



**TECHNICAL ADVISORY COMMITTEE MEETING**

Martin County Administrative Center  
4th Floor Workshop Room  
2401 SE Monterey Road, Stuart, FL 34996  
[www.martinmpo.com](http://www.martinmpo.com)  
(772) 221-1498

**Monday, February 5, 2024 @ 1:30 PM**

**AGENDA**

<b><u>ITEM</u></b>	<b><u>ACTION</u></b>
<b>1. CALL TO ORDER</b>	
<b>2. ROLL CALL</b>	
<b>3. APPROVE AGENDA</b>	<b>APPROVE</b>
<b>4. APPROVE MINUTES</b> <ul style="list-style-type: none"><li>• TAC Meeting – September 6, 2023 (pg. 4)</li></ul>	<b>APPROVE</b>
<b>5. COMMENTS FROM THE PUBLIC</b> (PLEASE LIMIT YOUR COMMENTS TO THREE MINUTES; COMPLETE CARD TO COMMENT)	
<b>6. AGENDA ITEMS</b>	
<b>A. ELECTION OF OFFICERS (pg. 10)</b>	<b>APPROVE</b>
<b>B. TRANSPORTATION IMPROVEMENT PROGRAM (TIP) AMENDMENT #3 (pg. 12)</b>	<b>APPROVE</b>
<b>C. PUBLIC INVOLVMENT ANNUAL REPORT - 2023 (pg. 15)</b>	<b>APPROVE</b>
<b>D. DRAFT FY26-FY30 LIST OF PROJECT PRIORITIES (LOPP) (pg. 34)</b>	<b>APPROVE</b>
<b>E. TRANSPORTATION ALTERNATIVES PROGRAM (TAP) PROJECT APPLICATIONS (pg. 36)</b>	<b>APPROVE</b>

- F. 2050 LONG RANGE TRANSPORTATION PLAN (LRTP)  
SCOPE OF SERVICES (pg. 51) APPROVE**
- G. TRANSIT DEVELOPMENT PLAN (TDP) PROGRESS  
REPORT UPDATE (pg. 69) APPROVE**
- H. FLORIDA DEPARTMENT OF TRANSPORTATION  
(FDOT) MONTEREY ROAD GRADE SEPARATION  
AT FEC RAILROAD CROSSING PD&E  
PRESENTATION (pg. 175) INFORMATION**
- I. DEVELOPMENT REVIEW INTERACTIVE MAP  
UPDATE (pg. 186) INFORMATION**
- 7. COMMENTS FROM COMMITTEE MEMBERS**
- 8. NOTES**
- 9. NEXT MEETING**
- TAC – April 3, 2024
- 10. ADJOURN**



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**METROPOLITAN PLANNING ORGANIZATION  
TECHNICAL ADVISORY COMMITTEE (TAC) MEETING**

Martin County Administration Building 4<sup>th</sup> Floor Workshop Room  
2401 SE Monterey Road, Stuart, FL 34996

[www.martinmpo.com](http://www.martinmpo.com)

(772) 221-1498

**Wednesday, September 6, 2023 @ 1:30 PM**

**MINUTES**

**CALL TO ORDER**

The meeting was called to order at 1:45 PM by Lisa Wichser.

**ROLL CALL** - Peggy Brassard called roll.

**TAC Members in Attendance:**

Lisa Wichser, Chair  
Dr. Kim DeLaney, Vice Chair  
Robert Daniels  
Stuart Trent  
Peter Kunen  
Ashman Beecher  
Andrew McBean

**TAC Members Excused:**

Taryn Kryzda

**TAC Members Not in Attendance:**

Mark Cocco  
Samantha Lovelady  
Milton Leggett  
Ken DeAngeles

**Staff in Attendance:**

Beth Beltran, MPO Administrator  
Ricardo Vazquez, Senior Planner  
Joy Puerta, Planner  
Lucine Martens, Planner  
Peggy Brassard, Transit Specialist - Mobility Coordinator

**Others in Attendance:**

George Dzama, Deputy Public Works Director  
Tony Norat, FDOT  
Kelly Budhu, FDOT

Victoria Williams, FDOT-Turnpike  
Todd Schimelfanick, Martin County Sheriff's Office  
Jeff Weidner, Marlin Engineering  
Lauren Boshell, Airport Operations Coordinator  
Gerald Bolden, The Corradino Group  
Stewart Robertson, Kimley-Horn

**A quorum was present.**

### **3. APPROVE AGENDA**

**A motion to approve the agenda was made by Robert Daniels and was seconded by Dr. Kim DeLaney. The motion passed unanimously.**

### **4. APPROVE MINUTES**

- TAC Meeting – June 5, 2023

**A motion to approve the Meeting Minutes of June 5, 2023 was made by Robert Daniels and was seconded by Dr. Kim DeLaney. The motion passed unanimously.**

### **5. COMMENTS FROM THE PUBLIC – None**

### **6. AGENDA ITEMS**

Beth Beltran, MPO Administrator, noted that today's meeting would be Lisa Wichser's last meeting and presented her with flowers. Ms. Beltran and Dr. DeLaney spoke high praises of Ms. Wichser.

#### **A. FY24 - FY28 TRANSPORTATION IMPROVEMENT PLAN (TIP) ROLL-FORWARD AMENDMENT #1**

Beth Beltran, MPO Administrator, sought approval of the FY24 Martin MPO Roll Forward Report Amendment #1. The Roll-Forward funds will be added to the TIP, after being approved and signed by the MPO Policy Board Chairman. The Roll-Forward Amendment will be submitted to FDOT before the October 1, 2023, effective date. MPO staff recommended approval.

**A motion to approve the Final Draft FY24-FY28 Transportation Improvement Program (TIP) Roll-Forward Amendment #1 was made by Robert Daniels and was seconded by Peter Kunen. The motion passed unanimously.**

## **B. FY23/24 UNIFIED PLANNING WORK PROGRAM (UPWP) REVISION 2 / AMENDMENT #1**

Beth Beltran, MPO Administrator, shared with the Committee the UPWP Revision #2, Amendment #1. This amendment is required since the MPO is increasing the budget by \$150,963.00. MPO staff recommends that this increase in funding be added to Task 4 - Consultant "2050 Long Range Transportation Plan" line item and Task 6 - Transportation Systems Planning Consultant "Bicycle and Pedestrian Facility Map" line item. MPO staff recommended approval.

**A motion to approve the FY23/24 Unified Planning Work Program (UPWP) Revision #2 / Amendment #1 was made by Dr. Kim DeLaney and was seconded by Robert Daniels. The motion passed unanimously.**

## **C. FY24 - FY28 TIP MODIFICATIONS**

Ricardo Vazquez, MPO Senior Planner, shared with the Committee the four (4) modifications requested by The Florida Department of Transportation (FDOT) to the MPO's FY24 - FY28 Transportation Improvement Program (TIP). MPO staff recommended approval.

