vertiport does not adversely impact the safety and efficiency of FPR airspace and fixed-wing aircraft operations.

3.1.2.1. Airspace

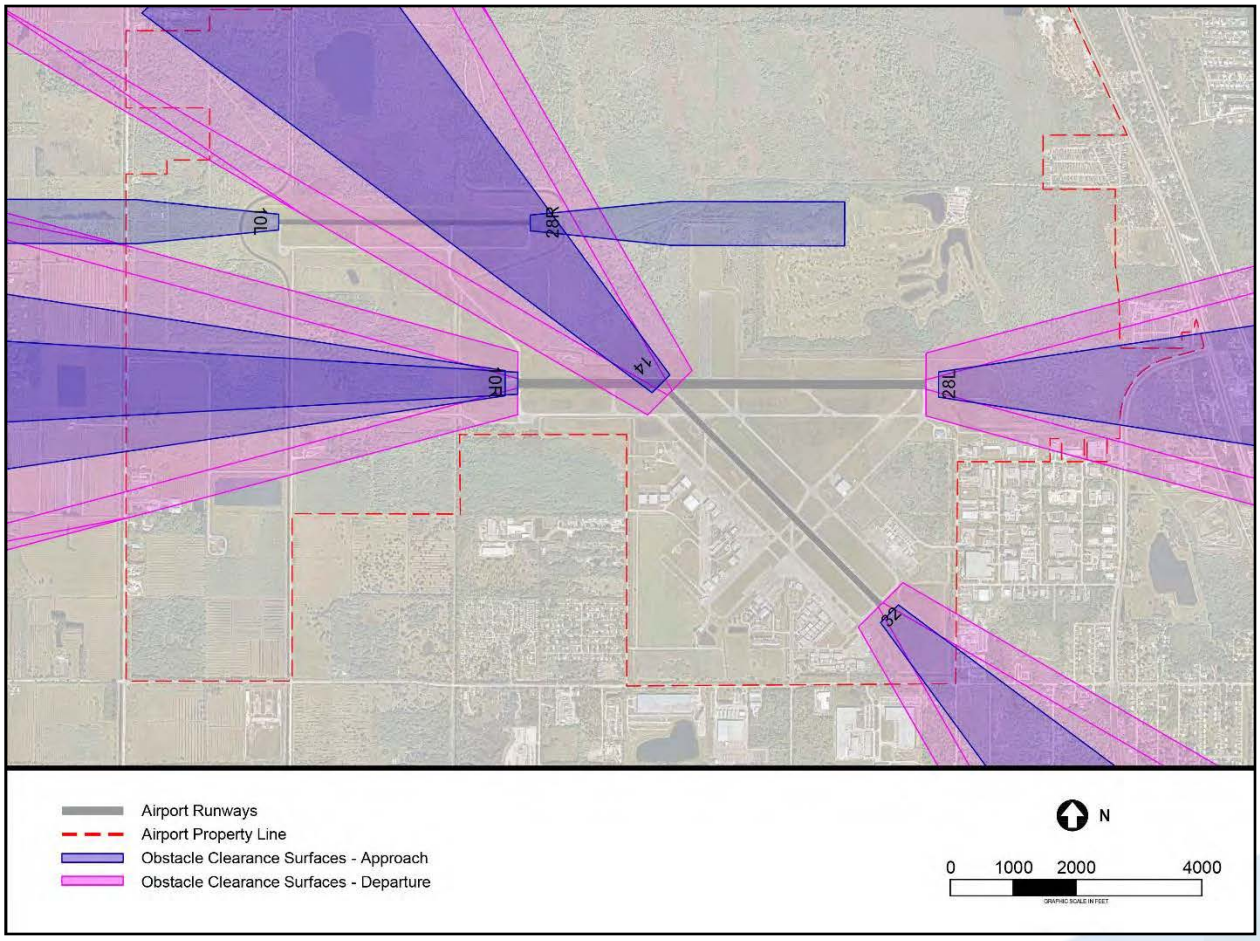
FPR is located within Class D airspace, which generally spans from the surface to 2,500 feet above airport elevation at certain airports equipped with an airport traffic control tower (ATCT). At FPR, the Class D airspace has a diameter of three statute miles and extends to 2,523 feet above mean sea level (MSL). Aircraft must establish two-way radio communication with the ATCT prior to entering this airspace.

3.1.2.2. Obstacle Clearance Surfaces

Obstacle Clearance Surfaces (OCS)—approach and departure—help ensure that aircraft have a clear path free from obstacles (e.g., vegetation, structures, poles) when landing at or taking off from a runway. Detailed in FAA Advisory Circular (AC) 150/5300-13B - Airport Design, OCS dimensions vary depending on the

approach capability and visibility minimums of each runway end, and a single runway end may have multiple approach OCSs. The existing approach and departure OCSs at FPR are depicted in **Figure 13**. Future vertiport operations should not adversely impact the approach and departure OCSs.

Figure 13 – Obstacle Clearance Surfaces



Source: Kimley-Horn, 2024.
Image Source: Nearmap, accessed March 2024.

3.1.2.3. Part 77 Surfaces

Title 14, Code of Federal Regulations, Part 77 - *Safe, Efficient Use and Preservation of the Navigable Airspace* (Part 77) defines airspace surfaces around an airport to identify and mitigate potential obstacles to aircraft operations. Obstacles that are not removable can be mitigated through marking and/or lighting. If not appropriately addressed, obstacles can have a negative impact on runway approach and departure minimums as well as standard operating procedures.

The Part 77 surfaces that are particularly applicable to vertiport siting are:

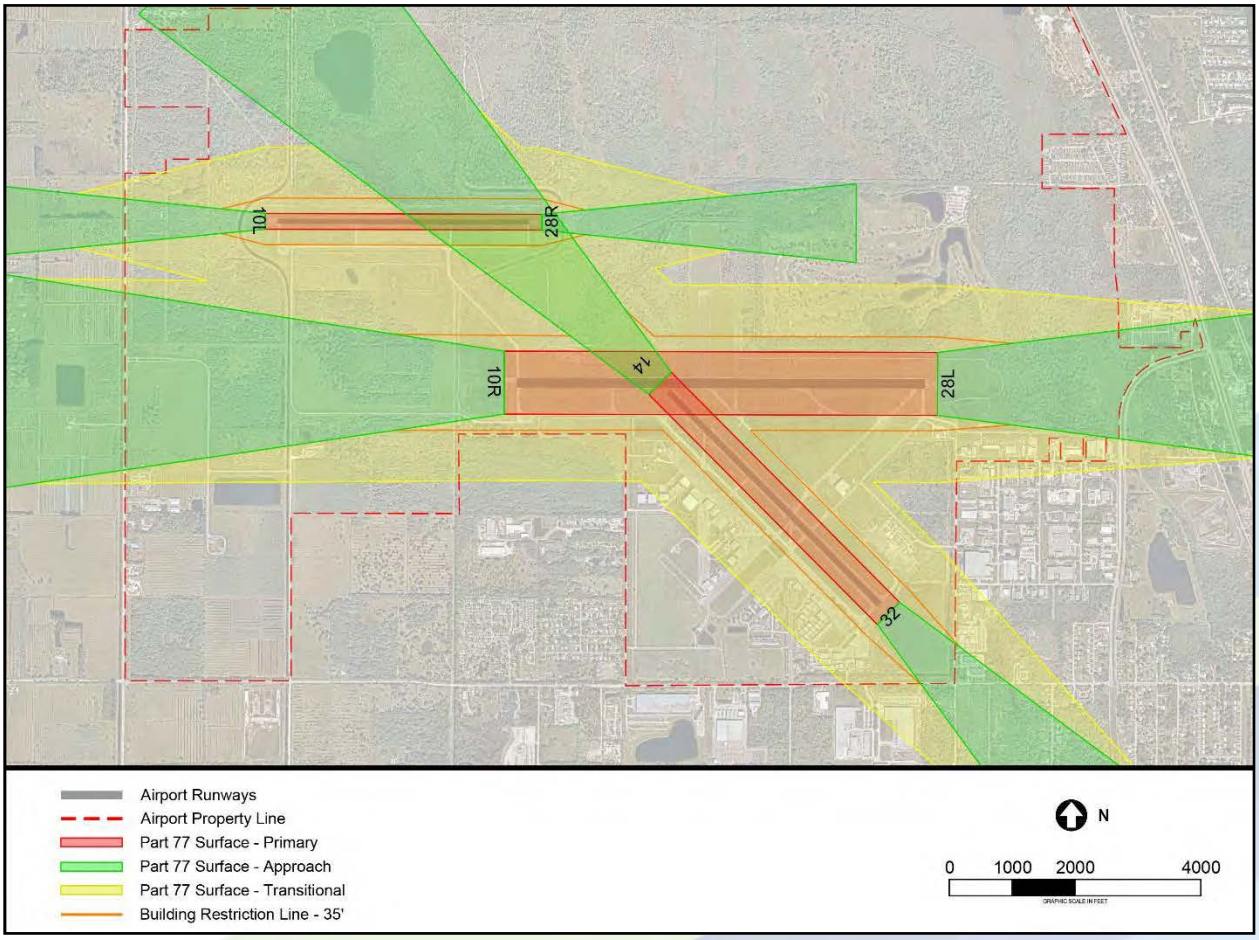
Primary Surface: The primary surface is centered on a runway centerline and extends 200 feet beyond each runway end. The width of the primary surface depends on a runway's instrument approach capabilities and the aircraft that operate on it. Other than airfield equipment necessary for aircraft ground navigation (e.g., airfield lighting, signage navigational aids), infrastructure should not be located within the primary surface.

Approach Surface: The Part 77 approach surface is separate from and in addition to the approach OCS. An approach surface's dimensions and slope are based on a runway's instrument approach capabilities and the aircraft that operate on it. To the extent practicable, eVTOL operations (i.e., approach and departures) should not disrupt a runway's Part 77 approach surface and ultimately the operations of fixed-wing aircraft.

Transitional Surface: The transitional surface extends outward and upward at a slope of seven to one (i.e., one vertical foot for every seven horizontal feet) from both sides of a runway's primary surface. The transitional surface is often expressed as a building restriction line (BRL) at a given height, which indicates that structures can be no taller than the given height at a specific location. For example, the 35-foot BRL represents the transitional surface's location at 35 feet above ground level (AGL). In this case, structures taller than 35 feet AGL at the location of the 35-foot BRL will penetrate the Part 77 transitional surface and may present a hazard to aircraft operations. While infrastructure is permitted under the transitional surface, it should not obstruct safe air navigation.

FPR's Part 77 primary, approach, and transitional surfaces are depicted in **Figure 14**. The 35-foot BRL is also shown for reference.

Figure 14 – Part 77 Surfaces

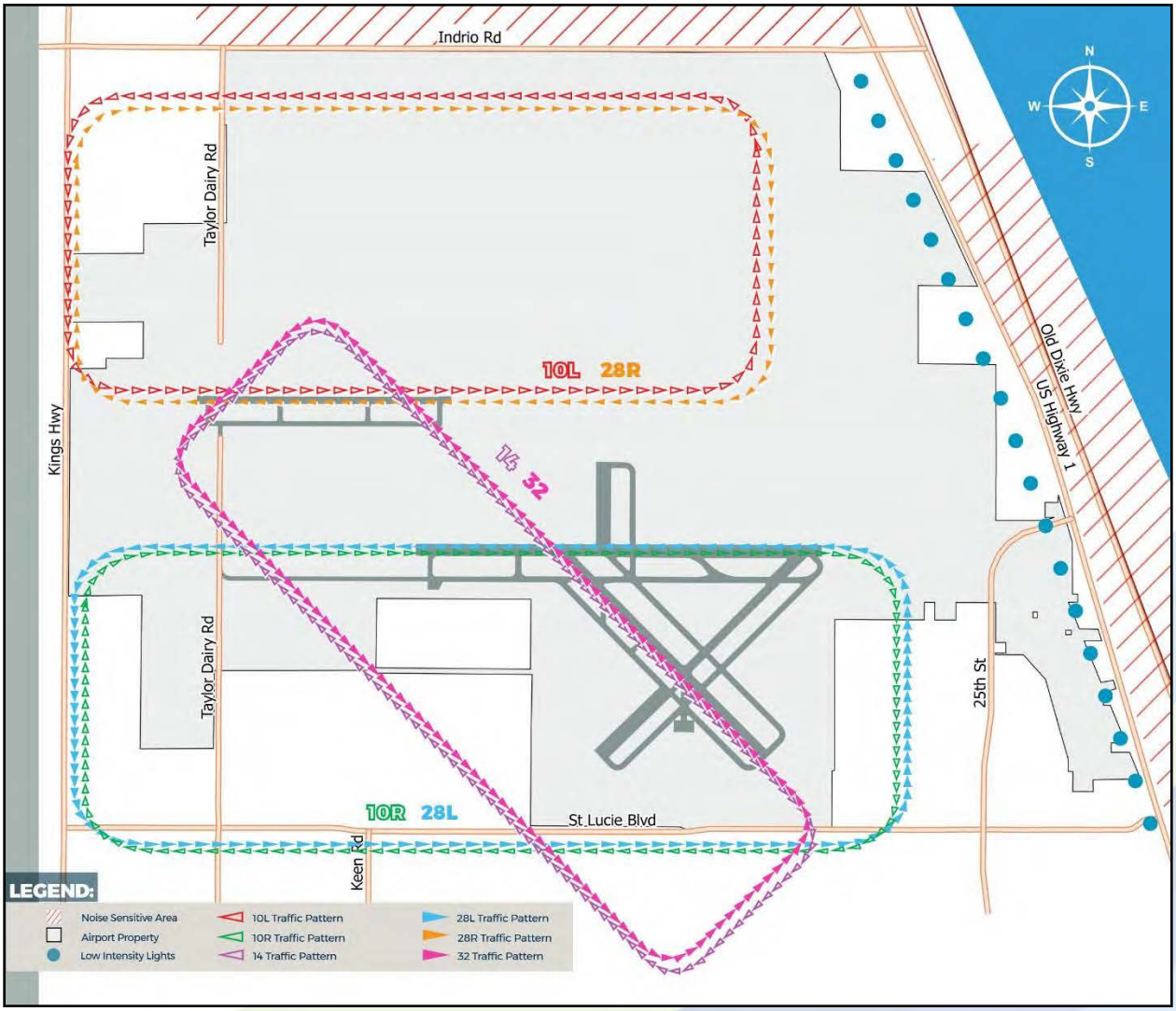


Source: Kimley-Horn, 2024.
Image Source: Nearmap, accessed March 2024.

