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

CITIZENS ADVISORY COMMITTEE (CAC)

Regular Meeting **and Federal Certification Review Public Meeting**

Tuesday, March 18, 2025
10:30 am

Public Participation / Accessibility

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

Participation by Webconference (not intended for Committee Members): Using a computer or smartphone, register at https://attendee.gotowebinar.com/register/7681576804421817434. 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 10:00 am on March 18, 2025.

AGENDA

1. Call to Order

2. Roll Call

3. Comments from the Public

4. Approval of Agenda

5. Approval of Meeting Summaries
   - *September 17, 2024 Regular Meeting*
   - *January 21, 2025 Regular Meeting*

6. Action Items

   6a. Transportation Alternatives Program (TAP) 2025 Grant Application: Review of an application for the 2025 TAP grant cycle.

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

   6b. US-1 Corridor Congestion Study: Review of the US-1 Corridor Congestion Study.

   Action: Recommend acceptance of the US-1 Corridor Congestion Study, recommend acceptance with conditions, or do not recommend acceptance.

6c. Treasure Coast Airport Connector (TCAC) Alternative Alignment Study: Review of the alignment alternatives for the TCAC.

Action: Recommend a Preferred Alternative for the TCAC, recommend a Preferred Alternative with conditions, or do not recommend a Preferred Alternative.

6d. Electric Bicycle (E-Bike) Safety Study: Review of the draft E-Bike Safety Study.

Action: Recommend acceptance of the draft E-Bike Safety Study, recommend acceptance with conditions, or do not recommend acceptance.

6e. Reimagine Mobility 2050 Long Range Transportation Plan (LRTP) Development: Review of various draft elements from the development of the Reimagine Mobility 2050 LRTP.

Action: Recommend adoption of the draft elements, recommend adoption with conditions, or do not recommend adoption.

6f. Federal Certification **Review** Public Meeting: Review of the St. Lucie TPO transportation planning process.

Action: Approve the St. Lucie TPO transportation planning process, approve with conditions, or do not approve.

7. Recommendations/Comments by Members

8. Staff Comments

9. Next Meeting: The next St. Lucie TPO CAC meeting is a regular meeting scheduled for 10:30 am on Tuesday, May 20, 2025.

10. Adjourn

NOTICES

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

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

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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CITIZENS ADVISORY COMMITTEE (CAC)

REGULAR MEETING

DATE: Tuesday, September 17, 2024

TIME: 10:30 am

MEETING SUMMARY

1. Call to Order

The meeting was called to order at 10:40 am.

2. Roll Call

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

Members Present	Representing
Bud Wild, Vice Chair	Unincorporated County
George Saylor	Port St. Lucie
Mazella Smith	Fort Pierce
Richard Silvestri	Unincorporated County
Ivan Somers	At Large

Others Present	Representing
Kyle Bowman	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
Mark Alvarez	Corradino Group
Ben Balcer	St. Lucie County
Daniel Hernandez	General Public
Saige Killion	Kimley-Horn
Stewart Robertson	Kimley-Horn
Everett Tourjee	City of Port St. Lucie

3. Comments from the Public – Mr. Hernandez identified himself as a longtime resident of St. Lucie County and the owner of a large tract of land north of Midway Road and west of I-95. He indicated his understanding that a north-south arterial roadway was planned for construction in connection with a new residential development in that vicinity and requested more information regarding the proposed alignment of the corridor given that the necessary right-of-way would likely impact his property. Mr. Buchwald affirmed that the City of Fort Pierce was reviewing plans for a subdivision adjacent to Mr. Hernandez's property, with the proposed Arterial A roadway intended to function as the primary north-south corridor west of I-95. Mr. Buchwald summarized the development of the facility thus far, explaining that Mr. Hernandez would not be required to have his property annexed by the City of Fort Pierce if he preferred to stay under the County's jurisdiction, and offered to discuss the matter further with Mr. Hernandez after the CAC meeting.

4. Approval of Agenda

This item was not presented due to a lack of a quorum.

5. Approval of Meeting Summary
   - July 23, 2024 Regular Meeting

This item was not presented due to a lack of a quorum.

6. Action Items

The agenda's Action Items were presented after the Discussion Items.

6a. US-1 Corridor Congestion Study Scope of Services: Review of the US-1 Corridor Congestion Study draft Scope of Services.

Mr. Buchwald introduced Mr. Ding, and Mr. Ding explained that the purpose of the Study was to quantify the level of traffic congestion on U.S. 1 between Prima Vista Boulevard and the boundary with Martin County, as well as on nearby parallel corridors, so that strategies might be developed to reduce the congestion. Mr. Ding outlined the Study's timeline and cost, noting that the consultant engaged to conduct it had also completed the recent Congestion Management Process Major Update along with providing ongoing traffic count collection and maintenance services for the Traffic Count Data Management System.

6b. Florida Shared-Use Nonmotorized (SUN) Trail Port Connector Feasibility Study: Review of the draft Preferred Alternatives of the SUN Trail Port Connector Feasibility Study.

Mr. Buchwald introduced the agenda item and invited Mr. Killion to continue the presentation. Mr. Killion began by outlining the requisite Sun Trail design criteria and the potential locations for the Port Connector segment east of Old Dixie Highway and north of Seaway Drive. He identified the preferred alternative as a two-phased approach consisting of the initial implementation of a short underpass to connect North 2nd Street with Old Dixie Highway followed by the construction of the multimodal Port to Parks Connector via the extension of Avenue O. Mr. Killion then enumerated several benefits of the preferred alternatives.

Mr. Buchwald indicated that TPO Staff had been coordinating with the various agencies involved with the implementation of the Port of Fort Pierce Master Plan to ensure that the SUN Trail segment would align with its vision, subsequently elaborating on the benefits of the preferred alternatives.

In answer to Vice Chairman Wild's questions, Mr. Buchwald clarified that the underpass would be constructed under the rail track and that the Avenue O extension would include a signalized intersection at U.S. 1 along with various safety features for bicyclists and pedestrians. Mr. Buchwald noted that the preferred alternatives were intended to provide the Lincoln Park area with access to the Port for employment and leisure opportunities, explaining that the first phase would be constructed in a relatively short timeframe using SUN Trail funding and under the management of the City of Fort Pierce. He noted the Fort Pierce City Commission's enthusiasm for the preferred alternatives, which complemented other development being pursued for properties west of U.S. 1 and indicated that the development of the second phase would proceed while the first phase was being completed.

The members collectively expressed their support for the preferred alternatives.

7. Discussion Items

7a. Autonomous Vehicle Study Update: The presentation of an update to the Autonomous Vehicle Study.

Mr. Buchwald invited Ms. Lathou to present the agenda item, and she began by outlining the five levels of vehicle autonomy. Ms. Lathou

provided an update on projections for the growth of the autonomous vehicle (AV) fleet in the coming years as well as the locations of current AV testing in the United States before explaining how AV technology was being utilized in shuttles, trucking, and robotaxis. She reported on the state of driver assistance technologies, described how such technology had been incorporated into various TPO planning documents, and enumerated several benefits and disadvantages of AVs. Ms. Lathou concluded with recommendations for further study.

Mr. Saylor remarked on the need to reevaluate infrastructure maintenance priorities as the prevalence of AV technology increased. Ms. Lathou compared the status of AV technology to that of Uber and Lyft usage several years before in that the latter had been popular in large urban areas but not yet common in St. Lucie County. She noted that planning agencies presently had an opportunity to prepare for changing maintenance priorities.

Mr. Somers initiated a discussion regarding the issue of public acceptance for AVs, commenting that the use of autonomous technology within the aviation industry had in his experience caused discomfort among decision-makers. He noted that many vehicles currently featured autonomous technology that drivers chose not to use, although the availability of driver override options or more evidence supporting the safety of driverless cars might impact adoption rates. Ms. Lathou remarked that the use of autonomous technology would probably spread faster in the commercial transportation sphere, citing the cost-saving benefits of robotaxis for services like Uber or Lyft. Ms. Smith expressed her discomfort with the idea of driverless taxis due to both safety reasons and the difficulties that might arise if passengers needed to change their destination mid-route or address some other unexpected situation. Ms. Lathou speculated that artificial intelligence could disrupt certain industries despite its potential challenges but concurred that biological intelligence enabled greater flexibility. Vice Chairman Wild opined on the likelihood of driver unions objecting to the advancement of autonomous technology out of concern that their jobs would disappear.

7b. St. Lucie County Sustainable Mobility Infrastructure Study: Presentation of the St. Lucie County Sustainable Mobility Infrastructure Study.

Mr. Buchwald introduced the agenda item and Mr. Alvarez, who outlined the purpose of the Study before explaining that transportation resiliency could be affected by both natural systems, such as climate events, and

human systems, such as population growth. He described how projections for the year 2100 had been produced for both types of systems for the TPO area along with how these projected scenarios might affect the County's right-of-way (ROW) needs using as case studies the Edwards and Midway Road corridors. Mr. Alvarez presented several considerations pertaining to the ROW acquisition process and concluded with the remaining steps in the Study's development.

Answering Ms. Smith's question, Mr. Alvarez clarified that Edwards Road was anticipated to be vulnerable to flooding in the vicinity of Five Mile Creek in the future, although most of St. Lucie County would not be.

8. Recommendations/Comments by Members – None.

9. Staff Comments – Mr. Buchwald thanked the members for their participation and announced two vacancies on the CAC. He then provided a preview of the agenda of the Joint Advisory Committee Meeting to be held in November.

10. Next Meeting: The next St. Lucie TPO CAC meeting is a joint meeting with the Technical Advisory Committee and the Bicycle-Pedestrian Advisory Committee scheduled for 1:30 pm on Tuesday, November 19, 2024.

11. Adjourn – The meeting was adjourned at 12:15 pm.

Respectfully submitted:

_____
Rachel Harrison
Recording Specialist

Approved by:

_____
Carolyn Niemczyk
Chairwoman

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CITIZENS ADVISORY COMMITTEE (CAC)

REGULAR MEETING

DATE: Tuesday, January 21, 2025

TIME: 10:30 am

MEETING SUMMARY

1. Call to Order

Vice Chairman Bud Wild called the meeting to order at 10:59 am.

2. Roll Call

The roll was conducted via sign-in sheet, and a quorum ultimately was confirmed with the following members present:

Members Present	Representing
Bud Wild, Vice Chair	Unincorporated County
Richard Silvestri	Unincorporated County
Bill Lindsey	Disabled Residents
George Saylor	Port St. Lucie
Mazella Smith	Fort Pierce
Ivan Somers	At-Large

Others Present	Representing
Kyle Bowman	St. Lucie TPO
Peter Buchwald	St. Lucie TPO
Yi Ding	St. Lucie TPO
Marceia Lathou	St. Lucie TPO
Teresa Lane	Recording Specialist
James Brown	Florida's Turnpike Enterprise

3. Comments from the Public – None.

4. Approval of Agenda

This item was postponed because of a lack of quorum at the time of the item.

5. Approval of Meeting Summary
   - September 17, 2024 Regular Meeting

This item was postponed because of a lack of quorum at the time of the item.

6. Action Items

The Action Items of the agenda with longer presentations were moved forward for discussion until a quorum was achieved allowing actions to be taken on each Item.

6d. 2025 Safety Performance Targets: A review of the 2025 Safety Performance Targets and Interim Benchmarks for the TPO.

Mr. Buchwald introduced Mr. Ding who explained there are five traffic safety performance measures to monitor the progress in meeting safety performance targets and interim benchmarks for the TPO: Number of Fatalities, Number of Serious Injuries, Number of Non-Motorized Fatalities and Serious Injuries, Fatality Rate per 100 million Vehicle Miles Traveled, and Serious Injury Rate per 100 million Vehicle Miles Traveled.

Mr. Ding identified that FDOT has established its Safety Targets of zero deaths or injuries since October 2017 and that MPOs must support the FDOT Safety Performance Targets or establish their own targets by February 27, 2025. The TPO has been setting interim, quantifiable benchmarks to monitor the progress toward meeting the ultimate "zero" targets. Mr. Ding indicated that for the first time in TPO history, motorists in St. Lucie County performed worse on all five benchmarks in 2023 than during the prior year. However, when compared to MPOs of similar size in Florida, the St. Lucie TPO is one of the safer regions with regard to traffic injuries. Mr. Ding listed the underlying reasons for the crashes, with distracted driving being the single greatest cause, followed by impaired or ill drivers and aggressive drivers and speeders.

Mr. Somers asked what classifies an injury as serious. Mr. Buchwald said it involves a traffic injury that requires hospital treatment. Mr. Wild asked if the standard 85 percent rule needed to change a speed limit

has been eliminated, prompting Mr. Buchwald to reply that it has been minimized. Mr. Buchwald reiterated that most serious crashes are caused by distracted or speeding drivers and identified the frustration that the TPO hasn't met its safety targets for several years in spite of efforts to design and maintain safe roadways. He also noted that the crashes are spread out across the TPO area.

Mr. Wild suggested that it is law enforcement's job to enforce traffic laws and combat unsafe driving. Mr. Buchwald offered that law enforcement agencies reportedly do not have enough officers to continually target traffic offenders, but he noted there were twice as many traffic deaths in the TPO area in 2023 than homicides from gun violence. Mr. Wild suggested inviting law enforcement officers to attend an upcoming meeting to discuss the problem. Mr. Somers suggested normalizing the data to accommodate for population growth and suggested the TPO use a base year for population to compare safety benchmarks on a per capita basis.

6c. Amendments to the FY 2024/25 – FY 2028/29 Transportation Improvement Program (TIP): Review of Amendments #2 and #3 for changes to the Orange Avenue at I-95 widening project and to add the Village Green Drive Corridor Planning Project.

Mr. Buchwald again introduced Mr. Ding, who explained that the TIP was being amended because of phase changes to two road projects. On Orange Avenue, the Right-of-Way phase was being replaced by the Project Development and Environmental phases, and Port St. Lucie received a $2 million grant from the U.S. Department of Transportation to design improvements to the Village Green Drive Corridor from Tiffany Ave to U.S. Highway 1.

6e. Public Participation Plan (PPP) Major Update: Review of the Major Update to the PPP.

Mr. Buchwald introduced Ms. Lathou, who explained that the PPP is a TPO core product that ensures full access to the transportation planning process by all interested parties and involves two-way communication between the public and the TPO. As part of the Major Update, she described how the plan has been reimagined and renamed the Community Participation Plan. She summarized the five levels of influence that will be emphasized and weighted evenly to ensure each step receives the proper attention. Those levels are to inform, consult, involve, collaborate and empower the public. Mr. Wild noted that while people like to complain about transportation on social media forums, not

many take the time to register complaints with the TPO. Ms. Lathou identified that relating problems to the TPO Board directly is the most effective way to register complaints.

Mr. Buchwald praised Ms. Lathou for ensuring the public participation process is clear and measurable. Mr. Somers suggested that the initial levels such as inform and consult should be weighted more heavily than later stages like collaborate and empower because the earlier stages require more time and study. Ms. Lathou identified that the participation process includes a matrix that staff will continually evaluate for effectiveness.

Mr. Buchwald proposed that the staff could more heavily weigh the performance targets for participation in the initial levels if that was the CAC's recommendation. Mr. Somers suggested that staff look at the complexity of each level before assigning targets.

A quorum was achieved allowing actions to be taken.

* MOTION by Ms. Smith to recommend adoption of the PPP Major Update with Mr. Somers' suggestion.

** SECONDED by Mr. Saylor Carried UNANIMOUSLY

The CAC returned to the earlier items on the agenda to take action.

6d. 2025 Safety Performance Targets: A review of the 2025 Safety Performance Targets and Interim Benchmarks for the TPO.

* MOTION by Mr. Somers to recommend adoption of the 2025 Safety Performance Targets and Interim Benchmarks.

** SECONDED by Mr. Saylor Carried UNANIMOUSLY

6c. Amendments to the FY 2024/25 – FY 2028/29 Transportation Improvement Program (TIP): Review of Amendments #2 and #3 for changes to the Orange Avenue at I-95 widening project and to add the Village Green Drive Corridor Planning Project.

* MOTION by Mr. Saylor to recommend adoption of the TIP amendments.

** SECONDED by Mr. Somers Carried UNANIMOUSLY

6b. 2025 Meeting Dates: Approval of the proposed meeting dates for the remainder of 2025 for the St. Lucie TPO CAC.

Mr. Buchwald presented the proposed remaining dates and times for CAC meetings in 2025, noting specifically the date for the annual Joint Advisory Committee meeting.

* MOTION by Ms. Smith to approve the proposed remaining 2025 meeting dates.

** SECONDED by Mr. Saylor Carried UNANIMOUSLY

6a. Annual Officer Elections: Election of a Chairperson and a Vice Chairperson for the CAC for 2025.

Mr. Buchwald invited the Recording Specialist to conduct the elections.

* MOTION by Ms. Smith to nominate Mr. Wild as Chairperson and George Saylor as Vice Chairperson for 2025.

** SECONDED by Mr. Somers

There were no other nominations, and the nominations were closed.

** MOTION to elect Mr. Wild as Chairperson and George Saylor as Vice Chairperson for 2025. Carried UNANIMOUSLY

7. Recommendations/Comments by Members

Mr. Somers asked whether it is possible for CAC members to attend meetings remotely in cases like this meeting where one member was running late, and no quorum was achieved until later in the meeting. Mr. Buchwald replied that State statutes require members to appear in person unless there is a significant reason to attend remotely.

Ms. Smith inquired as to whether it is possible to move the meetings to 10 a.m. rather than 10:30 a.m. to ensure business is completed by noon, and Mr. Buchwald indicated that it would require a vote by the committee. However, at this point, a CAC member had left the meeting, and a quorum was no longer present. Mr. Buchwald suggested that the vote could be taken at the next meeting.

8. Staff Comments – None.

9. Next Meeting: The next St. Lucie TPO CAC meeting is a regular meeting scheduled for 10:30 am on Tuesday, March 18, 2025.

11. Adjourn – The meeting was adjourned at 12:15 pm.

Respectfully submitted:

_____
Teresa Lane
Recording Specialist

Approved by:

_____
Bud Wild
Chairman

St. Lucie Transportation Planning Organization

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AGENDA ITEM SUMMARY

Board/Committee:	Citizens Advisory Committee (CAC)
Meeting Date:	March 18, 2025
Item Number:	6a
Item Title:	Transportation Alternatives Program (TAP) 2025 Grant Application
Item Origination:	2025 TAP Grant Cycle
UPWP Reference:	Task 3.3 - Transportation Improvement Program
Requested Action:	Recommend endorsement of the TAP grant application, recommend endorsement with conditions, or do not recommend endorsement.
Staff Recommendation:	Based on the inclusion of the project in the 2024/25 TA Priority Project List, it is recommended that the Easy Street Sidewalk Project be recommended for endorsement by the TPO Board for the allocation of the TAP funding from the 2025 grant cycle.

Attachments

- Staff Report
- 2024/25 Transportation Alternatives Priority Project List
- Easy Street Sidewalk Project Application Excerpts

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MEMORANDUM

TO: Citizens Advisory Committee (CAC)

FROM: Peter Buchwald
Executive Director

DATE: March 11, 2025

SUBJECT: Transportation Alternatives Program (TAP)
2025 Grant Application

BACKGROUND

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

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

The funding available for the 2025 TAP grant cycle for the St. Lucie TPO is estimated to be $700,000 that will be programmed by the Florida Department of Transportation (FDOT) District 4 in Fiscal Year 2028/29. The TPO Advisory Committees recommend to the TPO Board the endorsement/prioritization of the TAP grant applications received during the grant cycle for submittal to FDOT. Candidate TAP Projects originate from the attached 2024/25 Transportation Alternatives (TA) Priority Project List.

ANALYSIS

An application (excerpts attached) was received for the 2025 TAP grant cycle from St. Lucie County for the Easy Street Sidewalk Project which is included in the TPO's 2024/25 TA Priority Project List. The project consists of the construction of a six-foot wide, concrete-paved sidewalk from US Highway 1 to Canal 22 as depicted in the attached project location map.

The sidewalk will be approximately 0.5 miles in length and connect to the Florida Shared-Use Nonmotorized (SUN) Trail project that is currently under construction along Canal 22. The project is estimated to cost $1,022,815, and the applicant is requesting a total of $931,706 of TAP grant funding.

RECOMMENDATION

Based on the inclusion of the project in the 2024/25 TA Priority Project List, it is recommended that the Easy Street Sidewalk Project be recommended for endorsement by the TPO Board for the allocation of the TAP funding from the 2025 grant cycle.

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[5]	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[6]	TBD[7]	3
4	42.5	Oleander Avenue	Edwards Road	South Market Avenue	Sidewalk: 1.3 miles		$1,500,000[5]	4
4	42.5	Oleander Avenue	Saeger Avenue	Beach Avenue	Sidewalk: 1.4 miles		$1,650,000[5]	4
6	41.5	Indrio Road	U.S. Highway 1	Old Dixie Highway	Sidewalk: 0.2 miles		$225,000[5]	8
7	40.5	Indrio Road	Kings Highway	U.S. Highway 1	Sidewalk: 2.6 miles		$3,050,790[5]	9
8	40.0	Oleander Avenue	Midway Road	Saeger Avenue	Sidewalk: 1.5 miles		$1,323,840	10
9	36.5	Angle Road	Kings Highway	North 53rd Street	Sidewalk: 1.3 miles		$1,461,595[5]	11
10	36.0	17th Street	Georgia Avenue	Delaware Avenue	Sidewalk: 0.3 miles		$74,268	12
10	36.0	Boston Avenue	25th Street	13th Street	Sidewalk: 0.8 miles		$123,200	12
12	35.0	Brescia Street	Savage Boulevard	Gatlin Boulevard	Sidewalk: 1.3 miles		$323,000[8]	14
13	33.5	Weatherbee Road	U.S. Highway 1	Oleander Avenue	Sidewalk: 0.5 miles		$445,220	16
14	32.0	Range Line Road	Glades Cut Off Road	Martin County Line	Sidewalk: 6.1 miles		$5,300,000[6]	17
14	32.0	West Midway Road	West of Glades Cut Off Road	Shinn Road Area	Sidewalk: 5.0 miles		$5,753,580[6]	17
14	32.0	Florida SUN Trail, Port of Fort Pierce Connector	Old Dixie Highway	North 2nd Street	Shared-Use Path Crossing of FEC Railroad	TIP, Florida SUN Trail, and St. Lucie WBN	$14,730,000[9]	NR[10]
17	31.5	St. Lucie Boulevard	Kings Highway	North 25th Street	Sidewalk: 3.0 miles		$2,600,000[5]	19
18	30.5	Sunrise Boulevard	Edwards Road	Midway Road	Sidewalk: 2.8 miles		$2,250,000[5]	20
19	29.5	Bell Avenue	Oleander Avenue	Sunrise Boulevard	Sidewalk: 0.5 miles		$411,836[11]	21
20	27.0	Old Dixie Highway	St. Lucie Boulevard	Turnpike Feeder Road	Sidewalk: 5.2 miles		$6,066,780[5]	22
21	26.5	Glades Cut Off Road	Port St. Lucie City Boundary	Range Line Road	Sidewalk: 2.4 miles		$2,830,390[5]	23
21	26.5	Keen Road	Angle Road	St. Lucie Boulevard	Sidewalk: 1.0 miles		$1,160,000[5]	23

2024/25 Priority Ranking	Score[1]	Facility	Project Limits		Project Description	Project Source[2]	Estimated Cost[2]	2023/24 Priority Ranking
			From	To				
23	25.5	Selvitz Road	Edwards Road	South of Devine Road	Sidewalk: 1.8 miles		$562,202	25
24	24.5	Juanita Avenue	North 53rd Street	North 41st Street	Sidewalk: 1.3 miles		$393,004	26
25	15.5	Silver Oak Drive	Easy Street	East Midway Road	Sidewalk: 1.8 miles		$2,076,392[5]	27
26	15.0	Taylor Dairy Road	Angle Road	St. Lucie Boulevard	Sidewalk: 1.0 miles		$1,160,000[5]	28

[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 2025/26 - FY 2029/30 Work Program as a result of the 2024 TA Grant Cycle
[4]Source of Estimated Cost: 2024 TA Grant Application, March 2024
[5]Source of Estimated Cost: St. Lucie County Engineering
[6]WBN: Walk-Bike Network
[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: Florida SUN Trail, Port of Fort Pierce Connector Feasibility Study, June 2024
[10]NR: Not Ranked
[11]Source of Estimated Cost: 2019 TA Grant Application

TRANSPORTATION ALTERNATIVES SET-ASIDE PROGRAM (TA) FUNDING APPLICATION

A continuation of the Surface Transportation Block Grant, TA funding is by contract authority from the Highway Trust Fund, subject to the overall federal-aid obligation limitation determined by the Federal Highway Administration (FHWA). Projects must support surface transportation, be competitively solicited, and comply with the provisions of the FDOT Work Program Instructions and the Bipartisan Infrastructure Law (BIL), enacted as the Infrastructure Investment and Jobs Act (IIJA) [§ 11109; 23 United States Code (U.S.C.) 133(h)]. District representatives may be contacted for guidance.

PART 1 – APPLICANT INFORMATION

1. **Applicant Agency Sponsor Type.** Select the box indicating the agency of the person who can answer questions about this project proposal. Then complete applicable text fields. Note: State-recognized non-profit agencies may partner with an eligible governmental entity but are not eligible as a direct grant recipient.

Checkbox next to each of the following types of agencies that do not indicate text field. Document allows one selection.

- [●] Local government (e.g., county, city, village, town, etc.).
- [ ] Regional transportation authority or transit agency.
- [ ] Natural resource or public land agency.
- [ ] School district, local education agency, or school (may include any public or nonprofit private school). Projects should benefit the public and not just a private entity.
- [ ] Recognized Tribal Government.
- [ ] Other local or regional governmental entity with oversight responsibility for transportation or recreational trails, consistent with the goals of 23 U.S.C. 133(h).
- [ ] Metropolitan / Transportation Planning Organization / Agency (collectively MPO) (only for urbanized areas with less than 200,000 population).
- [ ] FDOT (only by request of another eligible entity, then enter the requesting entity). If “checked”, enter the requesting entity in the space provided. (Word limit 5)

2. **Agency name of the applicant.** (Word limit 5).

St Lucie County

3. **Agency contact person’s name and title.** (Word limit 5).

Dan Zrallack, County Engineer

4. **Agency contact person’s telephone number and email address.** (Word limit 5).

(772) 462-1667, Dan.Zrallack@stlucieco.gov

PART 2 – LOCAL AGENCY PROGRAM (LAP) CERTIFICATION

LAP is FDOT's primary mechanism to provide governmental subrecipients with federal funds to develop transportation infrastructure facilities through cost-reimbursement (grant) agreements. This legal instrument (the grant agreement) will describe intergovernmental tasks to be accomplished and the funds to be reimbursed for selected projects. The FDOT Local Programs Manual and FDOT Procedure 525-010-300 provides details for local agencies to complete a certification process that is a risk-based assessment evaluating whether they have sufficient qualifications and abilities "to undertake and satisfactorily complete the work" for infrastructure projects. Non-profit organizations are not eligible for LAP certification, local agencies are not eligible for certification of Project Development and Environment (PD&E) or Right-of-Way (ROW) acquisition phases. FDOT is required to provide oversight on fee-simple and less-than-fee ROW acquisition phases, including license agreements, encroachment agreements, perpetual easements, temporary construction easements, and donations.

● **LAP Full Certification**

Provide:

Approval Date: 7/20/2022 and Expiration Date: 7/20/2025

Responsible Charge Name: Diane Verrill

○ **LAP Project Specific Certification**

Provide:

Approval Date: Project FM(s) Number:

Responsible Charge Name:

○ **Not LAP Certified – A LAP Certified Agency will deliver the project on behalf of the uncertified Agency.**

Provide:

Sponsoring Agency Name: Contact Name:

Address: Phone:

○ **Not LAP Certified - FDOT District will administer the project.**

Provide:

FDOT Contact Name: Phone:

○ **Not LAP Certified – the Agency will become LAP certified 1 year prior to the delivery of the LAP project.**

○ **Not Applicable – this is a Non – Infrastructure Project.**

PART 3 – PROJECT INFORMATION

1. **Project Name / Title:** (Word limit 15). Easy Street Project

2. **Is this a resubmittal of a previously unfunded project?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate the year(s) of submittal(s) and include project title(s), if different, in the space provided. (Word limit 5).

   ○ Yes ● No N/A

3. **Does this project connect a previously funded project(s)?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate the Financial Management (FM) number(s) and provide a brief description of the other related FDOT-funded phases that are complete, underway, or in the FDOT 5-year Work Program. (Word limit 5).

   ○ Yes ● No N/A

4. **Is funding requested for this same project from another source administered by FDOT?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate funding source(s) / application(s) submitted. NOTE: Contact your district representative to discuss if this same project is partially funded in the 5-year Work Program or if FDOT has received another application for funding it. (Word limit 5).

   ○ Yes ● No N/A

5. **What are you proposing in this application?** In 200 words or less, provide a description of the project and what it will accomplish. The description should allow a person without prior knowledge of the project to clearly understand it. Summarize the purpose, need, project attributes, the relationship to surface transportation, how the project improves safety, and expected benefits.

The project will construct a 6 foot wide ADA accessible sidewalk on the southside of Easy Street from US Highway 1 to Canal 22 and the future SunTrail regional trail system for a distance of approximately 0.5 mile. The proposed sidewalk project is currently in the preliminary engineering phase and requesting funding from the FDOT Transportation Alternatives Program (TAP) for the FY 25/26 grant application cycle. County engineering has conducted a public outreach of the community and 59% of the residents along Easy Street support the proposed sidewalk project.

This sidewalk will provide a multi-modal connection for local residents of Indian River Estates within St. Lucie County by installing a 6 foot wide concrete sidewalk to connect US Highway 1 to the future SunTrail regional system. Students who do not have school bus service in the immediate vicinity would have the ability to use the sidewalk to have a safe walking route to a school bus stop on US 1.

REQUIRED UPLOAD: PROJECT INFORMATION SUPPORTING DOCUMENTATION including 1) Scope of Work clearly describing the purpose and need for this project and the desired outcome; detailed description of the existing conditions; and detailed description of the proposed project and major work item improvements (e.g., project limits (begin / end), width of sidewalks or trails and other components, materials, drainage, lighting, signing and pavement markings, etc.). 2) Intent to enter into a cost reimbursement agreement for delivering the project. 3) Signed PROJECT CERTIFICATION from the maintaining agency confirming the applicant is authorized to submit the proposal, the information is accurate, intent to enter into a Memorandum of Understanding or Interagency Agreement for ongoing operations and maintenance of the improved facility, and compliance with all federal and state requirements.

PART 4 – PROJECT LOCATION

1. **Indicate the municipality(ies) of the project location.** (Word limit 5).

   St Lucie County

2. **Indicate the county(ies) of the project location.** (Word limit 5).

   St Lucie County

3. **Roadway Classification**

   ○ Yes ● No State roadway (on-system)

   ○ Yes ● No Federal roadway

   ● Yes ○ No Local roadway (off-system)

4. **Indicate the roadway name(s) [including applicable state, federal, county road number(s), local roadway name, and roadway identification number (e.g., SR 5 / US 1 / CR 904 / Overseas Highway / ID number: 90040000)].** (Word limit 10).

   Easy Street

5. **Indicate the roadway beginning project limits (south or west termini), mile points, and crossroads at each end of each listed segment.** (Word limit 10).

   US Highway 1 as the western termini limit

6. **Indicate the roadway ending project limits (north or east termini), mile points, and crossroads at each end of each listed segment.** (Word limit 10).

   Canal 22 at SunTrail as the eastern limit.

7. **Indicate the total project length, in miles and linear feet.** (Word limit 10).

   Approximately 0.5 miles or 2,500 feet

8. **Does the project involve the Florida Shared-Use Nonmotorized (SUN) Trail network?** If not, select “no”, and indicate N/A in the space provided. If so, select “yes”, and indicate the trailway identification number, beginning and ending mile points. (Word limit 5).

   ○ Yes ● No

9. **Within the next five years, are non-FDOT funds being expended within the limits or adjacent to the proposed project?** If not, select “no” and indicate N/A in the space provided. If so, select “yes”, and briefly explain. (Word limit 50).

   ○ Yes ● No

   N/A

PART 5 – PROJECT TYPE

NOTE: Certain areas may not be prioritizing Non-infrastructure (NI) proposals or all eligible infrastructure activities (or may recommend bundling activities together). Contact your district representative for guidance.

1. **PROJECT CATEGORY** Select one box that best represents the project proposal. Then, complete either the "Infrastructure" or "NI" selections.

- ● **A. Infrastructure.** If so, select "yes", then select the most appropriate "infrastructure" eligible activity from listing below. (Pages range 5-6)
- ○ **B. Non-infrastructure (NI).** If so, select "yes", then select the most appropriate NI eligible activity from the listing following the Infrastructure activities. (Page range 7)

5-A. INFRASTRUCTURE ELIGIBLE ACTIVITY

Select one box that best represents the project proposal). As applicable, complete infrastructure eligible text fields.

- ● **Pedestrian and / or Bicycle facilities** (Select this box for construction, planning, and design of off-road trail facilities or on-road facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation).
- ○ **Safe Routes for Non-Drivers** (Select this box for construction, planning, and design of infrastructure related projects and systems that provide safe routes for non-drivers, including children, older adults, and individuals with disabilities to access daily needs).
- ○ **Conversion of Abandoned Railway Corridors to Trails** (Select this box for conversion and use of abandoned railroad corridors into trails for pedestrians, bicyclists, or other nonmotorized transportation users).
- ○ **Scenic Turnouts and Overlooks** (Select this box for construction of turnouts, overlooks, and viewing areas). If "yes", list any Florida Scenic Byways visible from the project or indicate N/A in text field. (Word limit 5).
- ○ **Outdoor Advertising Management** (Select this box for inventory, control, or removal of outdoor advertising). If "yes", list any Florida Scenic Byways within the project limits or indicate N/A in text field. (Word limit 5).
- ○ **Historic Preservation and Rehabilitation of Historic Transportation Facilities** (Select this box for historic preservation or rehabilitation of historic transportation facilities). If "yes", list any locally designated or National Register of Historic Places listed or eligible resources or indicate N/A in the text field. (Word limit 5).
- ○ **Vegetation Management** (Select this box for vegetation management in public transportation ROW to improve roadway safety, prevent invasive species, and erosion control). If "yes", list any Florida Scenic Byways within the project limits, or indicate N/A in text field. (Word limit 5).

- **Archaeological Activities** (Select this box for archaeological activities related to impacts from transportation projects funded by FHWA). If “yes”, list the State Site Number (aka Site File Number) for the archaeological site, or indicate N/A in the text field. (Word limit 5).

- **Stormwater Mitigation** (Select this box for environmental mitigation activities addressing stormwater management, control, and water pollution prevention or abatement related to transportation projects).

- **Wildlife Management** (Select this box for wildlife mitigation and reduction of wildlife mortality, or to restore and maintain connectivity among terrestrial or aquatic habitats).

- **Boulevards** (Select this box for boulevards, defined as a walkable, low speed (35 mph or less) divided arterial thoroughfares in urban environments designed to carry both through and local traffic, pedestrians, and bicyclists. These may be high ridership transit corridors; serve as primary goods movement and emergency response routes; and use vehicular and pedestrian access management techniques that promote economic revitalization and follow complete street principles]. If “yes”, list any Florida Main Street communities or Florida Trail Towns within the project limits, or indicate N/A in text field. (Word limit 5).

- **Recreational Trails Program** [Select this box for recreational trails compliant with 62-S-2, Florida Administrative Code, and 23 U.S.C. 104 (b)]. If “yes”, list the parks / recreational areas within the project limits, or indicate N/A in the text field. (Word limit 5).

- **Safe Routes to Schools (SRTS)** [Select this box for SRTS projects, codified as 23 U.S.C. 208, that substantially improves the ability of kindergarten through 12th grade students (vulnerable road users) to walk and / or bicycle to school]. Traditionally includes sidewalks, traffic calming and speed reduction, traffic diversion improvements, pedestrian and bicycle crossings, on-street bicycle facilities, off-street bicycle facilities, and bicycle parking facilities at public schools. If “yes”, list the benefiting schools that are within two miles of the project limits; total student enrollment; approximate number of students living along the route; and the percentage of students eligible for reduced meal programs, or indicate N/A in the space provided. (Word limit 10).

- **Other surface transportation eligible purpose** (Only if within urbanized areas with a population greater than 200,000). If “yes”, list the eligible activity or indicate N/A in the space provided. (Word limit 5).

5-B. NI ELIGIBLE ACTIVITY *** Note: For Infrastructure projects, skip this page.***

Select one box that represents the project proposal. Checkbox indicating NI eligible activity. Document allows one selection.

- **Vulnerable road user safety assessment as defined by Section 316.027 (b), F.S.**
- **Workforce development, training and education activities that are eligible uses of TAP funds.**
- **SRTS projects, codified as 23 U.S.C. 208.** This NI activity must be primarily based at the school and benefit students and / or their parents and have documented support from the school(s). If "yes", list the benefiting schools; total student enrollment and students served by project; approximate number of students living along the route; and the percentage of students eligible for reduced meal programs, or indicate N/A in space provided. (Word limit 10).

N/A

NI COMPONENTS As applicable, insert the number of each type of proposed activity. Numerical field indicating total number NI program would provide.

- Number of walk or bicycle audits.
- Number of bicycle skills / safety classes.
- Number of pedestrian skills / safety classes.
- Number of community demonstration projects.
- Number of community encouragement activities.
- Number of community challenges.
- Number of community workshops / stakeholder meetings.
- Number of classroom / educational classes receiving pedestrian / bicycle safety instruction / education.
- Number of school assemblies receiving pedestrian / bicycle safety instruction / education.
- Number of training sessions to implement the SRTS program (e.g., training for volunteer walking school bus leaders, training for bicycle train leaders, etc.).
- Number of after school programs receiving pedestrian / bicycle safety instruction / education.
- Number of bicycle rodeos.
- Number of pedestrian safety skills events.
- Number of schools with walking school bus programs (defined as planned route with meeting points, a timetable, and a schedule of trained volunteers).
- Number of schools with bicycle train programs (defined as a planned route with meeting points, a timetable, and a schedule of trained volunteers).
- Number of student-led leadership initiatives (e.g., student patrols, peer-led learning, etc.).

PART 6 – AREA CONDITIONS

Select applicable boxes describing the area and complete applicable text fields. Then, upload supporting documentation.

1. **Select one box that describes the geographic population size of the project area.**
   - ○ Non-Urban Area with a population of 5,000 or less
   - ○ Urban Area with a population greater than 5,000 but no more than 50,000
   - ○ Urban Area with a population greater than 50,000 but no more than 200,000
   - ● Urban Area with a population greater than 200,000

2. **Is the project within the boundary of an MPO*?** If not, select “no”, and indicate N/A in the space provided. If so, select “yes”, and indicate the MPO in the space provided. (Word limit 5).
   - ● Yes ○ No St. Lucie TPO

3. **Is the project within the boundary of a Transportation Management Area (TMA)?** If not, select “no”, and indicate N/A in the space provided. If so, select “yes”, and indicate the TMA in the space provided. (Word limit 5).
   - ● Yes ○ No St. Lucie TPO

4. **Is the project within a Rural Economic Development Initiative (REDI) community or designated as a Rural Area of Opportunity (RAO) as defined pursuant to Section 288.0656, F.S.?** If not, select “no”, and indicate N/A in the space provided. If so, select “yes” and indicate the REDI / RAO in the space provided. (Word limit 5)
   - ○ Yes ● No N/A

5. **Indicate the United States Congressional District number(s) of the project location.** (Word limit 5).

   21st Congressional District of Florida

6. **Will the project address equity by providing benefits to traditionally underserved communities as determined by the U.S. Census?** These communities could include low-income residents, minorities, those with limited English proficiency, persons with disabilities, children, or older adults. If not, select “no”, and indicate N/A in the space provided. If so, select “yes”, and briefly explain how the project improves environmental justice (e.g., disadvantage community access point(s) and destinations the project benefits, median household income, free or reduced priced school meals and how SRTS projects benefit the students, etc.). (Word limit 10).
   - ○ Yes ○ No Refer to the St. Lucie TPO

7. **Are there transit stops / shelters / support facilities within the project limits?** If not, select “no”, and indicate N/A in the space provided. If so, select “yes”, and indicate the identification number. (Word limit 5).
   - ○ Yes ● No N/A

8. **Is the project within a high-crash pedestrian corridor (or an area with a history of crashes involving pedestrians)?**
   - ○ Yes ● No

9. **Is the project within a high-crash bicycle corridor (or an area with a history of crashes involving bicyclists)?**

   ○ Yes ● No

10. **Would the project implement a bicycle or pedestrian action plan(s)?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and specify the name of the plan and date of adoption. (Word limit 5).

    ● Yes ○ No Refer to the St. Lucie TPO

**** Metropolitan / Transportation Planning Organization / Agency (MPO)***

REQUIRED UPLOAD: AREA CONDITIONS SUPPORTING DOCUMENTATION (e.g., excerpt pages from adopted plans or studies, maps illustrating transit facilities and connectivity to the improvement, short statement of support with a signature of the school official and their contact information for SRTS projects, median household income by census tract for community benefiting, collision heat maps / crash data for area surrounding project limits, etc.).