**A motion to approve the FY24 - FY28 TIP Modifications was made by Robert Daniels and was seconded by Peter Kunen. The motion passed unanimously.**

## **D. US-1 AT SW PALM CITY ROAD INTERSECTION FEASIBILITY STUDY - ALTERNATIVES**

Joy Puerta, MPO Planner, introduced Gerald Bolden from The Corradino Group who appeared remotely. Gerald Bolden explained the scope of services which includes identifying and evaluating conceptual alternatives and gathering input from the public and relevant stakeholders to recommend an alternative to eliminate the uncontrolled right turn from southbound US-1 onto southbound SW Palm City Road and deter traffic from using SW Palm City Road. Gerald Bolden showcased a PowerPoint presentation that provided visual aids and the pros and cons of each alternative. Additionally, two public workshops were hosted to gather feedback from the public who preferred alternative five (5) and heavily supported the traffic calming options from the Complete Streets: Access to Transit Study.

A lengthy discussion took place over the alternatives and the feedback from the public. The Technical Advisory Committee (TAC) ultimately opted to support alternative five (5) with traffic calming.

**A motion to approve the US-1 at SW Palm City Road Intersection Feasibility Study Alternative 5 was made by Dr. Kim DeLaney with a comment requesting MPO Staff add an illustration of the crosswalks and the pedestrian pathways. The motion was**

**seconded by Robert Daniels with a comment to request the inclusion of a traffic control device. The motion passed unanimously.**

#### **E. DRAFT 2045 REGIONAL LONG RANGE TRANSPORTATION PLAN (RLRTP)**

Beth Beltran, MPO Administrator, introduced Stewart Robertson with Kimley-Horn & Associates who presented the draft for the 2045 Regional Long Range Transportation Plan (RLRTP). Stewart Robertson explained the new updates and improvements to the RLRTP. The five goals for the plan are to provide a safe and connected multi-modal transportation system for the regional movement of people and goods; to support the economic prosperity of the region through targeted equitable transportation investments; to protect the region's natural and social environment while minimizing impacts to local communities; to continue to conduct the coordinated regional planning and decision-making process; and to protect and enhance the unique quality of life in the Treasure Coast region. Stewart Robertson also introduced the new tiered scoring system which will consist of three (3) tiers, with Tier 1 projects being the highest priority. The next steps for the Draft 2045 RLRTP are to present it to the individual MPOs, the Treasure Coast Technical Advisory Committee (TCTAC), and the Treasure Coast Transportation Council (TCTC) for adoption. MPO staff recommended approval.

**A motion to approve the Draft 2045 Regional Long Range Transportation Plan (RLRTP) was made by Robert Daniels and was seconded by Peter Kunen. The motion passed unanimously.**

#### **F. TRANSIT EFFICIENCY STUDY FINAL REPORT**

Lucine Martens, MPO Planner, introduced Jeff Weidner of Marlin Engineering who presented a PowerPoint on the Transit Efficiency Study Final Report. The Martin MPO's FY22/23 – FY23/24 Unified Planning Work Program (UPWP) identifies the Transit Efficiency Study (TES). The purpose of this study was to describe the existing MARTY system (services and ridership); as well as review the adopted Transit Development Plan (TDP), socioeconomic trends, and travel patterns. The Transit Efficiency Study Final Report identifies various Transit Network Scenarios (some looking at ridership, some looking at coverage, and some a combination of both ridership and coverage scenarios (hybrid scenario), and the cost analysis for these scenarios.

**A motion to approve the Transit Efficiency Study Final Report was made by Ashman Beecher and was seconded by Andrew McBean. The motion passed unanimously.**

#### **G. PROFESSIONAL ASSISTANCE SUPPORT TASK SCOPE OF SERVICES**

Lucine Martens, MPO Planner, requested approval of a Scope of Services for Professional Assistance Support. The adopted FY23 - FY24 Unified Planning Work

Program (UPWP) specifies that the MPO will obtain one or more General Planning Consultants (GPCs) to provide assistance to staff on a task order basis. This task order provides four (4) additional Open Houses or Listening Sessions in addition to the previous two (2) that were approved with the TDP for a total of six (6) that would cover all five Commission Districts in Martin County. The MPO will use its General Planning Consultants, Marlin Engineering, Inc. and their sub-consultant Kittelson & Associates for this work effort.

**A motion to approve the Professional Assistance Support Task Scope of Services was made by Dr. Kim DeLaney and was seconded by Andrew McBean. The motion passed unanimously.**

#### **H. HOBE SOUND NORTH CORRIDOR SUN TRAIL FEASIBILITY STUDY - FINAL REPORT**

Joy Puerta, MPO Planner, introduced Jeff Weidner with Marlin Engineering who presented the background of the project, public engagement, stakeholder engagement, and the final report for the Hobe Sound North Corridor Sun Trail Feasibility Study. Jeff Weidner explained how they were directed to focus on the west side of the US-1 corridor and how it was the most popular option as there is plenty of right of way. The SUN Trail will cost \$1.55 million per mile, this includes all the earthwork, drainage, and signage. MPO staff recommended approval.

**A motion to approve the Hobe Sound North Corridor SUN Trail Feasibility Study - Final Report was made by Dr. Kim DeLaney and was seconded by Robert Daniels. The motion passed unanimously.**

**7. COMMENTS FROM COMMITTEE MEMBERS – None**

**8. NOTES – None**

**9. NEXT MEETING**

- Joint TAC/CAC/ BPAC Meeting – October 16, 2023 @ 1:30 PM

**ADJOURNMENT: 3:28 P.M.**

**Prepared by:**

\_\_\_\_\_  
Anthony O'Neill-Butler, Administrative Assistant

\_\_\_\_\_  
Date

**Approved by:**

\_\_\_\_\_  
Lisa Wichser, Chair

\_\_\_\_\_  
Date

**Minutes Approved on February 5, 2024**

DRAFT

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**TECHNICAL ADVISORY COMMITTEE (TAC) MEETING  
AGENDA ITEM SUMMARY**

<b>MEETING DATE:</b> February 5, 2024	<b>DUE DATE:</b> January 29, 2024	<b>UPWP#:</b> 1
<b>WORDING:</b> ELECTION OF OFFICERS		
<b>REQUESTED BY:</b> MPO	<b>PREPARED BY:</b> Ricardo Vazquez / Beth Beltran	<b>DOCUMENT(S) REQUIRING ACTION:</b> TAC Chair; TAC Vice-Chair

**BACKGROUND**

In accordance with Section 1.03 B. (2) of the MPO Bylaws, Standing Committee Officers “shall be elected at the first meeting of the Calendar year. The Chairman and Vice-Chairman shall serve for a period of one year or until a successor is elected and shall be voting members.” According to Section 1.03 B. (3), “The Chairman shall call and preside at all meetings. The Vice-Chairman shall serve as Chairman in the absence of the Chairman.” As stated in Section 1.02 C. (1), all MPO meetings will need to be conducted according to Robert’s Rules of Order.