3.1.2.4. Aircraft Traffic Flow

For arriving aircraft, FPR utilizes a right-hand traffic pattern for Runways 10R, 28R, and 14 and a standard left-hand traffic pattern for Runways 10L, 28L, and 32. Aircraft within the traffic patterns are generally at an elevation of 1,000 feet AGL. Noise sensitive areas exist north and east of the Airport, which are mostly associated with residential communities. Jet aircraft that depart on Runway 10R are asked to maintain the runway heading until they ascend to an altitude of 2,000 feet AGL or until they reach the ocean shoreline prior to making any turns. **Figure 15** illustrates the Airport's traffic pattern as published in the FPR Voluntary Noise Abatement Procedures brochure. As with airspace surfaces, a vertiport should not disrupt FPR's runway traffic patterns. Rather, it should be sited to facilitate eVTOL operations that are complimentary to existing airport procedures.

Figure 15 – FPR Traffic Pattern



Source: Treasure Coast International Airport, Voluntary Noise Abatement Procedures Brochure.

3.1.3. Landside Access

Primary vehicular access to FPR is provided on the south side of the Airport by Curtis King Boulevard via St. Lucie Boulevard/County Road 608 (East). This area of the Airport hosts the fixed-base operator (FBO) terminal, U.S. Customs facility, the Airport's restaurant, two flight schools, aircraft hangars, and various Airport tenants. Several other roadways provide access to facilities throughout the airfield: The aircraft hangars east of Runway 14/32 are accessed by Jet Center Terrace via Industrial 33rd Street, and facilities west of Runway 14/32 can be accessed via Hammond Road, Crosswind Drive, Tailwind Drive, and Airman's Way.

3.2. Vertiport Standards

3.2.1. Engineering Brief No. 105

Planning and design guidance for vertiports are provided by the FAA Engineering Brief No. 105 (EB 105) (September 21, 2022). EB 105 serves as the FAA's temporary guidance for vertiport design to support initial infrastructure development for eVTOL operations. The FAA has limited verified eVTOL aircraft performance data and is therefore taking a conservative approach with EB 105's recommendations. Eventually, vertiport guidance is expected to transition into aircraft performance-based design standards. In the meantime, EB 105 is a dynamic document that serves as the FAA's initial interim guidance and will be updated as more performance data is obtained to address new aircraft and technology.

3.2.1.1. EB 105 Reference Aircraft

Due to the rapid development and diverse designs of emerging eVTOL aircraft, the FAA utilizes a "Reference Aircraft" in EB 105 to establish baseline vertiport design criteria. This reference aircraft was developed in coordination with various original equipment manufacturers (OEMs) and incorporates common features observed among nine current eVTOL prototypes, such as multiple engines and emergency hover capabilities. The FAA acknowledges this is a temporary solution and plans to refine vertiport design guidance as they gather more data from evolving VTOL technologies. The foundation for this study is based on guidance and criteria from the EB 105 reference aircraft.

3.2.2. Vertiport Design and Geometry

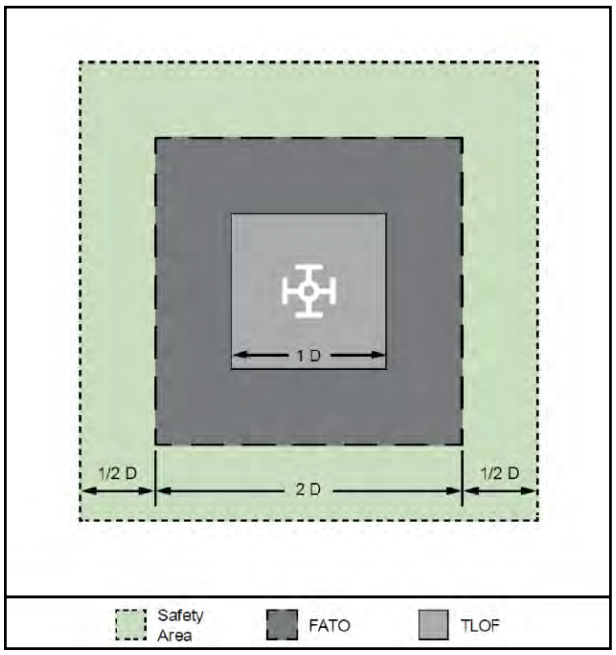
Vertiport design and geometry standards are developed to promote safe and efficient eVTOL operations. Elements of a vertiport include the Touchdown and Liftoff (TLOF) Area, Final Approach and Takeoff (FATO) Area, and Safety Area. **Figure 16** on the following page illustrates the sizes of these elements, which are based on the dimensions of a specific design aircraft.

In this figure, "D" represents the controlling dimension. EB 105 defines D as "The diameter of the smallest circle enclosing the VTOL aircraft projection on a horizontal plane, while the aircraft is in the takeoff or landing configuration, with rotors/propellers turning, if applicable." The value of D for the reference aircraft in EB 105 eVTOL aircraft is 50 feet. According to the FAA, as more validated performance data for individual eVTOL aircraft becomes available, these criteria may be adjusted accordingly. Descriptions of the vertiport TLOF, FATO, and safety area are provided below. For more detailed design information on each element, refer to EB 105 and, if applicable, AC 150/5390-2D - Heliport Design.

3.2.2.1. TLOF

At the center of the vertiport is the TLOF, which is load bearing and generally paved. This area is where an eVTOL aircraft performs a touchdown and liftoff maneuver. The TLOF should be clear of any ground objects (e.g., lighting, charging stations, air vents). Airspace surfaces should be clear of any obstacles when planning for the siting of the TLOF. This will ensure a safe approach and departure of an aircraft and prevent any penetrations to approach/departure and transitional surfaces.

Figure 16 – Vertiport Elements



Source: FAA, Engineering Brief 105 - Vertiport Design, 2022

As mentioned previously, the TLOF should be load bearing to support the weight of the design eVTOL aircraft and any operating ground vehicles within the area. EB 105 states that the TLOF should support dynamic loads based on 150 percent of the maximum takeoff weight (MTOW) of the design eVTOL aircraft. Using the EB 105 reference eVTOL aircraft with an MTOW of 12,500 pounds, the TLOF should support dynamic loads of up to 18,750 pounds. Rotor/propeller downwash is also accounted for in this load requirement.

3.2.2.2. FATO

The FATO surrounds the TLOF and is a defined area where an eVTOL aircraft completes the final phase of its approach and first phase of its departure (i.e., initial/final hover before initiating takeoff/landing). Like the TLOF, the FATO is generally a paved surface, should be clear of obstacles and ground objects, and should support dynamic loads based on 150 percent of the MTOW of the design eVTOL aircraft.

3.2.2.3. Vertiport Safety Area

The Safety Area is a designated space surrounding the FATO to minimize the risk of unintentional diversion for eVTOL aircraft. To ensure safety, the Safety Area should not contain any fixed objects such as parapet walls, lighting, elevator penthouses, canopies, or exhaust vents. However, certain navigation aids (NAVAIDs) that are classified as "fixed-by-function" by the FAA can be placed within the Safety Area as long as they are mounted on frangible supports, similar to how they are implemented on runways.

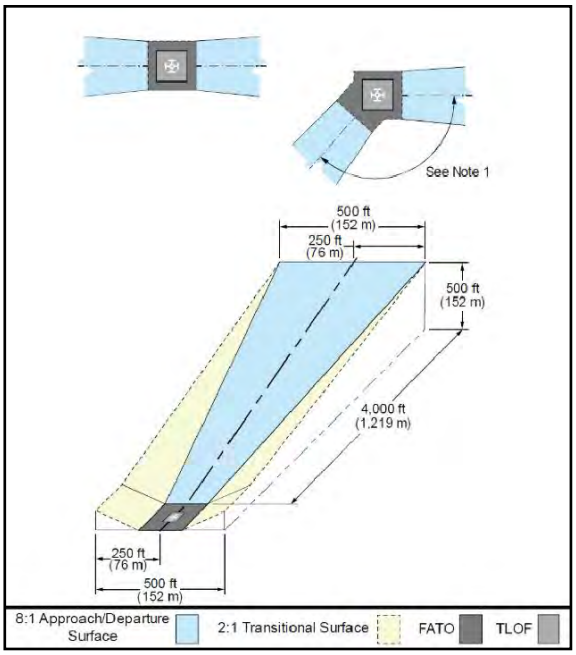
3.2.3. Vertiport Airspace

The purpose of vertiport airspace surfaces is to promote safe and unobstructed operations of eVTOL aircraft near a vertiport. These surfaces are summarized below. It is important to note that the FAA's published guidance on vertiport airspace pertains to visual flight rules (VFR), which is the expected operating mode for initial eVTOL aircraft. Future guidance will include information on airspace considerations for instrument flight rules (IFR) operations.

3.2.3.1. Part 77 Surfaces

Like Part 77 surfaces for runways, the airspace surfaces associated with vertiports are defined in Part 77 for heliports. These surfaces include the primary, approach, and transitional surfaces, which are summarized below and shown in **Figure 17**.

Figure 17 – Vertiport Part 77 Surfaces



Source: FAA, Engineering Brief 105 - Vertiport Design, 2022

Primary Surface: The vertiport's primary surface is a flat, level area that aligns with the shape and size of the FATO. The elevation of the primary surface matches the established elevation of the vertiport.

Approach Surface: The approach surfaces begin at each end of the vertiport primary surface. They have the same width as the primary surface and extend outward and upward for a horizontal distance of 4,000 feet at a slope of 8:1. The outer widths of the approach surfaces are 500 feet. Per EB 105, a vertiport's Part 77 approach surfaces also serve as the VFR approach/departure paths. These paths must be clear of all obstacles to ensure a safe operating environment for eVTOL aircraft.

Transitional Surface: Transitional surfaces extend outward and upward from the lateral boundaries of the primary surface and the approach surfaces. These surfaces extend for a horizontal distance of 250 feet at a slope of 2:1 from the center of the primary and approach surfaces.

3.2.3.2. Approach / Departure Paths

Vertiport approach/departure paths are the designated flight paths for eVTOL aircraft takeoff and landing at a vertiport. Similar to airport runways, these paths should be aligned with the prevailing wind direction. If a vertiport is located at an airport, it is important that these paths should not interfere with the existing approach and departure surfaces of the runways.

Ideally, vertiports should be designed to accommodate approaches and departures from two different directions, allowing for bidirectional use. It is preferrable for these paths to have reciprocal magnetic headings, such as 180 degrees and 360 degrees, and should be free from any obstacles. However, in certain situations where there are obstacles, sensitive land uses, or other constraints, it may be necessary to curve the approach and departure paths to avoid any conflicts.

3.2.4. Vertiport Support Facilities

When conducting a spatial analysis for vertiport infrastructure, it is essential to consider not only the previously mentioned elements but also the necessary support facilities and components needed for operations, including but not limited to:

- Vertiport lighting (required for nighttime operations)
- NAVAIDs (e.g., wind cones, visual glideslope indicator [VGSI])
- Aircraft stands and charging stations
- Ground service equipment
- Maintenance facilities
- Passenger facilities
- Emergency services

- Security features

3.3. Site Review

3.3.1. Vertiport Orientation

Runways are meant to be oriented such that aircraft can take off and land in the same direction as the prevailing wind (into the wind). Like a runway, a vertiport's approach/departure surfaces should be aligned in the direction of the prevailing wind to the extent practicable. Vertiport approach/departure surfaces should also complement existing airport infrastructure and limit impacts to runway operations. Therefore, it is recommended the vertiport approach/departure surfaces at FPR be aligned in an east-west orientation parallel to Runways 10R/28L and 10L/28R. Notably, Runway 14/32 provides an alternative landing direction during crosswind conditions, primarily for smaller aircraft. Given that eVTOL aircraft will likely be sensitive to the same crosswind components as small aircraft, supplementary vertiport approach/departure alignments in a 14/32 orientation should also be considered. Operational considerations associated with parallel and convergent runway/vertiport operations are discussed in the sections below.

3.3.2. Landside Access

As previously noted, efficient landside access is critical to maximizing the benefit of AAM to an airport and its community. Therefore, potential vertiport development sites should be located in a way that facilitates convenient access to existing airport access roads, other airport facilities, and local and regional roadways. As such, the following analyses primarily focus on available land adjacent to existing development at FPR—specifically, land south of Runway 10L/28R. Based on current lack of accessibility, vast undeveloped land, and distance from existing access roads, the northern half of Airport property is not recommended to be considered for initial vertiport infrastructure. However, industry growth and local demand for AAM should be monitored as the suitability of the northern half of Airport property for AAM-related development may be revisited in the future.

3.3.3. Vertiport / Runway Separation

The distances between parallel runway centerlines and vertiport approach/departure surfaces play a crucial role in ensuring the safety and efficiency of fixed-wing aircraft, helicopters, and eVTOL aircraft that operate in close proximity to one another. Standard distances between facilities take into consideration various factors such as the type of aircraft, approach speed, and characteristics of wake turbulence. It is critical that the location of a vertiport is carefully chosen to avoid compromising airport safety and to minimize any negative impacts on existing airport operations, capacity, and delays. The minimum separation distances between FPR's runways and potential future vertiport infrastructure for VFR, IFR, and wake turbulence considerations are illustrated in **Figure 18**.

3.3.3.1. VFR Operations

EB 105 establishes standards and guidelines for separation distances between the centerlines of approach/departure surfaces for both runways and vertiport during simultaneous, same-direction operations under VFR. These guidelines, summarized in **Table 3**, assume that the EB 105 reference eVTOL aircraft has an MTOW of 12,500 pounds or less.

Table 3 – Minimum Distance between Runway Centerline and Vertiport FATO for VFR Operations

Airplane Size (MTOW) *	Distance between Runway Centerline and Vertiport FATO Center †
Small (≤ 12,500 lbs.)	300’
Large (12,500 lbs. to 300,000 lbs.)	500’
Heavy (> 300,000 lbs.)	700’

Notes:
VFR = Visual Flight Rules
MTOW = Maximum Takeoff Weight
**Airplane Size refers to the MTOW of fixed-wing aircraft operating on a parallel runway to a vertiport approach/departure surface.*
†Assumes eVTOL aircraft with an MTOW of 12,500 pounds or less

Source: FAA Engineering Brief 105 - Vertiport Design, 2022.