PART 7 – PUBLIC INVOLVEMENT

Public involvement, engagement, and collaboration is a key component of the federal project development process and must be conducted in accordance with applicable rules and regulations in the event the project is selected for funding. Indicate which of the following are applicable (Select all that apply). Complete the text field or indicate N/A in the space provided. Then, upload supporting documentation.

1. **Does the greater community support the project, as demonstrated by recently adopted proclamations or resolutions expressing commitment and public engagement?** If "yes", explain the engagement and how the concept evolved based on public involvement. Indicate the resolution number, adoption date, and participating parties in the space provided. If "no", indicate N/A in the space provided. (Word limit 10).

   ● Yes ○ No Refer to the St. Lucie TPO Public Involvement Certification

2. **Was the project discussed at a regularly scheduled meeting of an advisory board of an appointed group of citizens, such as bicycle pedestrian advisory groups or similar committee that provides support toward the project?** If "yes", provide meeting information, including the date and type of advisory board meeting, and the input received. If "no", indicate N/A in the space provided. (Word limit 10).

   ● Yes ○ No Refer to the St. Lucie TPO Public Involvement Certification

3. **Was there an advertised public meeting to discuss the project?** If "yes", provide a brief description, including the input received, how the concept evolved based on public involvement, date, and type of meeting. If "no", indicate N/A in the space provided. (Word limit 10).

   ● Yes ○ No Refer to the St. Lucie TPO Public Involvement Certification

4. **Do recent community surveys indicate both need and support for the project and stakeholders will continue to be engaged in the implementation of the project?** If "yes", briefly explain. If "no", indicate N/A in the space provided. (Word limit 10).

   ● Yes ○ No Refer to the St. Lucie TPO Public Involvement Certification

REQUIRED UPLOAD: PUBLIC INVOLVEMENT SUPPORTING DOCUMENTATION (e.g., resolution, proclamation, regularly scheduled meeting agenda and minutes, public meeting advertisement, community survey, letters of support, etc.).

PART 8 – CONCURRENCY / CONSISTENCY

Is the project consistent with the applicable comprehensive plan(s), transportation plan(s), capital improvement plan(s), and / or the long-term management plan(s)? [Note: Board of County Commissioners functions as MPO in nonmetropolitan areas (Section 339.135(4)(c)1, F.S.)]. If not, select "no", and indicate N/A in the space provided. If so, select "yes", and use the text field to explain consistency, include MPO prioritization number. If a modification is required, indicate the meeting date for adoption. (Word limit 10).

● Yes ○ No Refer to the St. Lucie TPO

REQUIRED UPLOAD: CONCURRENCY / CONSISTENCY SUPPORTING DOCUMENTATION (e.g., supporting resolution(s), excerpt from comprehensive plan(s), transportation plan(s), capital improvement plan(s), management plan(s), prioritization list, etc.).

PART 9 – ENVIRONMENTAL CONDITIONS

Select the boxes describing the Environmental Conditions. As applicable, complete the text field or indicate N/A in the space provided. Then, upload supporting documentation. Applicants for NI proposals may skip the Environmental Conditions section.

1. **Does the project involve lands identified by the Florida Wildlife Corridor Act of 2021 [Section 259.10**55**, Florida Statutes (F.S.)]?**
   ○ Yes ● No
2. **Does the project involve state-owned conservation lands?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate the state-owned conservation lands. NOTE: Use of state-owned conservation lands is subject to coordination by the managing entity. (Word limit 5).
   ○ Yes ● No N/A
3. **Does a railway facility exist within 1,000 feet of the project limits?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate railway facility. (Word limit 5).
   ○ Yes ● No N/A
4. **Does the project physically cross a railway facility?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and indicate the crossing's railway identification number, and beginning and ending mile points. (Word limit 5).
   ○ Yes ● No N/A
5. **Would the project provide lighting at locations with nighttime crashes?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and describe the proposed lighting in the space provided. (Word limit 5).
   ○ Yes ● No N/A
6. **Would the project implement an adopted Americans with Disabilities Act (ADA) transition plan?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and describe proposed ADA improvements in the space provided. (Word limit 5).
   ○ Yes ● No N/A

7. **Is an Environmental Assessment for the project complete?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and describe any specific issues in the space provided. (Word limit 10).

   ○ Yes ● No N/A

8. **Is the project adjacent to locally designated or National Register of Historic Places (NRHP) listed or eligible resources?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and list resources, indicate if the resources have received Florida Department of State Historic Preservation Grant funds, and explain any preservation agreements, covenants, or easements in the space provided. If applicable, select "unknown". (Word limit 5).

   ○ Yes ● No ○ Unknown N/A

9. **Are there any archaeological sites or Native American sites located within or adjacent to the project boundary?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and list State Site Number (aka Site File Number) for the sites. If applicable, select "unknown"**.** (Word limit 5).

   ○ Yes ● No ○ Unknown N/A

10. **Are there any parks, recreation areas, or wildlife / waterfowl refuges within or adjacent to the project boundary?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and list the facilities in the space provided. (Word limit 5).

    ○ Yes ○ No

11. **Are there any navigable waterways adjacent to or within the project boundary?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and list the navigable waterways. (Word limit 5).

    ○ Yes ● No N/A

12. **Are there any wetlands within or adjacent to the project limits?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and describe in the space provided. Include permit types required and any obtained for the project. (Word limit 5).

    ○ Yes ● No N/A

13. **Is it likely that there are protected / endangered / threatened species and / or critical habitat impacts within the project limits?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and describe in the space provided. If applicable, select "unknown". (Word limit 5).

    ○ Yes ● No ○ Unknown N/A

14. **Are there any potential contamination / hazardous waste areas within or adjacent to the project limits?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and describe in the space provided. If applicable, select "unknown". (Word limit 5).

    ○ Yes ● No ○ Unknown N/A

15. **Are there any noise-sensitive areas near the project area?** If not, select "no", and indicate N/A in the space provided. If so, select "yes", and describe in the space provided. If applicable, select "unknown" (Word limit 5).

    ○ Yes ● No ○ Unknown N/A

REQUIRED UPLOAD for Infrastructure (not applicable for NI): ENVIRONMENTAL CONDITIONS SUPPORTING DOCUMENTATION (e.g., labeled photographs on maps depicting conditions, permits, copy of the entire study or environmental assessment, excerpt pages from adopted plans, etc.).

PART 10 – DESIGN / TYPICAL SECTIONS

Select the boxes describing the design status and complete the text fields. Then, upload supporting documentation. Applicants for NI proposals may skip the Design / Typical Section.

1. **Are signed and sealed design plans available for this project?**
   - ○ Yes
   - ● No

2. **If design plans are not at 100 percent, or do not meet current standards and / or reflect existing conditions, select the box identifying the status.** (Word limit 100).
   - ● No design plans
   - ○ 30% design plans
   - ○ 60% design plans
   - ○ 90% design plans
   - ○ Other:

The proposed sidewalk project is located on Easy Street in St. Lucie County from US Highway 1 to Canal 22 for a distance approximately 0.5 mile. Easy Street is one of several main entrances into the Indian River Estates residential community which has limited sidewalks. Based on the a preliminary engineering assessment completed by County staff, the south side of Easy Street is the preferred location to install a 6 foot wide concrete sidewalk within the existing County right of way due to minimal impacts to the single family residents and existing utilities. Easy Street is classified as a two-lane collector roadway with a posted speed of 30 mph. Pedestrians and students use Easy Street to access US 1 to connect to transit and school bus services. The County has completed a community survey of the residents along the south side of Easy Street and 59% on the residents are in support of the proposed sidewalk project. At the intersection of Easy Street and US 1, the two corner properties fronting US 1 are retail commercial businesses so the proposed sidewalk will facilitate a safe walking area for pedestrian customers.

3. **Briefly describe the design status in the space provided.** If design is at 100 percent, indicate the date of the plans. (Word limit 100).

The project is in the preliminary engineering phase with a conceptual design of the proposed Easy Street sidewalk typical sections. The conceptual design of the cross section assessed the drainage impact. The sidewalk surface is considered minor impermeable area with minimal impact to the existing drainage system. The swale system can easily accommodate the minor drainage runoff from the sidewalk. Typically, sidewalk construction is considered exempt from the permitting agencies on impacts to the stormwater system. A drainage analysis will be performed as part of the design to calculate the appropriate culvert pipe size and any drainage inlet structures, as well as determine the location of the outfall structures. The design will also redesign driveways to ensure the minimal slope to meet latest ADA standards and drainage. Any drainage and driveway impacts are expected to be minor. Based on initial field review, there are no impacts to existing trees or existing utilities poles within the County right of way. The 6 foot sidewalk will be construct on the south side of Easy Street from US 1 to Canal 22 which is bordered by single-family homes and two businesses at US 1. The County has completed an initial public outreach by surveying the houses along this section to determine support of the sidewalks in front of their house and 59% of the residents were in support of the sidewalk.

REQUIRED UPLOAD for Infrastructure (not applicable for NI): Typical Section(s) depicting existing and proposed features, dimensions, and ROW lines. If there are multiple segments, provide typical sections for each. If available, provide design plans.

PART 11 – OWNERSHIP / ROW STATUS

Select the boxes describing the Ownership / ROW Status and complete applicable text fields. Then, upload supporting documentation. Applicants for NI proposals may skip the Ownership / ROW Status section.

1. **Is ROW acquisition, defined as obtaining property not currently owned by the Local Agency through any means (e.g., deed, easement, dedication, donation, etc.), necessary to complete this project?**

   ○ Yes ● No

2. **Explain the ROW status (owned / fee simple, leased / less-than fee, and / or needs) along the project boundary, including when ROW was obtained and how ownership is documented (e.g., plats, deeds, prescriptions, certified surveys, transfers, easements). Provide information for verifying ownership (e.g., book / page number, transfer agreements, dates, etc.). If ROW acquisition is necessary before constructing the proposed project and / or the applicant agency is not the landowner, indicate the necessary coordination with other owners for all fee-simple purchases and / or any less-than fee / lease needs (including temporary construction and / or other easements and / or permits for drainage, railroad, utilities, etc.) necessary to secure ROW certification. Indicate the proposed acquisition timeline, expected funding source, the total number of parcels, type of acquisition, limitations on fund use or availability, and who will acquire and retain ownership of proposed land.** (Word limit 150).

The Right of Way (ROW) is owned by St Lucie County. The proposed 6 foot sidewalk will be constructed within existing St. Lucie County ROW. The County Property Appraiser map shows Easy Street from US 1 to Canal 22 with an 80 foot wide corridor, so there is sufficient room to construct the 6 foot wide sidewalk on the south side with no additional need to acquire any additional right of way for the project. Attached is the plat map with dedication of Easy Street to St. Lucie County.

REQUIRED UPLOAD for Infrastructure (not applicable for NI): OWNERSHIP / ROW STATUS SUPPORTING DOCUMENTATION including applicable ROW Certification including ownership verification documenting site control and related landowner supporting documentation. Site control documents must include an adequate legal description of the parcel(s) comprising the project site, such that staff can compare it to the boundary map submitted with the application and evaluate whether there is control of the project site (e.g., ROW Certification, ROW maps, plats, warranty deeds, prescriptions, certified surveys, easements, use agreement, etc.). Maps should clearly show the location of each ownership in relation to the project boundary and / or limits. NOTE: provide map documentation on 8.5” x 11” scale. DO NOT provide reduced copies of original plats and or maps that cannot be read at scale. If applicable, an exhibit visually depicting the new ROW anticipated for the project, together with a spreadsheet providing the tax identification number(s) of each impacted parcel and the approximate size of the new acquisition area for each impacted parcel.

PART 12 – PROJECT IMPLEMENTATION AND COSTS

Complete either the Infrastructure Table Summary with the overall project programming (phases, schedule, and estimated costs for the proposed work) or the NI Cost Narrative Table. Then, upload supporting documentation.

Not all phase types may be eligible for TA funds, and not all areas prioritize all phases. Local agencies are responsible for covering all unanticipated cost increases, including but not limited to price inflation and increases in the cost of construction; account for them using local funds. FDOT does not allow programming TA funds for contingency costs. The local agency must have the ability to pay for non-participating costs (e.g., utility relocation). Chapter 337.14, F.S. prohibits an entity from performing both design services and construction engineering inspection services (CEI) for a project wholly or partially funded by the FDOT and administered by a local government entity.

REQUIRED UPLOAD: PROJECT IMPLEMENTATION AND COSTS SUPPORTING DOCUMENTATION.

1) Either provide a detailed engineer cost estimate if the project is designed or if the project has not been designed or is a NI project, provide a detailed opinion of probable costs (including all pay items and a timeline for deliverable). Utilize the FDOT Basis of Estimates Manual to develop a detailed estimate with FDOT pay items for construction phase estimates.
2) As applicable, letter from local agency budget office committing local funds to the project.

***** Note: Applications for NI Projects to skip to page 15.*****

Infrastructure Project Phases / Work Types	Select phase(s) included in this request	INFRASTRUCTURE Table Summary Overall Project Programming (Cost Summary and Schedule)						
		Schedule (Month/Year)		Funding sources and costs ($)				
				Federal Funds		Non-Federal / Local Funds		Total Cost Estimate ($)
		Start (mm/yy)	End (mm/yy)	TA Program ($)	Other Federal ($)	Non-TA/ Local Funds ($)	Other ($)	
Planning Development (Corridor or Feasibility)								
PD&E								
Preliminary Engineering / Design (PE)	✓			$91,665				$91,665
Environmental Assessment (associated with PE)				$12,000				$12,000
Permits (associated with PE)								
ROW								
Construction	✓			$669,090		$22,000		$691,090
CEI	✓			$158,950.7				$158,950.7
Other costs (describe) Contingency						$69,109		$69,109
							Total Infrastructure Project Cost Estimate	$1,022,814.70

TRANSPORTATION ALTERNATIVES PROGRAM
CERTIFICATION OF PROJECT SPONSOR

PROJECT NAME: Easy Street Sidewalk

LOCATION: St. Lucie County

PROJECT LIMITS: (from south or west limit) US Highway 1

(to north or east limit) Canal 22 at the future SunTrail

By checking the box you agree to do the following:

- ✓ Enter into a maintenance agreement with the Florida Department of Transportation (FDOT), as necessary, prior to the design phase.
- ✓ Comply with the **Federal Uniform Relocation Assistance and Acquisition Policies Act** for any Right of Way actions required for the project.
- ✓ Provide any required funding match, incur any additional expenses beyond the approved project costs in the LAP agreement, and are responsible for any non-participating items (e.g. utility relocations).
- ✓ Pursue or retain LAP certification and enter into a LAP agreement with FDOT.
- ✓ Comply with NEPA process prior to construction, including any necessary involvement with the State Historic Preservation Officer (SHPO), and other State and/or Federal agencies, prior to construction.

I further certify that the estimated costs included herein are reasonable and agree to follow through on the project once programmed in the FDOT's Work Program. I fully understand that significant increases in these costs could cause the project to be removed from the FDOT's Work Program.

George Landry

* Signature

George Landry

Name (please type or print)

County Administrator

Title

1/29/2025

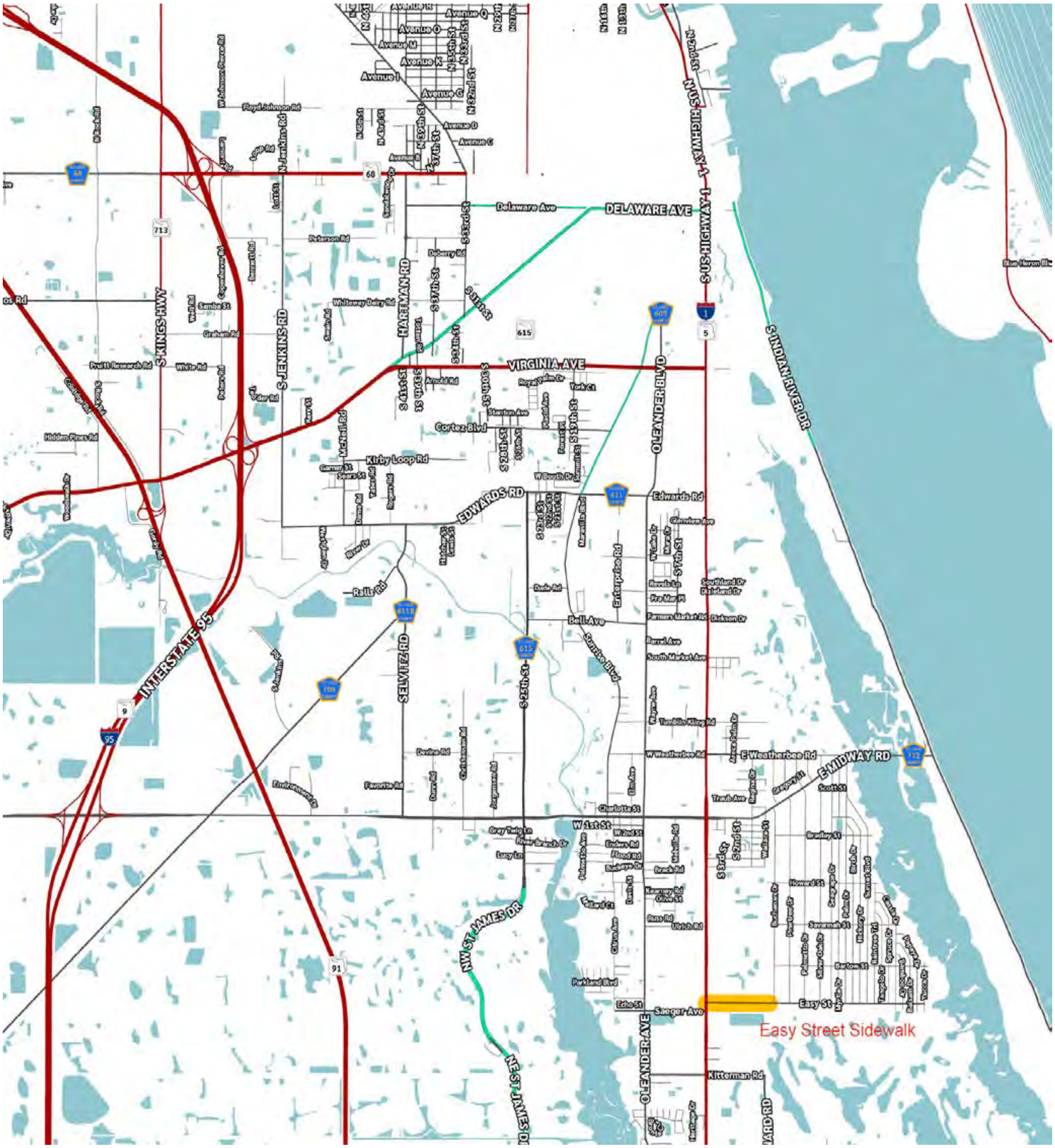
Date

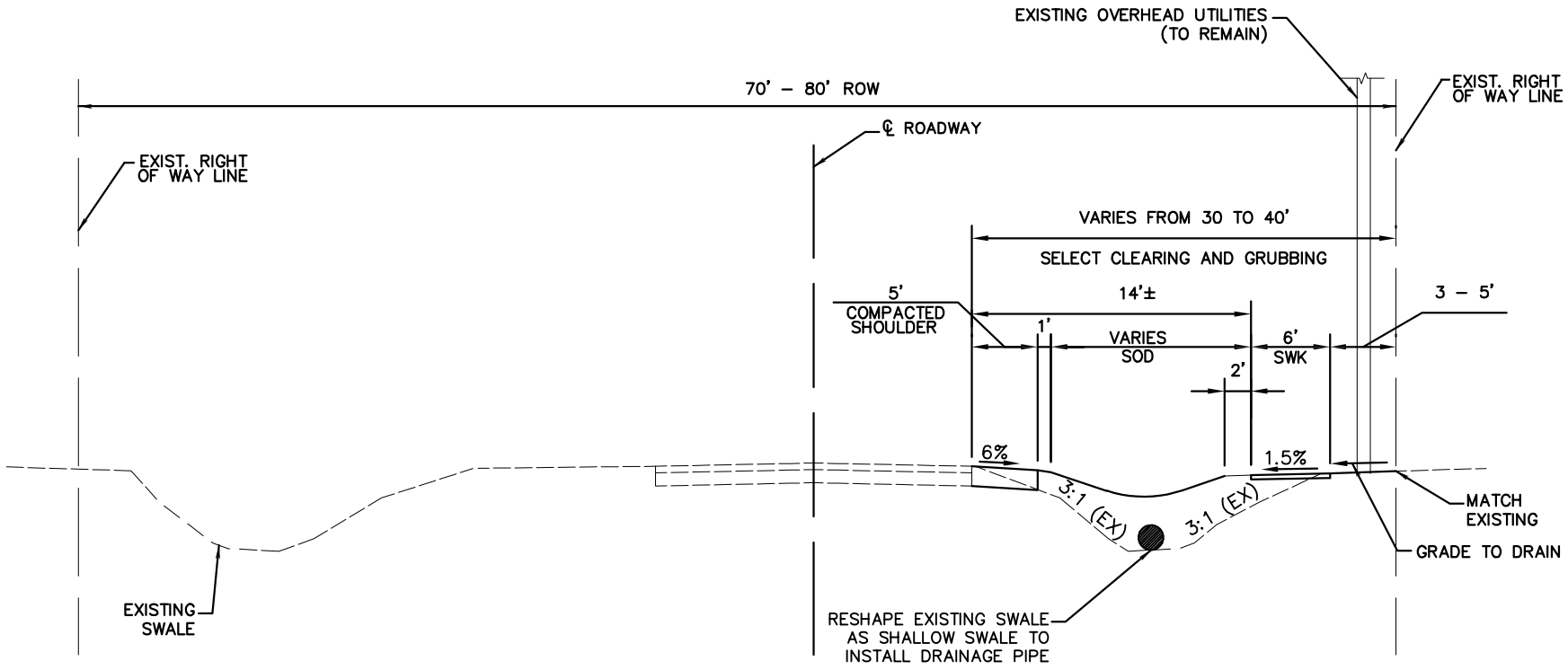
* This should be executed by person who has signatory authority for sponsor and is authorized to obligate services and funds for that entity (generally chairman of the board or council).

Easy Street Sidewalk

Project Limit: Easy Street from US Highway 1 to Canal 22

Site Map





EASY STREET SOUTHSIDE SIDEWALK
FROM US 1 TO CANAL 22 (SUNTRAIL)
PROPOSED AND EXISTING
TYPICAL SECTION

NTS

REVISIONS

NO.	DATE	SUBJECT	BY

35

BOARD OF COUNTY COMMISSIONERS
ST. LUCIE COUNTY, FLORIDA
PUBLIC WORKS DEPARTMENT, ENGINEERING DIVISION
SURVEY SECTION
2300 VIRGINIA AVE., FORT PIERCE, FLORIDA, 34982
TELEPHONE 772-462-1721

PROJECT:
EASY STREET SIDEWALK

SHEET NO.
1 OF 1

L:\4-Drafting\Completed\F-Watanabe\024-12 EASY STREET SIDEWALK.dwg

St. Lucie Transportation Planning Organization

ENGINEERS COST ESTIMATE

(Use for Off-System Projects - Administered through LAP)

Project Description: Easy Street Sidewalk Improvement

		FHWA Participating				FHWA non-participating (Local funds)					
Pay Item Number*	Pay Item Description*	Quantity	Unit	Engineer's Unit Cost	Engineer's Subtotal Cost	Quantity	Unit	Engineer's Unit Cost	Engineer's Subtotal Cost	Total Quantity	Total Engineer's Cost
Mobilization/Demobilization	101-1A	1	LS		$ 50,000.00				$ -	1	$ 50,000.00
Maintenance of Traffic (MOT)	102-1A	1	LS		$ 30,000.00				$ -	1	$ 30,000.00
Prevention, Control & Abtment of Erosion & Water Pollution	104-2A	1	LS		$ 25,000.00				$ -	1	$ 25,000.00
Clearing and Grubbing	110-1-1	3.6	AC	$ 25,000.00	$ 90,000.00				$ -	3.6	$ 90,000.00
Mailboxes (Remove, Protet and Replace)	110-7-1A	17	EA	$ 420.00	$ 7,140.00				$ -	17	$ 7,140.00
Regular Excavation	120-1	450	CY	$ 28.00	$ 12,600.00				$ -	450	$ 12,600.00
Embankment	120-6	200	CY	$ 35.00	$ 7,000.00				$ -	200	$ 7,000.00
Construction Layout and Record Drawings	199-1A					1	LS	12,000	$ 12,000.00	1	$ 12,000.00
Cemented Coquina Base (LBR 100) 18"	285-718A	1000	SY	$ 35.00	$ 35,000.00				$ -	1000	$ 35,000.00
Superpave Asphalt Concrete (Traffic C)(SP 12.5) 1.5"	334-1-13A	30	TN	$ 500.00	$ 15,000.00				$ -	30	$ 15,000.00
Superpave Asphalt Concrete (Traffic C)(SP 12.5) 1.0"	334-1-13B	30	TN	$ 500.00	$ 15,000.00				$ -	30	$ 15,000.00
Inlets & Manholes (< 10)	425-1A	16	EA	$ 5,000.00	$ 80,000.00				$ -	16	$ 80,000.00
Pipe Culvert (18" to 36" RCP)	430-174A	2200	LF	$ 60.00	$ 132,000.00				$ -	2200	$ 132,000.00
6' Concrete Sidewalk 4" Thick, 3000 PSI	522-1	1390	SY	$ 55.00	$ 76,450.00				$ -	1390	$ 76,450.00
6' Concrete Sidewalk 6" Thick, 3000 PSI	522-2	1000	SY	$ 65.00	$ 65,000.00				$ -	1000	$ 65,000.00
Performance Turf, Sod	570-1-2	5800	SY	$ 4.00	$ 23,200.00				$ -	5800	$ 23,200.00
Signs, Remove/Relocate/Reset	700-1-1A	6	EA	$ 200.00	$ 1,200.00				$ -	6	$ 1,200.00
Thermoplastic Pavement Markings	711-11A	1	EA	$ 4,500.00	$ 4,500.00				$ -	1	$ 4,500.00
Utility Coordination	999-1					1	LS	10000	$ 10,000.00	1	$ 10,000.00
					$ -				$ -	0	$ -
					$ -				$ -	0	$ -
					$ -				$ -	0	$ -
					$ -				$ -	0	$ -
		Funds for Construction (Phase 58)			$ 669,090.00	Local Funds for Construction (Phase 58)			$ 22,000.00	Subtotal	$ 691,090.00
FDOT IN-HOUSE DESIGN SUPPORT (Phase 31) (REQUIRED)		1	LS	$5,000	$ -	FDOT In-House Support must be included as an FHWA Participating Item; Local Agencies have the option to request funding for design and CEI, percentages are at the discretion of the Local Agency.					
ADDITONAL FDOT IN-HOUSE DESIGN SUPPORT FOR CRITICAL PROJECTS		0	LS	$2,000	$ -						
FDOT IN-HOUSE CONSTRUCTION SUPPORT (Phase 61) (REQUIRED)		1	LS	$5,000	$ -						
ADDITONAL FDOT IN-HOUSE CONSTRUCTION SUPPORT FOR CRITICAL PROJECTS		0	LS	$2,000	$ -						
PRELIMINARY ENGINEERING (DESIGN) (Phase 38) (OPTIONAL)**		1	LS	$103,665	$ 103,665.00	1	LS		$ -		
CONTINGENCY (Phase 58) (REQUIRED)		Contingency is not a FHWA Participating Item				1	LS	10%	$ 69,109.00		
TRANSIT RELATED PROJECTS (10% FTA ADMINISTRATIVE FEE)		Administrative Fee is not a FHWA Participating Item				0	LS	10%	$ -		
CONSTRUCTION ENGINEERING & INSPECTION ACTIVITIES (CEI) (Phase 68) (OPTIONAL)***		1	LS	$138,218	$ 138,218.00	1	LS		$ -		
FDOT OVERSIGHT CEI (3% OF TOTAL CONSTRUCTION COST ESTIMATE) (Phase 62) (REQUIRED)		1	LS	3%	$ 20,732.70	FDOT In-House Support must be included as an FHWA Participating Item					
					$ 931,705.70				$ 91,109.00		$ 1,022,814.70
					Subtotal FHWA Participating				Subtotal FHWA Non-Participating		Total Construction Cost Estimate

*Projects on the State Highway System and Critical Projects SHALL utilize FDOT pay items numbers and descriptions.

**Estimated cost for preparation of the Construction Plans, Specs, and estimatepackage.

***Estimated cost for Construction Engineering and Inspection; Must provide an esitmate if seeking reimburement for Professional Services.

Non-participating items:

- Mowing & Litter removal
- Engineering work; Optional services; Survey; Video inspection; MOT plans preparation; As-builts/record drawings
- Utility work -- this includes, but is not limited to: valve adjustments, utility relocations, FPL power pole relocations, AT&T directional bore, etc...
- Contingency

Other elements may be non-participating; the ones listed above are the commonly used pay items that are non-participating.

Prepared by: Frank Watanabe — Name: — Signature: — PE Number: 66735 — Date: 1/29/25

Reviewed by: Edmund Bas — Name: — Signature: — Date: 1/29/25

DESIGN AND CEI FEE GUIDE:

Recommended Percentage (%) of Construction Cost Estimate	
DESIGN (Phase38)	15-30%
CONSTRUCTION ENGINEERING & INSPECTION ACTIVITIES (CEI) (Phase 68)	15-30%

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

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

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:	Citizens Advisory Committee (CAC)
Meeting Date:	March 18, 2025
Item Number:	6b
Item Title:	US-1 Corridor Congestion Study
Item Origination:	Unified Planning Work Program (UPWP)
UPWP Reference:	Task 2.3 - Traffic Count Program Management
Requested Action:	Recommend acceptance of the US-1 Corridor Congestion Study, recommend acceptance with conditions, or do not recommend acceptance.
Staff Recommendation:	Because the US-1 Corridor Congestion Study fully evaluates the congestion conditions on US-1, it is recommended that the US-1 Corridor Congestion Study be recommended for acceptance by the TPO Board.

Attachments

- Staff Report
- US-1 Corridor Congestion Study

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: Citizens Advisory Committee (CAC)

THROUGH: Peter Buchwald
Executive Director

FROM: Yi Ding
Transportation Systems Manager

DATE: March 10, 2025

SUBJECT: US-1 Corridor Congestion Study

BACKGROUND

To evaluate and improve the reported or perceived congestion conditions on US-1 from Prima Vista Boulevard to the Martin County Line, as part of the 2025 Traffic Count Management Program, the US-1 Corridor Congestion Study (Study) is programmed for FY 2024/25 in Task 2.3 of the TPO's Unified Planning Work Program (UPWP). The draft Study was completed and is being presented for review and acceptance.

ANALYSIS

The attached US-1 Corridor Congestion Study was prepared by Benesch, one of the TPO's General Planning Consultants. Benesch has provided the traffic count collection and Traffic Count Data Management System (TCDMS) maintenance services since the inception of the County Program. Benesch also completed the recent Major Update to the Congestion Management Process.

For the study of the US-1 corridor, the annual average daily traffic (AADT) and AM and PM Peak hour travel traffic data were collected. Levels of Service (LOS) for the roadway segments were analyzed. In addition, travel characteristics were analyzed by using the Regional Integrated Transportation Information

System (RITIS) and Replica data sources. Finally, strategies are recommended to reduce the congestion that was confirmed by the analyses.

RECOMMENDATION

Because the US-1 Corridor Congestion Study fully evaluates the congestion conditions on US-1, it is recommended that the US-1 Corridor Congestion Study be recommended for acceptance by the TPO Board.

US 1 Corridor Congestion Study,

Martin County Line to Prima Vista Boulevard

March 2025

Prepared for:
St Lucie Transportation Planning Organization
Coco Vista Center
466 SW Port St Lucie Boulevard
Port St Lucie, FL 34953

Prepared by:
Alfred Benesch & Co.
1000 N Ashley Drive
Suite 400
Tampa, FL 33602

Contract No. C19-08-687 WA No. 10

Benesch Project No. 1825-100001.06

benesch

Table of Contents

APPENDICES

DEFINITIONS

Annual average daily traffic (AADT)	The volume passing a point or segment of a roadway in both directions for one year, divided by the number of days in the year.
Capacity	The maximum sustainable hourly flow rate at which persons or vehicles can be expected to traverse a point or a uniform section of a lane or roadway during a given time period under prevailing roadway, environmental, traffic, and control conditions. (HCM 6th Edition). As typically used in the Q/LOS Handbook, the maximum number of vehicles that can pass a point in one hour under prevailing roadway, traffic, and control conditions.
Context classification	A classification assigned to a roadway that broadly identifies the various built environments in Florida, based on existing or future land use characteristics, development patterns, and the roadway connectivity of an area.
K factor	The proportion of AADT that occurs during the peak hour. Standard K values are statewide fixed parameters that depend on the general area types (location) and facility types (roadway characteristics).
D factor	The Directional distribution (D) factor is the proportion of a peak hour's total volume that occurs in the higher volume direction.
T factor	The Truck (T) factor is the proportion of the total volume that represents truck (heavy vehicle) traffic.
Level of service (LOS)	A quantitative stratification of a performance measure or measures that represent quality of service, measured on an A-F scale, with "LOS A" representing the best operating conditions from the traveler's perspective and "LOS F" the worst. (HCM Sixth Edition)
Maximum service volume (MSV)	The highest number of vehicles for a given LOS where that LOS represents the adopted LOS standard. For example, the LOS D Capacity of an urban State road may establish the MSV.
Volume-to-capacity ratio (V/C)	Either the ratio of demand volume to capacity or the ratio of service flow volume to capacity, depending on the particular problem situation.

Source: 2023 Q/LOS Handbook, Florida Department of Transportation, 2023; Alfred Benesch & Co., 2025.

PURPOSE AND OBJECTIVES

As part of the St Lucie TPO 2025 Traffic Count Management Program, additional traffic count data was collected and analyzed to quantify the level of congestion on US 1 from the Martin County Line to Prima Vista Boulevard and nearby parallel corridors. Study area travel characteristics were identified, and strategies developed to minimize the impact of any traffic congestion along the corridor.

This work effort included conducting the corridor congestion traffic study as described below:

- Traffic data collection and gathering.
- Daily and peak-hour congestion analysis.
- Developing strategies to reduce traffic congestion.
- Documenting all findings.
- Presenting findings to TPO committees and board.

The objectives of the study were to assess the existing traffic conditions by determining generalized level of service (LOS) for the roadways, determining the severity of congestion, and estimating which roadways may or would reach a failing condition. The study considered daily traffic and AM and PM peak-hour conditions. The methodology/scope of services for this study can be found in **Appendix A**.

STUDY AREA – US 1, FROM MARTIN COUNTY LINE TO PRIMA VISTA BOULEVARD

The US 1 corridor runs north-south between Martin County and Prima Vista Boulevard. For the purpose of this analysis, the corridor has been divided into the seven following segments:

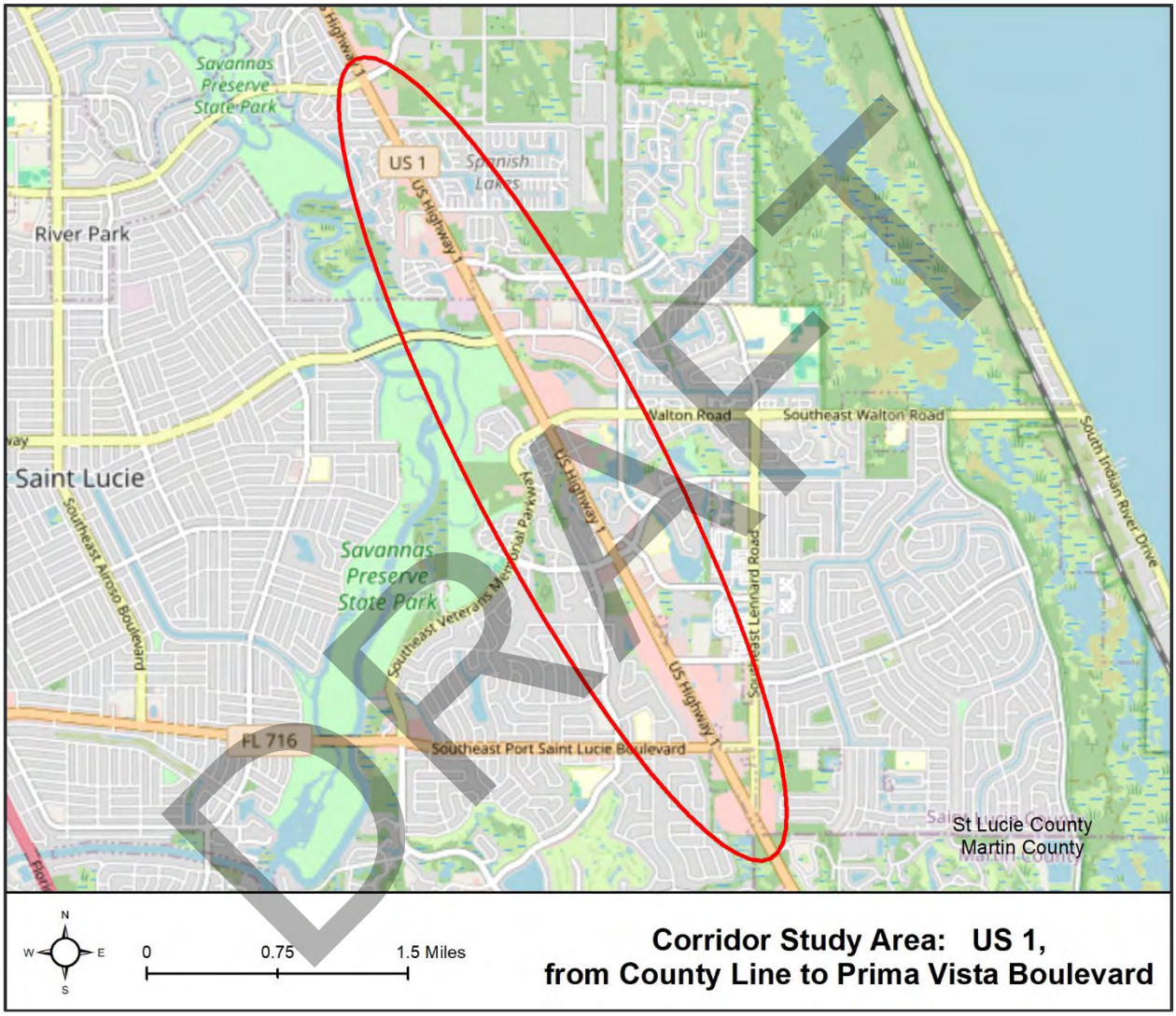
- Martin County Line to Lennard Road
  - Functions as eight lanes, divided roadway, 45 mph, C3C context classification.
- Lennard Road to Port St Lucie Boulevard / Mariposa Avenue
  - Functions as eight lanes, divided roadway, 45 mph, C3C context classification.
- Port St Lucie Boulevard to Lyngate Drive / Tiffany Avenue
  - Functions as six lanes, divided roadway, 45 mph, C3C context classification.
- Tiffany Avenue to Veterans Memorial Parkway / Walton Road
  - Functions as six lanes, divided roadway, 45 mph, C3R context classification.
- Walton Road to Crosstown Parkway / Village Green Drive
  - Functions as six lanes, divided roadway, 45 mph, C3C context classification.
- Crosstown Parkway to Savanna Club Boulevard
  - Functions as six lanes, divided roadway, 45 mph, C3C context classification.
- Savanna Club Boulevard to Prima Vista Boulevard
  - Functions as six lanes, divided roadway, 45 mph, C3C context classification.

Each segment is divided by a major signalized multi-lane intersection. There are a total of nine signalized intersections along the corridor with dedicated left and right-turn lanes along US 1 at each signalized intersection. Additionally, left and right-turn lanes occur along the corridor at non-signalized intersections, median openings, and driveways along the corridor. The segments listed above are not listed as part of the FDOT Strategic Intermodal System (SIS) roadway network.

Note that the above context classification is from the FDOT 2023 Q/LOS Handbook and is being used for analysis purposes for this study. In keeping with the methodology used by the Florida Department of Transportation and for consistency with the other corridor analyses of State roads, the 2023 Q/LOS context classification-based capacity thresholds are being used for this facility.

Figure 1-1 illustrates the study corridor and its location in south-east St Lucie County.

Figure 1-1: Corridor Location



As can be seen in **Figure 1-1**, the portion of US 1 making up the study corridor does not have immediately accessible and functional parallel facilities, with the possible exception of Lennard Road for the segments south of Walton Road. This both stresses the importance of US 1 in this area as an arterial thoroughfare facility and also limits alternative routes to through traffic in the event of incident induced congestion or lane closures.

1 - EXISTING CONDITIONS

For the existing conditions analysis, 48-hour volume and classification counts were collected along the corridor in January 2025. The 48-hour counts were converted to Annual Average Daily Traffic (AADT) using adjustment factors published by the Florida Department of Transportation (FDOT) and made available on their Florida Traffic Online web site. Roadway capacity is based on the FDOT 2023 Q/LOS Handbook and the adopted Level of Service (LOS) for each road segment. Generalized roadway Level of Service (LOS) is based on the FDOT 2023 Q/LOS Handbook generalized tables. For peak-hour analyses, the actual peak-hour volumes (seasonally adjusted to annual average values) were used, based on the 15-minute incremental traffic counts. The traffic count summaries, 2023 Q/LOS Tables, and FDOT adjustment factor reports can be seen in **Appendix B**.