**ISSUES**

At the February 2024 advisory committee meetings, committee members shall nominate and elect a Chair and a Vice-Chair.

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**RECOMMENDED ACTION**

Move appointment of \_\_\_\_\_ as TAC Chair and \_\_\_\_\_, as TAC Vice-Chair.

**APPROVAL**

MPO

**ATTACHMENTS**

MPO Bylaws Excerpt



(3) Meetings of the TCTC shall be hosted by the Martin MPO, Indian River MPO, and the St. Lucie Transportation Planning Organization (TPO) on a rotation basis.

(4) The **Treasure Coast Technical Advisory Committee (TCTAC)** – The function of the Treasure Coast Technical Advisory Committee is to provide technical and citizen input on regional transportation planning activities related to regional plan amendment activities and regional project prioritization and funding activities.

The TCTAC consists of representatives from the Martin MPO, the Indian River MPO, and the St. Lucie TPO. The TCTAC is comprised of seven total members; two representatives from each T/MPO, and an FDOT representative.

The TCTAC would be scheduled to meet prior to any Treasure Coast Transportation Council Meetings. These meetings shall be hosted by the three MPOs on a rotation basis.

### 1.03 COMMITTEES

#### A. *Standing Committees*

(1) There are hereby created three standing committees, which shall be advisory committees to the governing board of the MPO. These advisory committees are the Technical Advisory Committee (TAC), the Citizens Advisory Committee (CAC) and the Bicycle and Pedestrian Advisory Committee (BPAC).

#### B. *Operation*

(1) Committee Members having three consecutive unexcused absences in succession or four unexcused absences in the previous 12 months, will require a replacement or reappointment by the MPO, except as noted below. The active roster shall be comprised of committee members who have not had three consecutive unexcused absences in succession or four unexcused absences in the previous 12 months.

(a) For the Citizens Advisory Committee and the Bicycle and Pedestrian Advisory Committee, seasonal residents may serve any resident appointment. Seasonal residents, if so declared upon their appointment, shall be required to attend at least three meetings per year between September and May.

(2) **Officers – A Chairman and Vice Chairman shall be elected at the first meeting of the Calendar year. The Chairman and Vice Chairman shall serve for a period of one year or until a successor is elected and shall be voting members.**

(3) **Chairman – The Chairman shall call and preside at all meetings. The Vice Chairman shall serve as Chairman in the absence of the Chairman.**



**TECHNICAL ADVISORY COMMITTEE (TAC) MEETING  
AGENDA ITEM SUMMARY**

<b>MEETING DATE:</b> February 5, 2024	<b>DUE DATE:</b> January 29, 2024	<b>UPWP#:</b> 5
<b>WORDING:</b> FY24–FY28 TRANSPORTATION IMPROVEMENT PROGRAM (TIP) – AMENDMENT #3		
<b>REQUESTED BY:</b> FDOT	<b>PREPARED BY:</b> Ricardo Vazquez / Beth Beltran	<b>DOCUMENT(S) REQUIRING ACTION:</b> FY24- FY28 TIP Amendment #3

**BACKGROUND**

The Florida Department of Transportation (FDOT) requests an amendment to the FY24 – FY28 Transportation Improvement Program (TIP). This amendment is required because a project was added to the TIP.

The project being added is the SR-710 at CR-714 Realignment Project (FM# 447555-1). FDOT had funded Design and ROW in FY24.

**ISSUES**

At the February 2024 MPO advisory committee meetings, MPO staff will present the FY24 – FY28 TIP Amendment #3.

**RECOMMENDED ACTION**

- Approve FY24 – FY28 TIP Amendment #3
- Approve FY24 – FY28 TIP Amendment #3 with comments

**APPROVAL**

MPO

**ATTACHMENTS**

- FY24 – FY28 TIP Amendment Request Letter (FM# 447555-1)
- FM# 447555-1 TIP Page



**Florida Department of Transportation**

**RON DESANTIS**  
GOVERNOR

3400 West Commercial Boulevard  
Fort Lauderdale, FL 33309

**JARED W. PERDUE, P.E.**  
SECRETARY

January 26, 2024

Ms. Beth Beltran  
MPO Administrator  
Martin Metropolitan Planning Organization  
3481 SE Willoughby Blvd., Suite 101  
Stuart, FL 34994

**SUBJECT: Martin Metropolitan Planning Organization  
TIP Amendment Request FY 2023/24 – 2027/28  
SR-710/SW WARFIELD BOULEVARD AT CR-714/SW MARTIN HIGHWAY**

Dear Ms. Beltran:

Pursuant to *Part IV – Chapter 5: Statewide and Local Transportation Improvement Programs (STIP and TIP) of the Work Program Instructions*, the Florida Department of Transportation (FDOT) requests your processing and approval of the attached amendment to the FY 2023/24 – 2027/28 Transportation Improvement Program.

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

This project is consistent with the goals of the Martin Metropolitan Planning Organization’s Long-Range Transportation Plan. The TIP remains financially constrained. A State Transportation Improvement Program (STIP) Amendment is required.

The TIP amendment is as follows:

PROPOSED	FM#	Project Name		Project Description
	447555-1	SR-710/SW WARFIELD BOULEVARD AT CR-714/SW MARTIN HIGHWAY		2024 MPO PRIORITY #3 G/W 447555.2; INCLUDES RELOCATION OF CR-714 TO SE 126 BLVD B/C RATIO = 4.3 1) FLATTEN THE HORIZONTAL CURVE ON CR-714 2) CONVERT THE EXISTING STOP CONTROLLED INTERSECTION SR 710 SE 126 BLVD
	Phase	Fund	FY 2024	
	PE	ACSS	\$43,384	
	PE	SU-STP	\$491,545	
	Phase	Fund	FY 2024	
	ROW	ACSS	\$22,000	
	ROW	SA-STP	\$18,000	
<b>TOTAL</b>			<b>\$574,929</b>	

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

Sincerely,  
DocuSigned by:  
  
Kelly Placencia #7964C2...  
MPO Liaison  
FDOT – District 4





**TECHNICAL ADVISORY COMMITTEE (TAC) MEETING  
AGENDA ITEM SUMMARY**

<b>MEETING DATE:</b> February 5, 2024	<b>DUE DATE:</b> January 29, 2024	<b>UPWP#:</b> 2
<b>WORDING:</b> PUBLIC INVOLVMENT ANNUAL ANNUAL REPORT - 2023		
<b>REQUESTED BY:</b> MPO	<b>PREPARED BY:</b> Ricardo Vazquez / Beth Beltran	<b>DOCUMENT(S) REQUIRING ACTION:</b> Public Involvement Plan Annual Report - 2023

**BACKGROUND**

The MPO Public Participation Plan (PPP) is a guiding document to help ensure public input is considered during the transportation planning process. To this end, the Martin MPO Annual Report evaluates the MPO’s success in meeting the objectives and strategies outlined in the PPP.