FPR’s three runways each accommodate varying aircraft type, leading to different standard separation distances from runway centerlines to a vertiport’s FATO center:

Runway 10L/28R: As a visual runway constructed for small single-engine piston aircraft, Runway 10L/28R primarily hosts aircraft with MTOWs less than or equal to 12,500 pounds. Therefore, a vertiport should be sited no closer than 300 feet from the centerline of Runway 10L/28R.
Runway 10R/28L: Runway 10R/28L serves as the primary runway at FPR and hosts a variety of aircraft operations. According to the FAA’s Traffic Flow Management System Counts (TFMSC) database, several aircraft with MTOWs between 12,500 and 300,000 pounds consistently operate on Runway 10R/28L. As such, a vertiport should be sited at least 500 feet from the centerline of Runway 10L/28R.
Runway 14/32: Runway 14/32 serves as the Airport’s crosswind runway and, like Runway 10R/28L, accommodates a variety of aircraft type. To ensure compatibility with fixed-wing aircraft operations on the runway, a vertiport should be sited at least than 500 feet from the centerline of Runway 14/32.

3.3.3.2. IFR Operations

The guidance in EB 105 for vertiport/runway separation is limited to VFR operations. Given there are published instrument approach procedures on Runways 10R/28L and 14/32 at FPR, an evaluation of available guidance on instrument flight rules (IFR) and its criteria is necessary. At the time of writing, the FAA is developing vertiport-specific IFR operations criteria. In the meantime, FAA Advisory Circular 150/5300-13B and FAA Order JO 7110.65AA – Air Traffic Control (JO 711.65AA) can be referenced for criteria related to simultaneous, same-direction IFR aircraft operations at airports. These criteria are based on runway separation, airport elevation, and aircraft departure course.[4]

Simultaneous IFR Approaches: For simultaneous IFR approaches at airports below 2,000 feet MSL, like FPR (23.4 feet MSL), a minimum separation distance of 3,200 feet between parallel runway centerlines is required for straight-in instrument approaches. Alternatively, a separation of 2,500 feet is allowed if there is an offset approach to one runway end.
Simultaneous IFR Departures: Simultaneous IFR departures are permitted with a minimum runway separation distance of 2,500 feet as long as the aircraft departure courses diverge by at least 10 degrees.

[4] FAA Advisory Circular 150/5300-13B - Airport Design, March 2022.

Alternatively, a separation of less than 2,500 feet is permitted if the departure courses diverge by at least 15 degrees.

Simultaneous IFR Mixed Operations: In the case of simultaneous IFR mixed operations, where an aircraft is departing on one runway while another aircraft is on final approach to a parallel runway, the parallel runways must be separated by at least 2,500 feet.[5]

As previously noted, a vertiport's approach/departure surfaces should be aligned in the direction of the prevailing winds to the extent practicable and should not interfere with existing airport operations. As such, it is recommended the primary vertiport approach/departure surfaces at FPR be aligned in an east-west orientation and parallel to Runways 10R/28L and 10L/28R, with supplementary approach/departure surfaces aligned in an 14/32 orientation to support operations in periods of crosswinds.

Although guidance is only available for VFR eVTOL operations, it is prudent to plan conservatively to ensure safe and efficient airport operations in the future. To protect for potential simultaneous parallel IFR operations between fixed-wing aircraft and eVTOL, a vertiport at FPR should be located at least 2,500 feet from the centerline of Runway 10R/28L (this recommendation does not apply to Runway 10L/28R given that it does not have published instrument procedures). As described above, a separation of less than 2,500 feet from the runway centerline may be acceptable if the vertiport FATO is offset from the runway ends.

3.3.3.3. Wake Turbulence

Both AC 150/5300-13B and JO 7110.65AA reference FAA Order JO 7110.126B – Consolidated Wake Turbulence (JO 7110.126B) as a resource for managing wake turbulence separation during parallel operations involving aircraft and helicopters. JO 7110.126B provides guidelines and recommendations for minimizing the impact of wake turbulence caused by aircraft. The order categorizes aircraft based on their MTOW and their ability to withstand encounters with wake turbulence. This categorization, ranging from Category A (largest aircraft) to Category I (smallest aircraft), helps determine the necessary separation distances between aircraft during takeoff and landing.

The EB 105 reference eVTOL aircraft has an MTOW of 12,500 pounds and is categorized by JO 7110.126B as "Category I – Lower Small," defined as any aircraft with an MTOW of 15,400 pounds or less (not to be confused with the FAA's general definition of "small" aircraft with an MTOW of 12,500 pounds or less). According to 2023 FPR operations data from the FAA's TFMSC database, there were 2,914 operations by aircraft categorized as "Category H – Upper Small," 331 operations of "Category G – Lower Large," 136 operations of "Category F – Upper Large," and nine operations of "Category E – B757." There were no operations at FPR in 2023 by aircraft categorized as D, C, B, or A.

For this discussion, it is assumed a vertiport at FPR would have primary approach/departure surfaces that are aligned in an east-west orientation and parallel to Runway 10R/28L, as recommended above. For parallel runways (i.e., Runway 10R/28L and a future vertiport), JO 7110.126B states that ATC should separate Category I aircraft behind Category E aircraft by two minutes when departing parallel runways that are separated by less than 700 feet *or* if parallel runways separated by at least 700 feet have intersecting flight paths. In the case of nonintersecting converging runways (i.e., Runway 14/32 and a future vertiport), ATC should separate Category I aircraft behind Category E aircraft by two minutes if flight paths with cross.

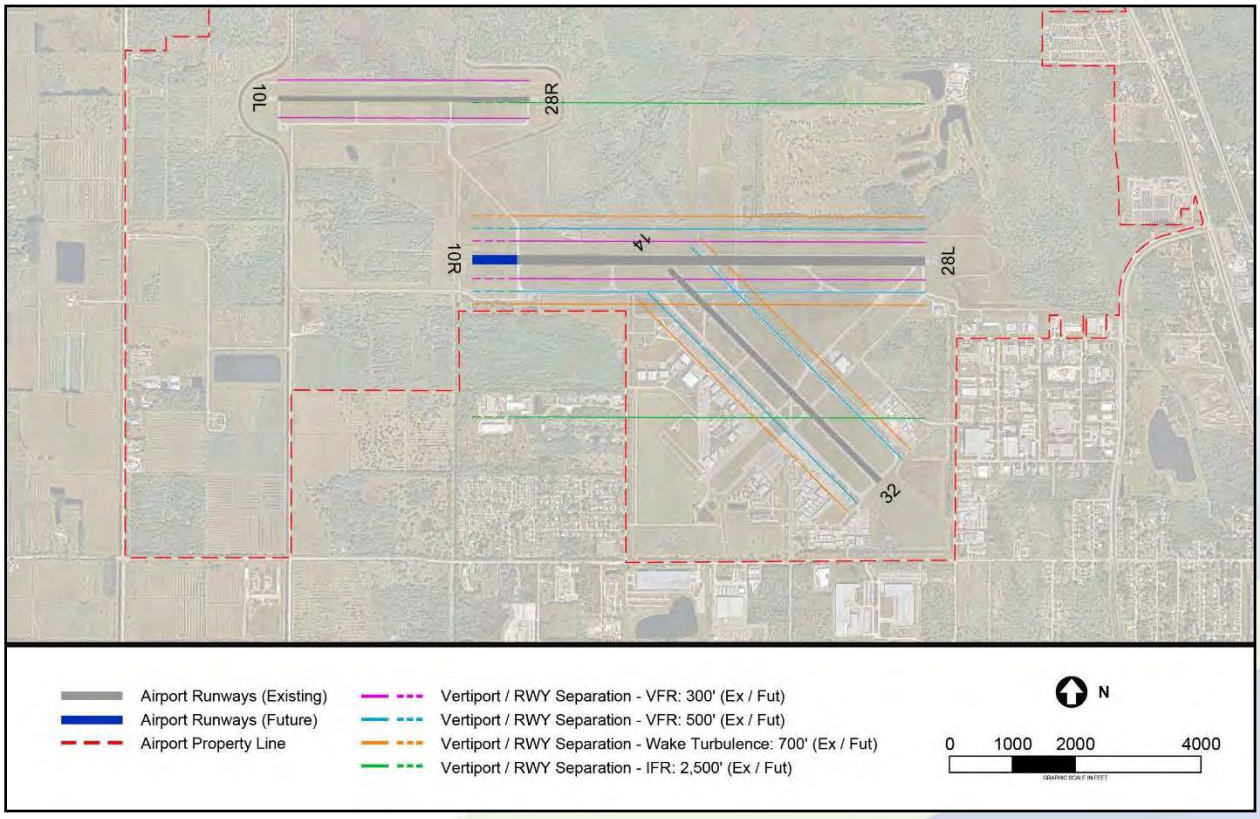
[5] When parallel runways are staggered, runway separation distance may be reduced based on the distance of threshold stagger.

Although there were only nine operations by aircraft with a Category E designation at FPR in 2023, a conservative planning approach to vertiport infrastructure should account for long-term changes in an airport's fleet mix. Therefore, it is recommended that a vertiport is sited at a minimum of 700 feet from all existing runway centerlines at FPR. Given that Runway 10L/28R only accommodates small, single-engine piston aircraft, these wake turbulence separation distances for vertiport siting do not apply to the visual runway.

3.3.3.4. Summary of Vertiport/Runway Separation

As shown in **Figure 18**, the separation distances of 500 feet associated with VFR operations on both Runways 10R/28L and Runway 14/32 are superseded by the separation distances of 700 feet associated with wake turbulence considerations. Furthermore, the recommended separation distance between Runway 10R/28L and a future vertiport is 2,500 feet to protect for simultaneous IFR mixed operations. Notably, this distance of 2,500 feet may be reduced with a staggered runway threshold and vertiport FATO, which is likely to be the case. The Airport's fleet mix and runway operations should be monitored for significant changes that may impact vertiport wake turbulence considerations.

Figure 18 – Vertiport / Runway Separation Distances



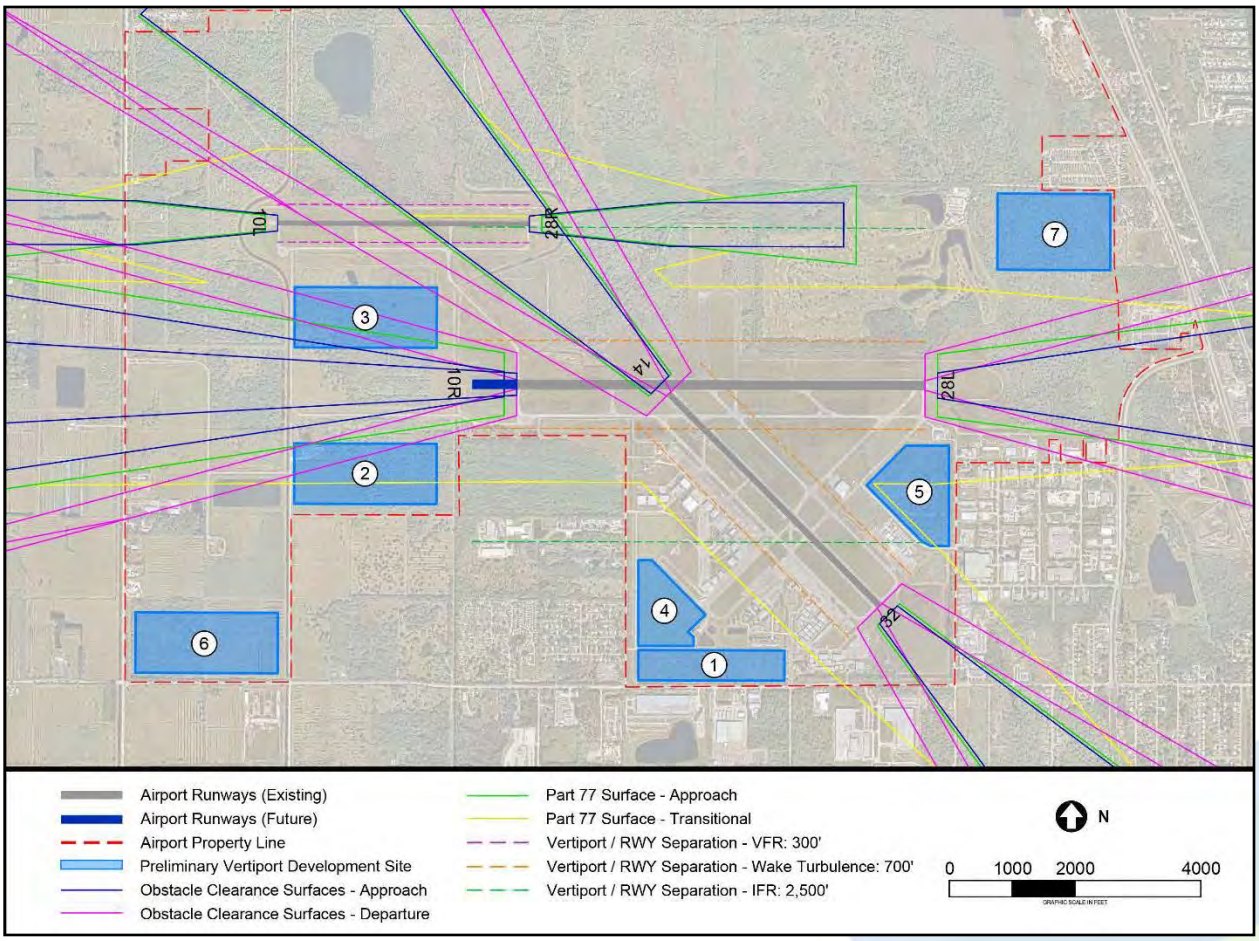
Source: Kimley-Horn, 2024.
Image Source: Nearmap, accessed March 2024.

3.4. Preliminary Sites

Thus far, this chapter has summarized the airspace at FPR (OCS and Part 77 surfaces), the general airspace surfaces associated with vertiports (approach/departure and transitional surfaces), vertiport and runway separation requirements, landside connectivity, and various other vertiport siting considerations.