As can be seen in **Table 1-1**, the eight-lane divided segments are operating at LOS C and the six-lane segments are operating at LOS D or better under daily existing traffic conditions. The adopted LOS Standard for each road segment along the study corridor is LOS D. Thus, all roadway segments are operating within the adopted LOS standard under generalized arterial analysis.

Table 1-1: Existing Conditions – Daily Traffic

				2025 48-hour Traffic Counts					
Segment (S to N)	**Length (mi.)**	**Lanes /Type**	**LOS D Capacity**	**2025 AADT**	**NB**	**SB**	**2025 LOS**	**2025 Dfact**	**2025 Tfact**
Martin CL to Lennard Rd	0.15	8LD	67,410	58,943	29,248	29,695	**C**	50.4	1.8
Lennard Rd to Port St Lucie Blvd	0.42	8LD	67,410	50,580	25,047	25,534	**C**	50.5	
Port St Lucie Blvd to Lyngate /Tiffany	1.24	6LD	56,805	38,275	19,070	19,205	**C**	50.2	2.1
Tiffany Ave to Veterans Memorial/Walton	0.85	6LD	57,855	43,897	22,036	21,861	**C**	50.2	
Walton Rd to Crosstown Pwy/Village Green	0.57	6LD	56,805	51,956	25,798	26,158	**D**	50.3	
Crosstown Pkwy to Savanna Club Blvd	0.49	6LD	56,805	46,296	22,978	23,318	**C**	50.4	
Savanna Club Blvd to Prima Vista Blvd	1.18	6LD	56,805	42,737	21,080	21,657	**C**	50.7	2.7

Notes: Capacity is based on FDOT 2023 QLOS Handbook, C3C, C3R, adjusted x1.05 for RT lanes.
Volumes are from Jan. 2025 48 hours counts, adjusted to AADT. T factor indicates Class Counts were taken at location.
2023 4th week adjustment factors SF=0.91, PSCF=1.03. AxF=0.98 taken from FDOT Peak Seaspn Correction Factor Report and Axle Adjustment Report.

Classification counts were conducted on three of the study corridor segments, further breaking down the counted traffic by vehicle classification, such as personal vehicle, light truck, heavy truck, etc. This indicated the percentage of trucks along the corridor at approximately two to three percent. The directional (D) factor is between fifty and fifty-one percent along the corridor, with a slight edge to northbound traffic over a twenty-four-hour period for most segments.

As can be seen in **Table 1-2**, below, all segments are operating at LOS C during the AM Peak-hour of traffic. The adopted LOS Standard for each road segment along the study corridor is LOS D and all roadway segments are operating within acceptable LOS under generalized arterial analysis.

The percentage of trucks along the corridor during the AM Peak-hour ranges between 1.9 and 3.4 percent. The directional (D) factor indicates heavier southbound traffic during the morning drive along the corridor.

Table 1-2: Existing Conditions – AM Peak-Hour Traffic

				2025 48-hour Traffic Counts (AM PH)							
Segment (S to N)	**Length (mi.)**	**Lanes /Type**	**LOS D Capacity**	**AM PH Volume**	**NB**	**SB**	**2025 AM PH LOS**	**2025 AM PH Dfact**	**2025 AM PH Tfact**	**AM PH PD Cap**	**Peak-Dir. LOS**
Martin CL to Lennard Rd	0.15	8LD	6,069	3,753	1,146	2,607	**C**	69.5	1.9	3,339	**C**
Lennard Rd to Port St Lucie Blvd	0.42	8LD	6,069	3,107	958	2,150	**C**	69.2		3,339	**C**
Port St Lucie Blvd to Lyngate /Tiffany	1.24	6LD	5,114	2,207	868	1,339	**C**	60.7	3.4	2,499	**C**
Tiffany Ave to Veterans Memorial/Walton	0.85	6LD	5,208	2,955	1,099	1,856	**C**	62.8		2,867	**C**
Walton Rd to Crosstown Pwy/Village Green	0.57	6LD	5,114	3,528	1,310	2,219	**C**	62.9		2,499	**C**
Crosstown Pkwy to Savanna Club Blvd	0.49	6LD	5,114	3,114	1,374	1,739	**C**	55.8		2,499	**C**
Savanna Club Blvd to Prima Vista Blvd	1.18	6LD	5,114	2,957	1,340	1,617	**C**	54.7	3.4	2,499	**C**

Notes: Capacity is based on FDOT 2023 QLOS Handbook, C3C, C3R, adjusted x1.05 for RT lanes.
Volumes are from Jan. 2025 48 hours counts, adjusted to AADT. T factor indicates Class Counts were taken at location.
2023 4th week adjustment factors SF=0.91, PSCF=1.03. AxF=0.98 taken from FDOT Peak Seaspn Correction Factor Report and Axle Adjustment Report.

As can be seen in **Table 1-3**, below, all segments are operating at LOS C during the PM Peak-hour of traffic. The adopted LOS Standard for each road segment along the study corridor is LOS D and all roadway segments are operating within the adopted LOS standard under generalized arterial analysis.

Table 1-3: Existing Conditions – PM Peak-Hour Traffic

				2025 48-hour Traffic Counts (PM PH)							
Segment (S to N)	**Length (mi.)**	**Lanes /Type**	**LOS D Capacity**	**PM PH Volume**	**NB**	**SB**	**2025 PM PH LOS**	**2025 PM PH Dfact**	**2025 PM PH Tfact**	**PM PH PD Cap**	**Peak-Dir. LOS**
Martin CL to Lennard Rd	0.15	8LD	6,069	4,502	2,703	1,799	**C**	60.0	1.1	3,339	**C**
Lennard Rd to Port St Lucie Blvd	0.42	8LD	6,069	3,748	2,246	1,502	**C**	59.9		3,339	**C**
Port St Lucie Blvd to Lyngate /Tiffany	1.24	6LD	5,114	2,899	1,720	1,179	**C**	59.3	1.2	2,499	**C**
Tiffany Ave to Veterans Memorial/Walton	0.85	6LD	5,208	3,410	2,007	1,403	**C**	58.9		2,867	**C**
Walton Rd to Crosstown Pwy/Village Green	0.57	6LD	5,114	4,135	2,384	1,751	**C**	57.7		2,499	**C**
Crosstown Pkwy to Savanna Club Blvd	0.49	6LD	5,114	3,748	2,004	1,744	**C**	53.5		2,499	**C**
Savanna Club Blvd to Prima Vista Blvd	1.18	6LD	5,114	3,474	1,810	1,663	**C**	52.1	2.0	2,499	**C**

Notes: Capacity is based on FDOT 2023 QLOS Handbook, C3C, C3R, adjusted x1.05 for RT lanes.
Volumes are from Jan. 2025 48 hours counts, adjusted to AADT. T factor indicates Class Counts were taken at location.
2023 4th week adjustment factors SF=0.91, PSCF=1.03. AxF=0.98 taken from FDOT Peak Seaspn Correction Factor Report and Axle Adjustment Report.

The percentage of trucks along the corridor during the PM Peak-hour ranges between 1.1 and 2.0 percent. The directional (D) factor indicates heavier northbound traffic during the evening peak-hour along the corridor.

The peak direction of traffic was also analyzed during the AM and PM peak-hours of travel along US 1 within the Study Area. As can be seen in both **Tables 1-2** and **1-3**, Peak direction LOS for both morning and evening peak-hours of travel is C and within the adopted service standard.

The St Lucie TPO maintains a Traffic Count Database Management System (TCDMS) as part of their annual traffic count program. The TCDMS was utilized to analyze cross-streets along the corridor for deficiencies adjacent to the study corridor that could impact US 1. **Table 1-4** provides a summary of traffic conditions and LOS for cross-streets along the corridor. The most recent St Lucie TPO LOS Report shows that all cross-street segments in the database are operating within acceptable LOS and that there are no deficiencies with regard to segment volumes exceeding capacities.

Table 1-4: Existing Conditions – Cross Street Traffic

Cross Street	Segment	AADT	AM Pk	AM LOS	PM Pk	PM LOS	PH SC
Lennard Rd	US 1 to Mariposa Ave	19980	1198	D	1136	D	1710
Port St Lucie Blvd	Morningside Blvd to US 1	37326	3359	C	3359	C	4870
Mariposa Ave	US 1 to Lennard Rd	9654	488	C	492	C	1710
Jennings Rd	US 1 to Lennard Rd	4667	244	C	233	C	2100
Lyngate Dr	Morningside Blvd to US 1	10212	645	C	582	C	920
Tiffany Ave	US 1 to Hillmoor Dr	17081	967	C	880	C	2100
Veterans Memorial Pkwy	Lyngate Dr to US 1	8900	507	C	480	C	2100
Walton Rd	US 1 to Village Green Dr	10000	581	C	589	C	1710
Crosstown Pkwy	Floresta Dr to US 1	34500	2331	C	2070	C	3170
Village Green Dr	US 1 to Walton Rd	17000	1060	C	1146	C	2100
Prima Vista Blvd	Rio Mar Dr to US 1	19500	1144	C	1003	C	2100
Prima Vista Blvd	US 1 to Lennard Rd	8934	483	C	460	C	1710

Notes: Capacity is based on FDOT 2020 QLOS Handbook.

Volumes, LOS, and Peak Hour Service Capacity (PH SC) are from the 2024 St Lucie TPO LOS Report.

Based on the January 2025 traffic counts along US 1 and the most recent St Lucie TPO LOS Report, all segments along the US 1 study corridor and adjacent cross street approaches to US 1 are operating within acceptable levels of service. This analysis is based on Annual Average Daily Traffic, or an average typical weekday for the year, using FDOT Generalized Tables for arterial capacity thresholds. While there appear to be no deficiencies along the corridor from an arterial capacity standpoint, it is worth noting that traffic congestion may still occur, or be perceived to occur, due to period traffic patterns, traffic incidents, or traffic operations related issues. There are nine major signalized intersections along the 4.9-mile corridor, several of which have heavy northbound left-turn movements. Intersection delays due to short segment lengths, long traffic signal cycle lengths, and lost time at start up on the green light can all contribute to congestion along the corridor.

2 - PEAK SEASON TRAFFIC CONDITIONS

For the peak season conditions analysis, the January 2025 traffic count data was converted from Annual Average Daily Traffic (AADT) to Peak Season Weekday Average Daily Traffic (PSWADT) using adjustment factors published by the Florida Department of Transportation (FDOT) and made available on their Florida Traffic Online web site. PSWADT represents the average of the 13 consecutive weeks with the highest daily volumes for a specific area. Roadway capacity is based on the FDOT 2023 Q/LOS Handbook and the adopted Level of Service (LOS) for each road segment. Generalized roadway Level of Service (LOS) is based on the FDOT 2023 Q/LOS Handbook generalized tables. For peak-hour analyses, the actual peak-hour volumes (seasonally adjusted to peak-season values) were used, based on the 15-minute incremental traffic counts.

As can be seen in **Table 2-1**, the eight-lane divided segments are estimated to operate at LOS C and the six-lane segments are operating at LOS D or better under peak-season daily existing traffic conditions, with the exception of one segment, from Walton Road to Crosstown Parkway, under generalized arterial analysis. The adopted LOS Standard for each road segment along the study corridor is LOS D.

Table 2-1: Peak Season Conditions – Daily Traffic

Segment (S to N)	Length (mi.)	Lanes /Type	LOS D Capacity	2025 48-hour Traffic Counts			
				2025 PSWADT	NB	SB	2025 LOS
Martin CL to Lennard Rd	0.15	8LD	67,410	66,981	33,236	33,744	C
Lennard Rd to Port St Lucie Blvd	0.42	8LD	67,410	57,477	28,463	29,016	C
Port St Lucie Blvd to Lyngate Dr/Tiffany Ave	1.24	6LD	56,805	43,494	21,670	21,824	C
Tiffany Ave to Veterans Memorial/Walton Rd	0.85	6LD	57,855	49,883	25,041	24,842	C
Walton Rd to Crosstown Pkwy/Village Green Dr	0.57	6LD	56,805	59,041	29,316	29,725	F
Crosstown Pkwy to Savanna Club Boulevard	0.49	6LD	56,805	52,609	26,111	26,498	D
Savanna Club Boulevard to Prima Vista Blvd	1.18	6LD	56,805	48,565	23,955	24,610	C

Notes: Capacity is based on FDOT 2023 QLOS Handbook, C3C, C3R, adjusted x1.05 for RT lanes.
Volumes are from Jan. 2025 48 hours counts, adjusted to PSWADT. T factor indicates Class Counts were taken at location.
2023 4th week adjustment factors SF=0.91, PSCF=1.03. AxF=0.98 taken from FDOT Peak Seaspn Correction Factor Report and Axle Adjustment Report.

As can be seen in **Table 2-2**, below, all segments are estimated to operate at LOS C during the AM Peak-hour for two-way traffic. However, like the daily traffic conditions, the AM Peak-hour Peak-direction of traffic is estimated to operate at LOS F between Walton Road and Crosstown Parkway, under generalized arterial analysis during the peak-season. The adopted LOS Standard for each road segment along the study corridor is LOS D.

Table 2-2: Peak Season Conditions – AM Peak-Hour Traffic

Segment (S to N)	Length (mi.)	Lanes /Type	LOS D Capacity	2025 48-hour Traffic Counts (AM PH)					
				AM PH Volume	NB	SB	2025 AM PH LOS	AM PH PD Cap	Peak-Dir. LOS
Martin CL to Lennard Rd	0.15	8LD	6,069	4,265	1,302	2,963	C	3,339	C
Lennard Rd to Port St Lucie Blvd	0.42	8LD	6,069	3,531	1,089	2,443	C	3,339	C
Port St Lucie Blvd to Lyngate Dr/Tiffany Ave	1.24	6LD	5,114	2,508	986	1,522	C	2,499	C
Tiffany Ave to Veterans Memorial/Walton Rd	0.85	6LD	5,208	3,358	1,249	2,109	C	2,867	C
Walton Rd to Crosstown Pkwy/Village Green Dr	0.57	6LD	5,114	4,009	1,489	2,522	C	2,499	F
Crosstown Pkwy to Savanna Club Boulevard	0.49	6LD	5,114	3,539	1,561	1,976	C	2,499	C
Savanna Club Boulevard to Prima Vista Blvd	1.18	6LD	5,114	3,360	1,523	1,838	C	2,499	C

Notes: Capacity is based on FDOT 2023 QLOS Handbook, C3C, C3R, adjusted x1.05 for RT lanes.
Volumes are from Jan. 2025 48 hours counts, adjusted to PSWADT. T factor indicates Class Counts were taken at location.
2023 4th week adjustment factors SF=0.91, PSCF=1.03. AxF=0.98 taken from FDOT Peak Seaspn Correction Factor Report and Axle Adjustment Report.

As can be seen in **Table 2-3**, below, all segments but one are estimated to operate at LOS C during the PM Peak-hour for two-way traffic. However, like the AM traffic conditions, the PM Peak-hour Peak-direction of traffic is estimated to operate at LOS F between Walton Road and Crosstown Parkway, under generalized arterial analysis during the peak-season. The adopted LOS Standard for each road segment along the study corridor is LOS D.

Table 2-3: Peak Season Conditions – PM Peak-Hour Traffic

				2025 48-hour Traffic Counts (AM PH)					
Segment (S to N)	Length (mi.)	Lanes /Type	LOS D Capacity	AM PH Volume	NB	SB	2025 AM PH LOS	AM PH PD Cap	Peak-Dir. LOS
Martin CL to Lennard Rd	0.15	8LD	6,069	5,116	3,072	2,044	C	3,339	C
Lennard Rd to Port St Lucie Blvd	0.42	8LD	6,069	4,259	2,552	1,707	C	3,339	C
Port St Lucie Blvd to Lyngate Dr/Tiffany Ave	1.24	6LD	5,114	3,294	1,955	1,340	C	2,499	C
Tiffany Ave to Veterans Memorial/Walton Rd	0.85	6LD	5,208	3,875	2,281	1,594	C	2,867	C
Walton Rd to Crosstown Pkwy/Village Green Dr	0.57	6LD	5,114	4,699	2,709	1,990	D	2,499	F
Crosstown Pkwy to Savanna Club Boulevard	0.49	6LD	5,114	4,259	2,277	1,982	C	2,499	C
Savanna Club Boulevard to Prima Vista Blvd	1.18	6LD	5,114	3,948	2,057	1,890	C	2,499	C

Notes: Capacity is based on FDOT 2023 QLOS Handbook, C3C, C3R, adjusted x1.05 for RT lanes.
Volumes are from Jan. 2025 48 hours counts, adjusted to PSWADT. T factor indicates Class Counts were taken at location.
2023 4th week adjustment factors SF=0.91, PSCF=1.03. AxF=0.98 taken from FDOT Peak Seaspn Correction Factor Report and Axle Adjustment Report.

Based on January 2025 traffic counts along US 1, adjusted to Peak-season traffic conditions, all segments but one along the US 1 study corridor and adjacent cross street approaches to US 1 are operating within acceptable levels of service. The 0.57-mile segment between Walton Road and Crosstown Parkway is estimated to operate at LOS F during daily and Peak-hour, Peak-direction traffic conditions. This analysis is based on Peak Season Weekday Average Daily Traffic, or an average typical weekday for the 13 highest consecutive weeks of traffic for the year, using FDOT Generalized Tables for arterial capacity thresholds. While there appears to be only one deficiency along the corridor from an arterial capacity standpoint, it is worth noting that traffic congestion may still occur, or be perceived to occur, along other segments due to AM and PM peak-hour traffic patterns, traffic incidents, or traffic operations related issues. There are nine major signalized intersections along the 4.9-mile corridor, several of which have heavy northbound left-turn movements. Intersection delays due to short segment lengths, long traffic signal cycle lengths, and lost time at start up on the green light can all contribute to congestion along the corridor.

It is also worth noting that a more detailed operational analysis, or micro-analysis, could reveal improved conditions over the generalized analysis conducted in this study, or at least the potential for acceptable LOS through operational improvements at the intersections, such as signal timing changes. When analyzed as a single facility using average volumes for the entire corridor, the study corridor operates within acceptable LOS standards.

3 - TRAVEL CHARACTERISTICS

To better understand the existing traffic using the corridor, the Regional Integrated Transportation Information System (RITIS) database was accessed to estimate the speed, travel time, and delay along the corridor. RITIS integrates existing data from public transportation and public safety systems, the private sector, and military. The data is fused in a private, secure cloud, and then disseminated to credentialed users through interactive websites, applications, data feeds, and APIs. Within RITIS are a broad portfolio of analytical tools and features, enabling a wide range of capabilities and insights, planning activities and research, and providing interagency information sharing, collaboration, and coordination.

RITIS has three segments along the US 1 corridor that overlay the seven analysis segments used in this study. **Table 3-1** provides a crosswalk for comparing the extents of the RITS segments within the study area segments.

Table 3-1: RITIS Segmentation Crosswalk

Segment Number RITIS	Original Segment (S to N)
Segment 1 NW Jensen Beach (1.5 Miles South of County Line) to Port St Lucie Blvd	Martin CL to Lennard Rd
	Lennard Rd to Port St Lucie Blvd
Segment 2 Port St Lucie Blvd to Walton Rd	Port St Lucie Blvd to Lyngate Dr/Tiffany Ave
	Tiffany Ave to Veterans Memorial/Walton Rd
Segment 3 Walton Rd to Prima Vista Blvd	Walton Rd to Crosstown Pkwy/Village Green Dr
	Crosstown Pkwy to Savanna Club Boulevard
	Savanna Club Boulevard to Prima Vista Blvd

For the RITIS analysis, January 14th, and 15th, 2025 were selected as typical weekdays during a week that had a seasonal factor closest to 1.0 during the year to date. A seasonal factor of 1.0 can be considered representative of AADT or annual average traffic conditions.

Analysis of RITIS Segment 1 indicates that the average travel speed along the corridor is 29.4 miles per hour (mph) over 24 hours, as shown in **Table 3-2**. This represents an approximate reduction in free-flow speed of approximately 35%. Travel time along this segment is 8.4 minutes, indicating an overall average travel speed equivalent to 15 mph, including time spent stopped at signals. There are seven major signalized intersections along the two-mile RITIS Segment 1, which suggests that most of the increase in travel time is likely due to time spent at traffic signals, including start-up loss time, and signal related congestion. AM and PM Peak-hour results are provided for each category and suggest that the PM Peak-hour experiences higher congestion levels than the AM Peak-hour. Segments 2 and 3 show similar patterns, however they appear to be less severe.

Table 3-2: RITIS Speed and Travel Time

Jan 14/15th 2025 Averaged									
Segment	Speed (mph)			Travel Time (Min)			Travel Time Index		
	Daily Average	AM Peak	PM Peak	Daily Average	AM Peak	PM Peak	Daily Average	AM Peak	PM Peak
1	29.4	33.25	24.5	8.42	7.44	10.135	1.21	1.065	1.455
2	37.3	35.4	31.2	6.585	6.935	7.855	0.965	1.015	1.155
3	34.15	32.45	27.55	7.875	8.275	9.745	1.07	1.125	1.325

Source: RITIS, 2025

The travel time index summary shown in **Table 3-2** is a measure used to quantify the level of congestion or delay in traffic. It compares the actual travel time in a given area or on a specific road segment to the ideal or free-flow travel time, which is the time it would take to travel the same route under perfect conditions with no congestion. A TTI score of greater than 1 means there is traffic congestion, and the actual travel time is longer than the ideal. A TTI score of less than 1 is rare but can indicate a situation where traffic is moving faster than the free-flow time (such as road improvements or reduced traffic).

Table 3-3, which summarizes causes of congestion for RITIS Segments over the full year 2024, where data has been reported, supports the notion that the majority of congestion related delays are caused by traffic signals along the segment.

Table 3-3: RITIS Causes of Congestion

2024 Causes of Congestion			
Causes	**Seg 1**	**Seg 2**	**Seg 3**
Signals	67.69%	84.55%	No Data
Multiple Causes	20.05%	15.45%	
Recurrent	12.26%		
Holiday & Signals	7.95%	9.07%	
Signals & Weather	6.56%	6.38%	
Holiday, Signals, Weather & Work Zone	3.26%	9.07%	
Incidents & Signals	1.15%		
Other Multiple Causes	1.13%		

Source: RITIS, 2025

Overall, the RITIS data analyzed suggests that there is some level of congestion along the US 1 study corridor. However, the causes of congestion appear to be related more to traffic signal related congestion such as stop time queuing and start-up loss time than due to arterial capacity. This supports the findings of the arterial LOS analysis section above which shows acceptable levels of service under annual average traffic conditions. Traffic data indicates PM northbound traffic as the peak direction of flow and RITIS data indicates higher congestion during the PM Peak-hour of travel. Intersection geometry shows double and triple left turn lanes indicating strong demand for northbound to westbound travel which likely contributes to intersection generated delay along the corridor.

4 - ORIGIN/DESTINATION ANALYSIS

To better understand the existing traffic using the corridor, the Replica database was accessed to estimate the origins and destinations (O/D) of trips along each segment of the corridor. This was to provide insight into the regional significance of the roadway and help to identify travel length characteristics. Due to the length of the corridor, three segments were selected individually for O/D analysis in order to show any differences in travel characteristics along the corridor. The three corridors were set to the same limits as the RITIS segments to better make comparisons between the data sources and identify relationships between travel characteristics if any existed.

In addition to O/D data, the Replica data also provided data on trip purpose and travel mode for vehicles traveling on each segment. **Figure 4-1** shows the trip purpose percentages for daily travel on Segment 1 of US 1, from Martin County to Port St Lucie Boulevard, for the year 2024. As can be seen from the graph, Home based travel accounts for just over a third of the primary trip purposes for travel, followed by shopping, work, and dining. This was similar for the other US 1 segments analyzed, with all other trip purposes accounting for 6% or less each across all segments.

Figure 4-1: Replica: Segment 1 Primary Trip Purpose of Travel

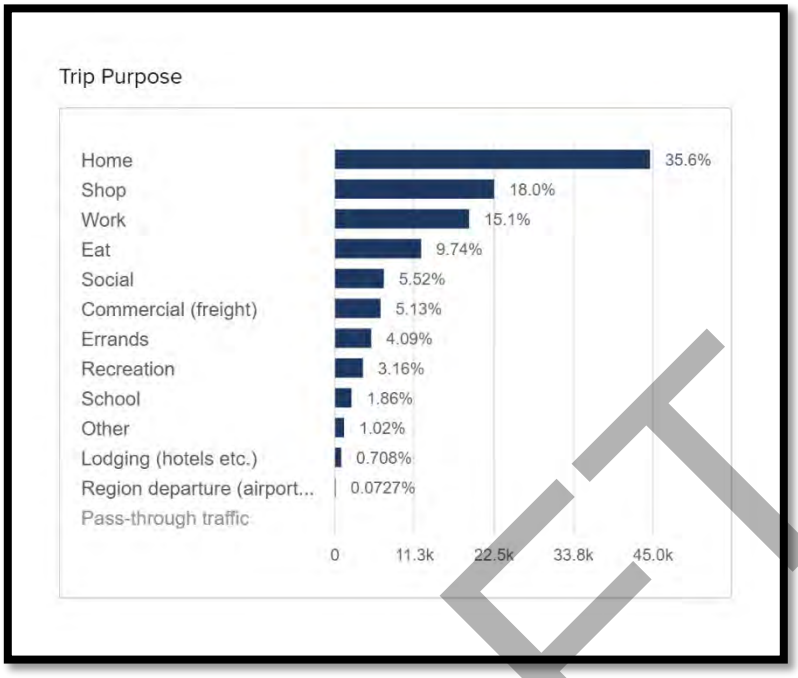
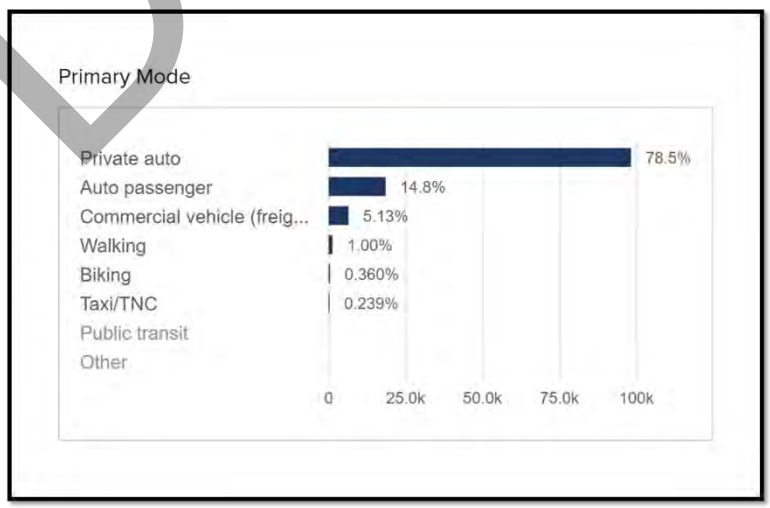


Figure 4-2 Shows the primary mode of travel for Segment 1. The Replica data indicates that 94% of travel was by private auto or as an auto passenger for the year 2024. While the percentage of private auto travel ranged from 69% to 78% over the three segments, the total for private auto and auto passenger stayed at 94% for each segment. All other modes of travel totaled 6% along the corridor.

Of note is that commercial vehicles make up about 5% of travel by both trip purpose and mode of travel over an average weekday of traffic. When combined with the fact that approximately 64% of travel is for home, shopping, and dining-based trip purposes, these travel characteristics suggest that a significant portion of the travel on this section of US 1 is local rather than regional.

Figure 4-2: Replica: Segment 1 Primary Mode of Travel



Tables showing Trip Purpose and Primary Mode of Travel for each segment can be seen in **Appendix D** for each of the three US 1 Replica analysis segments.

The Replica database provides O/D estimates by Census block group for a specific roadway corridor or segment. The number of trips per block group was classified to the following ranges for mapping and analysis purposes: 1-250, 251-500, 501-1000, & >1000.

For the US 1 corridor, higher intensity trip O/Ds (>500 trips/block group) were primarily limited to block groups local to the segment and within about twelve miles of the segment analyzed. Trip O/Ds between 100 and 500 were limited to St Lucie and northern Martin Counties, with regional trips notable to block groups below 100 trip O/Ds per block group throughout the district (Broward to Indian River Counties).

Figure 4-3 shows trip origin block groups, for Segment 1, from the County Line to Port St Lucie Boulevard. **Figure 4-4** shows trip destination block groups, for Segment 1. For travel on US 1 Segment 1, high intensity (>1000 trips/block group) trip O/Ds identified were within about 10 miles of the segment. Both trip origins and trip destinations occur at this intensity within this distance to the corridor suggesting local travel as the primary purpose for travel on this segment. Alternatively, trip O/Ds between 1 and 250 were notable throughout Broward, Palm Beach, Martin, St Lucie, and Indian River Counties suggesting regional travel, but at much lower intensity than local travel. In general, regional travel on Segment 1 appears to decrease in intensity as proximity to the study corridor decreases.

Segments 2 and 3, from Port St Lucie Boulevard to Prima Vista Boulevard share the same general O/D characteristics as Segment 1 for vehicles traveling along the US 1 study corridor. Detailed block Group O/D maps for each segment along the corridor can be seen in **Appendix D.** .

In summary, segments along the US 1 study corridor tended to have more local impact in terms of trip origins and destinations per block group. This also supports the findings above related to trip purpose and mode of travel.

Figure 4-3: Replica: Segment 1 Travel Origin by Block Group

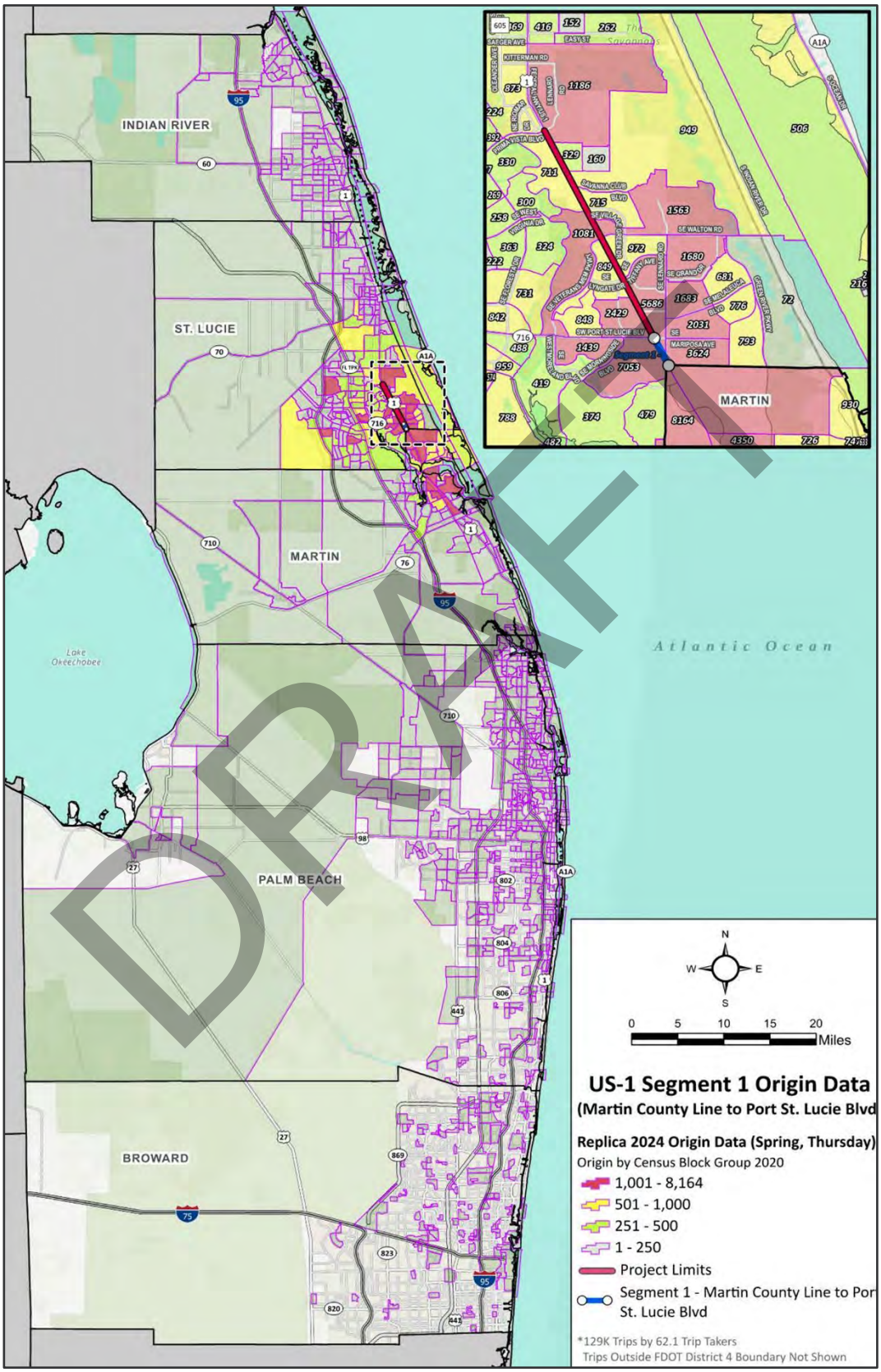
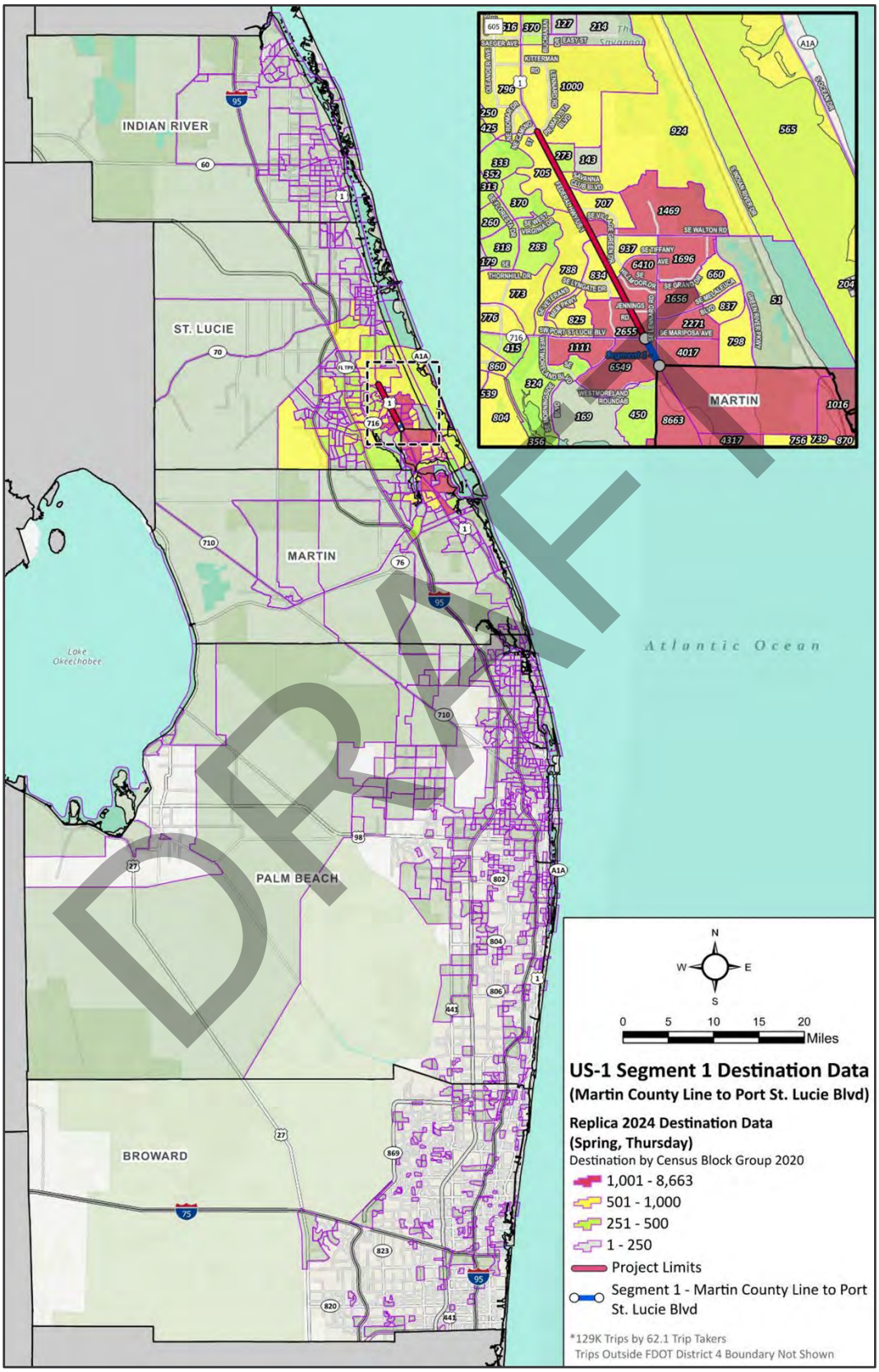


Figure 4-4: Replica: Segment 1 Travel Destination by Block Group



5 - STRATEGIES TO REDUCE CONGESTION

Traffic count data and generalized arterial analysis indicate that the US 1 study corridor is operating within acceptable levels of service (LOS) under annual average traffic conditions for daily and AM and PM Peak-hour travel. However, Peak-season generalized arterial analysis indicates possible issues on the Walton Road to Crosstown Parkway segment during periods of high seasonal traffic. While peak season conditions are not necessarily representative of average weekday traffic over the course of the year, they could indicate future traffic congestion issues in the future over the long term.

Travel characteristics from RITIS and Replica data sources suggest that much of the congestion and delay that does exist is due to the number of traffic signals, and also that most of the travel is local and discretionary (home, shopping, eating, and social, as compared to commuting and commercial).

Initial strategies to deal with congestion that may be occurring along US 1 would be to: conduct an operational analysis to ensure that the numerous signals along the study corridor are operating optimally for traffic conditions based on the time of day and the time of year; and implement an ITS/ATMS (Intelligent Traffic Systems/Advanced Traffic Monitoring Systems) solution to provide real time data to signal operation and advanced notification to drivers, through overhead signage and the FL511 traffic information service, of traffic conditions along the corridor.

For operational strategies, signal related delay is a significant cause of delay along the corridor. Of note are the number of double and triple left turn lanes at intersections along US 1 accommodating turning movements that oppose the dominant through movement of the mainline. Optimization of cycle lengths and signal phases could provide both short term and long-term relief of signal related congestion.

ITS/ATMS solutions could work to provide real time data for both signal optimization as well as advance notice of traffic conditions to both travelers and potential travelers. Since much of the travel is both local and discretionary, advance notification may help alleviate congestion by allowing avoidance of travel during periods of peak congestion or specific traffic incidents that may restrict or block travel beyond typical traffic congestion.

CONCLUSIONS

In order to quantify the level of congestion on US 1 from the Martin County Line to Prima Vista Boulevard, traffic count data was collected and analyzed to quantify the level of congestion on US 1 and nearby facilities. Study area travel characteristics were identified, and strategies developed to minimize the impact of any traffic congestion along the corridor.

This work effort included conducting the corridor congestion traffic study, including traffic data collection, daily and peak-hour congestion analysis, developing strategies to reduce traffic congestion, summarizing the analysis and documenting all findings.

The objectives of the study were to assess the existing traffic conditions by determining generalized level of service (LOS) for the roadways, determining the severity of congestion, and estimating which roadways may or would reach a failing condition. The study considered daily traffic and AM and PM peak-hour conditions.

1. Using 2025 traffic count data and current generalized arterial analysis thresholds, the US 1 study corridor operates within acceptable levels of service (LOS) under annual average daily traffic (AADT) conditions for daily traffic, as well as for AM and PM Peak-hour travel. Cross street segments intersecting the US 1 study corridor were analyzed using the St Lucie TPO Traffic Count Data Management System (TCDMS) and 2024 ST Lucie TPO LOS Report. All segments along the corridor and analyzed segments intersecting the corridor are operating at LOS D or better and within adopted LOS standards.

2. Peak-season generalized arterial analysis indicates possible issues on the Walton Road to Crosstown Parkway segment during periods of high seasonal traffic. While peak season conditions are not necessarily representative of average weekday traffic over the course of the year, they could indicate future traffic congestion issues in the future over the long term as traffic volumes increase. When analyzed as a single facility, the study corridor operates within acceptable LOS standards.

3. Travel characteristics from RITIS and Replica data sources suggest that much of the congestion and delay that does exist is due to the number of traffic signals rather than arterial capacity issues, and also that most of the travel is local and discretionary (Home, shopping, eating, and social, as compared to commuting and commercial).

4. The travel characteristics along the corridor may aid in congestion solutions being able to operate in real time if implemented, such as operational improvements to increase efficiency at intersections to deal with signal related congestion, and installation of ITS/ATMS traffic monitoring and notification to optimize signal timing and phasing, and also provide advance or current notification of traffic conditions to discretionary travelers as well as travelers approaching on within the study corridor, allowing for appropriate action

St. Lucie Transportation Planning Organization

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AGENDA ITEM SUMMARY

Board/Committee:	Citizens Advisory Committee (CAC)
Meeting Date:	March 18, 2025
Item Number:	6c
Item Title:	Treasure Coast Airport Connector (TCAC) Alternative Alignment Study
Item Origination:	Unified Planning Work Program (UPWP) and St. Lucie County
UPWP Reference:	Task 3.1 – Long Range Transportation Planning Task 4.2 – Intergovernmental Planning and Coordination
Requested Action:	Recommend a Preferred Alternative for the TCAC, recommend a Preferred Alternative with conditions, or do not recommend a Preferred Alternative.
Staff Recommendation:	It is recommended that the alignment alternatives in the Study be reviewed and a Preferred Alternative for the TCAC be recommended to the TPO Board based on the review.