**ISSUES**

MPO Staff has reviewed the PPP and has no recommended changes at this time. At the February 2024 advisory committee meetings, MPO staff will present the 2023 PPP Annual Report for discussion and approval.

**RECOMMENDED ACTION**

- Approve the PPP Annual Report - 2023 as presented.
- Approve the PPP Annual Report - 2023 with comments.

**APPROVAL**

MPO

**ATTACHMENTS**

Public Participation Plan Annual Report - 2023



# Public Involvement Annual Report 2023



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# **PUBLIC INVOLVEMENT ANNUAL REPORT 2023**

## **Introduction**

Each year, the Martin Metropolitan Planning Organization (MPO) assesses the effectiveness of its public outreach techniques and strategies to ensure that funds and time are invested efficiently and only after consultation with the public on a regular and as-needed basis. The MPO measures its overall performance by conducting a Public Involvement Annual Report. In doing so, the MPO evaluates the Objectives and Strategies detailed in the MPO’s Public Participation Plan (PPP), adopted on February 21, 2022.

This Annual Report aims to showcase the MPO’s public involvement efforts in 2023 and review the objectives and strategies listed in the PPP to assess if/when they were met during the 2023 calendar year. To access the previously approved 2022 Public Involvement Annual Report, visit [www.martinmpo.com](http://www.martinmpo.com).





**Hobe Sound North Corridor SUN Trail Feasibility Study Open House at Hobe Sound Civic Center – 1/11/23**



**US-1 at SW Palm City Road Intersection Feasibility Study Open House at Stuart City Hall – 3/8/23**





**Transit Efficiency Study Open House  
Robert Morgade Library – 3/29/23**



**Bike to School Day at Crystal Lake Elementary – 5/17/23**





**US-1 at SW Palm City Road Intersection Feasibility Study Open House at Flagler Place – 8/8/23**



**Walk to School Day at J.D. Parker Elementary - 10/4/23**





**Florida Department of Transportation (FDOT) Mobility Week  
Art Walk Event in Downtown Stuart - 11/3/23**

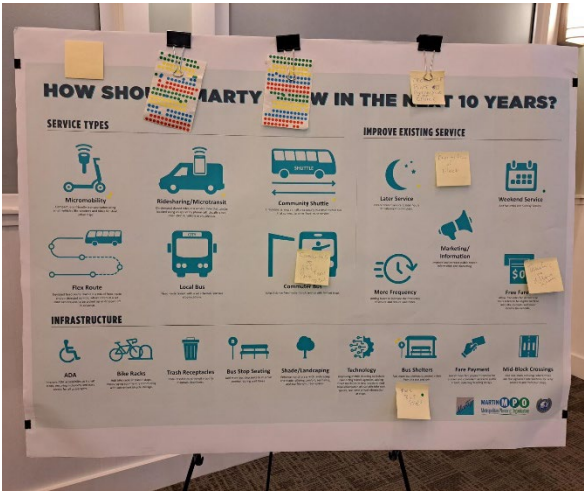


**Transit Development Plan (TDP) Open House in  
Golden Gate – 12/6/23**





TDP Open House in Downtown Jensen – 12/7/23



Public Participation Plan Objectives

OBJECTIVE 1



Advisory Committee Meetings

Hold regular public meetings with MPO advisory committees to obtain feedback on all documents, projects, and funding determinations before consideration by the MPO Board.

OBJECTIVE 2



Equitable Access

Provide equitable access to information regarding transportation decision-making.

OBJECTIVE 3



Engage the Public

Engage the public early, often, and with clarity so that opportunities exist for public feedback in the transportation decision-making process.

OBJECTIVE 4



Public Involvement Methods

Use a variety of methods to involve and engage the public.

OBJECTIVE 5



Transit Feedback

Gather public feedback on the Program of Projects for Martin County Public Transit.

OBJECTIVE 6



Strive to Improve

Strive to continuously improve the public participation process.

## OBJECTIVE 1



### Advisory Committee Meetings

Hold regular public meetings with MPO advisory committees to obtain feedback on all documents, projects, and funding determinations before consideration by the MPO Board.

## STRATEGY 1A

### Advisory committee positions are filled

- Technical Advisory Committee (TAC): 100% filled
- Citizens' Advisory Committee (CAC): 83% filled
- Bicycle and Pedestrian Advisory Committee (BPAC): 75% filled
- Freight Transportation Advisory Committee (FTAC): 100% filled
- Local Coordinating Board for the Transportation Disadvantaged (LCB-TD): 88% filled
- Overall Percentage of Committee Positions filled in 2023: 90%
- ❖ **Evaluation: Strategy Achieved (Satisfaction 90%; Measure: ≥ 80%)**

## STRATEGY 1B

### Advisory committees receive meeting notices, agenda items, and information at least 5 days before meetings

- 100% of Advisory Committee meeting notices and information were sent at least five days before the meeting.
- ❖ **Evaluation: Strategy Achieved (Satisfaction 100%; Measure: ≥ 80%)**

## STRATEGY 1C

### Advisory committee recommendations/actions are presented to the MPO Board

- In 2023, committee members had opportunities to provide comments and recommendations to the MPO Board for planning studies and products such as:
  - FY24 - FY28 Transportation Improvement Program (TIP)
  - FY25 - FY29 List of Project Priorities (LOPP)
  - Hobe Sound SUN Trail Feasibility Study
  - Community Characteristics Report 2023
  - US-1 at SW Palm City Road Feasibility Study
  - Transit Efficiency Study
  - Transit Development Plan (TDP) Scope of Services
  - US-1 Congestion Management/Public Outreach Scope of Services
- ❖ **Evaluation: Strategy Achieved (Satisfaction 100%; Measure: 100%)**

## OBJECTIVE 2



### Equitable Access

**Provide equitable access to information regarding transportation decision-making.**

#### STRATEGY 2A

##### Meetings and events are held at convenient times and locations

- In 2023, the MPO held over 30 public meetings at various times of the day as well as different locations in Martin County, such as the County Administrative Center, Hobe Sound Civic Center, Jensen Beach Community Center, Flagler Place in Stuart, City of Stuart City Hall, and Lamar Howard Park in Golden Gate.
- ❖ **Evaluation: Strategy Achieved (Satisfaction 100%; Measure: 100%)**