Figure 19 layers various vertiport siting considerations into one exhibit to help further define preliminary sites for a vertiport at FPR. As shown, seven preliminary vertiport sites have been identified based on the analyses in the previous section. These sites are adequate in size to accommodate an eVTOL takeoff/landing area and supporting infrastructure, including aircraft parking stands, electric aircraft charging stations, taxiways, pedestrian areas, terminal facilities, ground vehicle parking, and landside access roadways.

Figure 19 – Preliminary Vertiport Sites



Source: Kimley-Horn, 2024.
Image Source: Nearmap, accessed March 2024.

3.4.1. Initial Review of Preliminary Sites

Airport management was consulted regarding the preliminary sites identified in **Figure 19**, and noted that Sites 4 and 5 are earmarked for near-term aeronautical development. With requests for proposals (RFPs) being released for both parcels, these sites are not available for vertiport infrastructure.

Site 7 is aligned with the extended centerline of Runway 10L/28R. A vertiport sited in this location may disrupt aircraft operations on the runway, especially with the high level of training operations that occur on this runway. Additionally, the site is located adjacent to a mobile home residential community and would facilitate eVTOL operations near several other residential neighborhoods.

Site 3, while complying with vertiport/runway separation distances and not falling along an extended runway centerline, is located in a congested portion of the airfield in terms of airspace. Additionally, there is no existing landside access to this site, which would substantially increase the total cost of improvements.

Based on this initial review, Sites 3, 4, 5, and 7 will not be considered for vertiport development at the Airport. The following sections perform a deeper dive into the remaining sites: Sites 1, 2, and 6.

3.4.2. Vertiport Airspace Obstacle Analysis

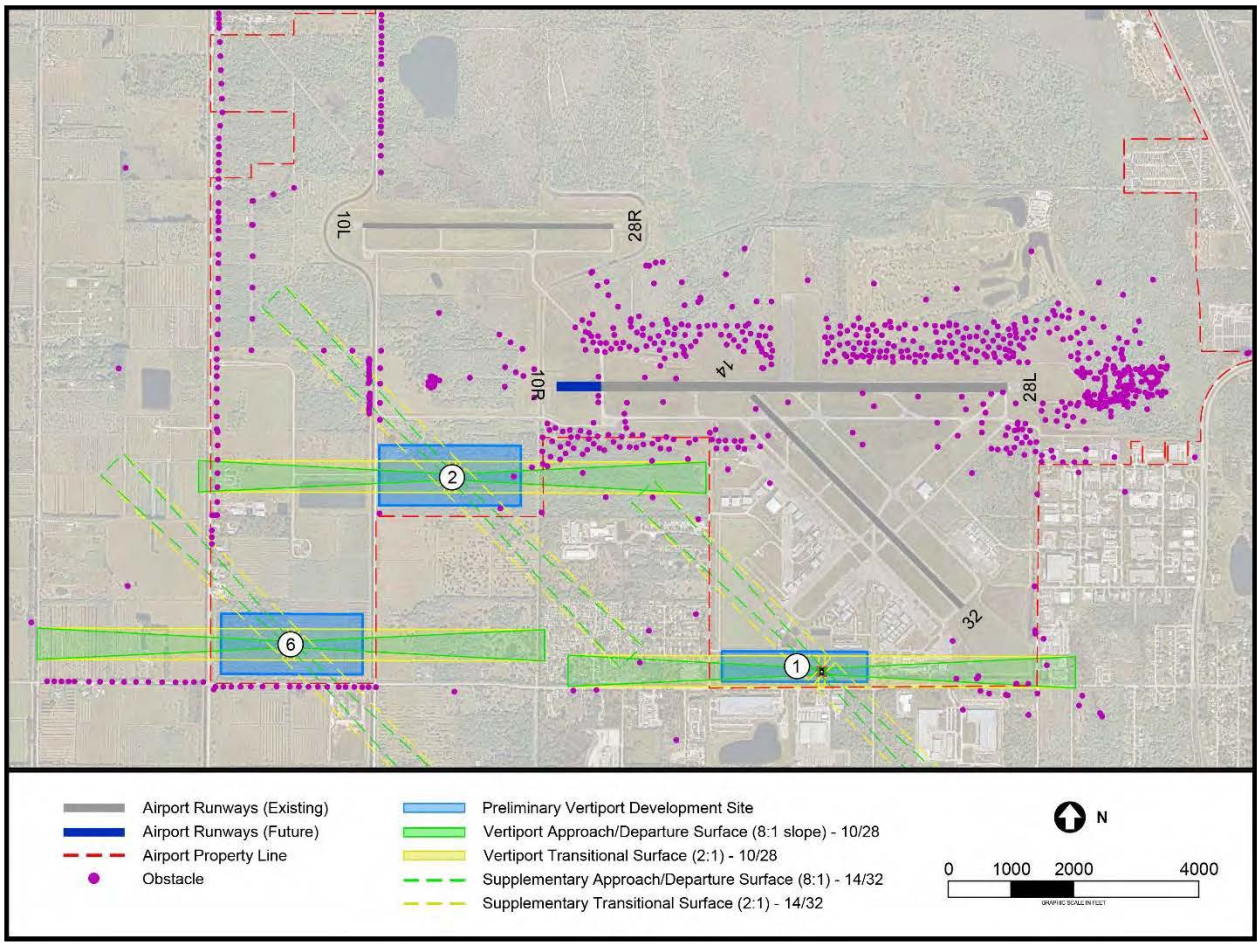
To promote safe eVTOL operations during flight, it is necessary to protect the vertiport Part 77 surfaces and the corresponding approach/departure paths from any obstacles. Airport obstacles were sourced from available data in the FAA's OE/AAA database to determine potential objects that may affect the imaginary surfaces of vertiports located within the three preliminary sites.

Figure 20 below shows the obstacle data and adds vertiport imaginary surfaces to each preliminary site. Although the exact location of a vertiport on each site can vary, this visual provides an initial review of potential obstacles to these surfaces. Obstacles near the preliminary vertiport sites include trees, utility poles, and buildings. Trees can be trimmed or removed, but the ultimate location of a vertiport should ensure objects that cannot be easily relocated or moved, such as utility poles and buildings, do not penetrate the imaginary surfaces.

A review of the obstacle data shows that while there are some trees, utility poles, and buildings located within the limits of the vertiport imaginary surfaces, these objects would not penetrate the surfaces and therefore would not be deemed hazards to air navigation. As such, there are no significant obstacle constraints that prevent a vertiport from being sited in either of the three preliminary locations.

It is important to note that data within the FAA's OE/AAA database represent existing obstacles to the imaginary surfaces of the Airport's runways (i.e., OCS, Part 77 surfaces). Prior to selecting a vertiport site at FPR, a site-specific obstacle analysis should be conducted to identify potential hazards to eVTOL operations and, if necessary, an obstacle mitigation plan should be developed.

Figure 20 – Airport Obstacles



Source: Kimley-Horn, 2024.
Obstacle Data Source: FAA Obstruction Evaluation / Airport Airspace Analysis (OE/AAA) database (accessed March 2023).
Image Source: Nearmap, accessed March 2024.

3.4.3. Integration into Airport Operations

A vertiport at FPR must facilitate eVTOL operations that effectively integrate into the Airport's existing procedures to promote the safe and efficient movement of aircraft in the airspace and on the ground. Referencing the Airport's traffic pattern in **Figure 15**, Site 1 is located inside the traffic patterns of Runways 10R/28L and 14/32, Site 2 is located inside the Runway 10R/28L traffic pattern and directly under the traffic pattern of Runway 14/32, and Site 6 is located within the southwest corner of the Runway 10R/28L pattern. Recognizing that a vertiport's approach/departure surfaces at FPR are ideally aligned in an east-west orientation (parallel to Runway 10R/28L) with supplemental approach/departure surfaces aligned in an 14/32 alignment, an eVTOL aircraft approaching/departing a vertiport located in Sites 1, 2, or 6 may conflict with fixed-wing aircraft in the Airport's traffic patterns. Coordination to ensure smooth aircraft traffic flow may increase ATC workload, especially during peak periods of activity.

Alternatively, neither of the three preliminary sites conflict with the traffic pattern of Runway 10L/28R. Unlike the patterns of Runways 10R/28L and 14/32, which are primarily used to facilitate aircraft departures and arrivals, the Runway 10L/28R traffic pattern is frequently utilized for training activity and may have multiple aircraft in the traffic pattern at one time while performing touch-and-go maneuvers.

Regarding ground operations, both Sites 1 and 2 are adjacent to existing taxiways/taxilanes. In the event that an eVTOL aircraft needs to access other facilities on the airfield, such as maintenance and repair, a taxilane connection may be made to support ground taxiing or tug operations. Site 6 is located west and south of existing airfield facilities on a portion of Airport property that extends south, like a peninsula. Additionally, the Airport does not own properties between the main landside area and Site 6, and Airport-owned parcels north of Site 6 are currently non-aeronautical uses, eliminating the possibility to connect a vertiport on Site 6 with the airfield.

3.4.4. Landside Considerations

3.4.4.1. Access Roadways and Landside Facilities

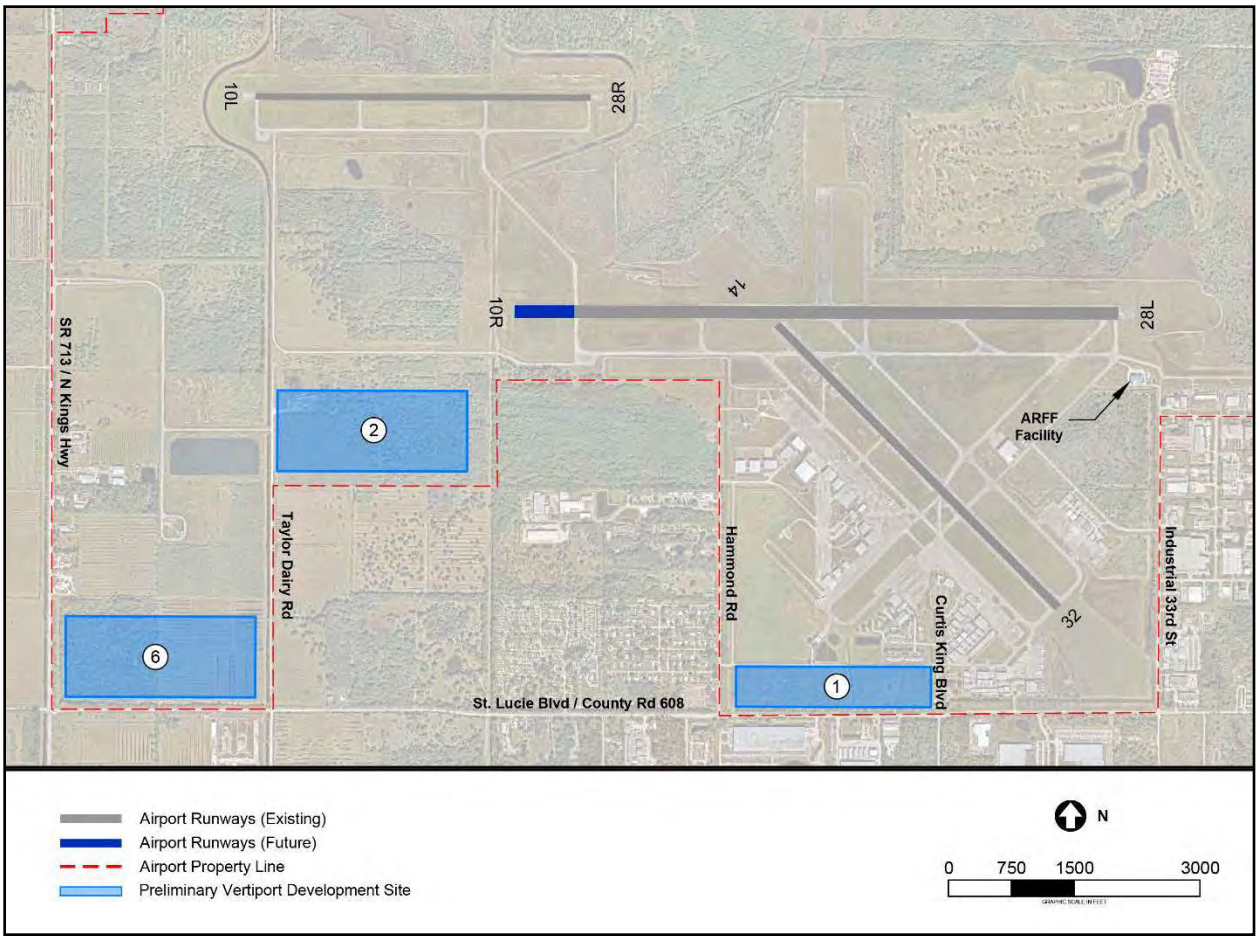
Access roadways are critical to connecting an airport's facilities and the communities they serve. With sustained, streamlined mobility being among AAM's key objectives, efficient landside access will play a critical role in facilitating first- and last-mile transportation for eVTOL users.

Site 1 is located near the main access point to the Airport and may be accessed by Curtis King Boulevard via St. Lucie Boulevard/County Road 608 (East). This location near existing Airport access points provides for efficient vehicular connectivity between a vertiport and the St. Lucie County roadway network. Site 1 is also conveniently located near FPR's main landside campus, including the FBO, U.S. Customs facility, restaurant, and flight schools.

Sites 2 and 6 are located further from the Airport's existing landside areas than Site 1. Site 2 can be accessed via Taylor Dairy Road, an unpaved roadway. It is likely this road will require improvements should a vertiport be located in Site 2. Site 6, while located further from the Airport's landside areas, is accessible via St. Lucie Boulevard/County Road 608 (East). As discussed, however, Site 6 is separated from the rest of Airport property with future aeronautical connectivity being unlikely due to the number of non-aeronautical uses that surround the site.

The Airport's access roadways are shown on the following page in **Figure 21**.

Figure 21 – Access Roadways



Source: Kimley-Horn, 2024.
Image Source: Nearmap, accessed March 2024.