Attachments

- Staff Report
- Draft TCAC Alternative Alignment Study

St. Lucie Transportation Planning Organization

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MEMORANDUM

TO: Citizens Advisory Committee (CAC)

FROM: Peter Buchwald
Executive Director

DATE: March 11, 2025

SUBJECT: Treasure Coast Airport Connector (TCAC) Alternative Alignment Study

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BACKGROUND

As part of adopted amendments to the FY 2022/23 – FY 2023/24 Unified Planning Work Program (UPWP), the St. Lucie Transportation Planning Organization (TPO) partnered with St. Lucie County to complete a study of alignment alternatives for a new roadway, known as the Airport Connector, that will connect the proposed I-95 and Turnpike Interchanges in northern St. Lucie County, known as the Northern Connector, to the Treasure Coast International Airport. Both the Airport Connector and the Northern Connector are identified as Cost Feasible Projects in the TPO's SmartMoves 2045 Long Range Transportation Plan (LRTP). The draft study has been completed and is being presented for review and recommendation of a Preferred Alternative for the new roadway.

ANALYSIS

The attached draft TCAC Alternative Alignment Study analyzes the alternative design routes and a "No-Build" alternative for a 4-lane arterial roadway connecting I-95 to the Immokolee Road and Kings Highway Intersection. A total of nine alternative alignments across two general areas were analyzed.

The long-range planning, public safety, environmental impacts, right-of-way acquisition, and costs of each of the alternatives were evaluated as part of the analyses. Based on the analyses, one alternative alignment, known as Alternative Alignment D, is being recommended as the Preferred Alternative.

RECOMMENDATION

It is recommended that the alignment alternatives in the Study be reviewed and a Preferred Alternative for the TCAC be recommended to the TPO Board based on the review.

Treasure Coast Airport Connector – Alternative Alignment Study

From Interstate 95 (I-95) to SR 713 (Kings Highway)

Prepared for:
St. Lucie County Public Works Department
2300 Virginia Avenue
Fort Pierce, FL 34982

047203158
January 2025

Registry No. 35106
445 24th Street, Suite 200
Vero Beach, Florida 32960
772-562-7981 TEL

Kimley»Horn

Treasure Coast Airport Connector – Alternative Alignment Study

From Interstate 95 (I-95) to SR 713 Kings Highway

Prepared for:
St. Lucie County Public Works Department
2300 Virginia Avenue
Ft. Pierce, Florida 34982

Prepared by:
Kimley-Horn and Associates, Inc.
445 24th Street, Suite 200
Vero Beach, Florida 32960

January 2025

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Brian Good, P.E.
Date:_____
Florida Registration No. 56939
Registry No. 35106

047203158

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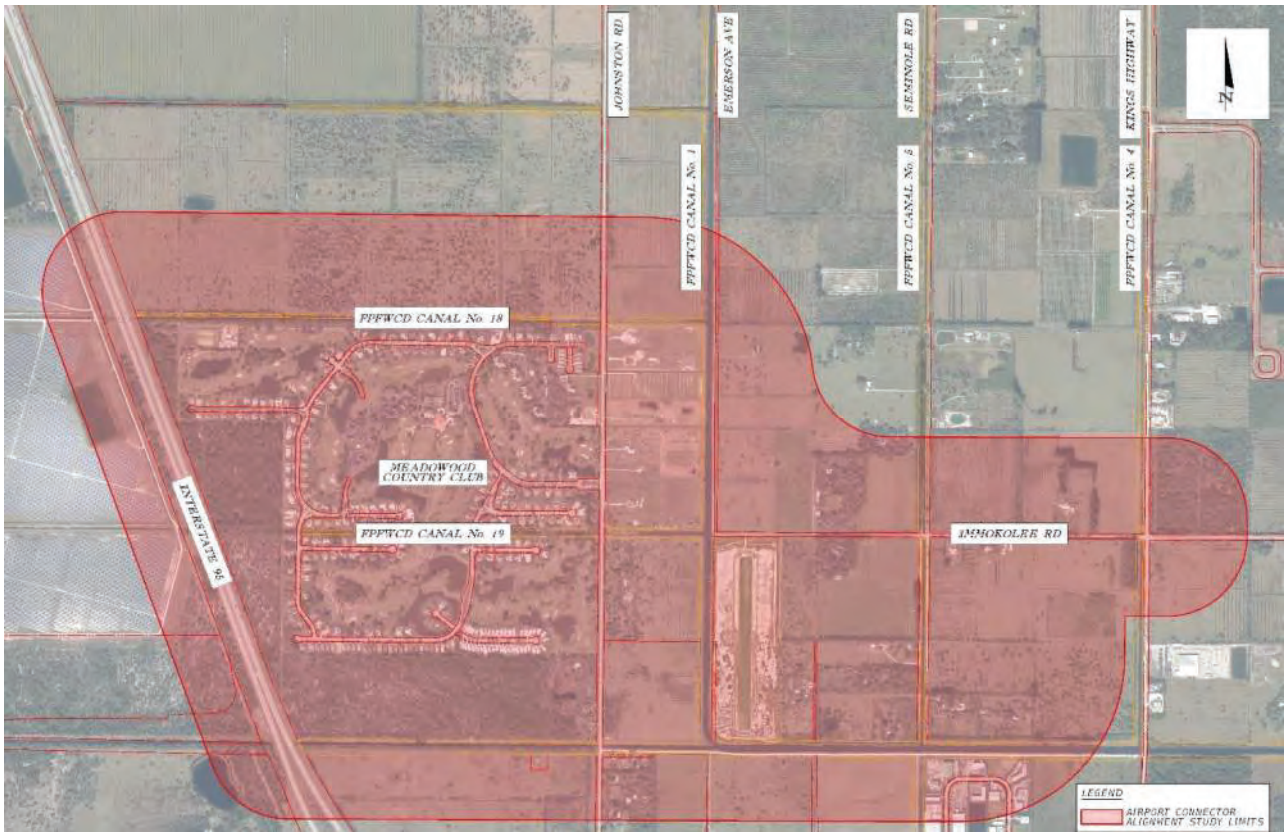
1.0 INTRODUCTION

Based upon current traffic volumes and projected growth, the St. Lucie County (SLC) Board of County Commissioners and the St. Lucie Transportation Planning Organization (TPO) have identified the need to plan and construct an east-west transportation corridor between Interstate 95 (I-95) and SR 713 (Kings Highway) within the 2045 Long Range Transportation Plan (2045 LRTP).

This Corridor Study evaluates the impacts associated with the contemplated Treasure Coast Airport Connector between I-95 and Kings Highway. The majority of the contemplated corridor will consist of new roadway right-of-way. The corridor is proposed to consists of a 4-lane arterial roadway connecting to I-95 and terminating at the Immokolee Road and Kings Highway Intersection.

The Treasure Coast Airport Connector is intended to provide a more direct route connecting I-95 to the Treasure Coast International Airport, increase mobility and connectivity, and support economic development in the region. This study will examine the alternative design routes and a "No-Build" alternative based on factors such as long-range planning, safety, environmental aspects, alignment alternatives and costs. ***Figure 1*** delineates the Study Limits.

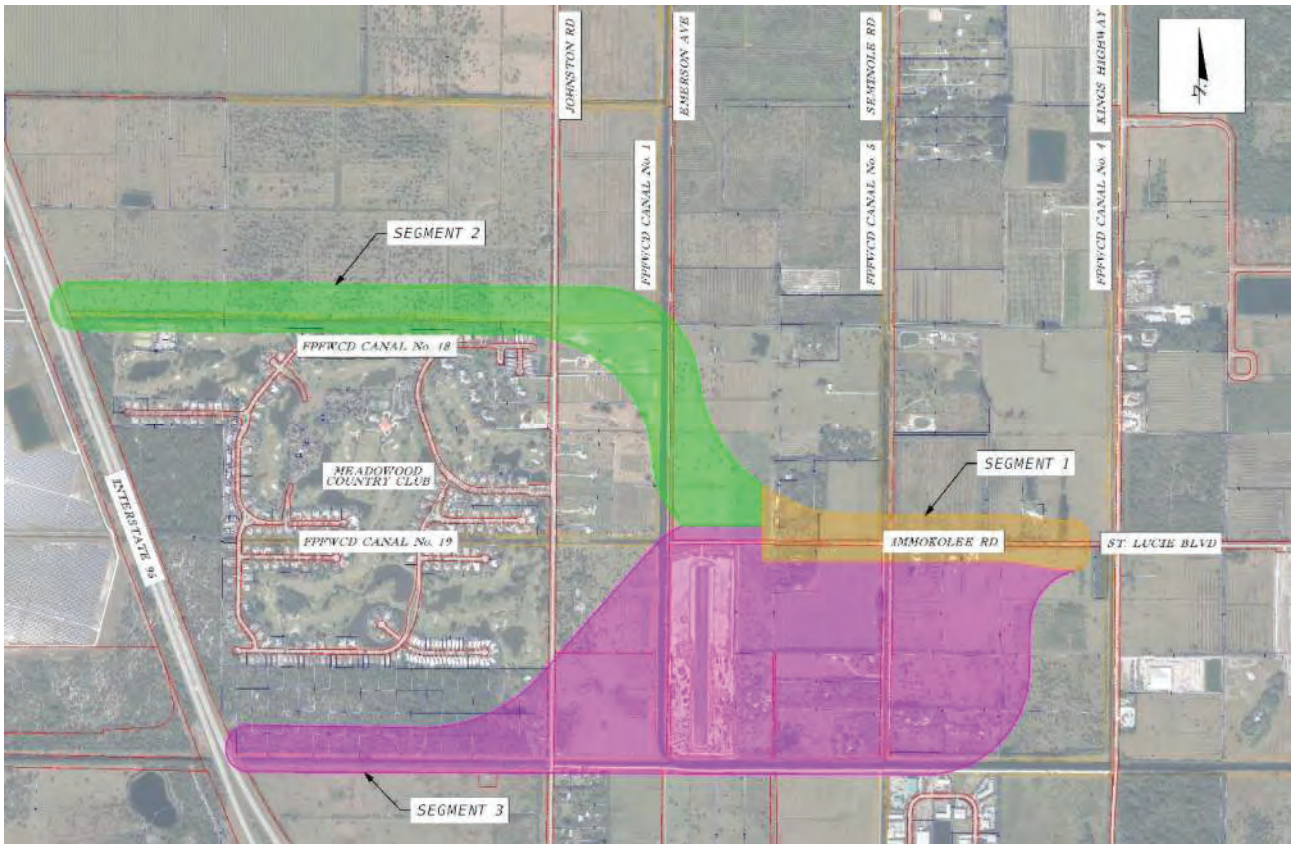
Figure 1: Study Limits



2.0 EXISTING ROADWAY CONDITIONS

The following sections describe the existing conditions within the contemplated Treasure Coast Airport Connector Study Limits. As much of the contemplated roadway corridor does not presently exist, the Existing Roadway Conditions will be discussed relative to segments located along the contemplated alternative corridors. For the purposes of describing the Existing Roadway Conditions, the Study Limits have been delineated into three (3) segments. ***Figure 2*** depicts the three (3) Existing Roadway Conditions Study Limits segments:

Figure 2: Study Limit Segments



2.2 FUNCTIONAL CLASSIFICATION

The roadways within Segment 1 (orange highlighted area), Segment 2 (green highlighted area) and Segment 3 (purple highlighted area) would be classified as collector roadways providing access to rural residential and agricultural land uses. The County improved roadway corridors and functional classifications located within the Study limits consist of the following:

- Johnston Road – Major Collector
- Seminole Road – Rural Minor Collector
- Immokolee Road – Rural Minor Collector
- Emmerson Avenue – Rural Minor Collector

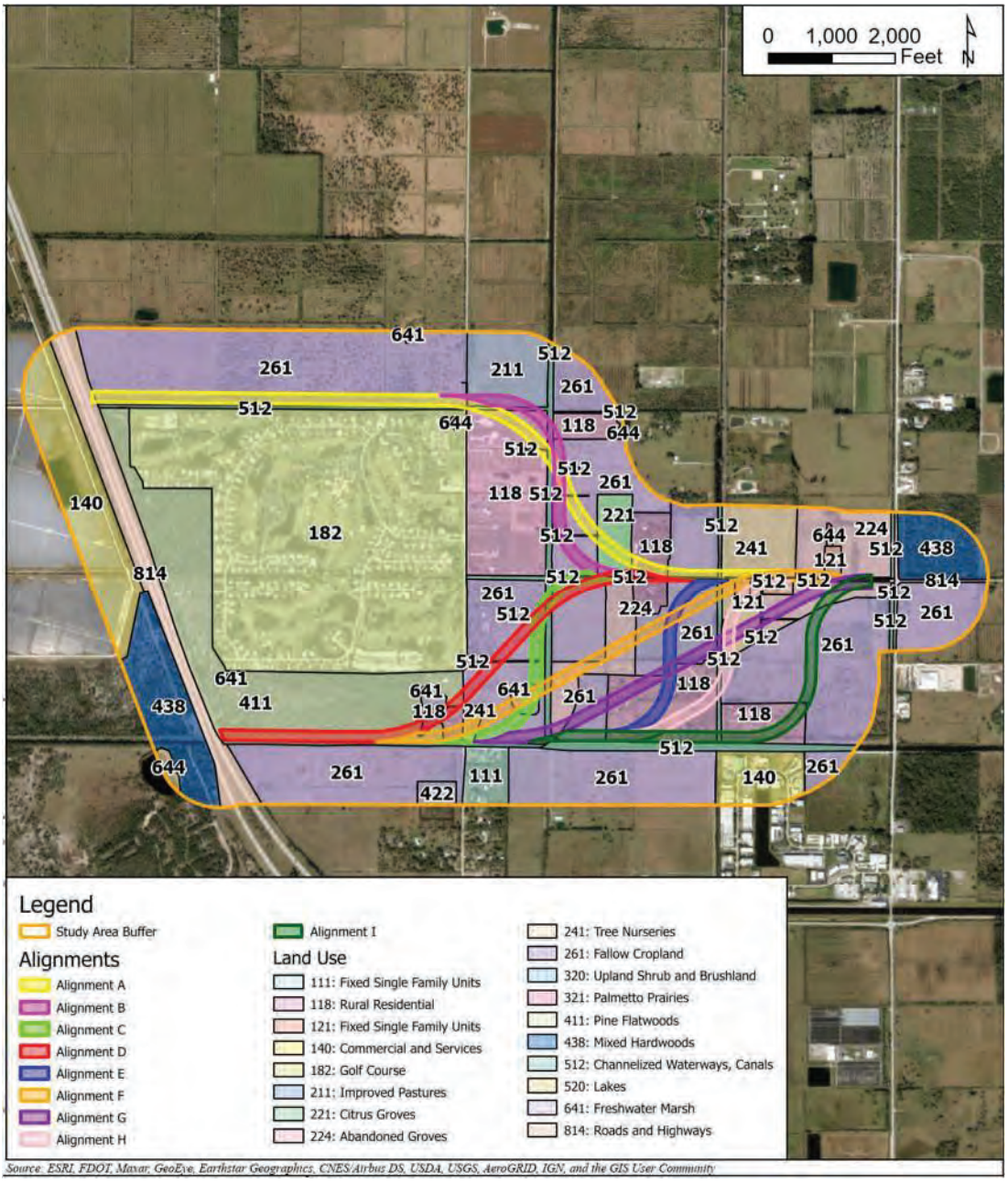
2.2 EXISTING LAND USES

Existing land uses within the Study Limits consists of the following:

- Residential
- Commercial
- Golf Course
- Improved Pastures
- Citrus Groves
- Tree Nurseries
- Fallow Cropland
- Abandoned Groves
- Upland Shrub and Brushland
- Palmetto Prairies
- Pine Flatwoods
- Mixed Hardwoods
- Channelized Waterways, Canals
- Lakes
- Freshwater Marsh
- Roads and Highways

Please refer to ***Figure 3*** for an aerial depiction of the existing land uses located within the Study Limits.

Figure 3: Existing Study Limit Land Uses



2.3 TYPICAL SECTION AND RIGHT-OF-WAY

The County roadways within the Study Limits consist of improved (paved) and unimproved (dirt) rural roadways. ***Figure 4A*** through ***Figure 4E*** delineates the existing roadway typical sections within the Study Limits.

Figure 4A: Johnston Road Existing Typical Section

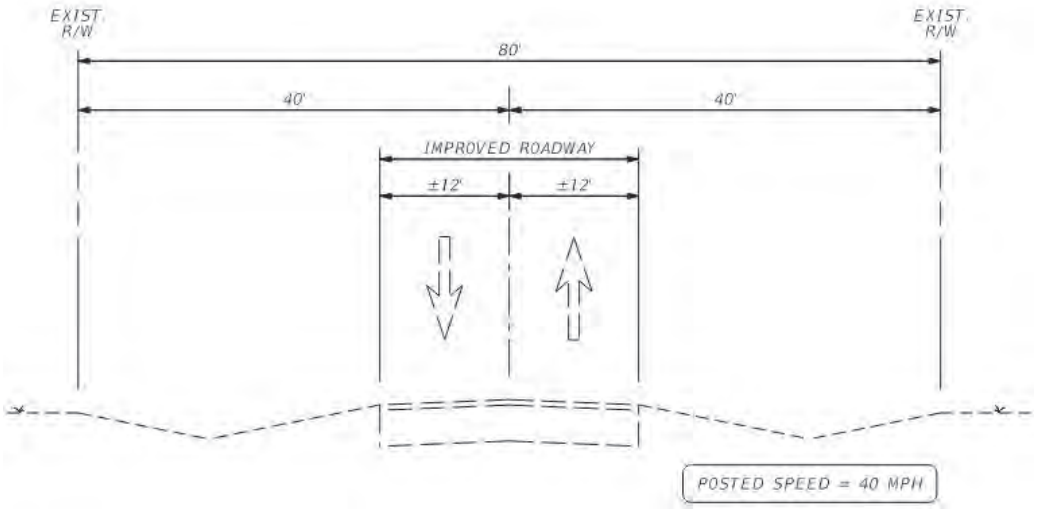


Figure 4B: Emerson Avenue Existing Typical Section

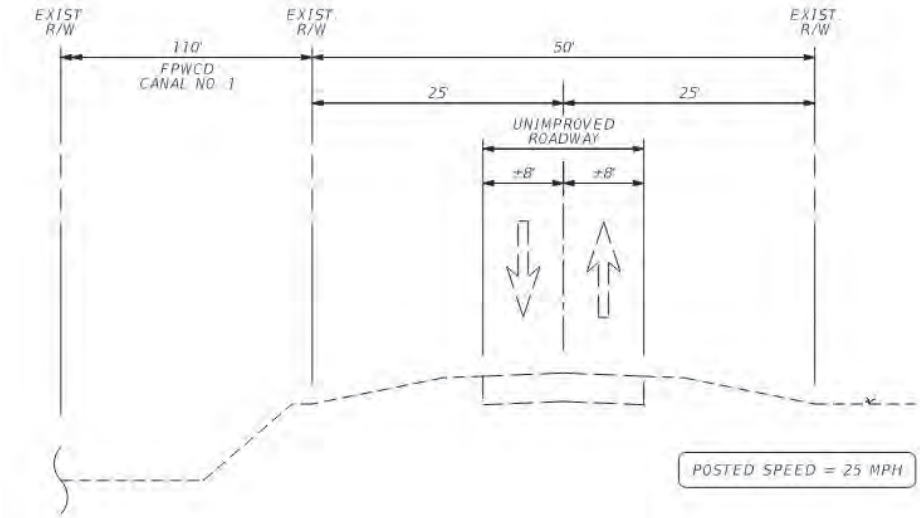


Figure 4C: Seminole Road Existing Typical Section – North of Immokolee Road

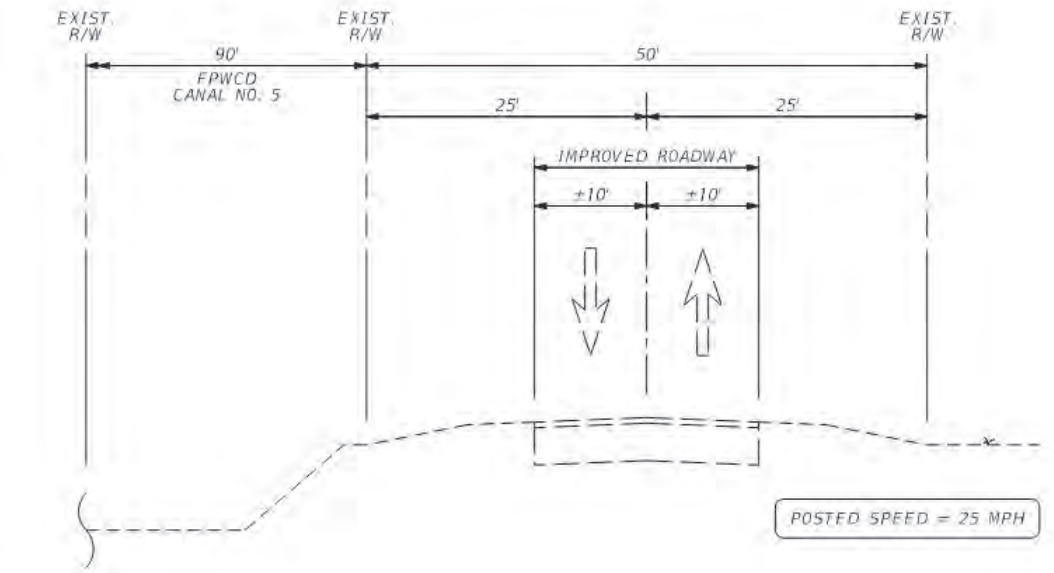


Figure 4D: Seminole Road Existing Typical Section – South of Immokolee Road

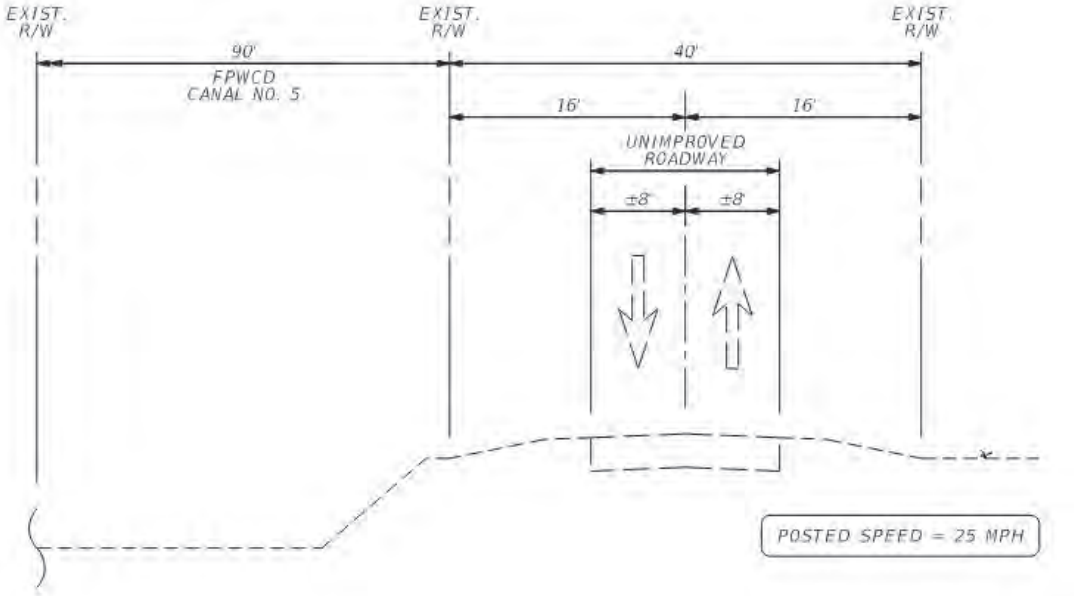
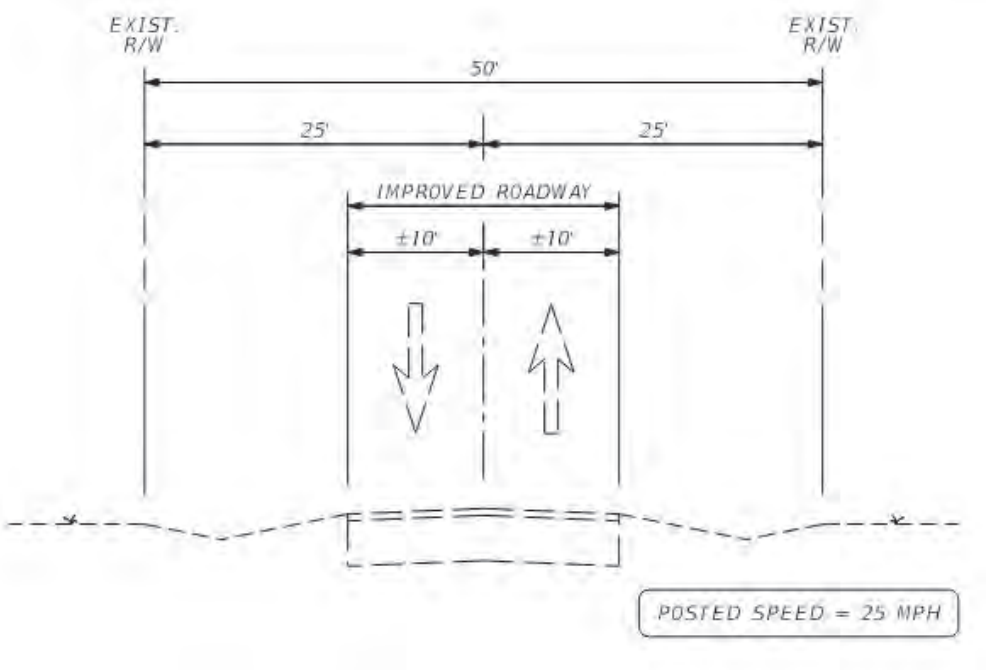


Figure 4E: Immokolee Road Existing Typical Section



2.4 UTILITIES

The following utility providers have indicated that they have existing facilities located within the Study Limits:

- Florida Power & Light
- Comcast Cable
- AT&T Distribution
- Fort Pierce Utility Authority
- Florida Gas Transmission Company.
- Advanced Cable Communications
- Crown Castle

Further Coordination with the existing franchise utility providers will be necessary to better understand the magnitude of potential impacts to existing infrastructure based upon the alternative corridors.

3.0 PROPOSED ROADWAY

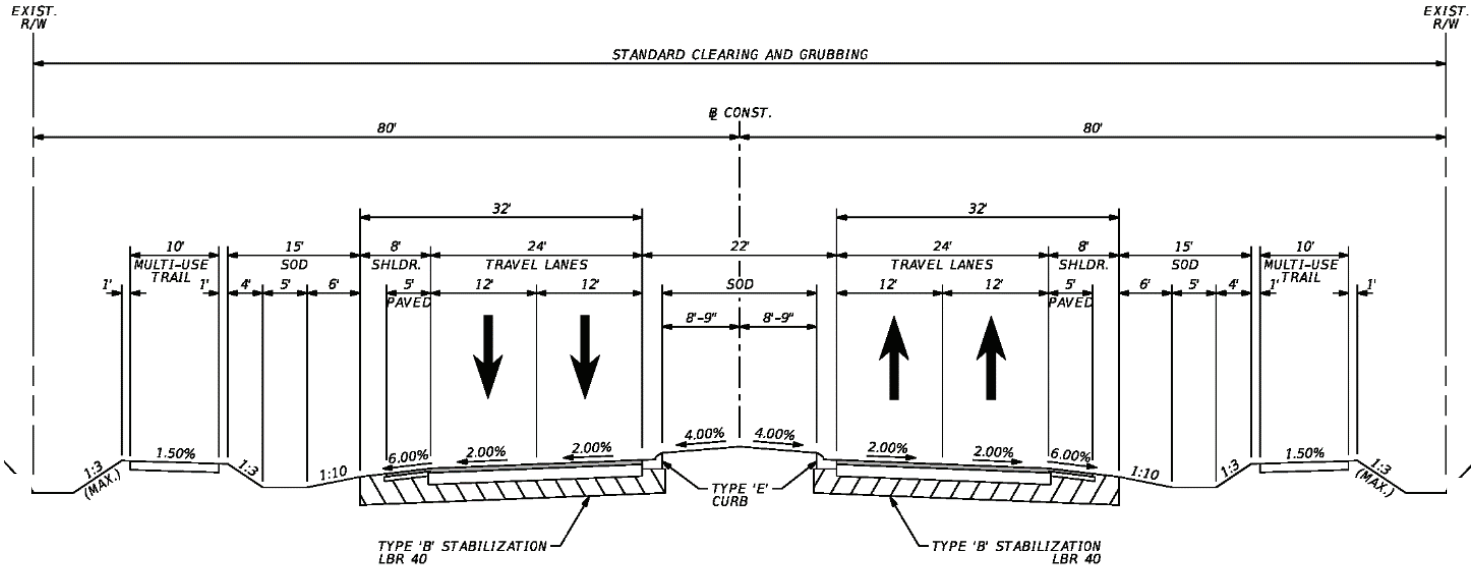
The Treasure Coast Connector typical section from I-95 to Kings Highway is proposed to be and consist of the following elements:

- 160-ft right-of-way width – *consistent with SLC Land Development Code 7.05.03 Rights-of-Way Determination and Dedications, Improvements.*
- Suburban section (roadside swales with raised median)
- 22-foot-wide raised median
- Four (12-foot wide) travel lanes – *consistent with TPO LRTP Roadway Needs Plan also designated to be a freight corridor*
- 5-foot-wide paved outside shoulders – *consistent with SLC Land Development Code 7.05.02(A)(11)*
- 10-foot-wide multi-use trails located along both sides of the corridor.

Understanding the use and users of a specific corridor is essential to successfully planning a new corridor. The County's Future Land Use Map (2022) has the parcels identified within the Study Limits to reside in the Towns, Villages & Countryside (TVC) land use designation. The TVC goal is to establish a development framework that encourages a sustainable settlement pattern that preserves the rural character of St. Lucie County.

A suburban section has been proposed as it is a more economical option to construct, as compared to an urban section, and is aligned with the planned development intensity and future land uses. ***Figure 5*** depicts the proposed Treasure Coast Airport Connector typical roadway section within the Study Limits.

Figure 5: Treasure Coast Airport Connector Typical Section



4.0 ALTERNATIVE ROUTE ANALYSIS

4.1 LONG RANGE PLANNING

The Treasure Coast Airport Connector has been identified within the St. Lucie Transportation Planning Organizations (TPO) Smart Moves 2045 Long Range Transportation Plan as infrastructure that is essential for accommodating future multimodal travel demands, the movement of freight and goods, addressing safety issues and meeting community needs. The Treasure Coast Airport Connector is also identified within the St. Lucie County Comprehensive Plan Capital Improvement Element Goals, Objectives, and Policies as a needed capital improvement.

The Treasure Coast Airport Connector is identified within the County's Thoroughfare Network Right-of-Way Protection Plan contained within the St. Lucie County Development Design and Improvement Standards. A comprehensive study on the Treasure Coast Airport Connector has also been performed by FDOT in 2021 to analyze the feasibility of the corridor and impacts to traffic patterns. Refer to *Appendix A* for the FDOT Treasure Coast Airport Connector from Turnpike to SR-713/Kings Highway Corridor Feasibility Study.

4.2 PUBLIC SAFETY

The proposed roadway improvements shall be designed in accordance with the criteria, guidelines and provisions established by the Florida Department of Transportation (FDOT) Manual of Uniform Minimum Standards for Design Construction and Maintenance for Streets and Highways (Florida Greenbook) and the SLC Land Development Code. ***Table 1*** summarizes the design criteria utilized in developing the proposed typical section and alternative alignments evaluated:

Table 1: Design Standards

Design Element	Standards	Reference
Right-of-Way Width	160 feet	SLC
Design Speed (DS)	45 mph	SLC
Design Vehicle	WB-67	SLC
Lane Widths	12 feet	SLC
Bike Lanes	10' multi-use path	Florida Greenbook
Median Width	22 feet	Florida Greenbook
Shoulder Width	8 feet (5 ft paved)	SLC / Florida Greenbook
Minimum Clear Zone	20' from edge of travel (1:6 F.S.) 24' from edge of travel (1:5 F.S.)	Florida Greenbook
Max. Horiz. Deflection	0 Degrees 45' 00"	Florida Greenbook
Max. Through Lane Deflection at Intersections	3 Degrees, 6' max (45 mph DS)	Florida Greenbook
Min. Horiz. Curve Radius	2,083' at normal crown (45 mph) 955' at reverse crown (45 mph)	Florida Greenbook
Min. Horiz. Curve Length	675 ft (400 ft min.)	Florida Greenbook
Superelevation Rate	e_{max} = 5.0%	Florida Greenbook

The above identified design standards have been developed to promote safety for motorists, cyclists, pedestrian and workers that operate within public streets and highways. The Treasure Coast Airport Connector is being designed to contain a restrictive median, as restrictive medians have been shown to be an important tool in creating a safe and efficient highway system.

4.3 ENVIRONMENTAL IMPACTS

Roadway corridor projects can impact many aspects of the environment such as wildlife, habitat, wetlands and groundwater resources. Each identified alignment was evaluated based upon potential impacts to the below identified resources. A Natural Resource Assessment (NRA) has been conducted to evaluate potential impacts associated with constructing the Treasure Coast Airport Connector corridor. The NRA evaluation considers and identifies potential development constraints consisting of the following:

- Soils
- Land Cover and Natural Communities
- Wetland and Other Surface Waters
- Wildlife
- Endangered, Threatened and Species of Special Concern
- Historic and Archeological Resources
- Contamination
- Floodplain

The following are summaries relative to the notable alternative factors identified within the attached NRA:

A. Land Use, Wetlands, and Surface Waters

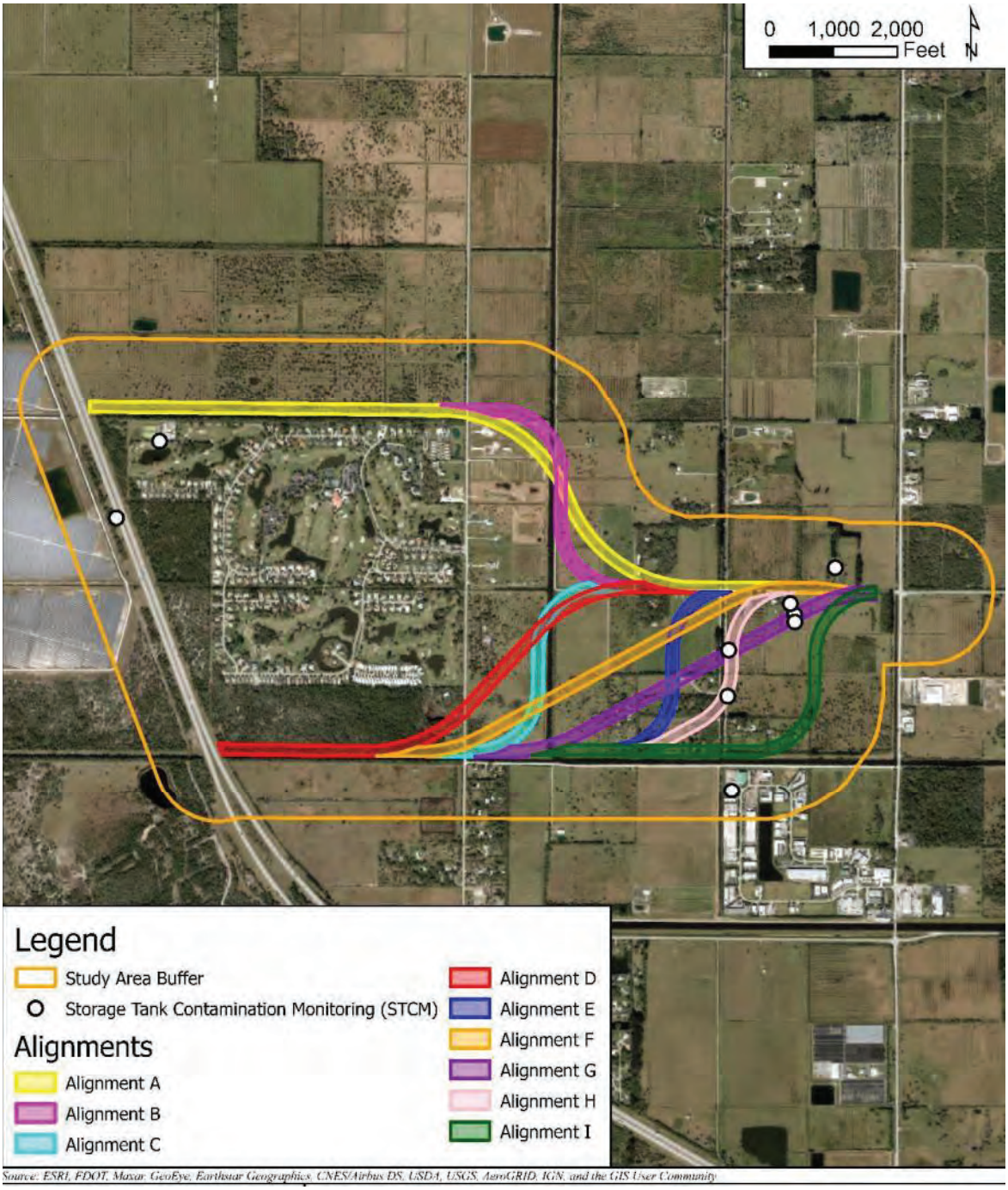
Land uses within the project alignments were identified through aerial photograph interpretation and utilizing land use shapefiles as provided by South Florida Water Management District. Land use types were classified using the Florida Land Use, Cover, and Forms Classification System (FLUCFCS, Florida Department of Transportation, 1999). A FLUCFCS map of the project alignments is attached as ***Figure 3***. Wetlands (FLUCFCS 644: Emergent Aquatic Vegetation) were found in various locations within and adjacent to the project alignments (see *Appendix D Figure 2 – Wetland and Surface Waters Map)*. Additionally, this map depicts furrows that are present within fallow crop land. There is the potential that State and Federal agencies may claim furrows as wetlands if the furrows are exhibiting characteristics of wetlands: hydric soils, wetland vegetation, and/or evidence of hydrology, such as standing water. To determine which furrows, if any, could be considered wetlands, a site visit will be required. If impacts on wetlands/furrows and surface waters occur, permitting and wetland mitigation will be required. The project is located within the service area of the following wetland mitigation banks: Bluefield Ranch Mitigation Bank, Basin 22 Mitigation Bank, and CGW Mitigation Bank. If wetland mitigation is required,

wetland credits could be purchased from these banks with the completion of a Cumulative Impacts Analysis as all three banks are not within the same drainage basin as the proposed project.

B. Contamination

A preliminary evaluation of the project alignments and a 1,000-foot buffer was conducted to identify potentially contaminated sites that may impact the proposed project. This analysis included a desktop review of the Florida Department of Environmental Protection (FDEP) Map Direct website and readily available documents from FDEP's OCULUS database. Various Storage Tank Contamination Monitoring Areas (STCM) were found within and adjacent to project limits. Sites identified during this review are shown in ***Figure 6***. The project alignments are not within any brownfield areas. Further contamination review of the site may be required, including a Phase I, especially if dewatering will be required during construction.

Figure 6: Potential Contamination Sites Map



C. Endangered, Threatened and Species of Special Concern

FWC (Florida Fish and Wildlife Conservation Commission) – A bald eagle (*Haliaeetus leucocephalus*) nest is found within 1.5 miles of the project limits. However, as this is not within the 660-foot buffer, no further action should be required. Additionally, no wading bird colonies were found within one mile of the Study Limits.

USFWS (US Fish and Wildlife Service) Consultation Areas – The Study Limits are within the grasshopper sparrow (*Ammodramus savannarum*), Audubon's crested caracara (*Caracara cheriway*), Florida scrub-jay (*Aphelocoma coerulescens*) and Everglade snail kite (*Rostrhamus sociabilis plumbeus*) consultation areas. These species are discussed further below.

A listing of species potentially occurring within the project limits was reviewed using FNAI Biodiversity Matrix Report – Matrix Units 65145, 65146, 65147, 65357, 65358, 65359, 65566, 65568 and the USFWS IPaC Trust Resources Report. USFWS IPaC includes historical data in their reporting, which results in some species findings that do not reflect current conditions within the Study Limits. Species listed in the report that do not have suitable habitat within the Study Limits include the Florida panther (Concolor coryi), puma (Felis concolor), Southeastern beach mouse (*Peromyscus polionotus niveiventris*), West Indian manatee (*Trichechus manatus*), Eastern black rail (*Laterallus jamaicensis*), Everglade snail kite (*Rostrhamus sociabilis plumbeus*), green sea turtle (*Chelonia mydas*), hawksbill sea turtle (*Eretmochelys imbricata*), leatherback sea turtle (*Dermochelys coriacea*), and loggerhead sea turtle (*Caretta caretta*). The monarch butterfly (*Danaus plexippus*) is currently proposed for listing, however, is still under review by USFWS and as a result, no permitting requirements are associated with this species at this time.