#### STRATEGY 2B

##### Persons with disabilities are provided access to information and participation opportunities.

- All meetings are held in ADA-accessible locations and project-related information is made accessible to vision-impaired persons by using the “Searchable” feature of Adobe Acrobat Pro.
- In addition, Persons with Disabilities are represented on the Local Coordinating Board for the Transportation Disadvantaged, Citizens Advisory Committee, and the Bicycle and Pedestrian Advisory Committee to provide input.
- The public is also notified on how to access accommodations as needed. All meeting notices, agendas, and staff e-mails contain information regarding nondiscrimination or who to contact if special accommodations or language translation services are required.
- ❖ **Evaluation: Strategy Achieved (Satisfaction 100%; Measure: 100%)**

#### STRATEGY 2C

##### Public involvement activities are geographically dispersed throughout the MPO area.

- MPO staff held a Hobe Sound SUN Trail Feasibility Study Public Meeting on January 11, 2023, at the Hobe Sound Civic Center.
- MPO participated in Mobility Week during the First Friday ArtWalk event in Stuart, where staff shared safety information/items.
- MPO staff hosted a Transit Development Plan (TDP) public meeting at Lamar Howard Park in Golden Gate on December 6<sup>th</sup>, and in Downtown Jensen Beach during Jammin’ Jensen on December 7<sup>th</sup>.



- The US-1 at SW Palm City Road Intersection Feasibility Study had two public workshops held for the project. The first workshop was hosted on March 8, 2023, at the City of Stuart City Hall Commission Chambers. The second workshop was hosted on August 23, 2023, at Flagler Place in downtown Stuart.
- ❖ **Evaluation: Strategy Achieved (Satisfaction 100%; Measure: 100%)**

## STRATEGY 2D

### Public involvement activities and events target a diverse group of participants.

- MPO staff continues its Safety Social Media Campaign with key components for Bicycle and Pedestrian Safety, Nighttime Visibility Safety Awareness and Mid-Block Safety Awareness.
- On January 11, 2023, MPO staff held a Hobe Sound Corridor SUN Trail Feasibility Study Open House at the Hobe Sound Civic Center.
- MPO staff held a public meeting at the Lamar Howard Park in Golden Gate on December 6<sup>th</sup>.
- MPO staff conducted safety-related campaigns throughout the year, such as the Walk to School Day at JD Parker Elementary on October 4<sup>th</sup>, the Bike to School Day on May 17<sup>th</sup> at Crystal Lake Elementary, as well as participating in a downtown Stuart Artwalk Event during the Florida Department of Transportation's (FDOT) Mobility Week.
- ❖ **Evaluation: Strategy Achieved (Satisfaction 100%; Measure: 100%)**

## STRATEGY 2E

### Public information is available in a format for traditionally underserved populations.

- The MPO continues to contract with LanguageLine Solutions, a nationwide leader in the field of translation and interpretation services. The service provides over-the phone, face-to-face and videoconference interpreting and document translation services. This provides the MPO access to more than 200 languages.
- Flyers for the January 11, 2023 Hobe Sound SUN Trail Open House were developed in both English and Spanish.
- Flyers, surveys, and other printed materials were developed in Spanish and English for the Transit Development Plan.
- Martin MPO's website is easily translated into different languages with the use of Google Translate.
- ❖ **Evaluation: Strategy Achieved (Satisfaction 100%; Measure: 100%)**

## STRATEGY 2F

### The MPO maintains an up-to-date database of contacts that regularly receive information.

- The MPO maintains an up-to-date database of contacts that regularly receive information.
- **Evaluation: Strategy Achieved (Satisfaction 100%; Measure: 100%)**

## OBJECTIVE 3



### Engage the Public

Engage the public early, often, and with clarity so that opportunities exist for public feedback in the transportation decision-making process.

## STRATEGY 3A

Public information regarding MPO actions is available in different formats and easily accessible.

- Documents are available in a searchable format that accommodates the visually impaired.
- MPO meetings are televised live on local Martin County Television (MCTV) Channel 20 and U-verse Channel 99; past meetings can be viewed “on demand” on the Martin County website.
- MPO meeting minutes and agendas are easily accessible on the Martin MPO website.
- ❖ **Evaluation: Strategy achieved.**

## STRATEGY 3B

The MPO responds to public inquiries within seven working days of the date of receipt.

- Martin MPO utilizes the electronic public inquiry system “Request for Service”. This allows the request to be tracked from the time of inquiry until the time of resolution.
- All public inquiries were addressed within seven working days.
- ❖ **Evaluation: Strategy achieved.**

## STRATEGY 3C

Meeting notices and information are available at least five days prior to meetings.

- 100% of meeting notices and information were made available at least five days before meetings.
- ❖ **Evaluation: Strategy achieved (Satisfaction 100%; Measure 80%)**

## STRATEGY 3D

MPO will provide follow-up information to groups on project process and comments received.

- During each MPO public meeting, staff shares information related to public comments and recommendations.
- After MPO Meetings, staff shares relevant information with all committee members and Board members.

- MPO staff provides follow-up notices and information to groups in the form of meetings, flyers, or updates to the website.
- ❖ **Evaluation: Strategy achieved.**

## STRATEGY 3E

### Public participation opportunities will be made available at key decision-making milestones.

- The FY24-FY28 Transportation Improvement Program (TIP) review period was advertised for 45 days prior to adoption. Advisory Committee members and Board members were able to provide comments on the Draft FY24-FY28 TIP in May and the Final FY24-FY28 TIP during the June 2023 cycle of meetings.
- The FY25-FY29 Draft List of Project Priorities was presented at the Advisory Committee meetings and Board meeting in February 2023 and the final LOPP was presented during the June 2023 cycle of meetings.
- Hobe Sound Corridor SUN Trail Study Public Meeting was held at the Hobe Sound Civic Center on January 11, 2023, to gain input from the community regarding the final conceptual alignment for the East Coast Greenway trail connection.
- ❖ **Evaluation: Strategy achieved.**

## STRATEGY 3F

### Public feedback is incorporated into transportation decision making.

- Comments received from the public were shared with the MPO Policy Board members.
- Comments and feedback from the public were incorporated into several of the Martin MPO's plans and studies, such as the Transit Efficiency Study, the Hobe Sound SUN Trail Feasibility Study, the Community Characteristics Report, and the US-1 at Palm City Road Intersection Feasibility Study.
- Record of public comments and how they were integrated into the transportation planning process maintained by MPO staff.
- ❖ **Evaluation: Strategy achieved.**

## OBJECTIVE 4



### Public Involvement Methods

Use a variety of methods to involve and engage the public.