3.4.4.2. Emergency Response

Landside access also facilitates efficient emergency response in the event of an incident at or around a vertiport. As shown above in **Figure 21**, FPR has an on-site Aircraft Rescue and Fire Fighting (ARFF) facility located immediately south of Runway end 28L. ARFF personnel utilize ground vehicles (e.g., ARFF trucks) to access emergencies throughout the Airport. Preliminary vertiport Sites 1 and 2 can be accessed by ARFF personnel via the airfield as long as vehicle service roads provide access between existing airfield facilities and the vertiport development area. Given the remote nature of Site 6, ARFF personnel would be required to exit the airfield, travel south on Industrial 33rd Street, and then west on St. Lucie Boulevard/County Road 608 (East) to access the vertiport—an approximately 3-mile trip around the perimeter of Airport property.

3.4.5. Preliminary Site Determination

Based on the analyses within this chapter, Sites 1, 2, and 3 are capable of hosting vertiport operations in the future—the sites do not conflict with runway imaginary surfaces and are not constrained by airspace obstacles. For all sites, ATC will be required to coordinate eVTOL operations in/out of the vertiport to avoid interference with aircraft in runway traffic patterns. As noted above, however, Site 1 provides the most efficient landside connectivity for both eVTOL users and ARFF personnel of the three sites. Additionally,

vertiport infrastructure on the site may benefit from adjacent utilities associated with existing development. Therefore, this study favors Site 1 as the leading candidate for future vertiport development at FPR.

The St. Lucie TPO recognizes the Airport's autonomy in infrastructure planning at FPR. The analyses and recommendations of this study are meant to provide initial due diligence to support AAM adoption and integration at FPR and throughout St. Lucie County. It is recommended the Airport conduct additional site investigation and planning to confirm, refine, and/or revise the recommendations of this study.

3.5. Assumptions and Limitations

AAM is a developing industry in its early stages. At the time of writing, validated data for eVTOL aircraft are not readily available, and subsequent guidance and regulations for vertiport development and AAM operations are preliminary in nature. In response to this rapidly evolving industry, the FAA has advised interested parties to refer to existing guidance, such as EB 105, AC 150/5300-13B, and Part 77, for initial AAM planning.

While a preliminary site investigation such as this one is the first step in reviewing feasibility of an area for vertiport development, future studies should be conducted to gather input from stakeholders and subject-matter experts, and a thorough analysis of the site should be performed using the latest FAA standards, airport survey data, and industry trends. Future studies should also include reviews of ATC line-of-sight from the ATCT to the vertiport, the capacity of the local power grid to support electric aircraft charging stations, and the land use and zoning surrounding a vertiport. Furthermore, additional site investigation and engineering design—including environmental, grading, stormwater, and utilities—should be conducted prior to finalizing site plans for a future vertiport at FPR.

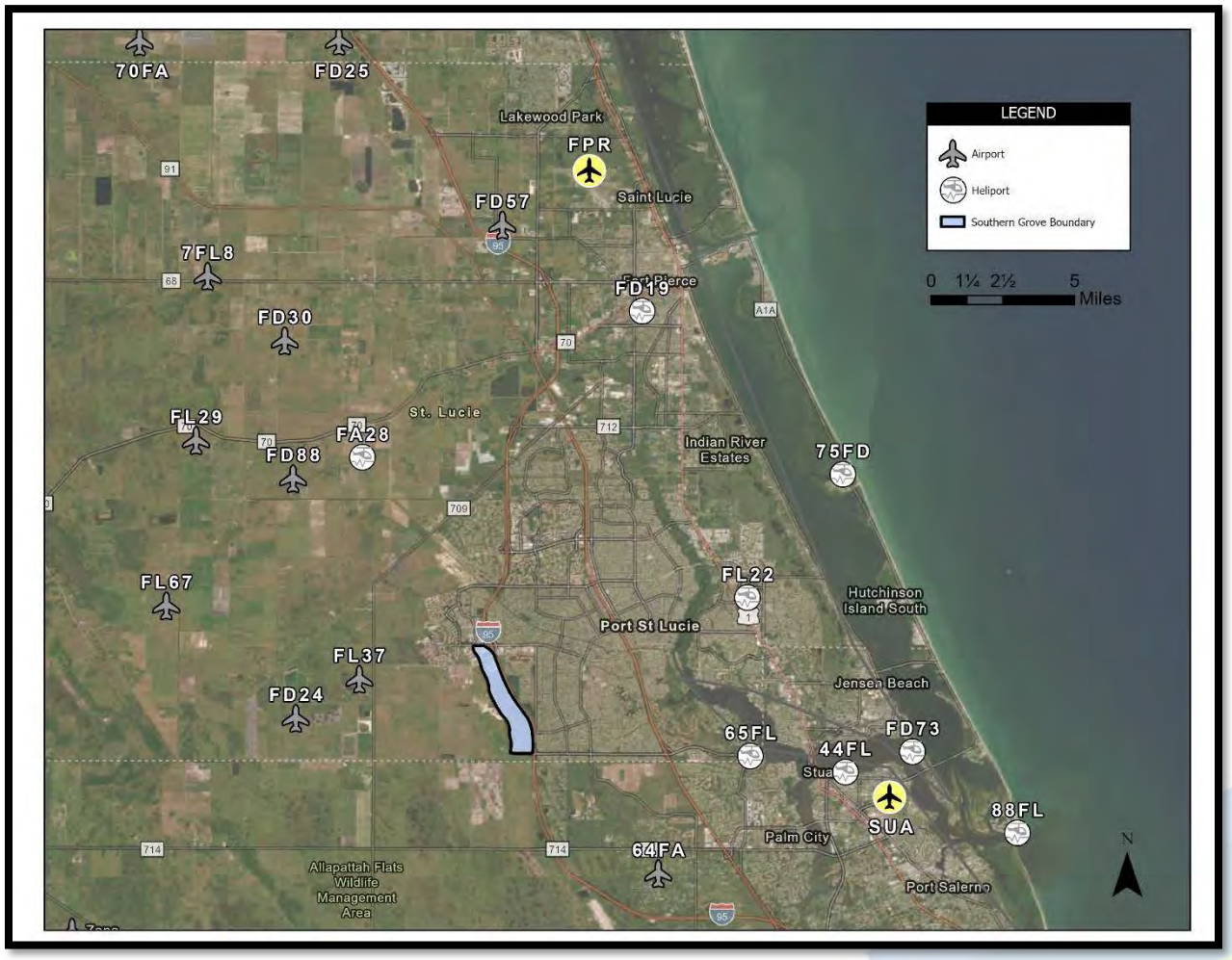
Based on this information, limited regulatory guidance, and a lack of published aircraft operational and performance data, the findings and recommendations of this study should not be used as the sole basis for the Airport's decision making.

Chapter 4. Airspace and Infrastructure Modeling

4.1. Airports in St. Lucie

The first step of any airspace modeling task is to understand the location of local airports and heliports that influence the structure of airspace surrounding the study area. Airports and heliports (both public and private) surrounding the study area are shown in **Figure 22**.

Figure 22 – Local Airports and Heliports Facilities



Notes: Facility callout acronyms illustrated above are FAA identification codes.
Source: FAA Sectional / Kimley-Horn.

For purposes of this study, it is assumed that the proposed future vertiport sites as determined in previous chapters of this study will represent initial AAM operating areas within St. Lucie County. Exact locations and designs of these facilities are to be further evaluated once operators are identified and the economics of the operations are verified. No existing airports or heliports were located within the areas identified in Chapter 2 of this study.

4.2. Airspace Structure Overview

Airspace is defined in three-dimensional volumes and organized by the FAA. The National Airspace System (NAS) consists of a network of airspace, airports, air navigation systems, and Air Traffic Control (ATC) facilities, and is governed by a set of rules and regulations that allow for the coordination and control of airspace within the U.S. Classified airspace corresponding to the airports presented in **Figure 23** was collected. These data were analyzed to ensure the airspace system and procedures can accommodate the anticipated demands of AAM.

4.2.1. Controlled Airspace

Classification and active control help the FAA organize complex airspace. Restrictions on certain portions of airspace may include specific aircraft equipment, visibility minimums, cloud clearance, and/or procedures when operating inside them, such as communication with ATC. These restrictions assist the NAS to operate at maximum levels of safety and efficiency. Controlled airspace (Classes A, B, C, D, and E) refers to airspace where ATC services are provided. Typically, these classifications are associated with different types of airports and are dependent on the frequency of operations and complexities of the local airspace. Special use designates airspace where specific activities occur or where limitations must be imposed, such as military operating areas or routes, which are typically coordinated by ATC.

4.2.2. Uncontrolled Airspace

Within uncontrolled airspace (Class G) ATC has no authority over or responsibility to control. Other airspace refers to the remaining airspace not covered by the aforementioned classifications.

4.3. Airspace Above St. Lucie

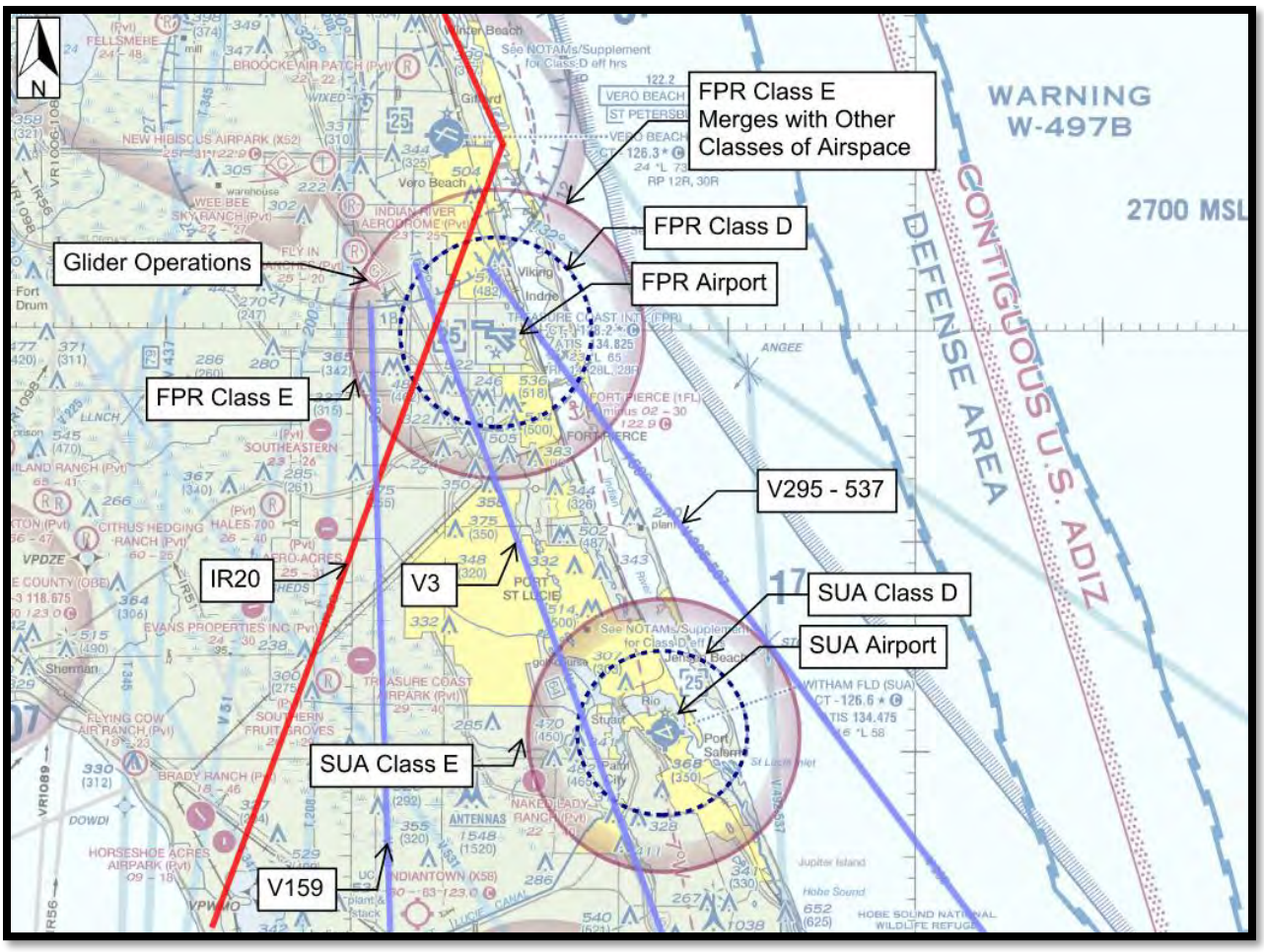
The airspace above St. Lucie County is depicted within **Figure 23** below. A glider operating area located northwest of FPR is the only special use airspace within the County. Class A airspace generally begins at 18,000 feet above mean sea level (MSL) and extends up to and including 60,000 feet MSL (flight level 600). AAM operations are not anticipated to operate at this high altitude and therefore will not utilize Class A airspace.

Class D airspace surrounds FPR to the north and Witham Field (SUA) to the south during specified hours. Class D airspace starts at the ground surface and extends upward to 2,500 feet above ground level (AGL). It is required that aircraft establish communication with ATC prior to entering Class D airspace. Class D airspace surrounding each airport is only active when the ATCT is operational. For exact ATCT service hours, refer to the FAA's "Chart Supplement" for each airport.

Class E airspace extends beyond the lateral extent of Class D that surrounds FPR and SUA, and overlays the airports when not operating as Class D airspace. Class E makes up the majority of airspace above St. Lucie County. Class E is controlled airspace by ATC surrounding FPR and SUA, which begins at 700 feet AGL and extends up to 17,999 feet MSL surrounding each airport within the local region, with FPR's Class E merging to the north with other airport's Class E airspaces. Outside the Class E lateral bounds for each airport, Class E begins at 1,200 AGL, as opposed to 700 feet AGL near those airports.

Class G airspace makes up all other local airspace underneath Class E airspace, inclusive of airspace immediately above FPR, up to 699 feet AGL, when Class D is not active. Class G is uncontrolled airspace and operates under VFR.

Figure 23 – Airspace Classifications and Airways Above St. Lucie



Note: This exhibit is for illustrative purposes and not to be used for air navigation; Victor Airways (V); Treasure Coast International Airport (FPR); Witham Field (SUA); Instrument Military Training Route (IR).

Source: FAA, Sectional Aeronautical Chart, 2024; Kimley-Horn, 2024.