The American alligator (*Alligator mississippiensis*) was listed as a potentially occurring species within the IPaC report. This species would likely occur within the surface water ditches within the project limits. However, there would be no impacts to this species as flow of the ditches would be maintained. Therefore, this species is not discussed further.

The results of the database review are as follows:

Gopher Tortoise (*Gopherus polyphemus*)

Gopher tortoises are listed as threatened by the FWC. The gopher tortoise is a burrowing tortoise that inhabits upland habitats such as pine flat woods, xeric oak hammocks, and open sandy pastures, but is also often found in disturbed areas.

Suitable burrowing habitat exists within the Study Limits. Therefore, a site visit with a 15% gopher tortoise survey is recommended to be conducted before project development to ensure no burrows are within the areas proposed for development. If burrows are found, then FWC requires a 100% survey within 90 days of construction. Any gopher tortoise burrows that will be impacted by the proposed roadway (or within 25 feet of the project limits) will require a relocation permit from FWC to relocate the gopher tortoises.

Florida Burrowing Owl (*Athene cunicularia*)

The Florida burrowing owl is listed as threatened by the FWC. The Florida burrowing owl is a small, ground-dwelling owl that is boldly spotted and barred with brown and white. They often dig their burrow and line the entrance with decorative materials before laying eggs at the bottom of the burrow. They inhabit high, sparsely vegetated, sandy ground and can be found in ruderal areas such as pastures, airports, ball fields, vacant lots, and road rights-of-way. Burrowing and foraging habitat exists within and adjacent to the project limits. Therefore, a survey is recommended in conjunction with a 100% gopher tortoise survey.

Florida Sandhill Crane (*Grus canadensis pratensis*)

The Florida sandhill crane is listed as threatened by FWC. Sandhill cranes are typically found in freshwater marshes, pastures and farmlands, prairies, as well as along roadsides and lawns throughout Florida. They also nest in large marshes from January through July. Suitable foraging and nesting habitat (herbaceous wetlands, surrounding farmlands) for this species exists within the Study Limits. It is recommended that the project limits be surveyed for nesting sandhill cranes during the design and permitting phase. If nesting sandhill cranes are observed, the nest cannot be disturbed along with a 400-foot buffer must be maintained until the fledglings walk from the nest.

Eastern Indigo Snake (*Drymarchon couperi*)

The Eastern indigo snake is listed as threatened by USFWS and as federally designated threatened by FWC. The Eastern indigo snake occurs in a range of habitats, including pine flatwoods, scrubby flatwoods, high pine, dry prairie, tropical hardwood hammocks, edges of freshwater marshes, agricultural fields, coastal dunes, and human-altered habitats. The snake requires large tracts of land to survive and often winters in burrows of gopher tortoises, armadillos, cotton rats, and land crabs (in coastal areas) and forages in more hydric habitats. Marginal nesting and foraging habitat exist within the project site. Given the presence of

marginal habitat, the implementation of the *USFWS Standard Protection Measures for the Eastern Indigo Snake* it is recommended during construction to minimize possible impacts on the eastern indigo snake. Additionally, if the proposed alignment will impact more than 25 acres of suitable habitat, then further coordination will be required with USFWS.

Wood Stork (*Mycteria americana*)

The wood stork is listed as threatened by USFWS and as federally designated threatened by FWC. The wood stork inhabits both fresh and saltwater habitats, such as fresh and saltwater marshes, tidal flats, wet prairies, cypress swamps, and drainage features. As part of the Effect Determination Key for the Wood Stork in South Florida, Core Foraging Area (CFA) buffers were established around known wood stork colonies. These buffers monitor proposed impacts to suitable foraging habitats (SFH) for the wood stork. SFH can be defined as shallow-water areas containing relatively open (<25% aquatic vegetation) water with a permanent or seasonal water depth between 2 and 15 inches. Within south Florida, the wood stork is known to utilize an 18.6-mile radius CFA from its nesting area for foraging. The project alignments are within the CFA of two wood stork colonies: Cypress Creek Bluefield Road, and North Fork St. Lucie River. Additionally, existing ditches and wetland areas present within the project alignments may be considered wood stork SFH. If more than 0.50 acres of impacts are proposed to SFH, then a biomass foraging analysis will be required along with suitable mitigation to offset the loss of SFH.

Crested Caracara

The Audubon's crested caracara is listed as threatened by USFWS and federally designated threatened by FWC. The caracara inhabits wet prairies with cabbage palms and may also be found in wooded areas with saw palmetto, pastures and farmlands, cypress, and scrub oaks. The project alignments fall within the crested caracara consultation area and habitat does exist within portions of the project limits. Further coordination should occur with USFWS to determine surveying requirements for this species. Surveys should occur during the design phase as surveys are only valid for one year. Caracara surveys should be conducted in accordance with the USFWS Crested Caracara Draft Survey Protocol.

Florida Scrub-Jay

The Florida scrub-jay is listed as threatened by the USFWS and federally designated threatened by FWC. Scrub-jays inhabit sand pine and xeric oak scrub, and scrubby flatwoods, which occur in some of the highest and driest areas of Florida, such as ancient sandy ridges that run down the middle of the state. The Study Limits fall within the range of the Florida scrub-jay and habitat does exist within portions of the project limits. Scrub-jay surveys should be conducted during the design phase if there will be impacts on scrub habitat. Surveys should be conducted in accordance with the USFWS Draft Survey Protocol for the Florida Scrub-jay.

Florida Grasshopper Sparrow

The Florida grasshopper sparrow is listed as endangered by the USFWS and federally designated endangered by FWC. The species inhabit dry open prairies that contain bunch grasses, low shrubs, and saw palmetto. They can be found in south-central Florida in the counties of Polk, Osceola, Highlands, and Okeechobee. The Study Limits are within the Florida grasshopper sparrow consultation area and there appears to be some suitable nesting and foraging habitat for this species within the project alignments. Further coordination should be conducted with the USFWS to determine level of surveying effort required for this species.

D. Historic and Archeological Resources

Kimley-Horn requested an inquiry from the Department of State, State Historic Preservation Officer (SHPO) Division of Historical Resources (DHR) Florida Master Site File (FMSF) regarding the presence of known historic or archaeological findings within the Study Limits or within a 1,000-foot buffer. Five (5) resource groups, five (5) standing structures, and one (1) archeological site were recorded within 1,320 feet of the Study Limits. One standing structure, SL00287 – Immokolee is listed on the National Register of Historic Places (NRHP). This structure is discussed further below. A Cultural Resources Assessment Survey will be required for this project due to the number of potential historic resources nearby.

Additionally, a desktop review using Florida Geographic Data Library (FGDL) was conducted, and several resources and structures were found to occur within the project limits. The results are as follows:

Resource Groups

The following resource groups occur on or within 1,320 feet of the Study Limits:

1. SL03114 – Kings Highway
2. SL03117 – FPFWCD Canal #1
3. SL03118 – Canal to West of Kings Highway
4. SL03286 – Canal No. 18
5. SL03289 – Fort Pierce Farms Water Control District

Resources SL03114, SL03117, SL03118, and SL03286 are listed as ineligible for listing with the NRHP. Therefore, no further action should be required regarding these resources. SL03289 is not shown on ***Figure 7*** due to it being the entire Fort Pierce Farms Water Control District and therefore includes the entire map extent. This resource has "insufficient information" to be determined to be eligible for listing with the NRHP. Therefore, further coordination may need to occur with SHPO for this resource.

Historic Structures

The following resources occur on or within 1,320 feet of the Study Limits:

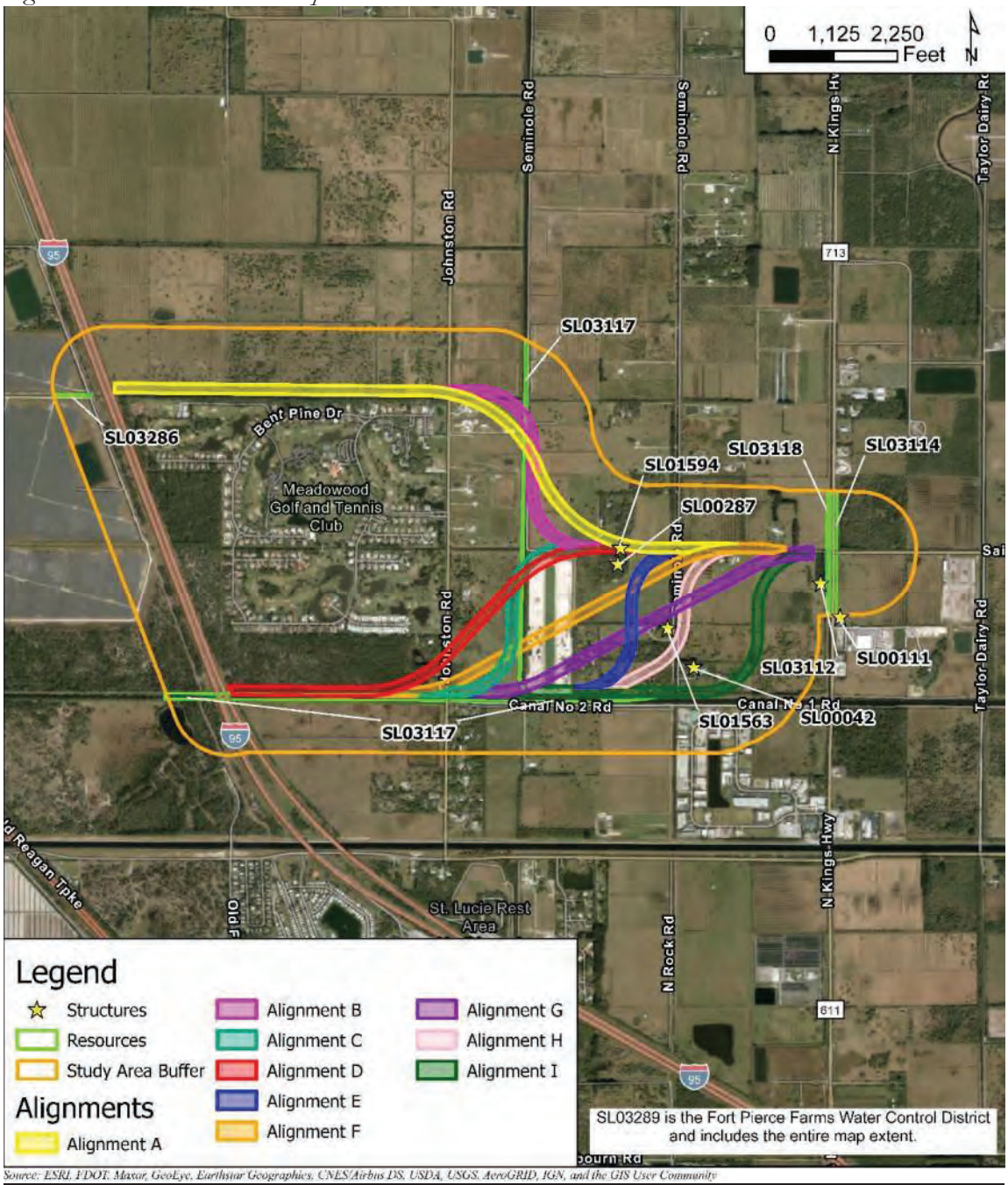
1. SL00287 – 8431 Immokolee Road
2. SL00111 – 2626 Kings Highway
3. SL01563 – 2599 Seminole Road
4. SL01594 – 8410 Immokolee Road
5. SL03112 – 7315 Immokolee Road

Resources SL00111, SL01563, SL01594, and SL03112 are listed as ineligible for listing with the NRHP. Therefore, no further action should be required regarding these resources. SL00287 is on the NRHP as of July 29, 1994. If any proposed impacts would occur to this historic structure, significant coordination will be required with the SHPO, including mitigation. Mitigation options vary however, the options could include signage of the historic resource located at nearby recreational facilities, and/or video preparation showing the historic resource and discussing the historic resource. Although impacts can be allowed to historic resources, should an alignment be chosen which impacts this resource, a significant time delay would be anticipated due to the surveys and coordination needed with the SHPO.

Archaeological Sites

There is one archaeological site, SL00042 – Drondoski Midden, found within 1,000 feet of the project alignments. Human remains may be found at this site however, as none of the proposed alignment cross this archaeological site, no impacts should occur.

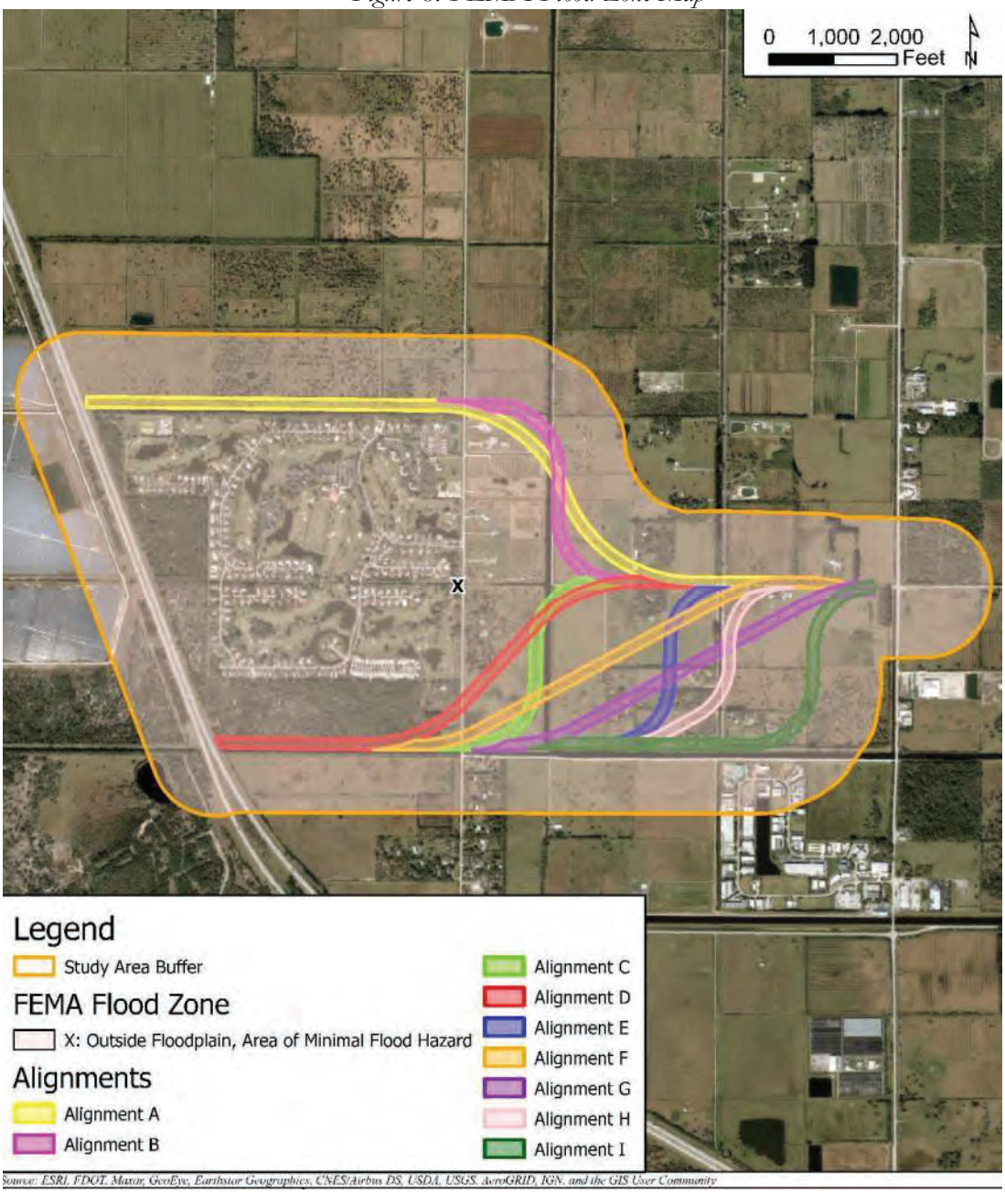
Figure 7: Cultural Resources Map



E. Floodplain

The Federal Emergency Management Agency (FEMA) lists the following flood zone within the project site: Flood Zone X, Outside Floodplain, Area of Minimal Flood Hazard. No further action should be required, regarding floodplain compensation.

Figure 8: FEMA Flood Zone Map



Refer to *Appendix D* for the complete NRA report.

4.4 ALTERNATIVE ALIGNMENTS

Nine (9) alternative alignments were evaluated when contemplating the Treasure Coast Airport Connector. Each alternative alignment was evaluated to determine impacts to natural features (drainage canals, wetlands, etc.), private property (improved and unimproved) and projected project related costs. Overall, the alternative alignments can be broken into two groups, a series that curve to the north and a series that curve to the south to avoid impacts to the Meadowood Country Club, Segments 2 and 3 respectively in ***Figure 2***.

More iterations for the southern alignments have been studied as these alignments would lend themselves to better future expansion of the Treasure Coast Airport Connector as a link between Interstate 95 and the Florida Turnpike and potential connectivity to adjacent land uses.

Logical Termini

Logical termini is defined as the rational beginning and end points for a transportation project and serve as the basis for the Study Limits, as identified in ***Figure 1***. The eastern termini with SR 713 (Kings Highway) provides the most direct connection to the Treasure Coast Internation Airport and maximizes utilization of the existing thoroughfare road network.

The Study Limits contemplate two (2) alternative western termini points with I-95, north of Meadowood County Club and south of the Meadowood County Club. The two identified termini locations with I-95 are consistent with the previous conducted FDOT Treasure Coast Airport Connector Corridor Feasibility Study interchange locations. While the potential interchange designs are not contemplated within this scope of work, we have prepared two (2) conceptual alternative interchange layouts, for each western termini point, consisting of the following:

- Partial Cloverleaf Interchange Layout
- Tight Urban Diamond Interchange Layout

Figure 9 through ***Figure 12***, on the following pages, provide the conceptual interchange layouts.

Figure 9: Northern I-95 Termini as Partial Cloverleaf Interchange

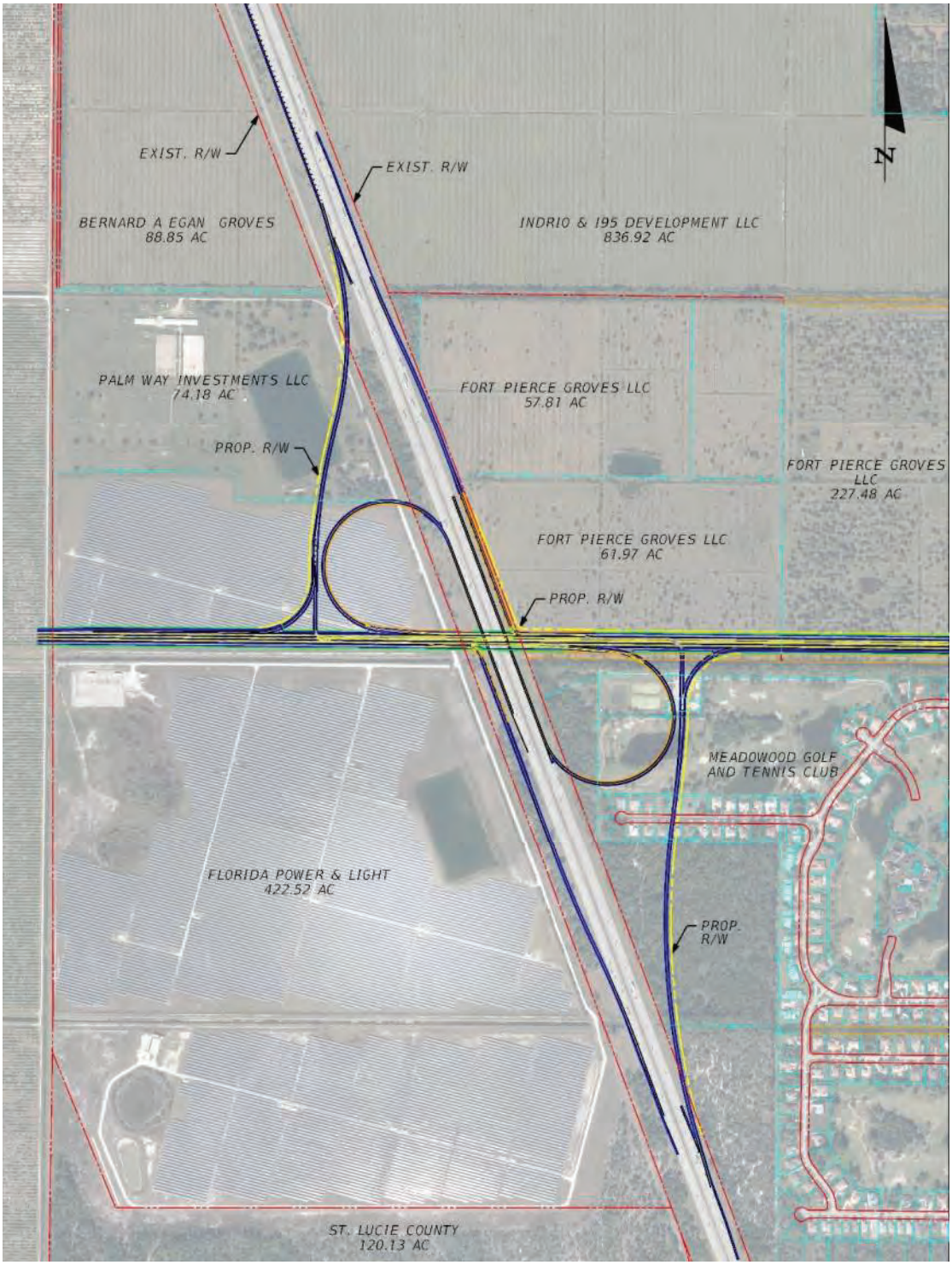


Figure 10: Southern I-95 Termini as Partial Cloverleaf Interchange

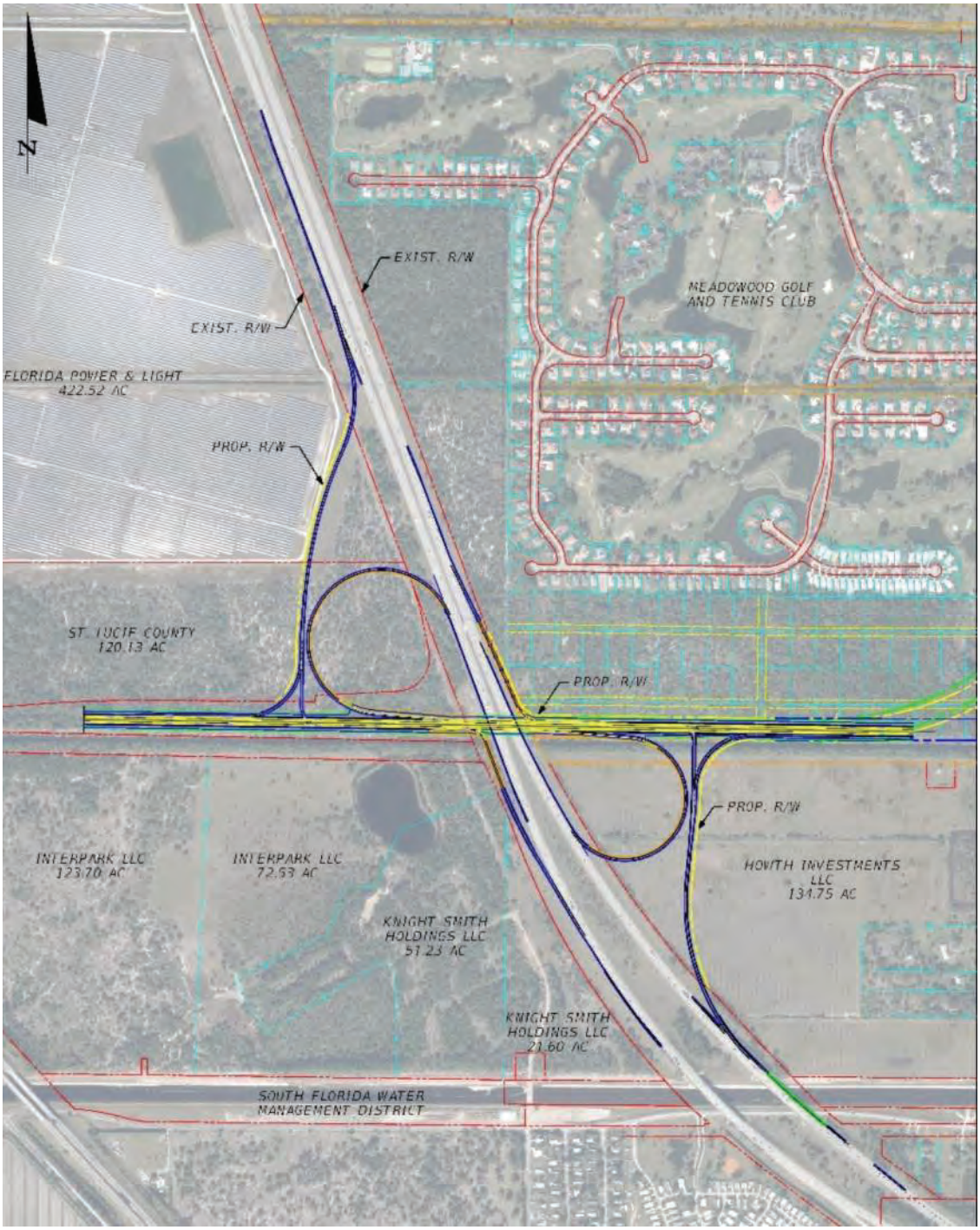


Figure 11: Northern I-95 Termini as Tight Urban Diamond Interchange

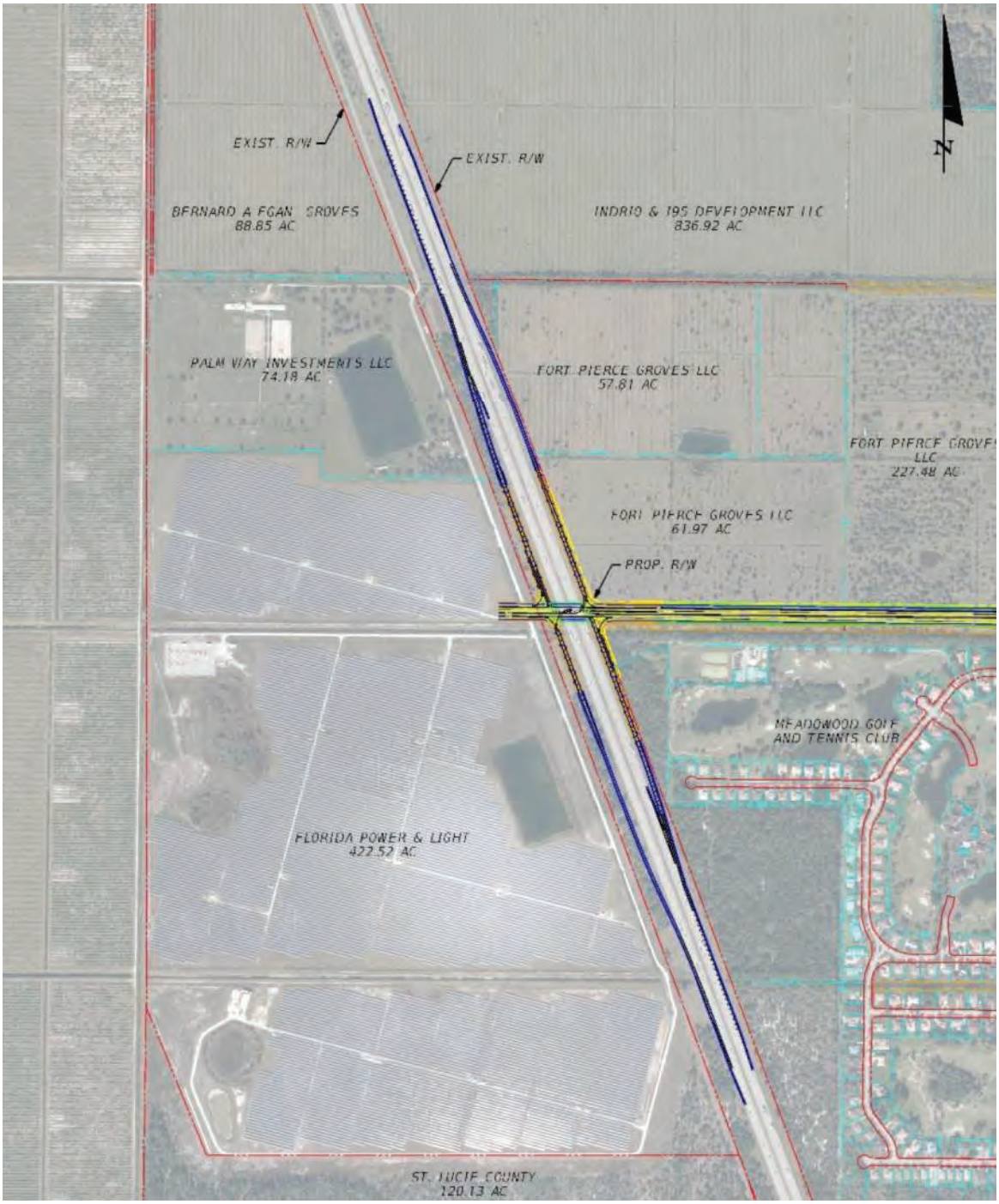
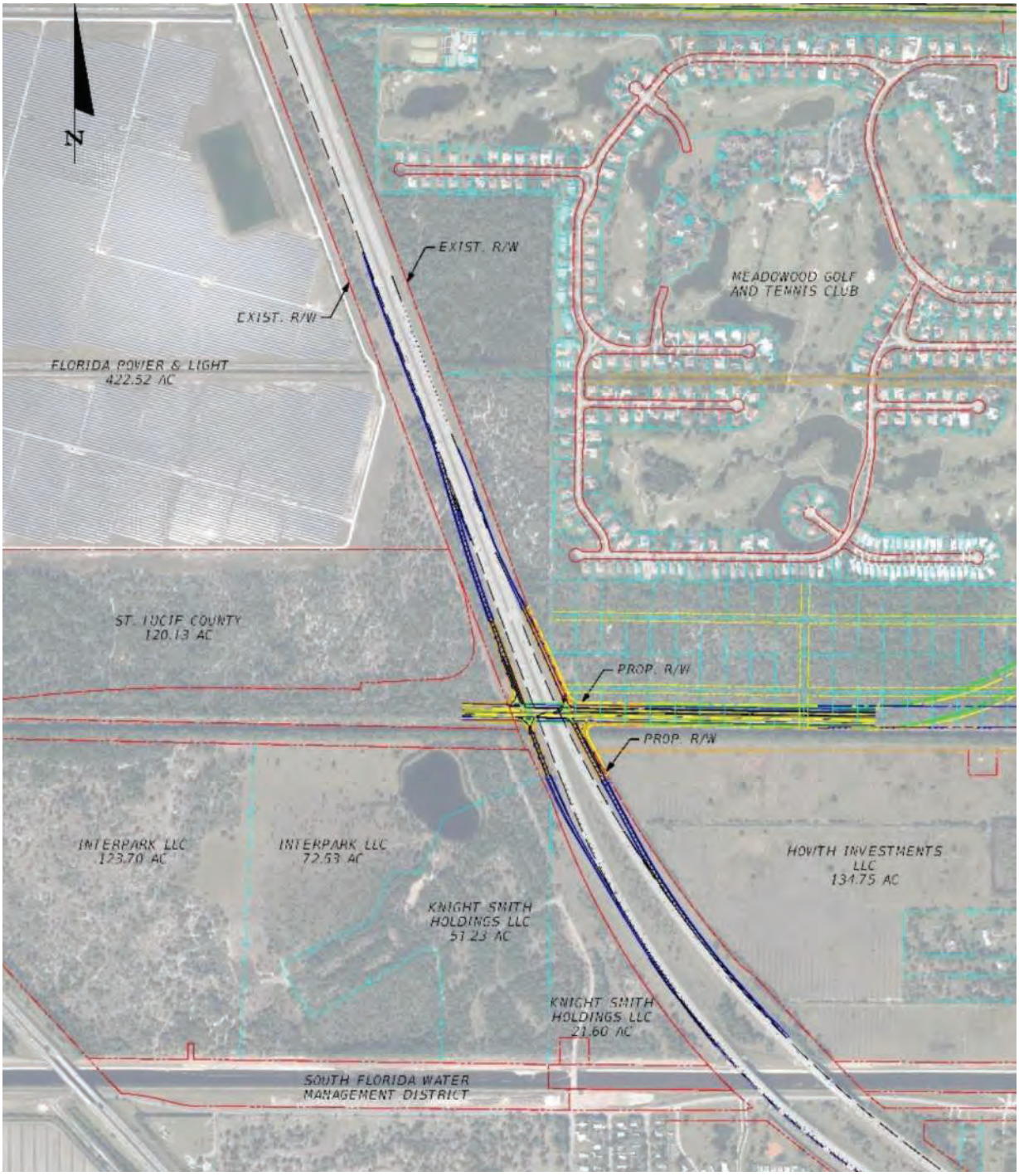


Figure 12: Southern I-95 Termini as Tight Urban Diamond Interchange



Between the two types of conceptual interchange layouts, the tight urban diamond interchange geometry maximizes utilization of existing FDOT and County right-of-way and minimizes impacts to privately owned parcels.

Figure 13 and ***Table 2***, on the following pages, delineates the distinct corridor alternatives and Total Right-of-Way associated with each:

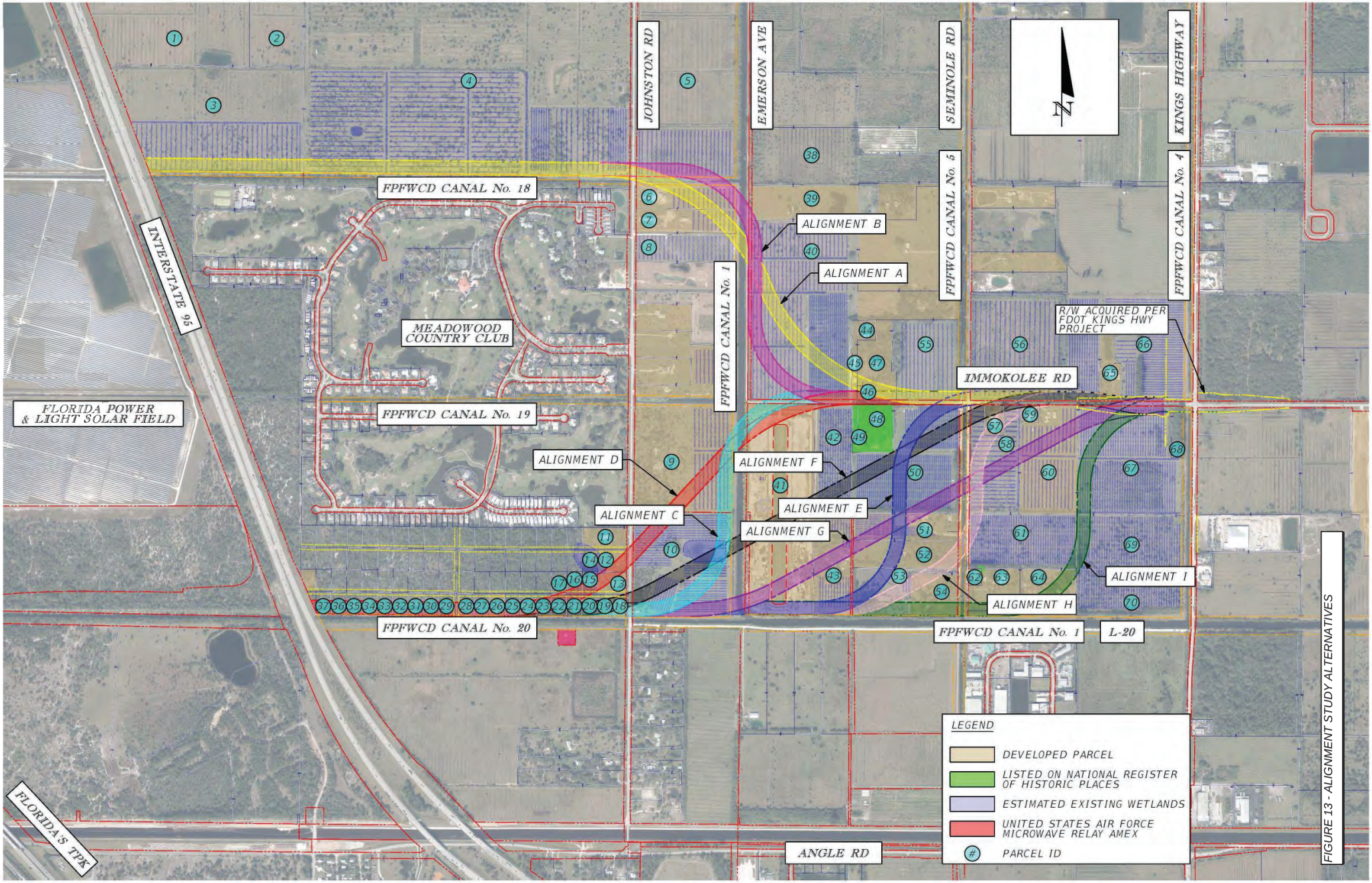


FIGURE 13 - ALIGNMENT STUDY ALTERNATIVES

Table 2: Alternative Alignment Right-of-Way Impacts

Alignment	Total Right-of-Way Acreage (Ac)	Right-of-Way Impact Acreage (Ac)	Existing St Lucie County Right-of-Way Acreage (Ac)	Estimated Wetland Impact Acreage (Ac)
A	49.44	42.96	6.48	7.64
B	52.24	43.39	8.85	7.70
C	44.09	36.33	7.76	4.35
D	41.12	34.03	7.09	2.53
E	46.37	39.15	7.22	4.39
F	40.18	35.64	4.54	5.23
G	40.45	37.60	2.85	4.56
H	43.00	38.80	4.20	2.89
I	43.20	42.18	1.02	4.40

Refer to *Appendix C* for a breakdown of parcel impacts per each Alternative Alignment.

The following describes each alternative alignment evaluated and their corresponding advantages and disadvantages within each corridor segment:

Alignment A

Alignment A has the following characteristics:

- The overall length of roadway improvement is 2.55-miles.
- The western I-95 termini is consistent with the FDOT Treasure Coast Airport Connector Corridor Feasibility Study interchange location 'B' (north of Meadowood Country Club).
- The northern I-95 interchange location (location 'B') is not consistent with the future I-95 interchange location and future developer funded Turnpike and I-95 interchanges identified in the 2045 TPO Long Range Transportation Plan.
- The horizontal curve geometry maintains normal crown pavement cross slope through the corridor length. Centerline minimum radius is 2,150-ft at 45 mph.
- The alignment crosses three (3) Ft. Pierce Farms Water Control District canals (Canal No. 1, No. 5 and No. 18) resulting in three (3) bridges and/or bridge-culverts needed to support the alignment.

- The total number of parcels impacted by this alignment is fifteen (15), equating to 42.96-acres of needed right-of-way acquisition.
- The alignment avoids direct impacts to the listed National Registry of Historical Places parcel (Parcel 48 and 49, 8431 Immokolee Road)
- This alignment is anticipated to result in displacement of two (2) residential dwellings (Parcel 6 and 46) and is anticipated to impact four (4) developed parcels (Parcel 7, 45, 47 and 65).
- This alignment is estimated to result in 7.64-acres of wetland impacts.

Refer to ***Table 2*** for estimated right-of-way impacts associated with Alignment A and *Appendix C* for a detailed breakdown of parcels impacted by the alignment. ***Figure 14*** on the following page, provides a graphical representation of Alternative Alignment A.