## STRATEGY 4A

### The MPO utilizes varied public involvement techniques.

- Hobe Sound SUN Trail Feasibility Study Public Meeting was held on January 11, 2023. This meeting was held in the Hobe Sound Civic Center and scheduled right before the Hobe Sound Neighborhood Advisory Committee (NAC) meeting.

- The Martin In Motion Facebook page has continued to share safety messages and also provides updates on current MPO work products and public events.
  - The Martin MPO Website shares announcements on upcoming meetings and special events and hosts all MPO documents.
  - MPO Staff members participated in Walk to School Day with staff from J.D. Parker Elementary on October 4, 2023, to promote safe walking.
  - Staff participated in a Bike to School event at Crystal Lake Elementary School on May 17, 2023, to teach students how to properly wear a helmet and how to ride a bicycle safely.
  - Staff engaged the public during the US 1 at SW Palm City Road Intersection Feasibility Study Open House on August 23, 2023, where the attendees were asked to rank their preferred alternatives for the intersection.
  - During the development of the Transit Efficiency Study, surveys were conducted to gain input from the public on their preferred transit service improvements.
  - MPO staff used surveys during the development of the Transit Development Plan (TDP) to learn how the public views transit and what enhancements they would like to see within the next 10 years.
- ❖ **Evaluation: Strategy achieved.**

## STRATEGY 4B

### The MPO conducts surveys on the effectiveness of public outreach techniques.

- During MPO public meetings, members of committees and the general public during sign-in are asked if meetings are scheduled at convenient days and times.
  - The MPO included a survey in the Winter 2023 edition of the MPO Newsletter “On the Move” which asked readers to answer questions regarding their preferred time for meetings and their preferred methods of public outreach.
- ❖ **Evaluation: Strategy achieved.**

## STRATEGY 4C

### Public information is available in languages other than English, as appropriate, or in other means to address disabilities.

- The MPO partners with Google to offer a unique option on its website that translates the site into more than 75 languages.
  - The MPO maintains a contract with LanguageLine, a translating service available for written, on-site, and telephone translations to accommodate more than 200 languages.
  - Currently, one Spanish-speaking professional is on staff.
  - During the development of the Transit Efficiency Study and the Transit Development Plan, surveys and public outreach materials were produced in both English and Spanish.
- ❖ **Evaluation: Strategy achieved.**

## STRATEGY 4D

### The MPO uses varied website tools to provide information.

- MPO staff continued to use its traditional website as a means of providing information to the public (www.martinmpo.com). All pages of the MPO website are available in more than 75 languages.
- The MPO has an interactive web-based TIP that will allow users to see each project on a map, research financial information for specific projects, and generate customized reports.
- MPO staff utilizes social media to share meeting event information and safety messages.
- Staff continued the Bicycle and Pedestrian Virtual Safety Awareness messages with key components for Nighttime Visibility Safety, Mid-Block Safety, Bicycle Safety and Pedestrian Safety as part of the Vision Zero Plan. Awareness Messages continued to be published in the County Connection Digital Newsletter and the Martin MPO Martin in Motion Social Media Account.
- Martin MPO staff developed a Development Review Interactive Map to assist the MPO Board in prioritizing projects in relation to planned developments.
- MPO staff introduced three new social media campaigns that included:
  - Schools Out Campaign
  - Back to School Campaign
  - Aggressive Driving Campaign
- The Martin MPO developed a new website, which included improvements to the event/meeting calendar, meeting minutes and agenda archive, plans and studies archive, and the search function.

❖ **Evaluation: Strategy achieved.**

## STRATEGY 4E

### The MPO uses the website to track public interest in activities.

- Martin MPO uses Google Analytics to track activity on the website.
- Activity is tracked on the Development Review Interactive Map.
- The Martin MPO Facebook page and Instagram profile (Meta Business Suite) allows staff to receive notifications when someone comments, likes, or shares an announcement from the MPO.

❖ **Evaluation: Strategy achieved.**

## STRATEGY 4F

### The MPO maintains and uses a social media presence to provide information and receive feedback.

- Martin MPO uses Facebook and Instagram to maintain a social media presence.

❖ **Evaluation: Strategy achieved.**

**OBJECTIVE 5**

**Transit Feedback**



**Gather public feedback on the Program of Projects for Martin County Public Transit.**

**STRATEGY 5A**

**Request the Martin County Section 5307 Program of Projects (POP).**

- The MPO collaborates with Martin County Public Transit to inform the public about transit projects. In doing so, the public can provide input on the Program of Projects and be involved in the prioritizing of the Program of Projects for funding. During the June 2023 Advisory Committee meetings, individuals had the opportunity to comment on the Public Transit POP. The MPO Policy Board also reviewed the POP on June 19, 2023.
- ❖ **Evaluation: Strategy achieved.**

**STRATEGY 5B**

**POP will be included in the MPO List of Project Priorities (LOPP) and presented at the CAC, TAC, BPAC and MPO Policy Board meetings.**

- The POP was included in the LOPP and presented to the CAC, TAC, BPAC and MPO Policy Board.
- ❖ **Evaluation: Strategy achieved.**

**OBJECTIVE 6**

**Strive to Improve**



**Strive to continuously improve the public participation process.**

**STRATEGY 6A**

**Review, revise, and re-adopt the PPP at least once every 3-5 years, amending as necessary in between.**

- The PPP was adopted on February 21, 2022. MPO staff has reviewed the PPP and does not have any recommended changes to the document at this time.
- ❖ **Evaluation: Strategy achieved.**

## STRATEGY 6B

**Continuously evaluate public participation techniques and strategies, changing or adding as necessary.**

- MPO staff produces an Annual Report to determine the effectiveness of its public outreach.
- ❖ **Evaluation: Strategy achieved.**

## STRATEGY 6C

**Produce a Public Involvement Annual Report each year using Methods of Effectiveness (MOE) to monitor performance.**

- An Annual Report has been produced. All strategies have been achieved.
- The 2023 Annual Report is available on the Martin MPO website, and available upon request.
- ❖ **Evaluation: Strategy achieved.**



**TECHNICAL ADVISORY COMMITTEE (TAC) MEETING  
AGENDA ITEM SUMMARY**

<b>MEETING DATE:</b> February 5, 2024	<b>DUE DATE:</b> January 29, 2024	<b>UPWP#:</b> 5
<b>WORDING:</b> DRAFT FY26 – FY30 LIST OF PROJECT PRIORITIES (LOPP)		
<b>REQUESTED BY:</b> MPO	<b>PREPARED BY:</b> Ricardo Vazquez / Beth Beltran	<b>DOCUMENT(S) REQUIRING ACTION:</b> Draft FY26 – FY30 LOPP

**BACKGROUND**

The MPO is required to submit its List of Project Priorities (LOPP) each year for consideration of funding for what will become the new fifth year of the Florida Department of Transportation’s (FDOT) Work Program. Priority projects must be selected from the adopted Long Range Transportation Plan (LRTP). Projects already in the Work Program remain on the list to guide in programming funds until the final phase is fully funded.