4.3.1. Existing Airways and Routing Above St. Lucie

In addition to airspace classifications around the study area, **Figure 23** above also identifies common routes and airways used by aircraft navigating the NAS, such as victor airways. Victor airways are commonly contained within Class E airspace and are used by pilots to navigate between Very High Frequency Omnidirectional Range Stations (VORs), which is a NAVAID used by pilots. These routes are used by a variety of aircraft types and speeds for both VFR and IFR, three of which are near the study area: V3, V159, V159, V537.

A published military training route closest to St. Lucie County, which traverses FPR airspace, was identified. This route, named IR20, is used by military aircraft operating under instrument flight rules regardless of weather conditions traveling at high speeds and low altitudes, typically below 10,000 feet MSL. The route has a width of 8 nautical miles and is commonly contained within Class E airspace.

AAM operations should not impede or interfere with these published routes identified above. Therefore, any operational corridors between vertiports should be sited in a way that does not overlap these routes for extended periods, and minimize intersections to the extent possible.

4.4. AAM Corridors

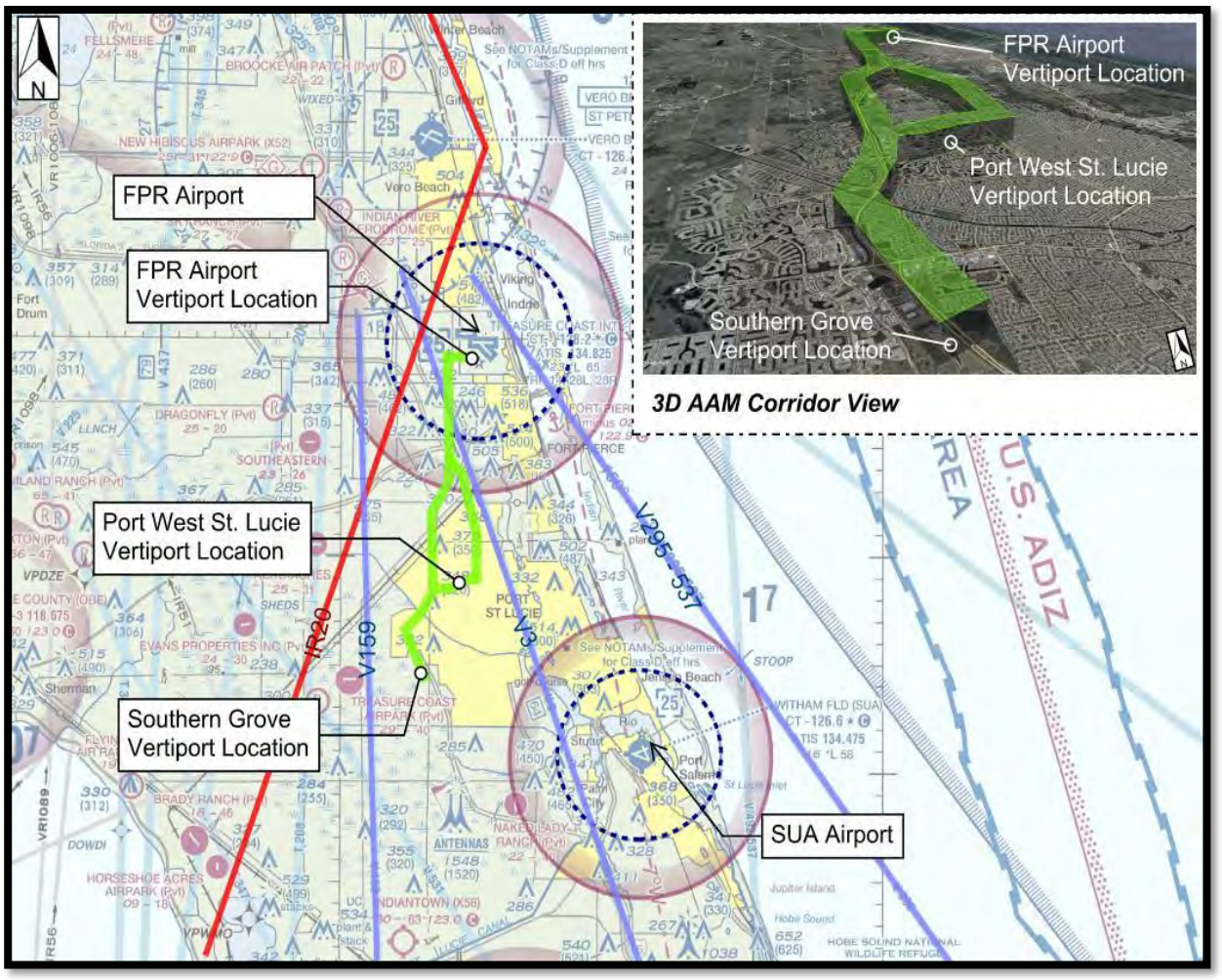
Any proposed AAM operational areas within this feasibility study must integrate into existing airspace without impeding on aircraft operations. As defined within the sections above, there are multiple airways used by aircraft to navigate in and around the St. Lucie airspace, and the airspace is prominently influenced by FPR to the north and SUA to the south. Additionally, the AAM corridor should factor in noise impacts to the local community, even though AAM operations are anticipated to be much quieter than traditional small aircraft.

A corridor is defined within this study as a volume of three-dimensional airspace that would be used to route AAM operations between vertiports. It was determined that two distinct corridor routes were needed to accommodate potential operations, connecting the three recommended initial vertiport locations: FPR, Southern Grove, and Port St. Lucie West. One would connect directly between FPR and Southern Grove vertiport locations, and another would connect all the three vertiport locations. Each corridor is planned to be 0.5 nautical miles wide due to the anticipated size and speed of aircraft; each corridor is planned to extend from the ground to 2,500 feet AGL which allows for bi-directional vertical separation between aircraft, which is assumed to require 1,000 feet of vertical separation. Northbound operations would be traveling at an altitude of around 1,000 feet AGL, with southbound operations operating at 2,000 feet AGL.

Corridors were planned to follow existing roadways to protect against additional noise exposure to noise-sensitive community areas such as parks, schools, and residential areas. In addition to aligning with roadways to limit noise impacts, roadways are often utilized by pilots and aircraft when operating by visual navigation.

The conceptual AAM corridors aligning to existing roadways and avoiding existing airspace conflicts is shown within **Figure 24** below. AAM corridors are not in conflict with victor airways, nor the military training route. AAM operations are anticipated to be in constant communication with ATC when flying inside Class E and Class D airspace. The proposed AAM corridors are predominantly inside Class E airspace, aside from operating near FPR when Class D is active, or under Class E airspace, which reverts to Class G. ATC may route AAM operations differently than what is shown in **Figure 24,** when operating within Class D to separate AAM operations and other air traffic as needed.

Figure 24 –Conceptual AAM Corridor(s)



Note: This exhibit is for illustrative purposes and not to be used for air navigation. Furthermore, these corridors represent potential feasible locations, and must be further vetted through design and coordination with the FAA.

Source: FAA, Sectional Aeronautical Chart, 2024; Google Earth Imagery, accessed 2024; Kimley-Horn, 2024.

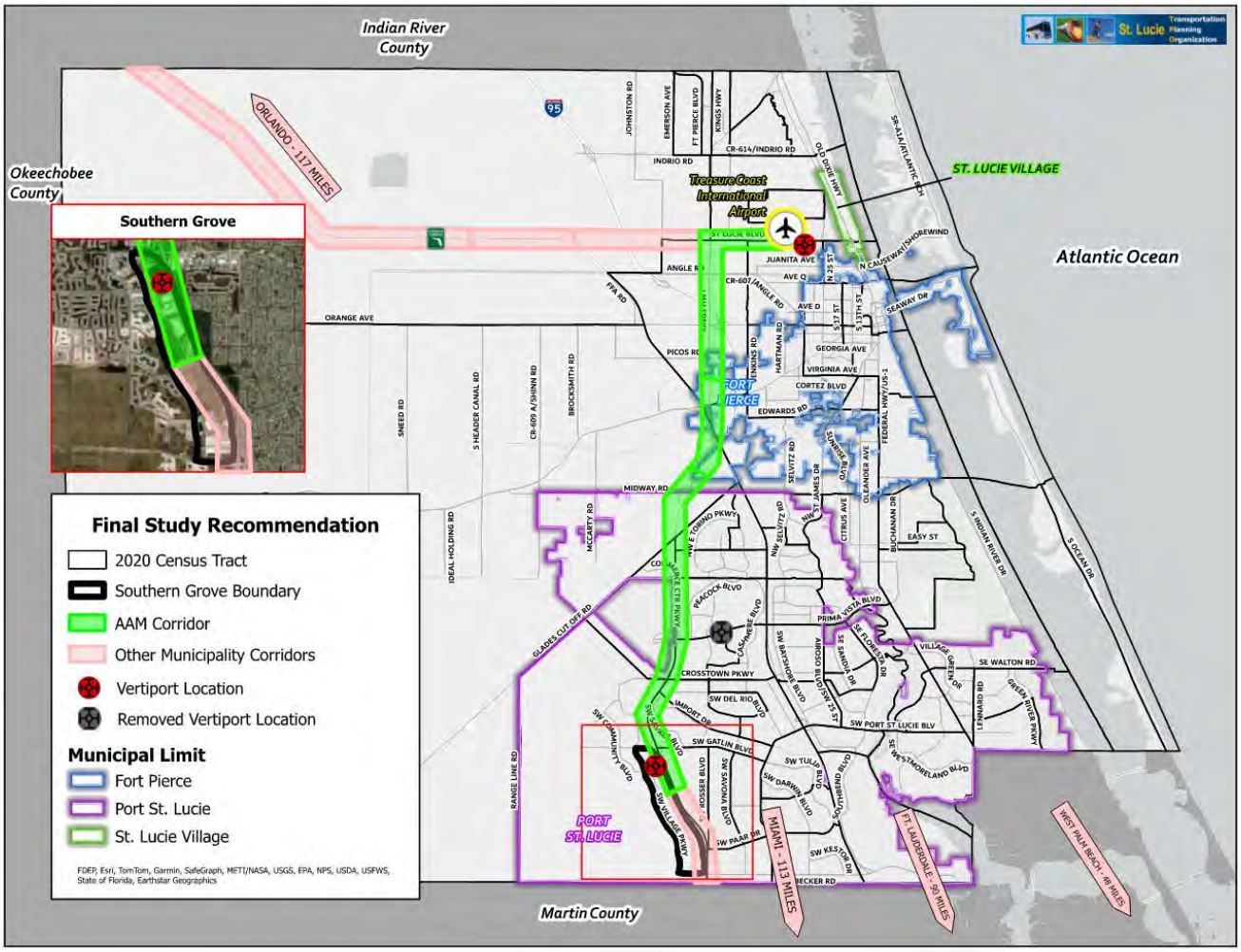
The corridor distances are relatively short ranging from 6 to 17 nautical miles. AAM travel times will depend on vehicle performance and capabilities. Depending on schedules and volume of traffic, additional corridors or wider corridors may be required to provide adequate separation.

4.5. Final Recommendation – Conclusion

Based on the airspace evaluation, it has been determined that the St. Lucie West Vertiport location is not suitable due to its potential negative impacts on nearby residential areas and short segments with tight maneuvers. Although the surrounding land use of the vertiport itself is compatible, the only feasible AAM corridor that follows St. Lucie West Boulevard would still potentially result in excessive noise impacts on the surrounding community areas such as parks, schools, and residential land uses. On the other hand, the Southern Groves Development Area remains a suitable location due to its proposed large-scale manufacturing, logistics, and retail development and the ability to utilize Interstate 95 as the primary roadway infrastructure for

the AAM corridor to be placed above, thereby minimizing noise exposure on the communities in between FPR and Southern Grove. Considering these factors, the study recommends two vertiport locations in St. Lucie County: FPR and the Southern Grove development area, connected by a conceptual AAM corridor above Interstate 95. **Figure 25** below depicts the final recommendation of the study.

Figure 25 – Final Recommendation



Source: Kimley-Horn, 2024

Lastly, it is important to note that AAM services will heavily rely on existing Aviation infrastructure, such as FPR and connectivity to out of County origins and destinations. St. Lucie is well suited to connect to a larger statewide UAM system, serving as a stopover point or transition point to other locations along the eastern seaboard of Florida and possibly connection to the southwestern portion of the peninsula.

Therefore, off-airport locations for AAM are expected to be developed at a later, mature stage, when higher volumes of AAM traffic is expected. At the time of implementation, the AAM industry would have advanced further and additional variables may need to be evaluated. For these reasons, it is recommended that these recommendations be reevaluated with updated transportation indicators in the future. The two vertiport

locations are recommended and should be further evaluated as part of the TPO's planning endeavors, such as the LRTP.

St. Lucie Transportation Planning Organization

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AGENDA ITEM SUMMARY

Board/Committee:	St. Lucie TPO Board
Meeting Date:	June 5, 2024
Item Number:	9e
Item Title:	2024/25 List of Priority Projects (LOPP)
Item Origination:	Unified Planning Work Program (UPWP)
UPWP Reference:	Task 3.3 – Transportation Improvement Program
Requested Action:	Adopt the draft 2024/25 LOPP, adopt with conditions, or do not adopt.
Staff Recommendation:	Based on the recommendations of the TPO Advisory Committees, the consistency of the projects in the draft 2024/25 LOPP with the SmartMoves 2045 Long Range Transportation Plan, and the prioritization of the projects in accordance with the TPO's adopted prioritization methodologies, it is recommended that the draft 2024/25 LOPP be adopted.

Attachments
- Staff Report
- Draft 2024/25 LOPP
- 2023/24 LOPP

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MEMORANDUM

TO: St. Lucie TPO Board

FROM: Peter Buchwald
Executive Director

DATE: May 29, 2024

SUBJECT: 2024/25 List of Priority Projects (LOPP)

BACKGROUND

As part of the annual development of the St. Lucie TPO's Transportation Improvement Program (TIP), the LOPP is developed for submittal to the Florida Department of Transportation District 4 (FDOT) for the allocation of funding to projects that are or will be programmed in the TIP. The projects identified in the LOPP subsequently are funded and included in the FDOT Work Program to the maximum extent feasible. The St. Lucie TPO's TIP for FY 2025/26 – FY 2029/30 then will be developed based on the LOPP and the FDOT Work Program. The LOPP is required to be submitted to FDOT by August 1st.