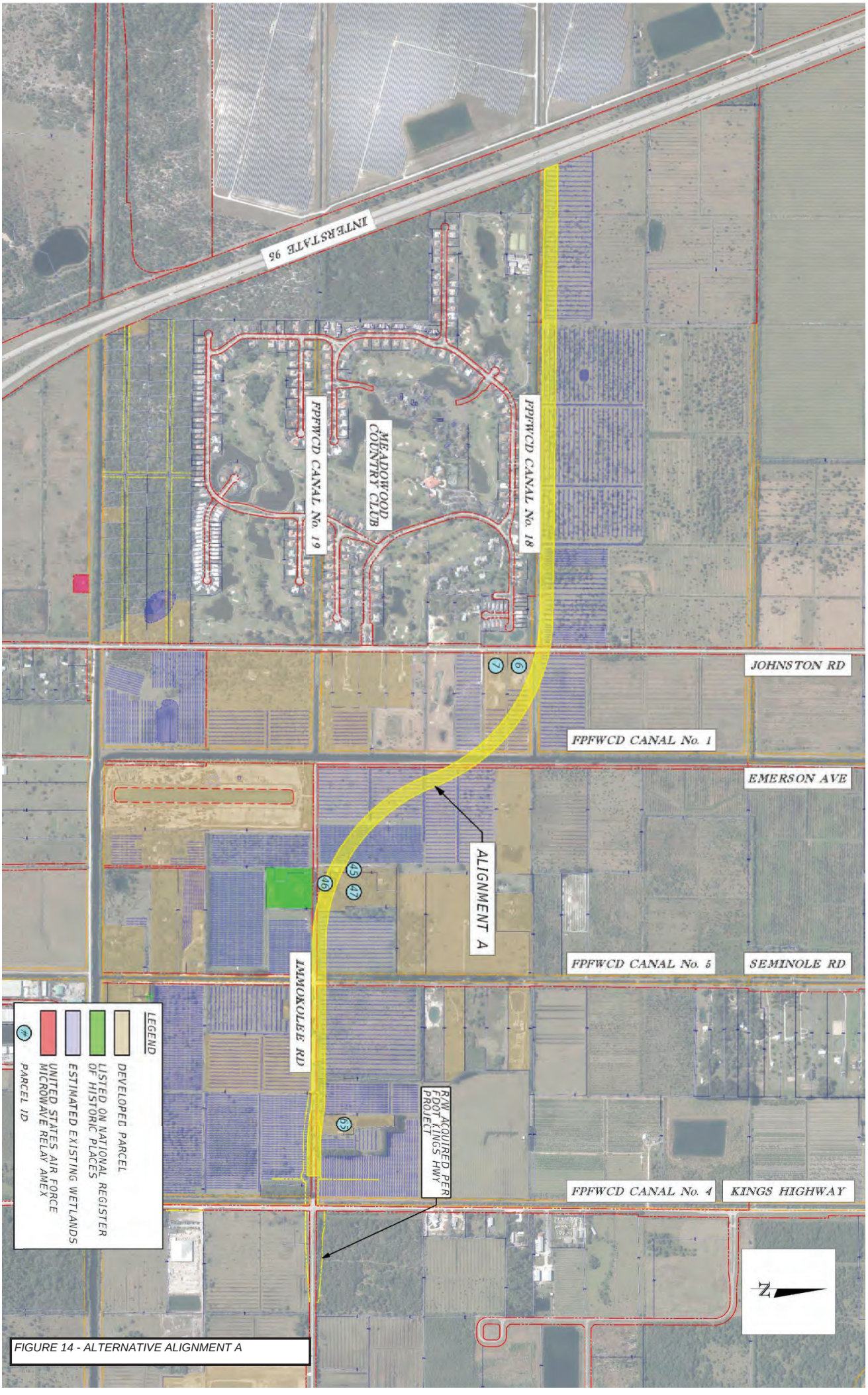


FIGURE 14 - ALTERNATIVE ALIGNMENT A

Alternative Alignment B

Alignment B has the following characteristics:

- The overall length of roadway improvement is 2.69-miles.
- The western I-95 termini is consistent with the FDOT Treasure Coast Airport Connector Corridor Feasibility Study interchange location 'B' (north of Meadowood Country Club).
- The northern I-95 interchange location (location 'B') is not consistent with the future I-95 interchange location and future developer funded Turnpike and I-95 interchanges identified in the 2045 TPO Long Range Transportation Plan.
- The horizontal curve geometry requires reverse crown pavement cross slope within the horizontal curves. Centerline minimum radius is 980-ft at 45 mph.
- The alignment crosses three (3) Ft. Pierce Farms Water Control District canals (Canal No. 1, No. 5 and No. 18) resulting in three (3) bridges and/or bridge-culverts needed to support the alignment.
- The total number of parcels impacted by this alignment is fourteen (14), equating to 43.39-acres of needed right-of-way acquisition.
- The alignment avoids direct impacts to the listed National Registry of Historical Places parcel (Parcel 48 and 49, 8431 Immokolee Road).
- This alignment is anticipated to result in displacement of one (1) residential dwelling (Parcel 46) and is anticipated to impact four (4) developed parcels (Parcel 6, 45,47 and 65).
- This alignment is estimated to result in 7.70-acres of wetland impacts.

Refer to ***Table 2*** for estimated right-of-way impacts associated with Alignment B and *Appendix C* for a detailed breakdown of parcels impacted by the alignment. ***Figure 15*** on the following page, provides a graphical representation of Alternative Alignment B.

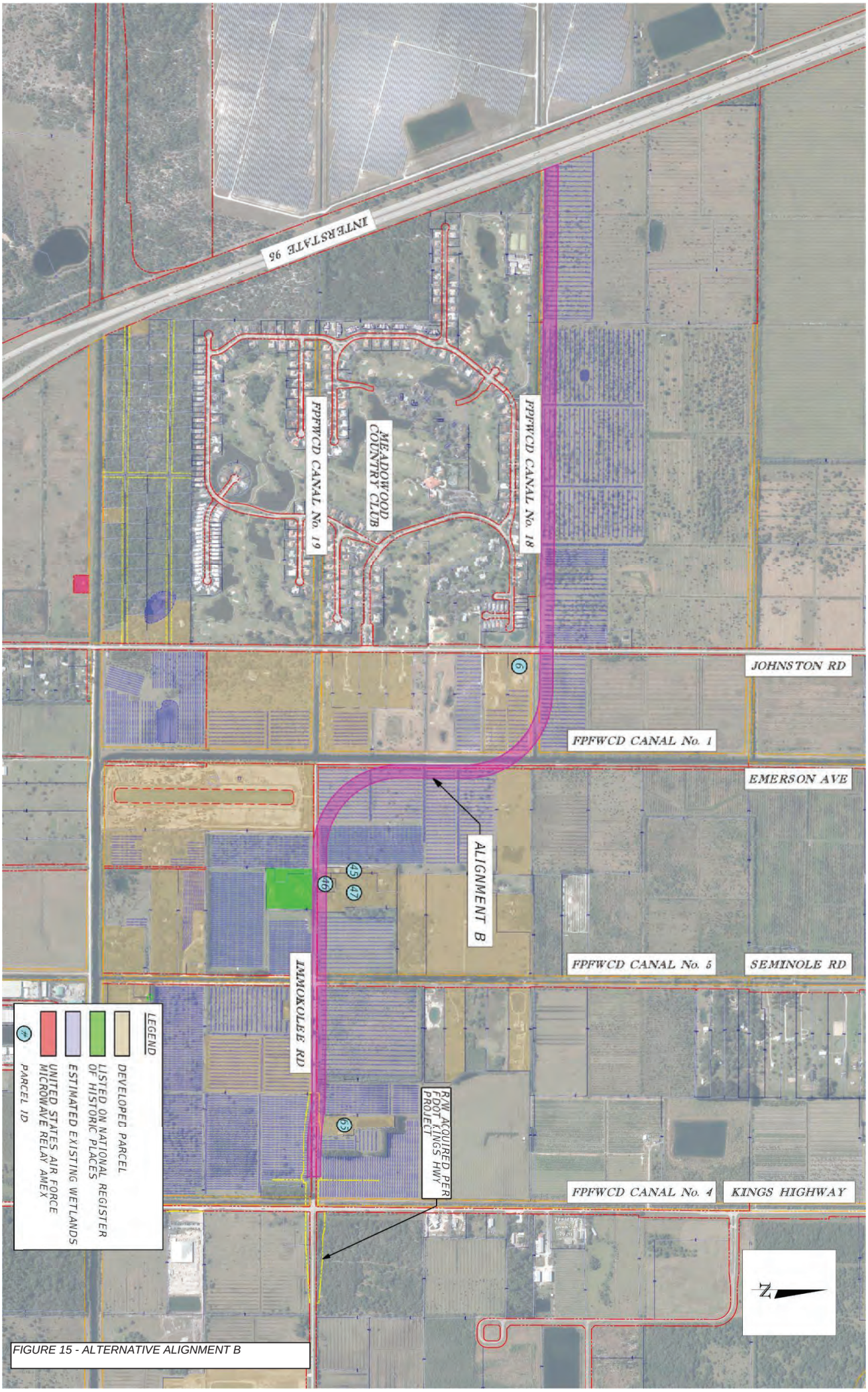


FIGURE 15 - ALTERNATIVE ALIGNMENT B

Alternative Alignment C

Alignment C has the following characteristics:

- The overall length of roadway improvement is 2.27-miles.
- The western I-95 termini is consistent with the FDOT Treasure Coast Airport Connector Corridor Feasibility Study interchange location 'A' (south of Meadowood Country Club).
- The southern I-95 interchange location (location 'A') is consistent with the future I-95 interchange location and future developer funded Turnpike and I-95 interchanges identified in the 2045 TPO Long Range Transportation Plan.
- The horizontal curve geometry requires reverse crown pavement cross slope within the horizontal curves. Centerline minimum radius is 980-ft at 45 mph.
- The alignment crosses two (2) Ft. Pierce Farms Water Control District canals (Canal No. 1 and No. 5) resulting in two (2) bridges and/or bridge-culverts needed to support the alignment.
- The total number of parcels impacted by this alignment is thirty-two (32), equating to 36.33-acres of needed right-of-way acquisition.
- The alignment avoids direct impacts to the listed National Registry of Historical Places parcel (Parcel 48 and 49, 8431 Immokolee Road).
- This alignment is anticipated to result in displacement of two (2) residential dwellings (Parcel 18 and 46) and is anticipated to impact six (6) developed parcels (Parcel 9, 26, 41, 45, 47 and 65).
- This alignment is estimated to result in 4.35-acres of wetland impacts.

Refer to ***Table 2*** for estimated right-of-way impacts associated with Alignment C and *Appendix C* for a detailed breakdown of parcels impacted by the alignment. ***Figure 16*** on the following page, provides a graphical representation of Alternative Alignment C.

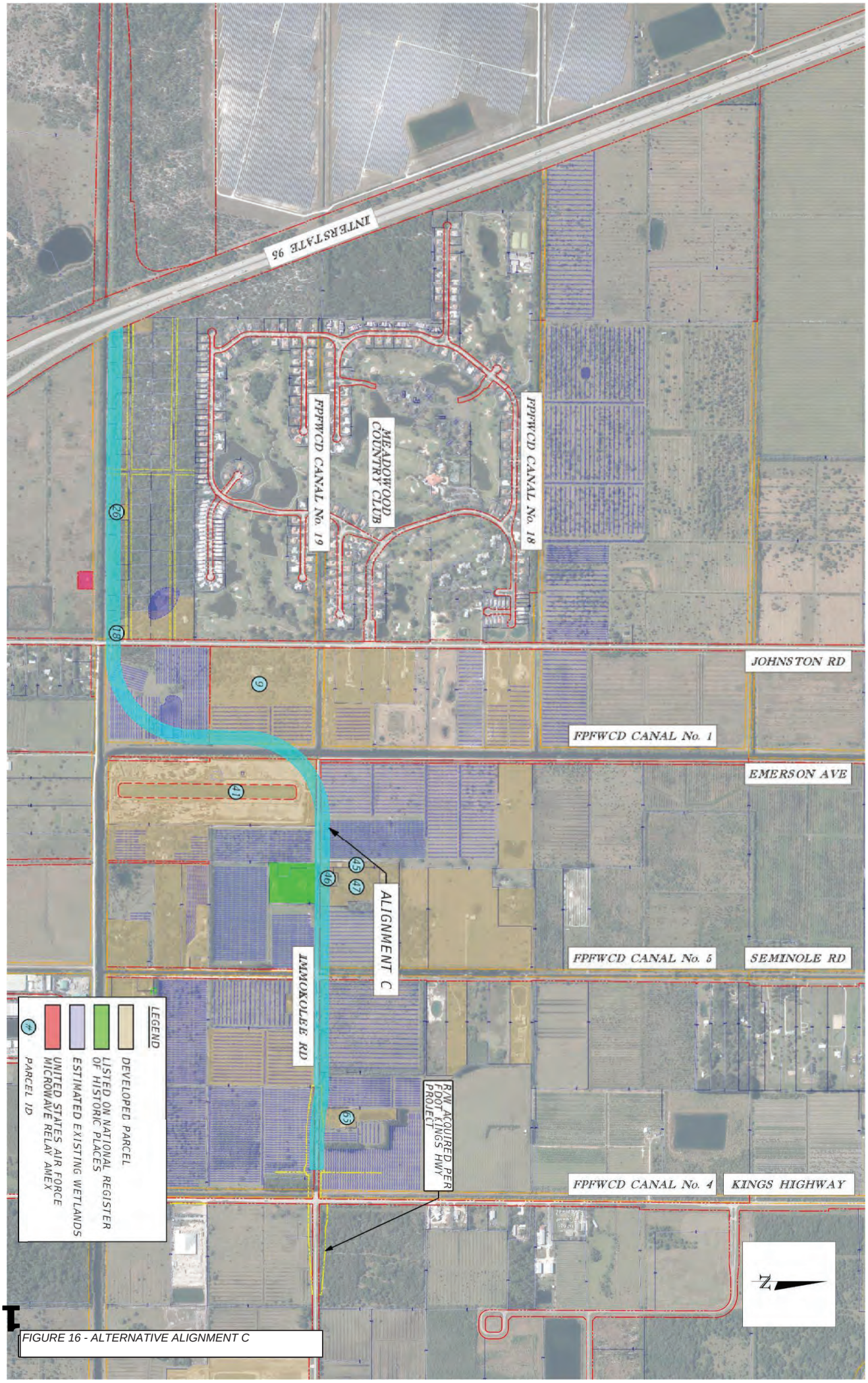


FIGURE 16 - ALTERNATIVE ALIGNMENT C

Alternative Alignment D

Alignment D has the following characteristics:

- The overall length of roadway improvement is 2.11-miles.
- The western I-95 termini is consistent with the FDOT Treasure Coast Airport Connector Corridor Feasibility Study interchange location 'A' (south of Meadowood Country Club).
- The southern I-95 interchange location (location 'A') is consistent with the future I-95 interchange location and future developer funded Turnpike and I-95 interchanges identified in the 2045 TPO Long Range Transportation Plan.
- The horizontal curve geometry maintains normal crown pavement cross slope through the corridor length. Centerline minimum radius is 2,150-ft at 45 mph.
- The alignment crosses two (2) Ft. Pierce Farms Water Control District canals (Canal No. 1 and No. 5) resulting in two (2) bridges and/or bridge-culverts needed to support the alignment.
- The total number of parcels impacted by this alignment is thirty-six (36), equating to 34.03-acres of needed right-of-way acquisition.
- The alignment avoids direct impacts to the listed National Registry of Historical Places parcel (Parcel 48 and 49, 8431 Immokolee Road).
- This alignment is anticipated to result in displacement of three (3) residential dwellings (Parcel 12, 13 and 46) and is anticipated to impact six (6) developed parcels (Parcel 9, 26, 41, 45, 47 and 65).
- This alignment is estimated to result in 2.53-acres of wetland impacts.

Refer to ***Table 2*** for estimated right-of-way impacts associated with Alignment D and *Appendix C* for a detailed breakdown of parcels impacted by the alignment. ***Figure 17*** on the following page, provides a graphical representation of Alternative Alignment D.

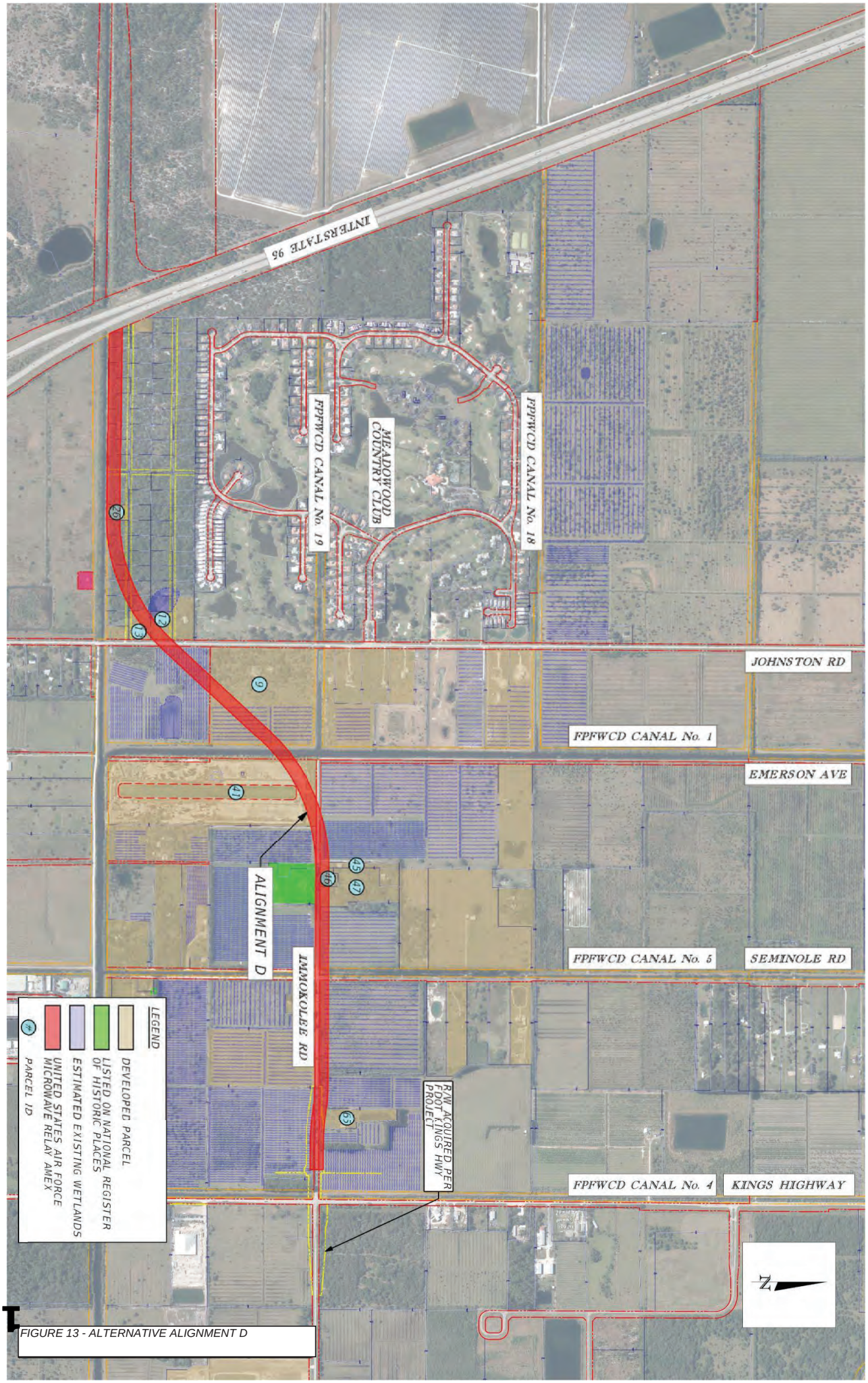


FIGURE 13 - ALTERNATIVE ALIGNMENT D

Alternative Alignment E

Alignment E has the following characteristics:

- The overall length of roadway improvement is 2.26-miles.
- The western I-95 termini is consistent with the FDOT Treasure Coast Airport Connector Corridor Feasibility Study interchange location 'A' (south of Meadowood Country Club).
- The southern I-95 interchange location (location 'A') is consistent with the future I-95 interchange location and future developer funded Turnpike and I-95 interchanges identified in the 2045 TPO Long Range Transportation Plan.
- The horizontal curve geometry requires reverse crown pavement cross slope within the horizontal curves. Centerline minimum radius is 980-ft at 45 mph.
- The alignment crosses two (2) Ft. Pierce Farms Water Control District canals (Canal No. 1 and No. 5) resulting in two (2) bridges and/or bridge-culverts needed to support the alignment.
- The total number of parcels impacted by this alignment is thirty-two (32), equating to 39.15-acres of needed right-of-way acquisition.
- The alignment avoids direct impacts to the listed National Registry of Historical Places parcel (Parcel 48 and 49, 8431 Immokolee Road).
- This alignment is anticipated to result in displacement of two (2) residential dwellings (Parcel 18 and 52) and is anticipated to impact five (5) developed parcels (Parcel 26, 41, 43, 51 and 65).
- This alignment is estimated to result in 4.39-acres of wetland impacts.

Refer to ***Table 2*** for estimated right-of-way impacts associated with Alignment E and *Appendix C* for a detailed breakdown of parcels impacted by the alignment. ***Figure 18*** on the following page, provides a graphical representation of Alternative Alignment E.

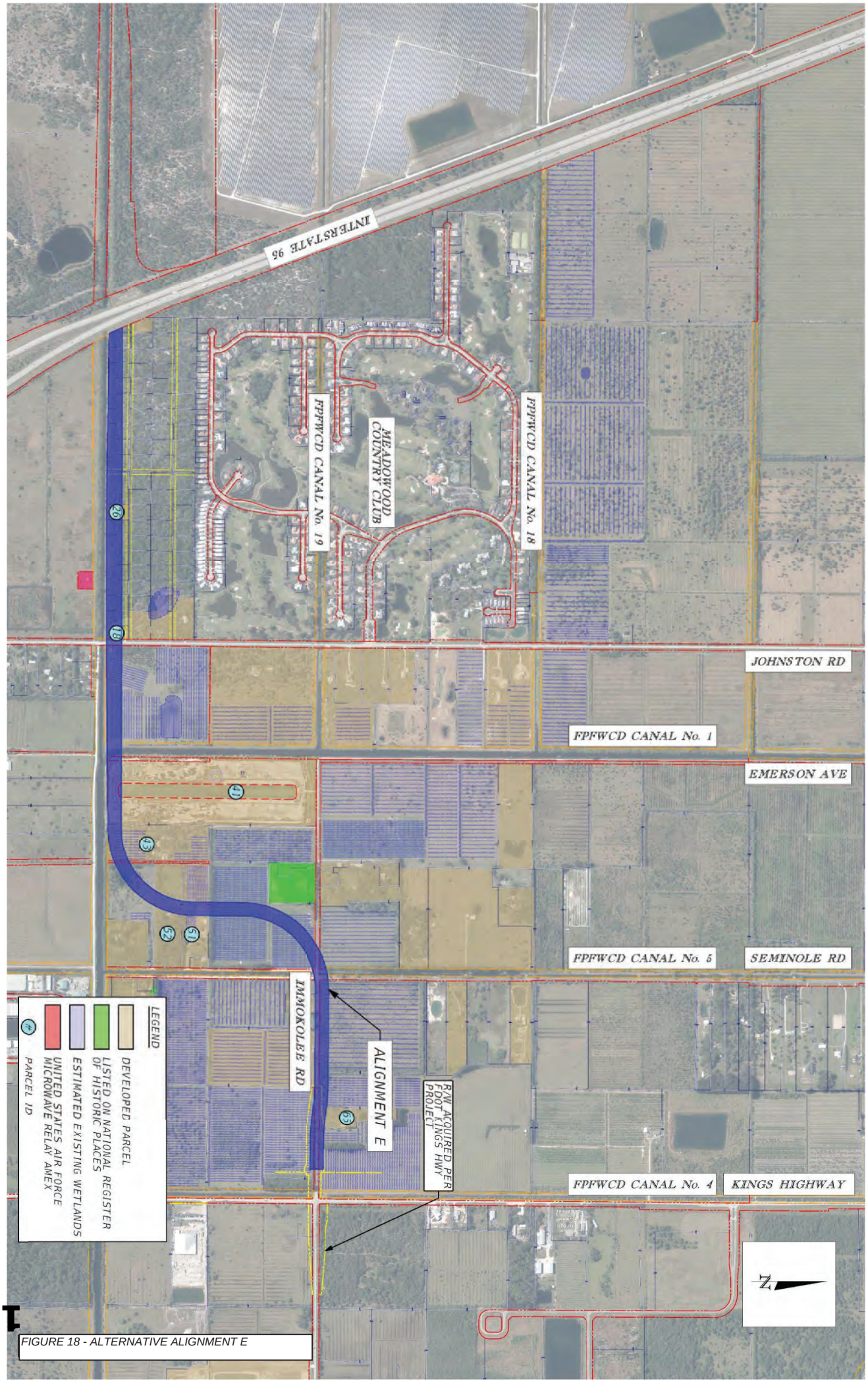


FIGURE 18 - ALTERNATIVE ALIGNMENT E

Alternative Alignment F

Alignment F has the following characteristics:

- The overall length of roadway improvement is 2.03-miles.
- The western I-95 termini is consistent with the FDOT Treasure Coast Airport Connector Corridor Feasibility Study interchange location 'A' (south of Meadowood Country Club).
- The southern I-95 interchange location (location 'A') is consistent with the future I-95 interchange location and future developer funded Turnpike and I-95 interchanges identified in the 2045 TPO Long Range Transportation Plan.
- The horizontal curve geometry maintains normal crown pavement cross slope through the corridor length. Centerline minimum radius is 2,150-ft at 45 mph.
- The alignment crosses two (2) Ft. Pierce Farms Water Control District canals (Canal No. 1 and No. 5) resulting in two (2) bridges and/or bridge-culverts needed to support the alignment.
- The total number of parcels impacted by this alignment is thirty-two (32), equating to 35.64-acres of needed right-of-way acquisition.
- The alignment avoids direct impacts to the listed National Registry of Historical Places parcel (Parcel 48 and 49, 8431 Immokolee Road).
- This alignment is anticipated to result in displacement of two (2) residential dwellings (Parcel 18 and 57) and is anticipated to impact five (5) developed parcels (Parcel 26, 41, 59, 60 and 65).
- This alignment is estimated to result in 5.23-acres of wetland impacts.

Refer to ***Table 2*** for estimated right-of-way impacts associated with Alignment F and *Appendix C* for a detailed breakdown of parcels impacted by the alignment. ***Figure 19*** on the following page, provides a graphical representation of Alternative Alignment F.

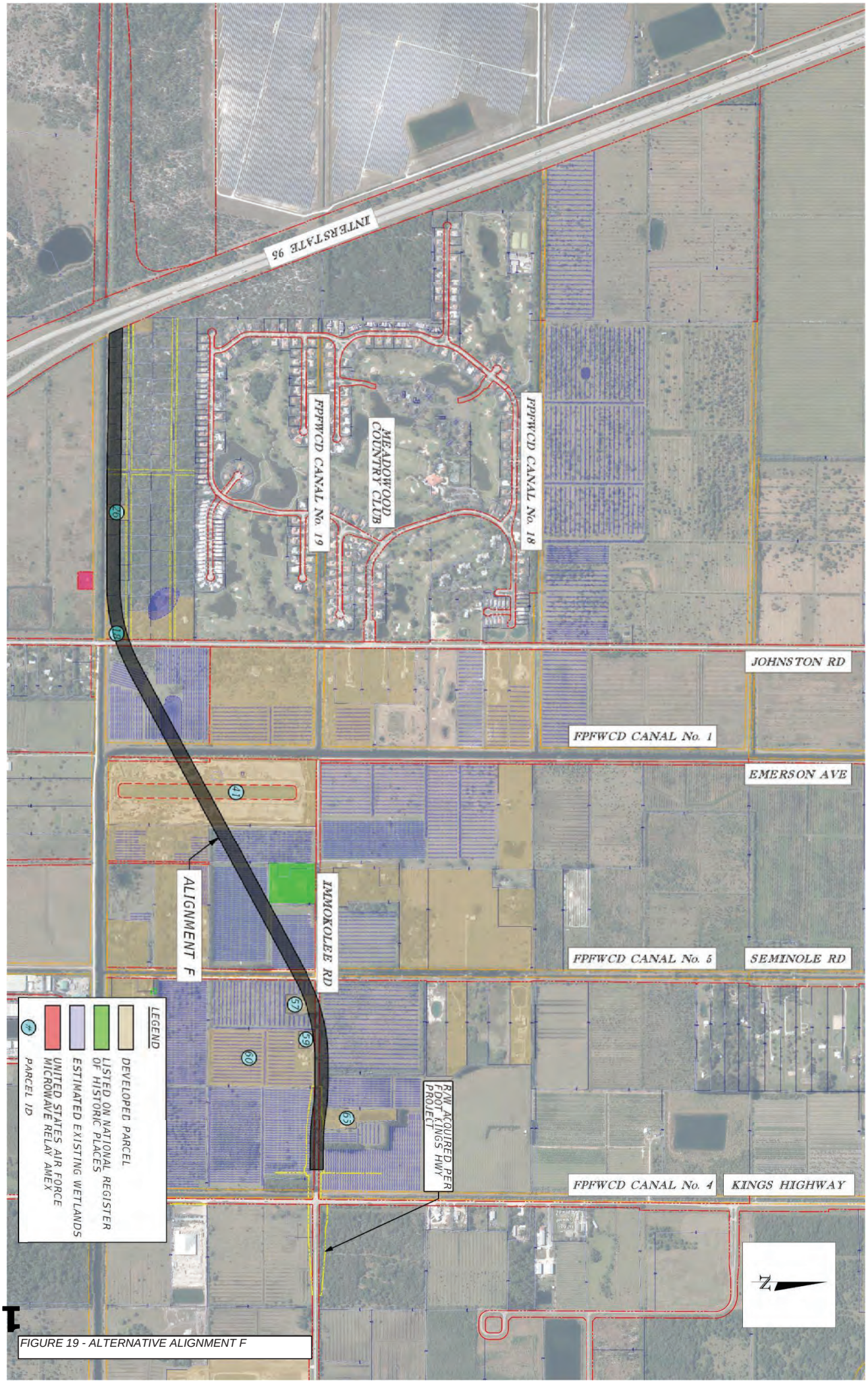


FIGURE 19 - ALTERNATIVE ALIGNMENT F

Alternative Alignment G

Alignment G has the following characteristics:

- The overall length of roadway improvement is 2.05-miles.
- The western I-95 termini is consistent with the FDOT Treasure Coast Airport Connector Corridor Feasibility Study interchange location 'A' (south of Meadowood Country Club).
- The southern I-95 interchange location (location 'A') is consistent with the future I-95 interchange location and future developer funded Turnpike and I-95 interchanges identified in the 2045 TPO Long Range Transportation Plan.
- The horizontal curve geometry maintains normal crown pavement cross slope through the corridor length. Centerline minimum radius is 2,150-ft at 45 mph.
- The alignment crosses two (2) Ft. Pierce Farms Water Control District canals (Canal No. 1 and No. 5) resulting in two (2) bridges and/or bridge-culverts needed to support the alignment.
- The total number of parcels impacted by this alignment is thirty (30), equating to 37.60-acres of needed right-of-way acquisition.
- The alignment avoids direct impacts to the listed National Registry of Historical Places parcel (Parcel 48 and 49, 8431 Immokolee Road).
- This alignment is anticipated to result in displacement of two (2) residential dwellings (Parcel 18 and 43) and is anticipated to impact five (5) developed parcels (Parcel 26, 41, 51, 52 and 60).
- This alignment is estimated to result in 4.56-acres of wetland impacts.

Refer to ***Table 2*** for estimated right-of-way impacts associated with Alignment G and *Appendix C* for a detailed breakdown of parcels impacted by the alignment. ***Figure 20*** on the following page, provides a graphical representation of Alternative Alignment G.

FIGURE 20 - ALTERNATIVE ALIGNMENT G

Alternative Alignment H

Alignment H has the following characteristics:

- The overall length of roadway improvement is 2.22-miles.
- The western I-95 termini is consistent with the FDOT Treasure Coast Airport Connector Corridor Feasibility Study interchange location 'A' (south of Meadowood Country Club).
- The southern I-95 interchange location (location 'A') is consistent with the future I-95 interchange location and future developer funded Turnpike and I-95 interchanges identified in the 2045 TPO Long Range Transportation Plan.
- The horizontal curve geometry requires reverse crown pavement cross slope within the horizontal curves. Centerline minimum radius is 980-ft at 45 mph.
- The alignment crosses two (2) Ft. Pierce Farms Water Control District canals (Canal No. 1 and No. 5) resulting in two (2) bridges and/or bridge-culverts needed to support the alignment.
- The total number of parcels impacted by this alignment is thirty-five (35), equating to 38.80-acres of needed right-of-way acquisition.
- The alignment avoids direct impacts to the listed National Registry of Historical Places parcel (Parcel 48 and 49, 8431 Immokolee Road).
- The alignment avoids direct impacts to the identified archaeological site (Drondoski Midden, SL00042).
- This alignment is anticipated to result in displacement of two (2) residential dwellings (Parcel 18 and 57) and is anticipated to impact seven (7) developed parcels (Parcel 26, 41, 43, 52, 54, 59 and 60).
- This alignment is estimated to result in 2.89-acres of wetland impacts.

Refer to ***Table 2*** for estimated right-of-way impacts associated with Alignment H and *Appendix C* for a detailed breakdown of parcels impacted by the alignment. ***Figure 21*** on the following page, provides a graphical representation of Alternative Alignment H.

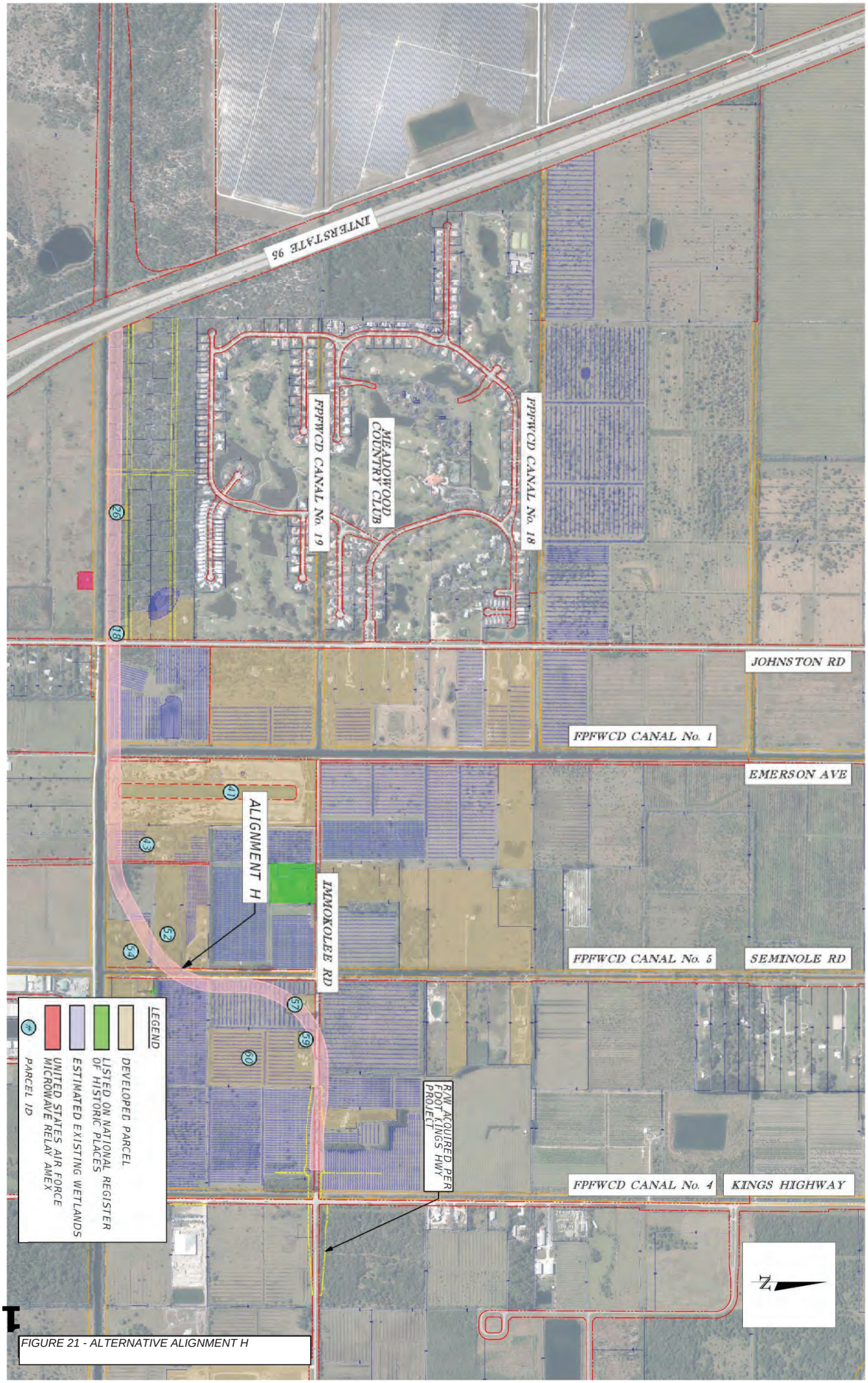


FIGURE 21 - ALTERNATIVE ALIGNMENT H

Alternative Alignment I

Alignment I has the following characteristics:

- The overall length of roadway improvement is 2.25-miles.
- The western I-95 termini is consistent with the FDOT Treasure Coast Airport Connector Corridor Feasibility Study interchange location 'A' (south of Meadowood Country Club).
- The southern I-95 interchange location (location 'A') is consistent with the future I-95 interchange location and future developer funded Turnpike and I-95 interchanges identified in the 2045 TPO Long Range Transportation Plan.
- The horizontal curve geometry requires reverse crown pavement cross slope within the horizontal curves. Centerline minimum radius is 980-ft at 45 mph.
- The alignment crosses two (2) Ft. Pierce Farms Water Control District canals (Canal No. 1 and No. 5) resulting in two (2) bridges and/or bridge-culverts needed to support the alignment.
- The total number of parcels impacted by this alignment is thirty-four (34), equating to 42.18-acres of needed right-of-way acquisition.
- The alignment avoids direct impacts to the listed National Registry of Historical Places parcel (Parcel 48 and 49, 8431 Immokolee Road).
- The alignment avoids direct impacts to the identified archaeological site (Drondoski Midden, SL00042).
- This alignment is anticipated to result in displacement of three (3) residential dwellings (Parcel 18, 54 and 64) and is anticipated to impact four (4) developed parcels (Parcel 26, 41, 43, and 63).
- This alignment is estimated to result in 4.40-acres of wetland impacts.

Refer to ***Table 2*** for estimated right-of-way impacts associated with Alignment I and *Appendix C* for a detailed breakdown of parcels impacted by the alignment. ***Figure 22*** on the following page, provides a graphical representation of Alternative Alignment I.

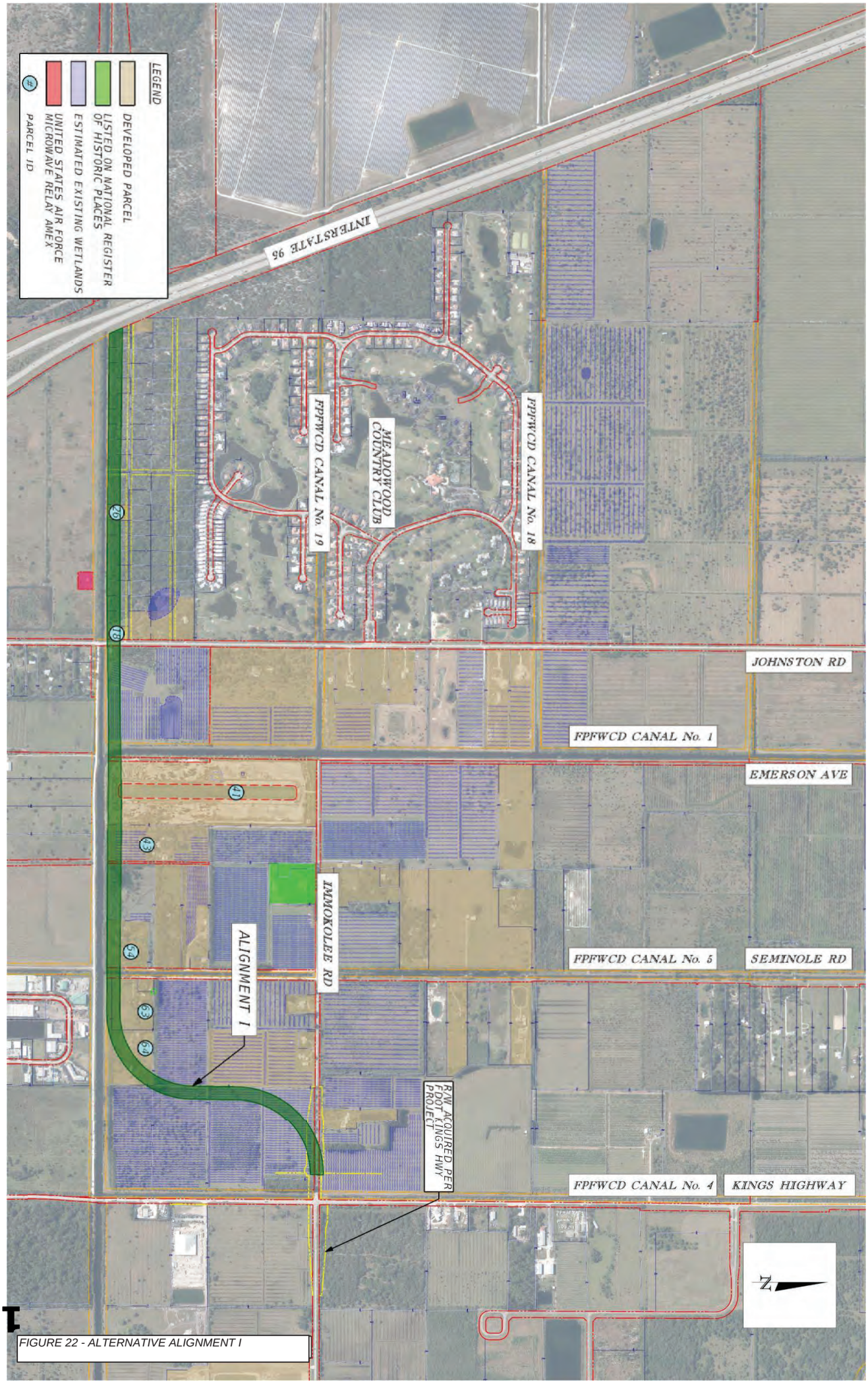


FIGURE 22 - ALTERNATIVE ALIGNMENT I

4.5 COSTS

A cost estimate has been prepared for each identified alternative alignment. The following elements were considered in developing the alternative alignment costs:

- Roadway Improvements
- Signalization Improvements
- Structure Improvements (bridge and/or bridge-culvert)
- Stormwater Management Facility Improvements
- Engineering Design and Regulatory Permitting
- Environmental Impact Mitigation
- Right-of-Way Acquisition
- Construction Engineering and Inspection

Table 3 summarizes each alignment cost components associated with the Treasure Coast Airport Connector:

Table 3: Alternative Alignment Cost Comparison Summary

Alternative Alignment	Estimated Construction Cost[1]	Estimated Right-of-Way Acquisition Cost[2]	Estimated Cost
Alignment A	$ 51,567,600	$ 5,612,400	***$ 57,180,000***
Alignment B	$ 56,6000,000	$ 4,075,000	***$ 60,675,000***
Alignment C	$ 45,223,000	$ 5,892,000	***$ 51,115,000***
Alignment D	$ 42,413,000	$ 6,125,000	***$ 48,538,000***
Alignment E	$ 45,078,000	$ 6,644,000	***$ 51,722,000***
Alignment F	$ 41,583,000	$ 7,804,000	***$ 49,387,000***
Alignment G	$ 41,770,000	$ 6,110,000	***$ 47,880,000***
Alignment H	$ 44,213,000	$ 5,268,000	***$ 49,481,000***
Alignment I	$ 44,908,000	$ 5,872,000	***$ 50,780,000***
No-Build	$0	$0	***$0***

Notes:

1. Estimated construction cost includes roadway, signal, structures and stormwater management facility construction elements. In addition, it includes engineering & jurisdictional permitting, environmental impact mitigation and construction engineering & inspection.