FDOT requires that the MPO submit the Draft LOPP by March 1<sup>st</sup> of each year. LOPP Scoping Forms must be completed for all new projects and must also be submitted with the Draft LOPP by March 1<sup>st</sup>. The Final LOPP will be presented at the June advisory committee meetings and MPO Board meeting before adoption.

**ISSUES**

At the February 2024 advisory committee meetings, MPO staff will present the Draft List of Roadway Project Priorities for review and recommendations.

**RECOMMENDED ACTION**

- a. Approve the Draft FY26-FY30 List of Project Priorities as presented.
- b. Approve the Draft FY26-FY30 List of Project Priorities with comments.

**FISCAL IMPACT**

The Lists of Project Priorities will guide FDOT with the application of transportation funds in next year’s FY26 – FY30 Tentative Work Program.

**APPROVAL**

MPO

**ATTACHMENTS**

Draft FY26 – FY30 Federal Attributable UNFUNDED Project Priorities



**MARTIN MPO FY26-FY30 Federal Attributable  
UNFUNDED List of Project Priorities**

FY26 Rank	Facility	Segment Limits		Project Description	2045 LRTP Page	Prev. Rank
		From	To			
1	SR-710	SE of CR-609/ SW Allapattah Rd.	Martin/ Okeechobee County Line	Widen from 2-lanes to 4-lanes	76	1
2	SE Cove Rd.	SR-76/ Kanner Hwy.	US-1	Widen from 2-lanes to 4-lanes including bike lanes and shared use pathway	69	2
3	CR-714	Realignment		Flatten curve of CR-714 before intersection at SR-710	Appx. G, pg. 1	3
4	Monterey Rd.	At FEC Railroad		Railroad/roadway grade separation	Appx. H, pg. 5	4
5	CR-708/ SE Bridge Rd.	Bascule Bridge		Bridge Replacement	132	5
6	SR-76/ Kanner Hwy.	At SW South River Dr.		*New southbound right turn lane at South River Dr. & traffic signal	80	6
7	SR-710	At CR-609/SW Allapattah Rd.		Intersection Improvements (Signal and Turn Lanes)	52	13
8	SE Commerce Ave.	SE Indian St.	SE Salerno Rd.	Roadway leveling, resurfacing, shoulder widening, drainage improvements, pedestrian crosswalks	128, 132	
9	US-1	At SW Palm City Rd.		Intersection reconstruction	128, 132	
10	SW Palm City Rd.	Monterey Rd.	US-1	Complete Streets improvements	128, 132	
11	Monterey Rd. & East Ocean Blvd.	Kingswood Ter.	St. Lucie Blvd.	Mid-block pedestrian crosswalks	Appx. H, pg. 11	8
12	NW Alice St.	FEC Crossing		Pedestrian facilities/realign roadway with NW Wright Blvd.	Appx. H, pg. 11	9
13	Willoughby Blvd. Extension	Monterey Rd.	US-1	New 2-lane road with bike lanes and sidewalks/shared use pathways	69	10
14	CR-713/High Meadow Ave.	I-95	CR-714/ Martin Hwy.	Widen from 2 lanes to 4 lanes with shared-use pathway	69	11
15	Dixie Hwy.	Cove Rd.	Jefferson St.	Resurfacing/Complete Street improvements/CEI	84	12
16	SW Citrus Blvd.	SW Hemingway Ter.	SR-710	Resurfacing/shoulder widening and bike lanes/safety improvements	128, 132	15
17	CR-609/ SW Allapattah Rd.	SR-710	2,800 feet north of Minute Maid Rd.	Resurfacing/southbound left turn lane/shoulder widening/CEI	128, 132	13
18	CR-609/ SW Allapattah Rd.	Approx. 3 miles North of Minute Maid Rd.	St. Lucie County Line	Resurfacing/shoulder widening/safety improvements	128, 132	14
19	N Sewall's Point Rd.	East Ocean Blvd.	NE Palmer St.	Mitigate for sea level rise impact	87	16

\*Design of right turn lane currently underway.



**TECHNICAL ADVISORY COMMITTEE (TAC) MEETING  
AGENDA ITEM SUMMARY**

<b>MEETING DATE:</b> February 5, 2024	<b>DUE DATE:</b> January 29, 2024	<b>UPWP#:</b> 6
<b>WORDING:</b> TRANSPORTATION ALTERNATIVES PROGRAM (TAP) PROJECT APPLICATIONS		
<b>REQUESTED BY:</b> MPO	<b>PREPARED BY:</b> Ricardo Vazquez / Beth Beltran	<b>DOCUMENT(S) REQUIRING ACTION:</b> 2024 TAP Applications

**BACKGROUND**

The Federal Transportation Alternatives Program (TAP) provides funding for programs and projects defined as transportation alternatives, including on and off-road pedestrian and bicycle facilities, and infrastructure projects for enhanced mobility. However, TAP funding does not cover design costs, permitting, environmental or archaeological reports/documentation, and certain construction items, such as utility relocations, utility adjustments, and as-built surveys.

**ISSUES**

The following application will be submitted for the 2024 Application cycle.

**SW Bulldog Way Sidewalk Project:**

A new six-foot wide sidewalk will connect the Foxwood neighborhood at SW Hawk View Circle and run north 1050 feet on SW Pratt Whitney Road. It will travel down the south side of SW Bulldog Way 2600 feet then north 750 feet to connect to the entrance of South Fork High School. The current drainage system will remain with a pipe extension and minor adjustments to the current swale. New pavement markings and updated signs will be included.

At the February 2024 advisory committee meetings, Martin County staff will present the County’s TAP project.

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**RECOMMENDED ACTION**

- a. Approve 2024 Martin County TAP Application.
- b. Approve 2024 Martin County TAP Application with comments.

**FISCAL IMPACT**

\$902,310 (\$876,310 TAP, \$26,000 local funds)

## AGENDA ITEM 6E

### **APPROVAL**

MPO

### **ATTACHMENTS**

PowerPoint presentation on Martin County's TAP application for SW Bulldog Way Sidewalk Project.