ANALYSIS

The draft 2024/25 LOPP is attached. The revisions from the 2023/24 LOPP, also attached, are summarized in the following.

Master List: The Midway Road Widening Project from Glades Cut Off Road to Jenkins Road was removed because it is programmed for construction in FY 2026/27. The Northern/Airport Connector Project was moved to the bottom of the list because the feasibility of the Northern Connecter portion of the project is questioned by the developer of the project and by Florida's Turnpike. Funding for the St. Lucie TPO was increased to $600,000 for inflation and growth. The Project Status/Notes were updated based on the FY 2024/25 – FY 2028/29 TIP, and the Estimated Costs are being updated based on the latest information.

Local Projects for Carbon Reduction Program (CRP) Funding and Transportation Alternatives Additional (TAA) Funding: This list was deleted because all of the projects were programmed, and all of the program funding available to the St. Lucie TPO was allocated.

Congestion Management Process (CMP) Projects: The Midway Road Fiber Optic Project and Gatlin Boulevard at Savona Boulevard Intersection Improvement project were removed because they are programmed for construction.

Transit Projects: This list was revised based on input from Area Regional Transit with the most significant revisions being the additions of the Micro-Transit Zone 3 to service the Western Fort Pierce Area and Van Pool Service for St. Lucie County residents to access jobs in St. Lucie County.

Transportation Alternatives (TA) Projects: This list was updated to reflect the results of the 2024 TA grant cycle which prioritized the Sunrise Boulevard Sidewalk Project and to remove the Peacock Trail Project because it is programmed for construction in the FY 2024/25 – FY 2028/29 TIP.

The projects in the draft 2024/25 LOPP are consistent with the SmartMoves 2045 Long Range Transportation Plan (LRTP) and are prioritized, where applicable, in accordance with the prioritization methodologies adopted by the St. Lucie TPO.

At their meetings during the week of May 20th, the TPO Advisory Committees recommended the adoption of the draft 2024/25 LOPP.

RECOMMENDATION

Based on the recommendations of the TPO Advisory Committees, the consistency of the projects in the draft 2024/25 LOPP with the SmartMoves 2045 LRTP, and the prioritization of the projects in accordance with the TPO's adopted prioritization methodologies, it is recommended that the draft 2024/25 LOPP be adopted.

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DRAFT

2024/25 List of Priority Projects (LOPP)

(Adopted _____)

Master List

2024/25 Priority Ranking	Major Gateway Corridor?[1]	Facility	Project Limits		Project Description	Project Status/Notes	In LRTP[2] Cost Feasible Plan?	Estimated Cost	2023/24 Priority Ranking
			From	To					
1	N/A[3]	St. Lucie TPO			Planning/administration as detailed in the Unified Planning Work Program		Yes	$600,000	1
2	Yes	Midway Road Turnpike Interchange Phase 2			New interchange with southbound off-ramp and northbound on-ramp		Yes	$20,000,000[4]	3
3	Yes	Kings Highway	Angle Road	Indrio Road	Add 2 lanes, sidewalks, bicycle lanes	ROW[5] acquisition underway	Yes	$142,162,000[6]	4
4	Yes	Jenkins Road	Midway Road	Orange Avenue	Add 2 lanes to existing segments, construct 4 lanes for new segments, and add sidewalks and bicycle lanes	PD&E[7] underway	Yes	$51,890,000[8]	6
5	Yes	California Boulevard	Del Rio Boulevard	Crosstown Parkway	Add 2 lanes and shared-use paths		Yes	$4,760,000[8]	7
6[9]	Yes	St. Lucie West Boulevard	Peacock Boulevard	Cashmere Boulevard	Add 2 lanes and multimodal paths	City to complete design	Yes	$22,000,000	8
7	Yes	Northern/Airport Connector	Florida's Turnpike	Kings Highway	New multimodal corridor with interchanges at Florida's Turnpike and I-95		Yes	$137,110,000[8]	5

[1]Landscape funding eligibility for capacity projects based on 2012 FDOT Landscape Policy
[2]LRTP: *SmartMoves 2045 Long Range Transportation Plan,* February 2021
[3]N/A: Not Applicable
[4]Source of Estimated Cost: Strategic Intermodal System Cost Feasible Plan, May 2023
[5]ROW: Right-of-Way Acquisition
[6]Source of Estimated Cost: Florida Department of Transportation District 4, June 2023
[7]PD&E: Project Development and Environment Study
[8]Source of Estimated Cost: *SmartMoves 2045 Long Range Transportation Plan,* February 2021
[9]For Transportation Regional Incentive Program (TRIP) Grant Funding Only

Congestion Management Process (CMP) Projects

(The St. Lucie TPO's allocation of Surface Transportation Block Grant funds to CMP projects is $300,000 - $400,000 annually)

2024/25 Priority Ranking	Facility/Segment or Intersection	Project Description	Project Status/Notes	Estimated Cost[1]	Project Source	2023/24 Priority Ranking
1	St. Lucie Transportation Management Center (TMC)	Design, construction, and installation of equipment including communication servers, video displays, and workstations that was originally included in Phase 1 of the ATMS Master Plan[2]	Phase I of the ATMS Master Plan was completed without a TMC	$400,000	ATMS Master Plan	1
2	Orange Avenue and South 7th Street (ATMS Master Plan Phase 2A)	Install fiber optic cable along Orange Avenue from US-1 to Kings Highway and along South 7th Street from Orange Avenue to Avenue A and traffic cameras/video detectors and adaptive signal control at the signalized intersections	PE[4] to start in FY 2026/27	$700,000	ATMS Master Plan	2

[1]Source of Estimated Cost is from the Project Source unless otherwise noted
[2]ATMS Master Plan: *Advanced Transportation Management System (ATMS) Master Plan for St. Lucie County,* February 2013
[3]CMP: *St. Lucie Transportation Planning Organization Congestion Management Process Major Update,* June 2018
[4]PE: Preliminary Engineering
[5]Source of Estimated Cost: City of Port St. Lucie

Transit Projects

2024/25 Priority Ranking	Facility/Equipment/Service	Project Location/Description	Is Funding for Capital and/or Operating?	In LRTP[1] or TDP[2]?	Estimated Cost[3]	2023/24 Priority Ranking
1	Port St. Lucie Intermodal Hub	Phase 1 completed in 2013 - Location is in need of an upgrade. Serves as connection point to four routes and Zones 1 and 2 Micro-Transit Service	Capital	Yes	$4,500,000	1
2	Vehicle Purchases	New/replacement buses as specified in the Transit Asset Management Plan[4]	Capital	Yes	$650,000- $1,500,000	2
3	Micro-Transit Zone 3	Expand the on-demand flex service to augment the fixed-route bus service with first and last mile connectivity to the Western Fort Pierce Area	Capital & Operating	No	$325,000-$450,000	NR[5]
4	Transit Operations Center	Centralized operations and maintenance facility to serve the transit system fleet	Capital	Yes	$25,000,000-$28,000,000	9
5	Bus Route Infrastructure	Miscellaneous locations along the fixed routes with priority at transfer locations	Capital	Yes	$500,000	7
6	Van Pool Service	Provide Van Pool Service for St. Lucie County residents to St. Lucie County employers	Operating	Yes	$250,000	NR
7	Micro-Transit Zone 1	Sustain service levels in the Tradition/Gatlin Boulevard area beyond expiration of the previous FDOT Service Development Grant	Capital & Operating	Yes	$325,000-$450,000[6]	3
8	Micro-Transit Fort Pierce	Expand on Freebee services in City of Fort Pierce and continue to provide transportation in transit deserts throughout the County	Capital & Operating	No	$535,000	4
9	Micro-Transit Zone 2	Expand the on-demand flex service to augment the fixed-route bus service with first and last mile connectivity to the Torino Boulevard area to sustain the existing service levels beyond the current FDOT Service Development Grant life of three years	Capital & Operating	Yes	$325,000-$450,000	5
10	Expand Local Services	Improve frequency to 30 minutes on high performing routes	Operating	Yes	$800,000	8
11	Express Route Bus Service	Continue to link the Port St. Lucie and Fort Pierce Intermodal Hubs.	Capital & Operating	Yes	$400,000	6
12	Jobs Express Terminal Regional Service	Regional bus service to West Palm Beach with express commuter services	Operating	Yes	$460,500	10

[1]LRTP: *SmartMoves 2045 Long Range Transportation Plan,* February 2021
[2]TDP: *Bus Plus, St. Lucie County FY 2020-FY 2029 Transit Development Plan Major Update,* June 2019
[3]Source of Estimated Cost: St. Lucie County Transit Staff, May 2024, unless otherwise noted
[4]*Transit Asset Management Plan*, November 2020
[5]NR: Not Ranked

Transportation Alternatives (TA) Projects

2024/25 Priority Ranking	Score[1]	Facility	Project Limits		Project Description	Project Source[2]	Estimated Cost[2]	2023/24 Priority Ranking
			From	To				
1	30.5	Sunrise Boulevard	Bell Avenue	NSLRWCD Canal 15	Sidewalk: 0.5 miles	2024 TA Grant Application[3]	$1,103,773[4]	20
2	25.5	Easy Street	US Highway 1	Silver Oak Drive	Sidewalk-1.0 miles		$1,090,396[6]	2
3	50.0	Florida SUN Trail, Historic Fort Pierce Downtown Retrofit	Georgia Avenue	North State Route A1A	Bicycle Boulevard, Roadway Section Connections, and Railroad Crossing Improvements	TIP, Florida SUN Trail Grant, and St. Lucie WBN[5]	TBD[7]	3
4	42.5	Green River Parkway Trail	Martin County Line	Walton Road	Resurfacing of Shared-Use Path: 2.5 miles	City of Port St. Lucie, Florida SUN Trail, and St. Lucie WBN	$350,000	Not Ranked
4	42.5	Oleander Avenue	Edwards Road	South Market Avenue	Sidewalk: 1.3 miles		$1,500,000[6]	7
4	42.5	Oleander Avenue	Saeger Avenue	Beach Avenue	Sidewalk: 1.4 miles		$1,650,000[6]	7
7	42.0	Lakehurst Drive	Bayshore Boulevard	Airoso Boulevard	Sidewalk: 1.3 miles	Under design by City of Port St. Lucie	$825,000[8]	9
8	41.5	Indrio Road	U.S. Highway 1	Old Dixie Highway	Sidewalk: 0.2 miles		$225,000[6]	12
9	40.5	Indrio Road	Kings Highway	U.S. Highway 1	Sidewalk: 2.6 miles		$3,050,790[6]	17
10	40.0	Oleander Avenue	Midway Road	Saeger Avenue	Sidewalk: 1.5 miles		$1,323,840	19
11	36.5	Angle Road	Kings Highway	North 53rd Street	Sidewalk: 1.3 miles		$1,461,595[6]	12
12	36.0	17th Street	Georgia Avenue	Delaware Avenue	Sidewalk: 0.3 miles		$74,268	13
12	36.0	Boston Avenue	25th Street	13th Street	Sidewalk: 0.8 miles		$123,200	13
14	35.0	Abingdon Avenue	Import Drive	Savona Boulevard	Sidewalk: 0.9 miles	Under design by City of Port St. Lucie	$575,000[8]	15
14	35.0	Brescia Street	Savage Boulevard	Gatlin Boulevard	Sidewalk: 1.3 miles		$323,000[8]	15
16	33.5	Weatherbee Road	U.S. Highway 1	Oleander Avenue	Sidewalk: 0.5 miles		$445,220	17
17	32.0	Range Line Road	Glades Cut Off Road	Martin County Line	Sidewalk: 6.1 miles		$5,300,000[6]	18
17	32.0	West Midway Road	West of Glades Cut Off Road	Shinn Road Area	Sidewalk: 5.0 miles		$5,753,580[6]	18
19	31.5	St. Lucie Boulevard	Kings Highway	North 25th Street	Sidewalk: 3.0 miles		$2,600,000[6]	20
20	30.5	Sunrise Boulevard	Edwards Road	Midway Road	Sidewalk: 2.8 miles		$2,250,000[6]	21
21	29.5	Bell Avenue	Oleander Avenue	Sunrise Boulevard	Sidewalk: 0.5 miles		$411,836[9]	22

2024/25 Priority Ranking	Score[1]	Facility	Project Limits		Project Description	Project Source[2]	Estimated Cost[2]	2023/24 Priority Ranking
			From	To				
22	27.0	Old Dixie Highway	St. Lucie Boulevard	Turnpike Feeder Road	Sidewalk: 5.2 miles		$6,066,780[6]	23
23	26.5	Glades Cut Off Road	Port St. Lucie City Boundary	Range Line Road	Sidewalk: 2.4 miles		$2,830,390[6]	24
23	26.5	Keen Road	Angle Road	St. Lucie Boulevard	Sidewalk: 1.0 miles		$1,160,000[6]	24
25	25.5	Selvitz Road	Edwards Road	South of Devine Road	Sidewalk: 1.8 miles		$562,202	26
26	24.5	Juanita Avenue	North 53rd Street	North 41st Street	Sidewalk: 1.3 miles		$393,004	27
27	15.5	Silver Oak Drive	Easy Street	East Midway Road	Sidewalk: 1.8 miles		$2,076,392[6]	28
28	15.0	Taylor Dairy Road	Angle Road	St. Lucie Boulevard	Sidewalk: 1.0 miles		$1,160,000[6]	29

[1]Scores are based on the *St. Lucie TPO TA Project Prioritization Methodology*
[2]Project Source and Source of Estimated Cost: *SmartMoves 2045 Long Range Transportation Plan,* February 2021 (2045 LRTP), unless otherwise noted
[3]Project is anticipated to be programmed for construction in the FDOT FY 2024/25 - FY 2028/29 Work Program as a result of the 2023 TA Grant Cycle
[4]Source of Estimated Cost: 2024 TA Grant Application, March 2024
[5]WBN: Walk-Bike Network
[6]Source of Estimated Cost: St. Lucie County Engineering
[7]TBD: To be Determined
[8]Source of Estimated Cost: *City of Port St. Lucie Sidewalk Master Plan (Design and Construction), July 2017*
[9]Source of Estimated Cost: 2019 TA Grant Application