2. Estimated right-of-way acquisition cost is based upon appraisal estimates prepared by Armfield-Wagner Appraisal Report.

Refer to *Appendix B* and *Appendix C* for additional information related to the estimated construction cost and right-of-way acquisition cost, respectively.

5.0 RECOMMENDATIONS

The Treasure Coast Connector Alternative Alignment Study has been evaluated based on five critical factors: long-range planning, public safety, environmental impacts, alternative alignments and cost. The alternative alignments considered were those that maximize the utilization of existing roadway right-of-way, minimized impacts to the environment and resulted in minimized impacts to private property. Nine (9) alternative alignments, as well as a "No-Build" alternative, were considered. The summary and conclusions are as follows:

5.1 LONG RANGE PLANNING

The St. Lucie TPO Smart Moves 2045 Long Range Transportation Plan (LRTP), St. Lucie County Comprehensive Plan Capital Improvement Element Goals, Objectives, and Policies, the St. Lucie County Thoroughfare Network Right-of-Way Protection Plan as well as the FDOT Treasure Coast Airport Connector Feasibility Study have identified the Treasure Coast Airport Connector between Kings Highway and Interstate 95 as a new 4-lane corridor that is essential for accommodating future multimodal travel demands, the movement of freight and goods, addressing safety issues and meeting community needs.

While Alternative Alignments A and B western terminus with I-95 are inconsistent with the findings and recommendations identified within the 2045 LRTP and the FDOT Treasure Coast Airport Connector Feasibility Study, Alignment C, D, E, F, G, H and I are consistent. The "No-Build" alternative will not provide infrastructure needed to meet the identified goals and transportation needs within the County.

5.2 PUBLIC SAFETY

The Treasure Coast Airport Connector will provide expanded facilities associated with pedestrian, bicyclists and vehicular traffic mobility. The corridor improvements will meet current safety and design standards as set forth in the Florida Department of Transportation (FDOT) "Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways" (Florida Greenbook) and St. Lucie County Design Standards.

The Treasure Coast Airport Connector will serve as an alternative route to the Treasure Coast International Airport and is shown to result in reducing vehicular congestion and decreased accident potential along Kings Highway and Indrio Road, resulting in improved corridor safety. The "No-Build" alternative will not improve safety along the Kings Highway and Indrio Road corridors.

5.3 ENVIRONMENTAL

An evaluation consisting of site characteristics, wetlands, floodplain, potential threatened and endangered species, soils and vegetative characteristics were reviewed within the Study Limits as it relates to the impact likelihood based upon the various proposed Treasure Coast Airport Connector alignments. Based upon the Florida Natural Area Inventory (FNAI) report, the Study Limits contain habitat that is conducive for Gopher Tortoise, Florida Burring Owl, Florida Sandhill Crane, East Indigo Snake, Wood Stork, Crested Caracara, Florida Scrub-Jay, and the Florida Grasshopper Sparrow.

It is recommended that, should the County move forward with implementing a preferred alignment, the County include the U.S. Fish and Wildlife Service (USFWS) Standard Protection Measures and surveys to further evaluate potential impacts to the above identified listed species. Of the nine (9) alternative alignments evaluated, Alignment D (2.53-acres) and Alignment H (2.89-acres) are projected to have the least and second least wetland impacts, respectively. The "No-Build" alternative will not result in any environmental impacts along the corridor.

5.4 COSTS

Considering the nine (9) alternative alignments evaluated and based upon the cost factors identified in Section 4.5, Alignment G and Alignment D are projected to result in the least and second least overall project related costs.

Table 4: Least Costly Alignments

Alternative Alignment	Estimated Construction Cost	Estimated Right-of-Way Acquisition Cost (1)	Estimated Cost
Alignment G	$ 41,770,000	$ 6,110,000	***$ 47,880,000***
Alignment D	$ 42,413,000	$ 6,125,000	***$ 48,538,000***

The "No-Build" alternative would be the overall least costly alternative.

5.5 ALTERNATIVE ALIGNMENTS

Nine (9) alternative alignments were developed to assist with evaluating potential impacts and whether it meets the project purpose, need and goals associated with creating a new east/west corridor between I-95 and Kings Highway. The alternative alignments allow for a comparative assessment relative to engineering analysis, environmental impacts, private property impacts and overall project costs. None of the alternative alignments result in direct impacts to the identified historical and archeological resources identified within the Study Limits.

5.6 CONCLUSION

Based upon the alternative alignments evaluated Alternative Alignment D is recommended to comprise the Preferred Alignment for the following reasons:

- Addresses the long-range planning and safety objectives set forth by the County and TPO.
- Generally aligns with developer funded project connecting the Florida Turnpike and I-95 identified within the TPO 2045 LRTP.
- Is projected to require the second lowest capital investment to achieve the goals and objectives ($ 48,538,000).
- Is projected to result in the least amount of wetland impacts (2.53-acres).
- Is projected to require the least amount of right-of-way acquisition (34.03-acres).

St. Lucie Transportation Planning Organization

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AGENDA ITEM SUMMARY

Board/Committee:	Citizens Advisory Committee (CAC)
Meeting Date:	March 18, 2025
Item Number:	6d
Item Title:	Electric Bicycle (E-Bike) Safety Study
Item Origination:	Unified Planning Work Program (UPWP)
UPWP Reference:	Task 3.5 – Bicycle-Pedestrian/Complete Streets Planning
Requested Action:	Recommend acceptance of the draft Study, recommend acceptance with conditions, or do not recommend acceptance.
Staff Recommendation:	It is recommended that the E-Bike Safety Study be reviewed and recommended for acceptance by the TPO Board based on the review.

Attachments
- Staff Report
- E-Bike Safety Study

St. Lucie Transportation Planning Organization

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MEMORANDUM

TO: Citizens Advisory Committee (CAC)

THROUGH: Peter Buchwald
Executive Director

FROM: Stephanie M. Torres
Bicycle Pedestrian Program Manager

DATE: March 11, 2025

SUBJECT: Electric Bicycle (E-Bike) Safety Study

BACKGROUND

The increase in e-bike usage is transforming transportation, especially in Florida, as people seek cost-effective and eco-friendly options. This increase has prompted some local governments to establish regulations for e-bike usage. Although e-bikes promote active transportation, they also raise safety concerns for all roadway users.

To address these concerns, the Electric Bicycle Safety Study was programmed in Task 3.5 (Bicycle-Pedestrian/Complete Streets Planning) of the Unified Planning Work Program. The study aims to understand current laws and safety measures, analyze crash data, identify safety challenges, and offer recommendations to enhance e-bike safety for all road users.

ANALYSIS

Florida has classified e-bike riders as vulnerable road users to emphasize the need for safety measures. Despite this, e-bike crashes appear to be increasing due to factors like high speeds, inexperience, and lack of awareness among both riders and motorists. The rising popularity of e-bikes also leads to more interactions with traditional vehicles, increasing crash risks.

Ensuring e-bike safety in Florida is essential for a secure and efficient transportation system. Addressing safety concerns through updated laws,

improved infrastructure, education, and enforcement can significantly reduce accidents and fatalities. E-bike incidents throughout the State in 2024 highlight the urgent need for safety measures and heightened awareness. In addition, accurate crash data is crucial for effective safety measures.

Safety can be enhanced through infrastructure improvements and community education. Policies like helmet laws, speed regulations, and training programs, along with dedicated bike lanes and improved signage, can create a safer environment. Public awareness campaigns and strict enforcement will reinforce safe riding practices

RECOMMENDATION

It is recommended that the E-Bike Safety Study be reviewed and recommended for acceptance by the TPO Board based on the review.

Electric Bicycle (E-Bike) Safety Study

January 2025

St. Lucie Transportation Planning Organization

Contact: Stephanie M. Torres, CPM
St. Lucie TPO
466 SW Port St. Lucie Boulevard, Suite 111
Port St. Lucie, Florida, 34953
Telephone: (772) 462-1533
Email: torress@stlucieco.org

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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.

CONTENTS

1. Introduction

The use of electric bicycles (e-bikes) has experienced a steady increase in recent years. E-bikes that were once a novelty are now mainstream, especially as populations look towards more cost-effective and environmentally friendly transportation options. In Florida, this surge of e-bike usage is impacting local governments by requiring municipalities to consider regulations on where and how e-bikes should be used. While the rising use of e-bikes presents an exciting opportunity to increase active transportation, their increased use is creating safety concerns for all roadway users, both motorized and non-motorized.

Proactively addressing safety impacts of e-bike usage allows communities to foster a safer transportation system for e-bike riders, pedestrians and other road users by reducing crashes, injuries and fatalities. The purpose of the Electric Bicycle Safety study is to assist the St. Lucie Transportation Planning Organization (St. Lucie TPO) and local partners in planning and preparing to address the growing use and associated safety concerns of increased e-bike usage.

This study aims to provide a comprehensive understanding of current state and local laws and provide an assessment of current safety measures implemented by various municipalities. The study will investigate current crash data allowing for key safety challenges to be identified, and actionable recommendations to enhance e-bike safety will be provided.

2. Florida Statewide E-Bike Laws

Florida e-bike laws categorize e-bikes into three classes based on their speed and how the motor assists the bicyclist:

Class 1** E-Bike	Class 2** E-Bike	Class 3** E-Bike
		
Bike with electric motor that only engages while the rider is pedaling (pedal-assist or pedelec).	Bike with electric motor that can be engaged at any time, with or without the rider pedaling.	Bike with electric motor that only engages while the rider is pedaling (pedal-assist or pedelec).
20 MPH	20 MPH	28 MPH

Class 1 Electric Bike: Motor activates only when pedaling and stops assisting at 20 mph.

Class 2 Electric Bike: Throttle-actuated motor assists up to 20mph.

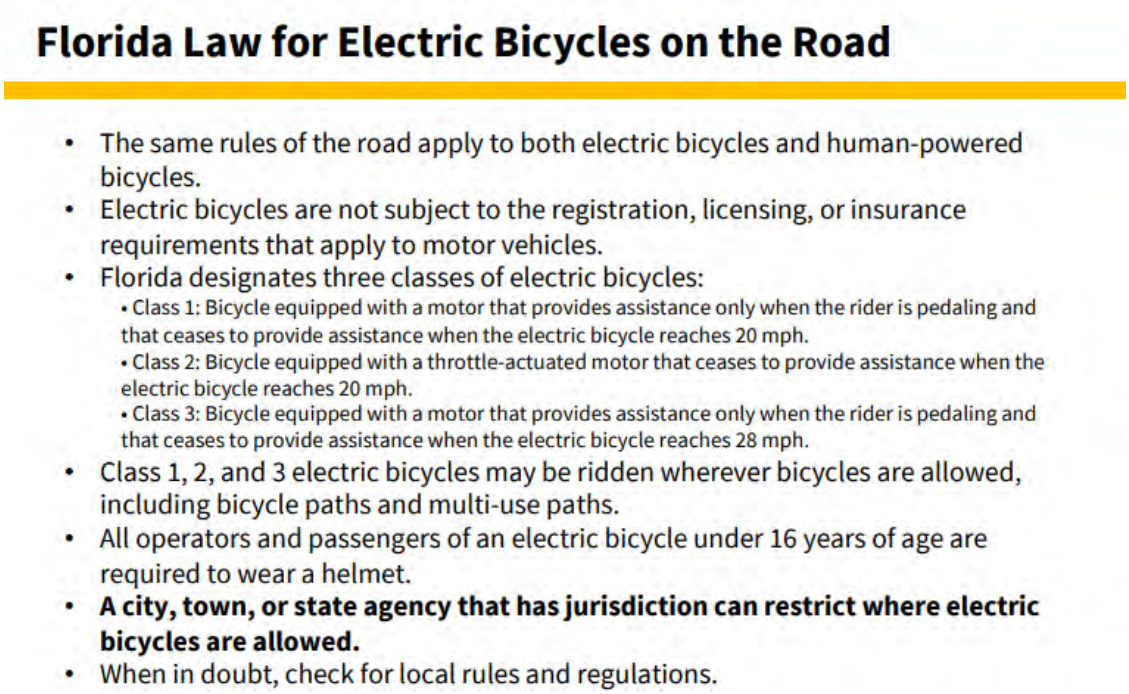
Class 3 Electric Bike: Same pedal-assist mode but can reach a speed of 28mph.

As defined by Florida Statute 316.20655, e-bike operators have the same rights and responsibilities as bicycle riders and are considered vulnerable road users. Florida law allows e-bikes to be operated on the same paths as bicycles, including streets, sidewalks, bike lanes and multi-use paths. As of the 2024 Legislative Session there are no age restrictions for operating e-bikes on a statewide level. However, users under the age of 16 are required to wear a helmet.

The state law delegates authority to local governments to restrict or ban the use of e-bikes in certain areas. While local governments can ban the use of e-bikes or specific classes of e-bikes all together; the language of the state law does not allow locals to restrict use of electric bicycles based on age without affecting the use of regular bicycles. This language presents challenges to local governments wishing to balance residents' wellbeing with the desire for accessible transportation options.

Florida law also requires e-bikes manufactured after January 1, 2021, to display a permanent label that includes the bike's classification (1, 2, or 3), the top speed, the e-bike's motor wattage, and any modifications made to the bike. Additionally, the label must be visible and legible from at least five feet away.

E-bikes are required to be equipped with a white front light that is visible from at least 500 feet away and a rear red light that is visible from at least 600 feet away. Reflectors are required when riding between sunset and sunrise.



Florida Law for Electric Bicycles on the Road

- The same rules of the road apply to both electric bicycles and human-powered bicycles.
- Electric bicycles are not subject to the registration, licensing, or insurance requirements that apply to motor vehicles.
- Florida designates three classes of electric bicycles:
  - Class 1: Bicycle equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the electric bicycle reaches 20 mph.
  - Class 2: Bicycle equipped with a throttle-actuated motor that ceases to provide assistance when the electric bicycle reaches 20 mph.
  - Class 3: Bicycle equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the electric bicycle reaches 28 mph.
- Class 1, 2, and 3 electric bicycles may be ridden wherever bicycles are allowed, including bicycle paths and multi-use paths.
- All operators and passengers of an electric bicycle under 16 years of age are required to wear a helmet.
- **A city, town, or state agency that has jurisdiction can restrict where electric bicycles are allowed.**
- When in doubt, check for local rules and regulations.

3. Florida Crash Data involving E-Bikes

To protect e-bike users, Florida has classified riders as vulnerable road users. The classification highlights the importance of safety measures and legislation to protect e-bike riders. Despite the specialized classification, e-bike crashes are on the rise due to several factors including high speeds, inexperience, and a lack of awareness among riders and motorists. Additionally, the increasing popularity of e-bikes has led to more interactions with traditional vehicles, further heightening the risk of crashes.

However, specific data on e-bike crashes can be difficult to find. Currently, the Florida Department of Highway Safety and Motor Vehicles (FHSMV) does not specifically track e-bike crashes. Florida Traffic Crash Reports are only required when a motor vehicle is involved. Furthermore, the “motor vehicle” definition does not include bicycles, motorized scooters, or electric personal assistive mobility devices such as wheelchairs. As such, the only way to determine if a crash involves an e-bike is to perform a detailed analysis of individual crash reports to determine if the reporting agency mentions if an e-bike was involved in the incident.

This issue is further exacerbated by the underreporting of e-bike incidents within the emergency medical community. When a first responder attends a vehicle vs. e-bike incident, the e-bike may not be recorded due to insufficient coding options identifying this mode of transportation. Consequently, if an individual arrives at the Emergency Room incapacitated and unable to communicate the circumstances, e-bike crashes may go unreported. This lack of reporting makes it difficult to extract accurate data on e-bike crashes, injuries and fatalities. Additionally, the medical community has raised concerns about whether reporting e-bike incidents constitutes a HIPPA violation, as it involves sharing patient information related to crash involvement and injury data.

To address this challenge, the Florida Pedestrian and Bicycle Safety Coalition, in collaboration with local partners including the St. Lucie TPO, is actively working with state law enforcement agencies to improve crash reporting methods. At the coalition’s quarterly meeting in January, members met with the FHSMV to advocate for the inclusion of e-bike and e-scooter users as distinct categories of road user on the crash report form. These updates are expected to be incorporated as the crash report form is updated this year. Additionally, the coalition is partnering with emergency medical services to develop e-bike specific coding for injury surveillance, ensuring that e-bike related injuries are accurately documented when individuals seek medical care after a crash.

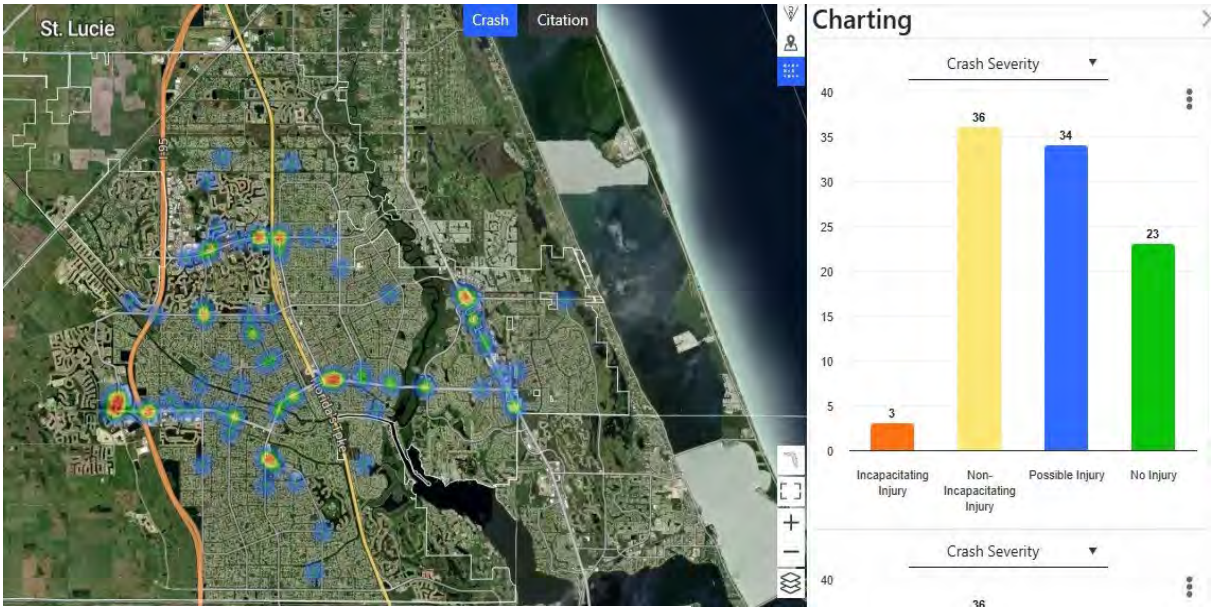
While official e-bike crash reporting data can be difficult to find, a review of local news stories identifies e-bike safety concerns across the State. In 2024, several e-bike crashes resulting in fatalities or serious injuries made Florida headlines:

- February / Key Biscayne — While riding her bicycle, a woman died in a head-on collision with a 12-year-old boy riding an electric bicycle.
- March / Jupiter — A 12-year-old Jupiter boy crashed with a car while riding his e-bike. Although he was wearing a helmet, his injuries left him hospitalized for over a week.
- August / St. Petersburg — A 46-year-old man riding an electric bike crashed with a car and was then struck by another vehicle when he fell from his bike.
- September / Brooksville — A 42-year-old man riding his electric bike on the Nature Coast Trail failed to stop at a posted stop sign and was struck and killed by an SUV.
- October / West Palm — An e-bike rider was left in critical condition after being hit by a car from behind while sharing the same lane.
- October / Vero Beach — A 30-year-old man was killed after he fell from his e-bike due to debris in the bike lane and was then struck by an oncoming vehicle.
- November / Ocala — A hit and run crash left a 28-year-old man dead after being struck while crossing the road on his e-bike.

4. Local Agency Electric Bicycle Crash Data

St. Lucie County had no reported e-bike fatalities in 2024 and one e-bike fatality in 2023. The December 2023 fatality occurred when a man riding an e-bike on Indian River Drive near Walton Road was involved in a hit-and-run crash. A review of 2024 bicycle crash data from the three local municipalities – Port Saint Lucie, St. Lucie County and Fort Pierce – reveals notable trends in e-bike incidents.

According to Signal 4 Analytics, the City of Port Saint Lucie Police Department (PSLPD) reported 96 bicycle-related crashes, with 21 HSMV Crash Reports explicitly mentioning e-bikes.

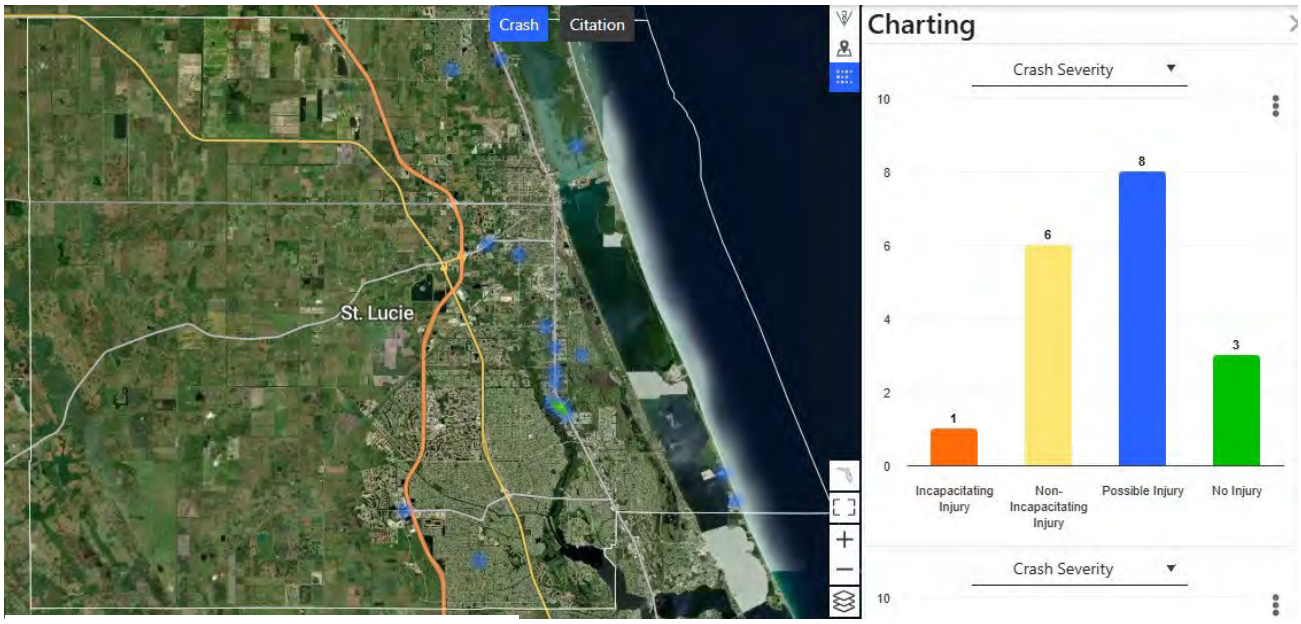


City of Port Saint Lucie Bicycle-Related Crashes

The heat map above highlights key areas for where bicycle-related crashes were most concentrated within the City of PSL. Notably, the Tradition community emerged as a hot spot for e-bike incidents, suggesting higher usage or risk factors in that area. Analysis of crash data further revealed that for most of these incidents, the e-bike user was not at fault. Instead, motorists were most often responsible, with failure to yield to the right of way being the leading cause of the crashes. This pattern underscores the need for increased driver awareness to the prevalence of electric bicycle presence in the area.

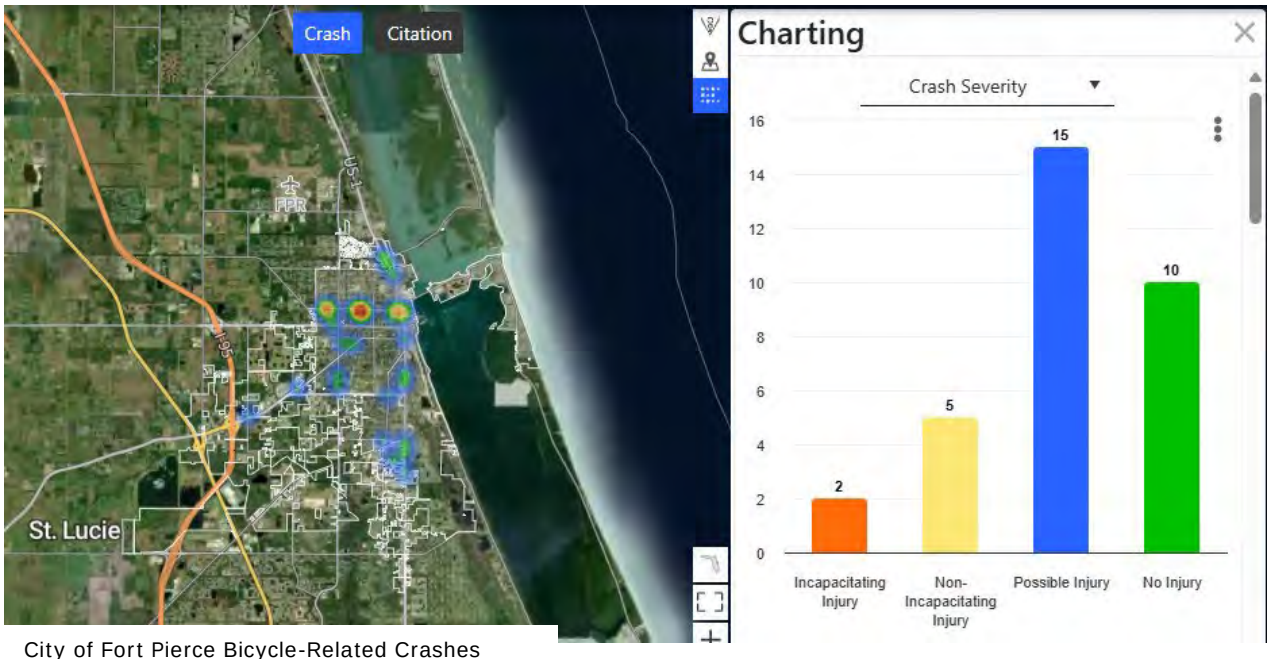
In the jurisdiction of St. Lucie County Sherriff's Department, Signal 4 details 18 total bicycle crashes, of which 6 involved e-bikes. Analysis of the crash data further revealed that the e-bike rider was not indicated to be at fault for the majority of the incidents, with only one crash attributed to cyclist error.

Although the below heat map for St. Lucie County includes all bicycle crashes, the e-bike related crash reports identified that 2 of the 6 crashes occurred on US Highway 1 between Prima Vista and Midway Road.



St. Lucie County – Bicycle Related Crashes

Meanwhile, the City of Fort Pierce recorded 32 bicycle crashes, with 4 reports indicating e-bike involvement. Unlike in the City of Port Saint Lucie and St. Lucie County, where motorists were primarily at fault, e-bike crashes in Fort Pierce were largely attributed to the e-bike riders, themselves, with failure to follow roadway laws being the leading cause of the incidents within the city limits of Fort Pierce. Two of the four e-bike related incidents occurred on Avenue D between N. 17th Street and N. 21st Street.



City of Fort Pierce Bicycle-Related Crashes

5. E-Bike Safety Measures in Florida

As of December 2024, St. Lucie County has no specific regulations on e-bikes in the County Code of Ordinances. The City of Port Saint Lucie Code of Ordinances Section 96.60 prohibits the use of motorized bicycles and vehicles in parks, on boardwalks, sidewalks, athletic fields, courts, playgrounds, or other designated areas. This regulation does not apply to motorized wheelchairs. The City of Fort Pierce Code of Ordinances Section 38-39 prohibits the use of bicycles, which would include e-bikes, upon piers, docks or walkways within the City Marina.

Comparatively, other municipalities in Florida have adopted a range of approaches to managing e-bikes. The different rules and regulations imposed by local governments depend on several factors including how densely populated the area is and the local traffic patterns.

For example, some areas may have designated bike lanes for e-bike riders, while others regulate use and speed in certain areas. In Tampa, e-bikes are allowed on bike lanes and some shared-use paths, while Class 3 e-bikes are prohibited on sidewalks. Other municipalities have moved to prohibit e-bike usage all together. Sanibel Island, Fort Myers Beach, and the Village of Key Biscayne have banned the use of e-bikes within their jurisdictions. Other approaches to e-bike restrictions include Pinellas Beach banning of e-bikes on the sand, while St. Augustine and Sarasota restrict the use of e-bikes on the sidewalks in certain areas due to the large number of pedestrians and tourists.

Furthermore, some local governments are focusing on the speed and power of e-bikes moving Juno Beach to prohibit e-bikes powered with an electric motor of over 750 watts on sidewalks and bicycle paths.

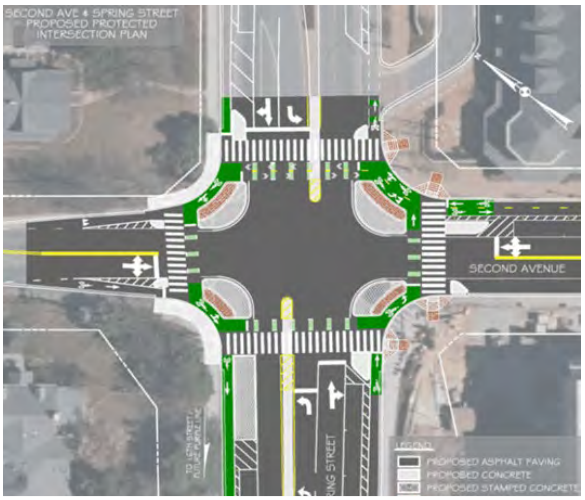
As such, residents and visitors must be educated and adhere to city-specific regulations regarding the use of e-bikes. The lack of uniformity can create confusion for both e-bike riders and motorists. Streamlining regulations could help ease the challenges associated with public awareness of safe e-bike usage.

6. E-Bike Safety Measures Nationwide

Although more stringent regulations on e-bikes could have some opposition, improved safety regulations and measures have proven to create a more enjoyable riding experience for e-bike users and those with which they share the roadway.

The City of Portland, Oregon is widely recognized as one of the most e-bike friendly cities in the Nation. The city boasts an extensive network of dedicated bike lanes, a strong bike-friendly culture, low-stress neighborhood greenways, and a thriving e-bike share program that offers a large fleet of readily available e-bikes. While Portland is often highly regarded as one of the most e-bike friendly communities, Oregon's e-bike laws are more stringent than Florida's laws. Oregon's laws focus on the safety factors of age, speed, and allowable riding surfaces. Much like Florida, Oregon has adopted the three-classification system of e-bikes.

However, a major difference between the States' laws is that Oregon law requires e-bike riders to be at least 16 years old. Oregon also regulates speed stating e-bikes must not exceed the speed limit for bicycles, which is 20 mph on roads and 15 mph on paths. E-bikes can be operated on bike paths and on roads open to motorized vehicles, but not on sidewalks. If there is no bicycle lane, e-bikes are permitted to ride in the travel lanes. One of the most impactful ways Portland has promoted e-bike safety is by providing the regulatory framework and physical infrastructure to create safe and separated riding spaces for e-bike users. The physical infrastructure includes separated bike lanes that are protected from vehicle traffic using physical barriers or curbs on roadways, and lanes that are clearly marked and wide enough to accommodate e-bikes. Designing bike-friendly intersections in heavily trafficked areas with features such as bike boxes, separate traffic signals for bikes, and clearly marked crosswalks further promote safety.



Protected Intersection, Montgomery County, Md.

By creating a more predictable traffic flow and prioritizing cyclist right-of-way, protected intersections help reduce the risk of collisions, particularly at busy or high-speed crossings. This example of a protected intersection design averts bike lane users from the need to merge with vehicular traffic at any point eliminating conflict points.

7. Public Awareness Campaigns

In conjunction with updating safety infrastructure, laws, and regulations, public awareness campaigns have the potential to play a crucial role in enhancing e-bike safety and educating riders and the public about the importance of safe riding practices and the unique risks associated with e-bike usage.

In April 2024, the Neptune Beach Police Department (NPBD) posted signs in efforts to stop the dangerous operation of e-bikes. The posted signs intend to ensure citizens are educated on proper traffic laws. As part of the Public Awareness Campaign, the Neptune Beach Police Department also made a Facebook post about the signs including information on traffic laws.

NBPD Regulatory Signs

It was noted anyone violating the rules are subject to a $62.50 fine. Neptune Beach residents seemed to support the Police Department efforts as comments on the Facebook post were mostly positive. Installing clear and informative wayfinding signage that directs e-bike riders to designated routes, bike lanes, and bike parking areas creates awareness of the presence of e-bikes for all roadway users. Ensuring that bike lanes, multi-use paths, and intersections are well-lit to improve visibility, regularly maintaining and cleaning these pathways, and improving connectivity between bike lanes, multi-use paths, and public transit options to create a seamless and accessible network, are all vital safety measures.

To increase safety awareness for young riders, Jupiter police initiated an educational campaign online, in the schools and in the streets. During the first week of the 2024 school year, the Jupiter police force performed special details around e-bike hot spots, specifically local schools, with the goal of educating young riders on the safe way of operating and riding on an e-bike.

The City of Palm Beach Gardens has a dedicated webpage for e-bike safety that offers safety tips and state and local law guidance on the use of e-bikes within the city.

Statewide, the Florida Pedestrian and Bicycle Safety Coalition promotes e-bike safety education by collaborating with community partners to share resources, enforce local ordinances, and advocate for e-bike safety in driver training programs. The Coalition also hosts workshops, distributes educational materials, launches social media campaigns, engages schools to include e-bike safety in their curriculum, and works with local media to highlight safe e-bike practices.

Additionally, the Florida Department of Transportation (FDOT) sponsors Community Traffic Safety Teams (CTST) that convene quarterly meetings that provide comprehensive e-bike safety recommendations, tips, and guidelines. The CTST offers infographic materials available for free on-line and can be distributed by community partners to educate the public on how to improve safety and encourage safe e-bike usage. Educating community partners on how to engage the public through these statewide public outreach efforts, fosters a safer environment for e-bike users across Florida.

8. Recommendations

To effectively address the increasing concerns regarding e-bike safety, the following recommendations are provided with regard to enhancing rider protection, infrastructure, and public awareness:

POLICY:

- Helmet Laws for all e-bike riders regardless of age.
- Speed Limits for e-bikes in specialized areas (school zones, residential areas, parks).
- Mandatory safety training and education programs.
- Age restrictions for e-bike riders.
- E-bike crash data collection improvements.

ENGINEERING:

- Separated bike lanes.
- Protected intersections.
- Clearly marked shared-use paths.
- Well maintained facilities.
- Regulatory & wayfinding signs.

ENFORCEMENT:

- Strengthen enforcement of laws.
- Impose penalties for violations.

EDUCATION:

- Public awareness campaigns.
- Safety training programs.

Addressing the safety concerns associated with the rising use of e-bikes is essential for creating a secure and efficient transportation system in Florida. Understanding and updating state and local laws as e-bike ridership continues to increase, improving infrastructure, and implementing comprehensive education and enforcement measures, can significantly enhance e-bike safety. A proactive approach to safety, can reduce crashes, injuries, and fatalities, ensuring a safer environment for all road users, both motorized and non-motorized.

The incidents involving e-bikes across Florida in 2024 alone highlight the urgent need for improved safety measures and heightened awareness to prevent further e-bike-related tragedies across the state. The rise in e-bike crashes resulting in fatalities and serious injuries underscores the importance of continuous efforts to enhance safety protocols and refine reporting methods. Accurate data on e-bike incidents is crucial for implementing effective safety measures and for local authorities to understand the extent of the issue.

Focusing on both infrastructure improvements and community education, can foster a safer environment for all transportation users. The outlined policy and infrastructure improvements, coupled with robust education and enforcement measures, form a comprehensive strategy for enhancing e-bike safety. Enforcing helmet laws, regulating speed limits, and implementing dedicated training programs, can significantly reduce the risk of accidents and injuries.

Infrastructure enhancements such as dedicated bike lanes, bike-friendly intersections, and improved signage will create a safer environment for e-bike riders. Moreover, public awareness campaigns will reinforce safe riding practices and responsible road-sharing. These combined efforts will not only protect e-bike riders but also foster a safer and more enjoyable transportation system for all road users.

St. Lucie Transportation Planning Organization

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AGENDA ITEM SUMMARY

Board/Committee:	Citizens Advisory Committee (CAC)
Meeting Date:	March 18, 2025
Item Number:	6e
Item Title:	Reimagine Mobility 2050 Long Range Transportation Plan (LRTP) Development
Item Origination:	2050 LRTP Development Process
UPWP Reference:	Task 3.1 – Long Range Transportation Planning
Requested Action:	Review and recommend adoption of the draft elements, recommend adoption with conditions, or do not recommend adoption.
Staff Recommendation:	It is recommended that the draft elements of the Reimagine Mobility 2050 LRTP be reviewed and recommended for adoption by the TPO Board based on the review.

Attachments

- Staff Report
- Reimagine Mobility 2050 LRTP Presentation

St. Lucie Transportation Planning Organization

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MEMORANDUM

TO: Citizens Advisory Committee (CAC)

THROUGH: Peter Buchwald
Executive Director

FROM: Yi Ding
Transportation Systems Manager

DATE: March 10, 2025

SUBJECT: Reimagine Mobility 2050 Long Range Transportation Plan (LRTP) Development

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BACKGROUND

At the meetings in November 2024, the Advisory Committees reviewed, commented, and recommended for approval the Scope of Services for the Reimagine Mobility 2050 LRTP that was prepared by the Corradino Group. Subsequently, the Scope of Services was approved by the TPO Board at their December meeting. Since then, several elements in the Scope of Services have been drafted for review, comments, and/or recommendations by the Advisory Committees.

ANALYSIS

The following elements will be presented for review, comments, and/or recommendations:

- Public Engagement: A combination of traditional public engagement tools and innovative outreach methods will be implemented to help ensure the greatest degree of public input, involvement, and education during the development of Reimagine Mobility 2050 LRTP.

- Study Area Review and Analysis: The Study Area Review and Analysis ensures the Reimagine Mobility 2050 LRTP is consistent with Federal and Florida Department of Transportation (FDOT) plans and requirements. In

addition, regional and local plans and initiatives were reviewed for consistency to ensure that projects and areas of emphasis identified by the local jurisdictions in the TPO area are included in the Reimagine Mobility 2050 LRTP. Transit routes and the St. Lucie Walk-Bike Network were reviewed to ensure a multimodal system planning being developed.

- Goals, Objectives, and Performance Measures: The vision for the Reimagine Mobility 2050 LRTP was drafted as “To reimagine an innovative, safe, and sustainable multimodal transportation”. The goals and objectives, which support achieving the vision, were developed by reviewing the Federal requirements, local plans, and the State long range transportation plan.

  Six goals are proposed which focus on the following issues:

  - Ø Support Economic Growth
  - Ø Improve Safety and Security
  - Ø Enhance Mobility Choices by Improving Connectivity/Accessibility
  - Ø Promote Environmental Sustainability and Disaster Resilience
  - Ø Embrace Technology and Innovation
  - Ø Maintain the Transportation System

  Objectives are proposed to support the goals and reflect desired outcomes and performance measures are proposed to enable the monitoring of progress toward achieving the outcomes.

- Land Use and Socioeconomic (SE) Data: As part of the development of the Reimagine Mobility 2050 LRTP, a travel demand model, known as the Treasure Coast Regional Planning Model Version 6 (TCRPM 6), is being used to project future throughput and traffic volumes. Inputs into this model include the Bureau of Economic and Business Research at the University of Florida (BEBR) high population and employment projections for the year 2050.

  A parcel-based land use allocation model, known as ULAM, was used to allocate the control total of 2050 population and employment to each traffic analysis zone (TZA) within the TPO area and ensure the consistency with the zoning and land use policies of the local jurisdictions. The initial Land Use and SE zonal data was reviewed by the planning staff of local agencies

during the coordination phase and subsequently updated based on the input provided.

- Preliminary Roadway Deficiencies: The updated SE data projections and the existing plus committed (E+C) network, which consists of those improvements in the TPO's recently adopted five-year Transportation Improvement Program (TIP) and in local jurisdictions' Capital Improvement Plans (CIPs), were input into the TCRPM 6 model to project future roadway deficiencies of the E+C network in the year 2050. A volume-to-capacity (V/C) ratio map was completed on the model output to identify those roadways of the E+C Network that potentially will be deficient in 2050. The roadways are considered to be deficient where the level of service (LOS) is projected to be worse than level "D", which generally is the adopted LOS of the local jurisdictions. The preliminary deficient roadways form the basis for the initial Needs Plan.

RECOMMENDATION

It is recommended that the draft elements of the Reimagine Mobility 2050 LRTP be reviewed and recommended for adoption by the TPO Board based on the review.

Reimagine MOBILITY 2050

St. Lucie TPO 2050 Long Range Transportation Plan

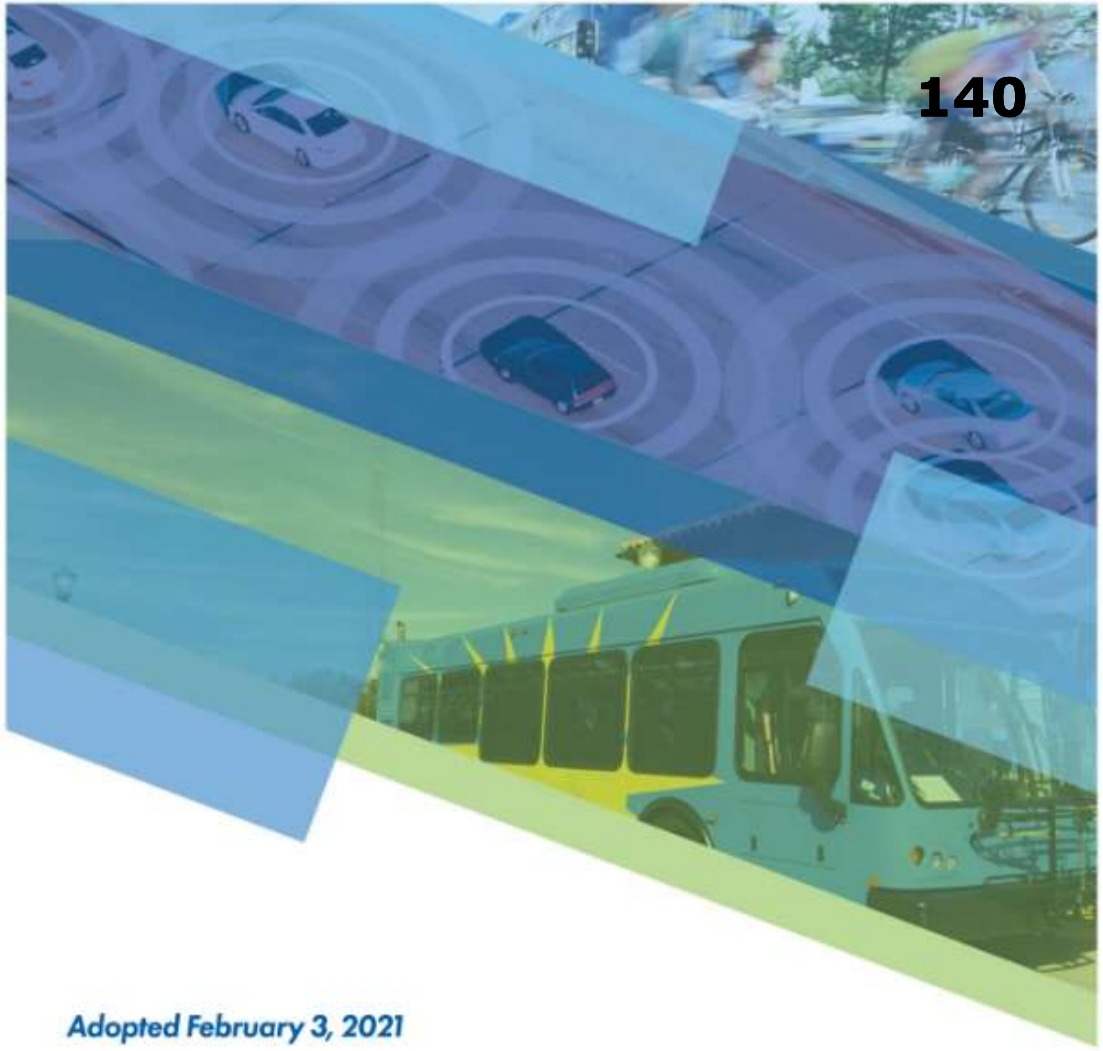
Presentation to the TPO Advisory Committees

2050 Long Range Transportation Plan Update Agenda

- Background
- Public Engagement
- Study Area Review
- Vision, Goals, Objectives & Performance Measures
- St. Lucie Socioeconomic (SE) Data
- 2050 Preliminary Roadway Deficiencies
- Next Steps

Background

- The 2050 Long Range Transportation Plan (LRTP) describes how St. Lucie County's multimodal transportation system will evolve over the next 25 years.
- 2050 LRTP is branded as *Reimagine Mobility 2050.*
- The St. Lucie Transportation Planning Organization (TPO) is required by federal law to review and update its transportation plan every five (5) years.
- The St. Lucie 2045 LRTP, referred to as *SmartMoves2045*, was adopted by the TPO Governing Board on February 3, 2021.



Public Engagement

- LRTP website
- Social media
- Innovative outreach methods
- Pop-up events
- In-person workshops
- Focus group presentations
- Regional coordination

Reimagine MOBILITY 2050

Public Engagement Survey

THE CORRADINO GROUP
Engineers • Planners • Program Managers • Environmental Scientists
Helping communities since 1970

St. Lucie TPO 2050
Long Range Transportation Plan

Reimagine MOBILITY 2050

What is Long Range Transportation Plan (LRTP)?

The Long-Range Transportation Plan (LRTP) is a key part of an agency's transportation planning process, outlining investment priorities over a 25-year horizon. The 2050 LRTP will act as a roadmap for transportation investments, focusing on mobility, safety, and infrastructure maintenance across modes like biking, walking, transit, and automobiles. It sets priorities for transportation projects to support future growth and meet the mobility needs of all users in St. Lucie County.

Participate in the process! Provide your input by taking the survey.

https://www.surveymonkey.com/r/3J7D7CX

Follow St. Lucie TPO's long-range transportation planning activities:
http://www.stlucietpo.org/

Contact
If you would like to contact the TPO with comments or questions regarding 2050 LRTP, Please use the following contact information:

Yi Ding
Transportation Systems Manager
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Email: dingy@stlucieco.org

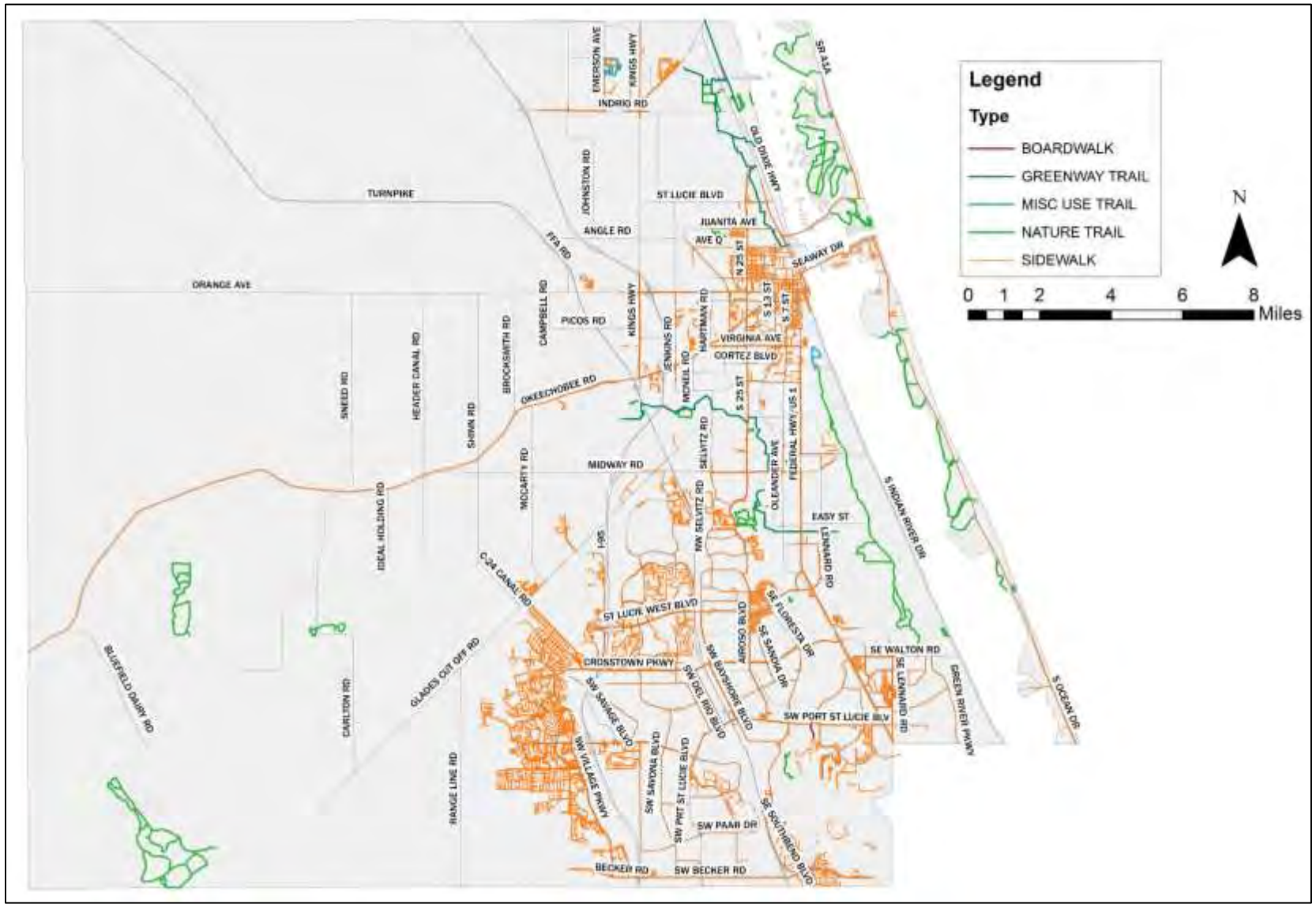
Study Area Data Review and Analysis

Major Studies under Review

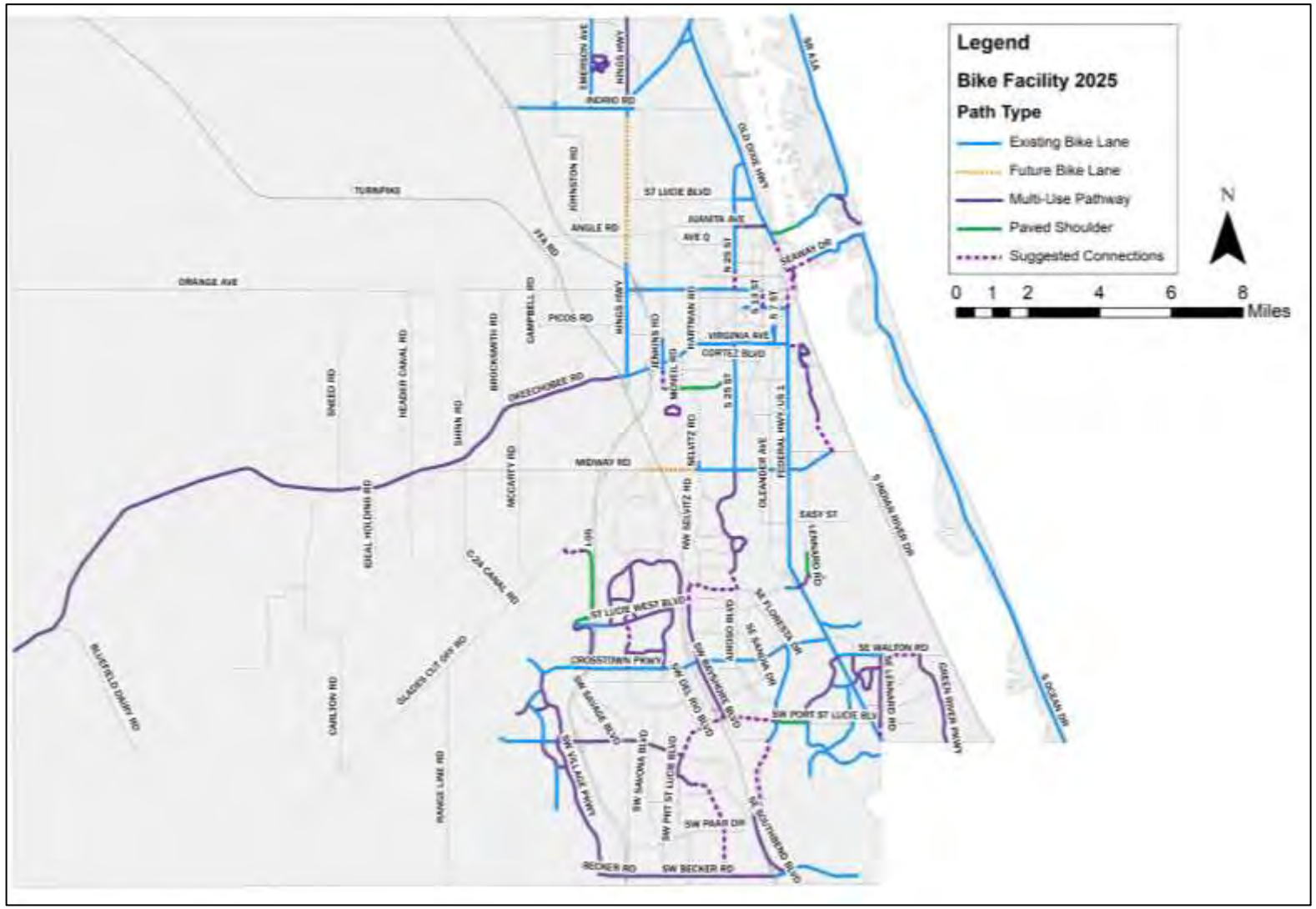
- 2055 Florida Transportation Plan
- Port St. Lucie Comprehensive plan (2020-2040)
- St. Lucie County Comprehensive plan (2020-2040)
- Fort Pierce Comprehensive Plan (2020-2030)
- Port St. Lucie Strategic plan FY 24-25
- St. Lucie County Strategic plan FY 2025
- Fort Pierce Strategic Plan FY 2025
- Smart Moves 2045
- Transit Development Plan FY 2025-34

St. Lucie Walk-Bike Network, 2025

Facility Type	Miles
8'-12' wide sidewalks	215
4'-6' wide sidewalks	769
Marked bike lanes	115
4-ft. wide paved shoulders	29
Unpaved hiking-biking trails	124
TOTAL	1,252



Bicycle Facilities, 2025



VISION

To Reimagine an Innovative, Safe, and Sustainable Multimodal Transportation System.

LRTP Goals


6. Maintain the Transportation System
1. Support Economic Growth
5. Embrace Technology and Innovation
2. Improve Safety and Security
4. Promote Environmental Sustainability and Disaster Resilience
3. Enhance Mobility Choices by Improving Connectivity/ Accessibility

Goal 1: Support Economic Growth

Objective	Performance Measure
1.1 Improve mobility of people on the transportation network	% of person-miles traveled on the interstate that are reliable
	% of person-miles traveled on the non-interstate NHS that are reliable
	% of uncongested roadway miles on NHS
	% of uncongested roadway miles on SHS
	Level of Travel Time Reliability (LOTTR) index on SHS
1.2 Improve mobility of goods on the transportation network	Combination truck miles traveled NHS
	Combination truck miles traveled SHS
	Combination truck hours of delay
	Truck Travel Time Reliability (TTTR) index

Goal 2: Improve Safety and Security

Objective	Performance Measure
2.1 Improve Safety and Security of Highway System	Number of fatalities
	Rate of fatalities
	Number of serious injuries
	Rate of serious injuries
2.2 Improve Safety and Security of Transit System	Total number of reportable fatalities
	Rate of reportable fatalities per total vehicle revenue miles by mode
	Total number of reportable injuries
	Rate of reportable injuries per total vehicle revenue miles by mode
	Total number of reportable safety events
	Rate of reportable safety events per total vehicle revenue miles by mode
	Mean distance between major mechanical failures by mode
2.3 Improve Safety and Security of Non-Motorized System	Non-motorized fatalities and serious injuries

Goal 3: Enhance Mobility Choices by Improving Connectivity/ Accessibility

Objective	Performance Measure
3.1 Improve multimodal access to public transit	% of roadways with transit that have sidewalks
3.2 Improve bicycle and pedestrian infrastructure	%pedestrian facility coverage
	%Bicycle facility coverage
3.3 Improve directness of freight hub connection	Combination truck miles traveled SIS
3.4 Improve roadway network connectivity	Total number of lane miles
3.5 Improve transit service	Transit passenger trips
	Transit revenue miles
3.6 Improve transit service in transportation underserved communities	% of low-income, older adults, or persons with disabilities withing 1/4 mile of transit route

Goal 4: Promote Environmental Sustainability and Disaster Resilience

Objective	Performance Measure
4.1 Limit impacts to natural resources like parks and preservation areas	# of additional roadway lane miles impacting environmentally sensitive areas
4.2 Promote disaster resilience by improving roadway conditions	% of roadway lane miles subject to sea level rise (NOAA Int High 2050)
4.3 Maintain mobility on evacuation routes	% of lane miles of evacuation routes within acceptable LOS

Goal 5: Embrace Technology and Innovation

Objective	Performance Measure
5.1 Increase the use of technological and/or operational strategies	% of miles with TSM&O strategic network deployment

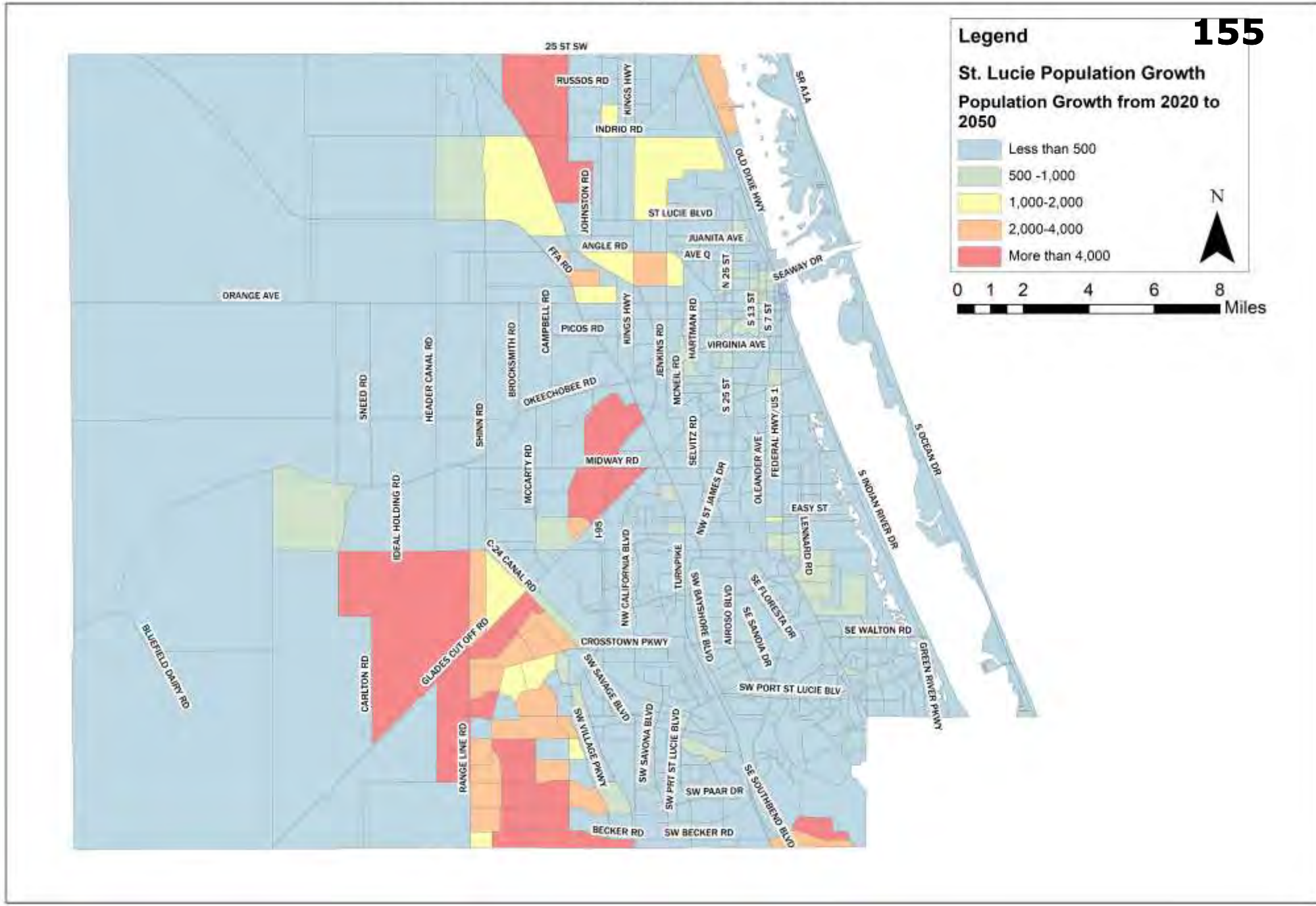
Goal 6: Maintain the Transportation System

Objective	Performance Measure
6.1 Address pavement in poor condition	% of pavements of the interstate system in good condition
	% of pavements of the interstate system in poor condition
	% of pavements of the non-interstate NHS in good condition
	% of pavements of the non-interstate NHS in poor condition
	%NHS bridges classified as good condition
	%NHS bridges classified as poor condition
6.2 Address transit assets	Rolling stock-percent of revenue vehicles that have either met or exceeded their useful life benchmark
	Equipment - Percentage of non-revenue, support-service and maintenance vehicles that have met or exceeded their useful life benchmark
	Percentage of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) scale

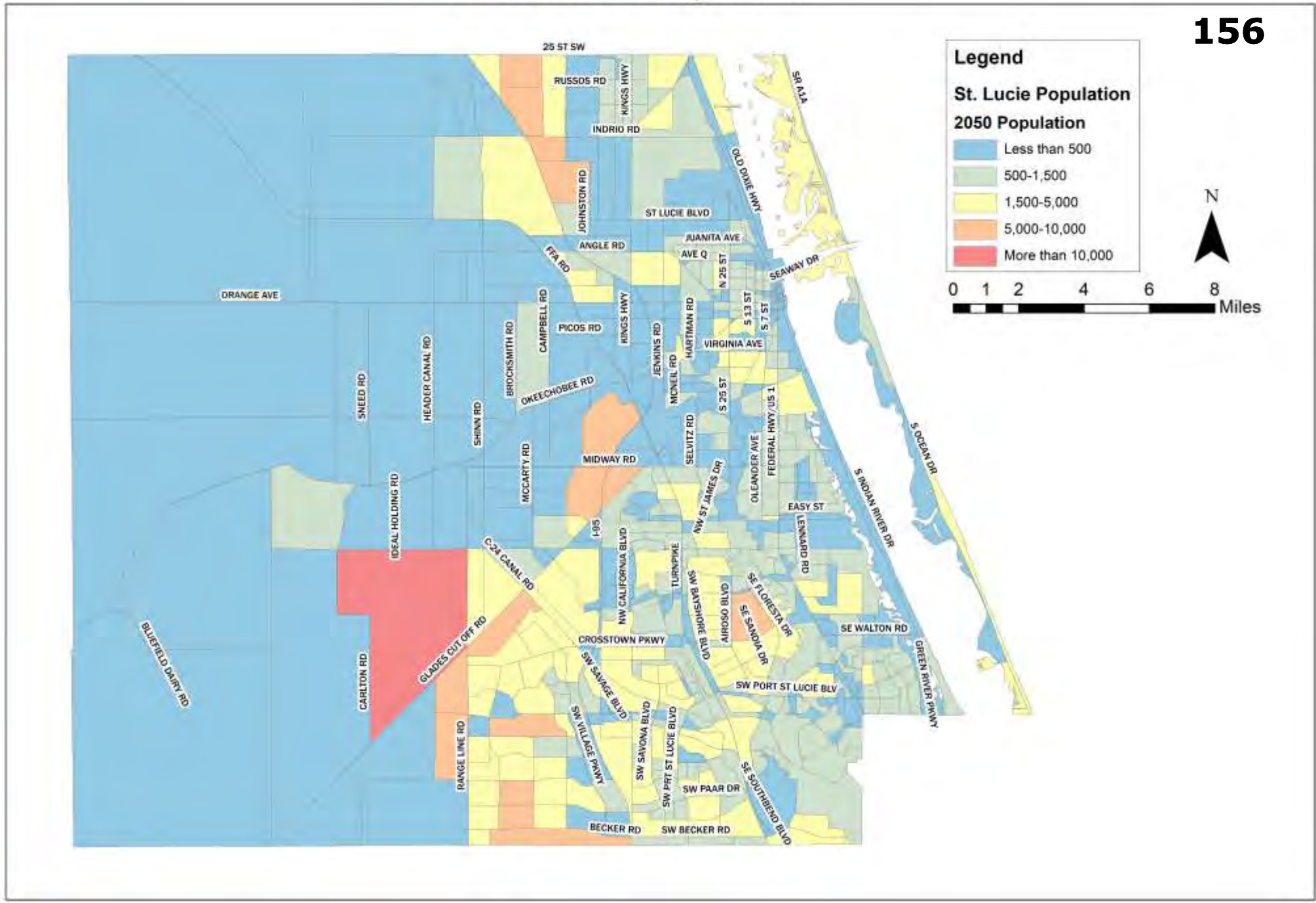
Socioeconomic Data

	Population	Households (Dwelling Units)	Employment
2020	326,451	128,998	133,019
2050	655,403	274,724	266,471
Total Growth	328,952	145,726	133,452
% Growth	101%	113%	100%

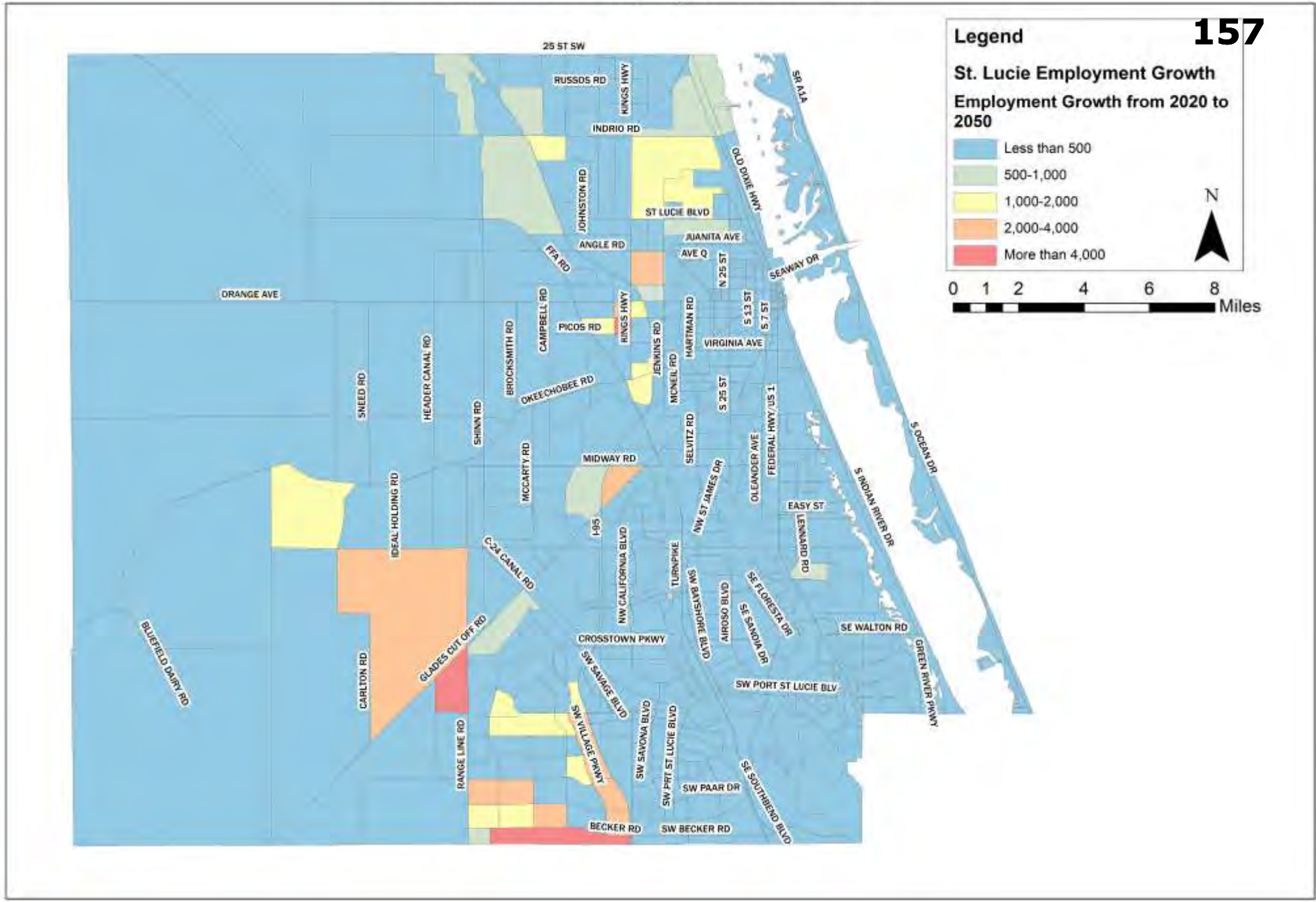
Population Growth from 2020 to 2050



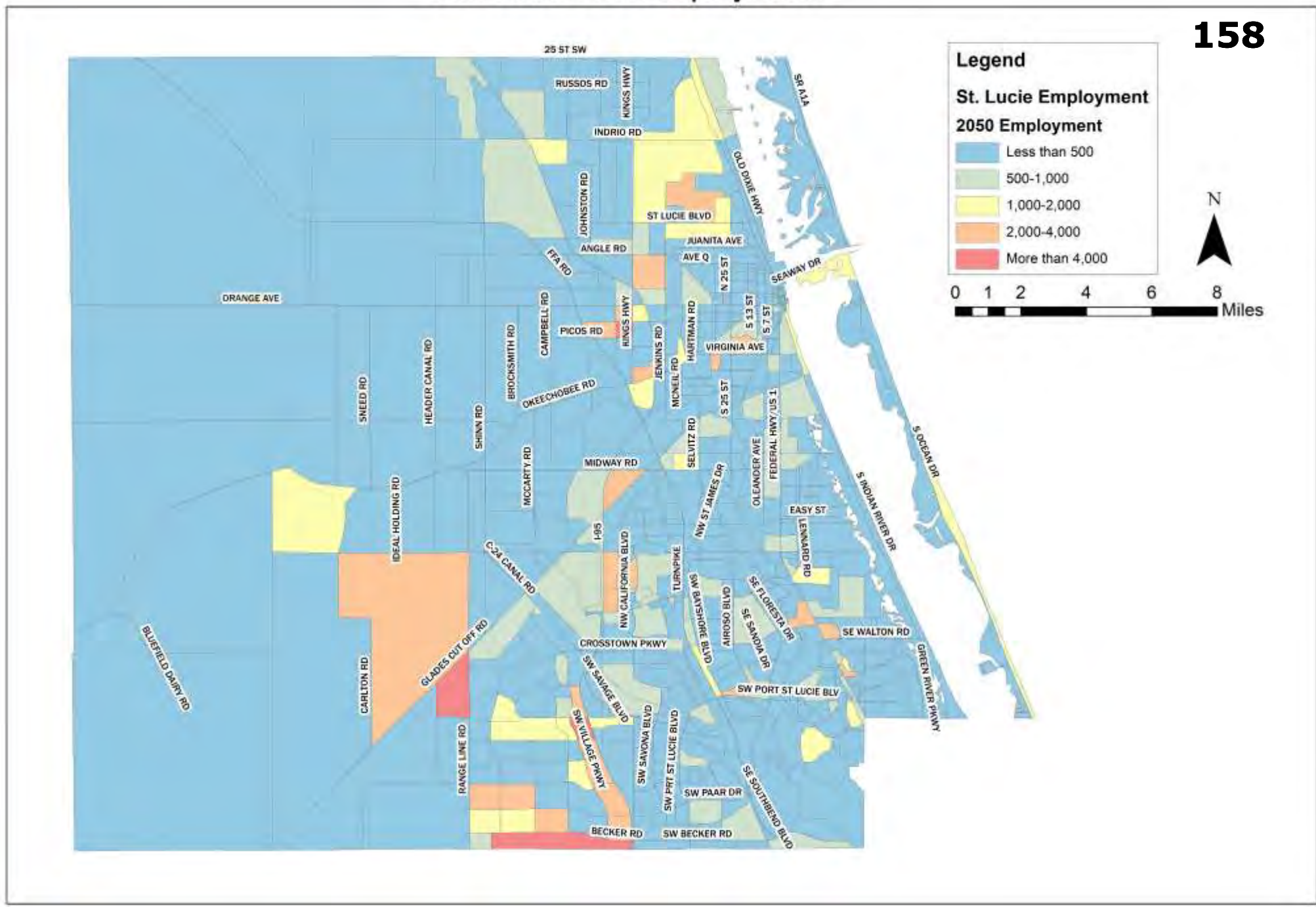
2050 Population



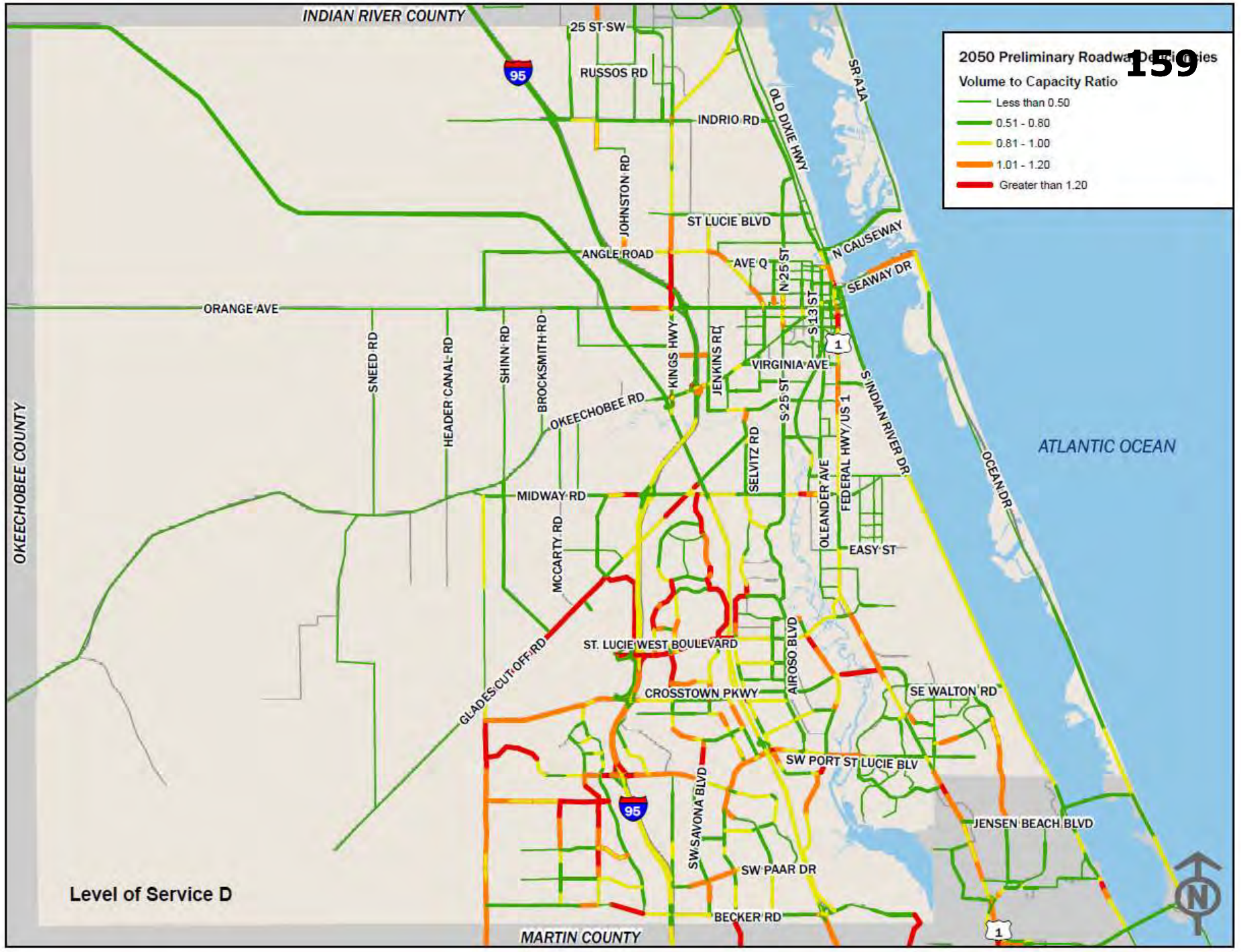
Employment Growth from 2020 to 2050



2050 Employment



2050 Preliminary Roadway Deficiencies



Next Steps

Compile Transportation Issues

- Public engagement/workshop/agency coordination
- Understand the issues of the community
- From objective analysis covering all major goals
  - Mobility, safety, accessibility, sustainability, operational, and system preservation

Prepare the Needs Assessment

- Multimodal transportation project bank development based on local needs
- Not fiscally constrained yet
- This will serve as the basis for the fiscally constrained plan

Approval Items

- Goals, Objectives, and Performance Measures
- Land Use and Socioeconomic Data

Thank You!

Participate in the process! Provide your input by taking the survey.

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:	Citizens Advisory Committee (CAC)
Meeting Date:	March 18, 2025
Item Number:	6f
Item Title:	Federal Certification Review Public Meeting
Item Origination:	Unified Planning Work Program (UPWP) and Federal Regulations
UPWP Reference:	Task 1.1: Program Management
Requested Action:	Approve the St. Lucie TPO transportation planning process, approve with conditions, or do not approve.
Staff Recommendation:	It is recommended that the St. Lucie TPO transportation planning process be reviewed and approved based on the review.

Attachment

- Staff Report

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: Citizens Advisory Committee (CAC)

THROUGH: Peter Buchwald
Executive Director

FROM: Marceia Lathou
Transit Program Manager

DATE: March 11, 2025

SUBJECT: Federal Certification Review Public Meeting

BACKGROUND

Every four years, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) conduct a review of the St. Lucie TPO to certify that the TPO conducts its comprehensive, cooperative, and continuing transportation planning process in accordance with Federal laws and regulations. The TPO completed its last Federal certification in 2021. No corrective actions were identified, recommendations were provided, and the TPO received commendations for several noteworthy practices. The recommendations and noteworthy practices from 2021 are summarized as follows:

Recommendations:

- Transit: The Federal Review Team recommends the TPO and the St. Lucie County Transit Division coordinate to explore opportunities to provide remaining funding towards construction of the County's proposed Treasure Coast Transit Center operations/maintenance facility.

- Transit: The Federal Review Team recommends continued coordination between the TPO, the St. Lucie County Transit Division, and FDOT on performance measures.

Noteworthy Practices:

- Transit: The Federal Review Team commended the TPO and the St. Lucie County Transit Division for their continued strong partnering efforts.

- Transit: The Federal Review Team commended the TPO and the St. Lucie County Transit Division for working together to establish multimodal mobility strategies.

- Freight: The Federal Review Team commended the TPO for its active role in freight planning and its coordination with the FDOT District 4 freight coordinator.

- Outreach and Public Participation: The Federal Review Team was impressed with how the TPO identifies, collects, analyzes, and displays its outreach data, providing transparency in decision making as well as measuring the performance of its public involvement.

- Congestion Management Process: The Federal Review Team commended the TPO for taking a leadership role in strategically and tactically visioning for arterial control.

ANALYSIS

The Quadrennial Federal Certification Review is underway to review and evaluate the St. Lucie TPO transportation planning process to determine if the process meets the requirements of applicable provisions of Federal law. The Review generally consists of a site visit by Federal staff, a review of planning documents in advance of the site visit, the development and issuance of a Federal Certification Report, and a closeout presentation to the TPO Board.

Input from the community is an important part of the Federal Certification Review process, and opportunities are provided for public involvement during the Review. The opportunities include Federal Certification Public Meetings at TPO Board and Committee Meetings. Surveys will be conducted at the Public Meetings to review the St. Lucie TPO transportation planning process. In addition, the community is invited to share its views of the process through online methods.

RECOMMENDATION

It is recommended that the St. Lucie TPO transportation planning process be reviewed and approved based on the review.