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2023/24 List of Priority Projects (LOPP)

(Adopted June 7, 2023; Amended February 7, 2024)

Master List

2023/24 Priority Ranking	Major Gateway Corridor?[1]	Facility	Project Limits		Project Description	Project Status/Notes	In LRTP[2] Cost Feasible Plan?	Estimated Cost	2022/23 Priority Ranking
			From	To					
1	N/A[3]	St. Lucie TPO			Planning/administration as detailed in the Unified Planning Work Program		Yes	$400,000	1
2	Yes	Midway Road	Glades Cut Off Road	Jenkins Road	Add 2 lanes, sidewalks, bicycle lanes	PE[4] underway, ROW[5] to start in FY 24/25	Yes	$55,186,000[6]	2
3	Yes	Midway Road Turnpike Interchange Phase 2			New interchange with southbound off-ramp and northbound on-ramp		Yes	$20,000,000[7]	4b
4	Yes	Kings Highway	Angle Road	Indrio Road	Add 2 lanes, sidewalks, bicycle lanes	PE underway, ROW to start in FY 23/24	Yes	$142,162,000[6]	5
5	Yes	Northern/Airport Connector	Florida's Turnpike	Kings Highway	New multimodal corridor with interchanges at Florida's Turnpike and I-95		Yes	$137,110,000[8]	6
6	Yes	Jenkins Road	Midway Road	Orange Avenue	Add 2 lanes to existing segments, construct 4 lanes for new segments, and add sidewalks and bicycle lanes	Initial PD&E[9] activities underway	Yes	$51,890,000[8]	7
7	Yes	California Boulevard	Del Rio Boulevard	Crosstown Parkway	Add 2 lanes and shared-use paths		Yes	$4,760,000[8]	NR[10]
8[11]	Yes	St. Lucie West Boulevard	Peacock Boulevard	Cashmere Boulevard	Add 2 lanes and multimodal paths	City to start design	Yes	$22,000,000	NR

[1]Landscape funding eligibility for capacity projects based on 2012 FDOT Landscape Policy
[2]LRTP: *SmartMoves 2045 Long Range Transportation Plan,* February 2021
[3]N/A: Not Applicable
[4]PE: Preliminary Engineering
[5]ROW: Right-of-Way Acquisition
[6]Source of Estimated Cost: Florida Department of Transportation District 4, June 2023
[7]Source of Estimated Cost: Strategic Intermodal System Cost Feasible Plan, May 2023
[8]Source of Estimated Cost: *SmartMoves 2045 Long Range Transportation Plan,* February 2021
[9]PD&E: Project Development and Environment Study
[10]NR: Not Ranked
[11]For Transportation Regional Incentive Program (TRIP) Grant Funding Only

Local Projects for
Carbon Reduction Program (CRP) Funding and Transportation Alternatives Additional (TAA) Funding

Funding Source	Facility/Segment or Intersection	Project Limits		Project Description	Estimated Cost	Project Source[1]	LAP-Certified Implementing Agency	Project Status/Notes
		From	To					
CRP	Midway Road	US-1	Selvitz Road	Install fiber optic cable along Midway Road and traffic cameras/video detectors and adaptive signal control at the signalized intersections	$370,000	CMP[2] LOPP[3]	St. Lucie County	
CRP	Gatlin Boulevard at Savona Boulevard			Extend eastbound and westbound left-turn lanes on Gatlin Boulevard	$750,000	CMP LOPP	City of Port St. Lucie	Right-of-way acquisition is not needed
TAA	Green River Parkway Trail	Martin County Line	Walton Road	Resurfacing of multi-use path: 2.5 miles	$350,000	TA[4] LOPP	City of Port St. Lucie	
TAA	St. James Drive	NE Lazy River Parkway	NE Royce Avenue	Sidewalk, 6-8 feet in width, 0.25 mile in length	$419,000	CSAP[5]	St. Lucie County	
TAA	Nebraska Avenue	South Lawnwood Circle	South 13th Street	Sidewalks, 6 feet in width, 1 mile in length, on both sides of street	$717,000	City of Fort Pierce	City of Fort Pierce	Project-specific LAP Certification is necessary

[1]Source of Estimated Cost is from the Project Source unless otherwise noted
[2]CMP: Congestion Management Process
[3]LOPP: List of Priority Projects
[4]TA: Transportation Alternatives
[5]CSAP: Comprehensive Safety Action Plan

Congestion Management Process (CMP) Projects

(The St. Lucie TPO's allocation of Surface Transportation Block Grant funds to CMP projects is $300,000 - $400,000 annually)

2023/24 Priority Ranking	Facility/Segment or Intersection	Project Description	Project Status/Notes	Estimated Cost[1]	Project Source	2022/23 Priority Ranking
1	St. Lucie Transportation Management Center (TMC)	Design, construction, and installation of equipment including communication servers, video displays, and workstations that was originally included in Phase 1 of the ATMS Master Plan[2]	Phase I of the ATMS Master Plan was completed without a TMC	$400,000	ATMS Master Plan	1
2	Orange Avenue and South 7th Street (ATMS Master Plan Phase 2A)	Install fiber optic cable along Orange Avenue from US-1 to Kings Highway and along South 7th Street from Orange Avenue to Avenue A and traffic cameras/video detectors and adaptive signal control at the signalized intersections	PE[4] to start in FY 2026/27	$700,000	ATMS Master Plan	3
3	Midway Road (ATMS Master Plan Phase 2B)	Install fiber optic cable along Midway Road from US-1 to Selvitz Road and traffic cameras/video detectors and adaptive signal control at the signalized intersections		$370,000	ATMS Master Plan	4
4	Gatlin Boulevard at Savona Boulevard	Extend eastbound and westbound left turn lanes on Gatlin Boulevard and install dedicated northbound and southbound right turn lanes on Savona Boulevard	Right-of-way acquisition is not anticipated to be needed	$750,000[5]	CMP	5

[1]Source of Estimated Cost is from the Project Source unless otherwise noted
[2]ATMS Master Plan: *Advanced Transportation Management System (ATMS) Master Plan for St. Lucie County,* February 2013
[3]CMP: *St. Lucie Transportation Planning Organization Congestion Management Process Major Update,* June 2018
[4]PE: Preliminary Engineering
[5]Source of Estimated Cost: City of Port St. Lucie

Transit Projects

2023/24 Priority Ranking	Facility/Equipment/Service	Project Location/Description	Is Funding for Capital and/or Operating?	In LRTP[1] or TDP[2]?	Estimated Cost[3]	2022/23 Priority Ranking
1	Port St. Lucie Intermodal Hub	Phase 1 completed in 2013 - Location is in need of an upgrade. Serves as connection point to four routes and Zone 1 Micro-Transit Service	Capital	Yes	$4,500,000	NR[4]
2	Vehicle Purchases	New/replacement buses as specified in the Transit Asset Management Plan[5]	Capital	Yes	$100,000-$650,000	3
3	Micro-Transit Zone 1	Sustain service levels in the Tradition/Gatlin Boulevard area beyond expiration of the previous FDOT Service Development Grant	Capital & Operating	Yes	$325,000-$450,000[6]	4
4	Micro-Transit Fort Pierce	Expand on Freebee services in City of Fort Pierce and continue to provide transportation in transit deserts throughout the County	Capital & Operating	No	$800,000	NR
5	Micro-Transit Zone 2	Expand the on-demand flex service to augment the fixed-route bus service with first and last mile connectivity to the Torino Boulevard area to sustain the existing service levels beyond the current FDOT Service Development Grant life of three years	Capital & Operating	Yes	$325,000-$450,000[6]	NR
6	Express Route Bus Service	Continue to link the Port St. Lucie and Fort Pierce Intermodal Hubs with a zone through a potential Service Development Grant	Capital & Operating	Yes	$800,000	2
7	Bus Route Infrastructure	Miscellaneous locations along the fixed routes with priority at transfer locations	Capital	Yes	$200,000 (total for bus shelters)	7
8	Expand Local Services	Improve frequency to 30 minutes on high performing routes	Operating	Yes	$800,000	6
9	Transit Operations Center	Centralized operations and maintenance facility to serve the transit system fleet	Capital	Yes	$18,000,000-$20,000,000	1
10	Jobs Express Terminal Regional Service	Regional bus service to West Palm Beach with express commuter services	Operating	Yes	$460,500[6]	5

[1]LRTP: *SmartMoves 2045 Long Range Transportation Plan,* February 2021
[2]TDP: *Bus Plus, St. Lucie County FY 2020-FY 2029 Transit Development Plan Major Update,* June 2019
[3]Source of Estimated Cost: St. Lucie County Transit Staff, May 2023, unless otherwise noted
[4]NR: Not Ranked
[5]*Transit Asset Management Plan*, November 2020
[6]*Jobs Express Terminal Connectivity Study*, June 2020

Transportation Alternatives (TA) Projects

2023/24 Priority Ranking	Score[1]	Facility	Project Limits		Project Description	Project Source[2]	Estimated Cost[2]	2022/23 Priority Ranking
			From	To				
1	38.0	Peacock Trail	Gatlin Boulevard	Dreyfuss Boulevard	Shared-Use Path: 1.0 mile	2023 TA Grant Application[3]	$1,674,174[4]	11
2	25.5	Easy Street	US Highway 1	Silver Oak Drive	Sidewalk-1.0 miles		$1,090,396[6]	2
3	50.0	Florida SUN Trail, Historic Fort Pierce Downtown Retrofit	Georgia Avenue	North State Route A1A	Bicycle Boulevard, Roadway Section Connections, and Railroad Crossing Improvements	TIP, Florida SUN Trail Grant, and St. Lucie WBN[5]	TBD[7]	3
4	42.5	Green River Parkway Trail	Martin County Line	Walton Road	Resurfacing of Shared-Use Path: 2.5 miles	City of Port St. Lucie, Florida SUN Trail, and St. Lucie WBN	$350,000	Not Ranked
4	42.5	Oleander Avenue	Edwards Road	South Market Avenue	Sidewalk: 1.3 miles		$1,500,000[6]	7
4	42.5	Oleander Avenue	Saeger Avenue	Beach Avenue	Sidewalk: 1.4 miles		$1,650,000[6]	7
7	42.0	Lakehurst Drive	Bayshore Boulevard	Airoso Boulevard	Sidewalk: 1.3 miles	Under design by City of Port St. Lucie	$825,000[8]	9
8	41.5	Indrio Road	U.S. Highway 1	Old Dixie Highway	Sidewalk: 0.2 miles		$225,000[6]	12
9	40.5	Indrio Road	Kings Highway	U.S. Highway 1	Sidewalk: 2.6 miles		$3,050,790[6]	17
10	40.0	Oleander Avenue	Midway Road	Saeger Avenue	Sidewalk: 1.5 miles		$1,323,840	19
11	36.5	Angle Road	Kings Highway	North 53rd Street	Sidewalk: 1.3 miles		$1,461,595[6]	12
12	36.0	17th Street	Georgia Avenue	Delaware Avenue	Sidewalk: 0.3 miles		$74,268	13
12	36.0	Boston Avenue	25th Street	13th Street	Sidewalk: 0.8 miles		$123,200	13
14	35.0	Abingdon Avenue	Import Drive	Savona Boulevard	Sidewalk: 0.9 miles	Under design by City of Port St. Lucie	$575,000[8]	15
14	35.0	Brescia Street	Savage Boulevard	Gatlin Boulevard	Sidewalk: 1.3 miles		$323,000[8]	15
16	33.5	Weatherbee Road	U.S. Highway 1	Oleander Avenue	Sidewalk: 0.5 miles		$445,220	17
17	32.0	Range Line Road	Glades Cut Off Road	Martin County Line	Sidewalk: 6.1 miles		$5,300,000[6]	18
17	32.0	West Midway Road	West of Glades Cut Off Road	Shinn Road Area	Sidewalk: 5.0 miles		$5,753,580[6]	18
19	31.5	St. Lucie Boulevard	Kings Highway	North 25th Street	Sidewalk: 3.0 miles		$2,600,000[6]	20
20	30.5	Sunrise Boulevard	Edwards Road	Midway Road	Sidewalk: 2.8 miles		$2,250,000[6]	21
21	29.5	Bell Avenue	Oleander Avenue	Sunrise Boulevard	Sidewalk: 0.5 miles		$411,836[9]	22

2023/24 Priority Ranking	Score[1]	Facility	Project Limits		Project Description	Project Source[2]	Estimated Cost[2]	2022/23 Priority Ranking
			From	To				
22	27.0	Old Dixie Highway	St. Lucie Boulevard	Turnpike Feeder Road	Sidewalk: 5.2 miles		$6,066,780[6]	23
23	26.5	Glades Cut Off Road	Port St. Lucie City Boundary	Range Line Road	Sidewalk: 2.4 miles		$2,830,390[6]	24
23	26.5	Keen Road	Angle Road	St. Lucie Boulevard	Sidewalk: 1.0 miles		$1,160,000[6]	24
25	25.5	Selvitz Road	Edwards Road	South of Devine Road	Sidewalk: 1.8 miles		$562,202	26
26	24.5	Juanita Avenue	North 53rd Street	North 41st Street	Sidewalk: 1.3 miles		$393,004	27
27	15.5	Silver Oak Drive	Easy Street	East Midway Road	Sidewalk: 1.8 miles		$2,076,392[6]	28
28	15.0	Taylor Dairy Road	Angle Road	St. Lucie Boulevard	Sidewalk: 1.0 miles		$1,160,000[6]	29

[1]Scores are based on the *St. Lucie TPO TA Project Prioritization Methodology*
[2]Project Source and Source of Estimated Cost: *SmartMoves 2045 Long Range Transportation Plan,* February 2021 (2045 LRTP), unless otherwise noted
[3]Project is anticipated to be programmed for construction in the FDOT FY 2024/25 - FY 2028/29 Work Program as a result of the 2023 TA Grant Cycle
[4]Source of Estimated Cost: 2023 TA Grant Application, March 2023
[5]WBN: Walk-Bike Network
[6]Source of Estimated Cost: St. Lucie County Engineering
[7]TBD: To be Determined
[8]Source of Estimated Cost: *City of Port St. Lucie Sidewalk Master Plan (Design and Construction), July 2017*
[9]Source of Estimated Cost: 2019 TA Grant Application