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SW BULLDOG WAY SIDEWALK

2024 FDOT  
TRANSPORTATION  
ALTERNATIVES APPLICATION  
CYCLE  
(FY 28 FUNDING)





# TRANSPORTATION ALTERNATIVES SET-ASIDE PROGRAM (TA)

The Transportation Alternatives Set-Aside Program (TA) is a reimbursable federal aid funding program that seeks to fund smaller-scale transportation projects and activities that expand and integrate accessible nonmotorized travel choices and make them safer for non-drivers. This includes accessibility improvements to help achieve compliance with the Americans with Disabilities Act of 1990.

The program aims to expand travel choice, strengthen the local economy, improve the quality of life, and protect the environment by supporting non-traditional projects linked to the transportation system.





# Safe Routes for Non-Drivers – SW Bulldog Way

- SW Bulldog Way is a 4-lane road with center median that serves as the entrance to South Fork High School.
- There are no sidewalks or bicycle paths on either side of the roadway.
- The Martin County School Board has identified that a large and growing number of students are now walking or bicycling to school from neighborhoods near the school with more development planned in the future.
- The proposed sidewalk project will provide safe, ADA compliant access to South Fork High School for pedestrians, bicyclists and other non-drivers.

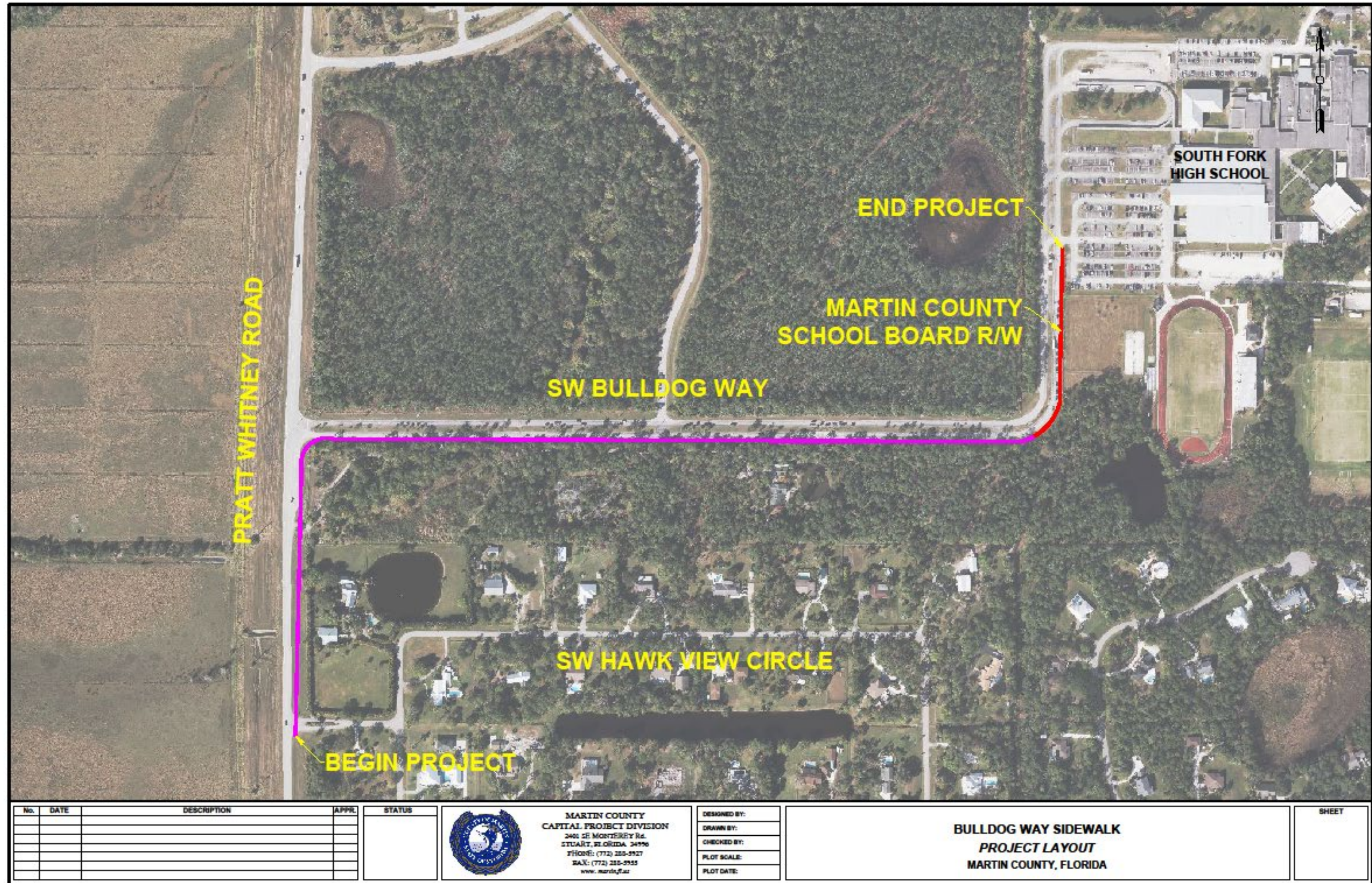


SW Bulldog Way and SW Pratt Whitney Road





# PROJECT LOCATION & LIMITS



NO.	DATE	DESCRIPTION	APPR.	STATUS



MARTIN COUNTY  
 CAPITAL PROJECT DIVISION  
 2402 E. MONTELEONE BL.  
 STUART, FLORIDA 34990  
 PHONE: (772) 285-5927  
 FAX: (772) 285-5955  
 www.martinfla.gov

DESIGNED BY:  
 DRAWN BY:  
 CHECKED BY:  
 PLOT SCALE:  
 PLOT DATE:

**BULLDOG WAY SIDEWALK  
 PROJECT LAYOUT  
 MARTIN COUNTY, FLORIDA**

SHEET



MARTIN COUNTY  
 PUBLICWORK  
 @WORK



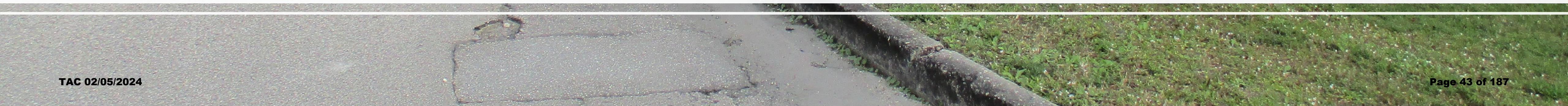


# Existing Conditions – SW Hawkview Circle and SW Pratt Whitney Road





# Existing Conditions - SW Bulldog Way and SW Pratt Whitney Road







Existing Conditions – SW Bulldog Way at the curve





Existing Conditions – SW Bulldog Way at SFHS entrance



# PROJECT SCOPE

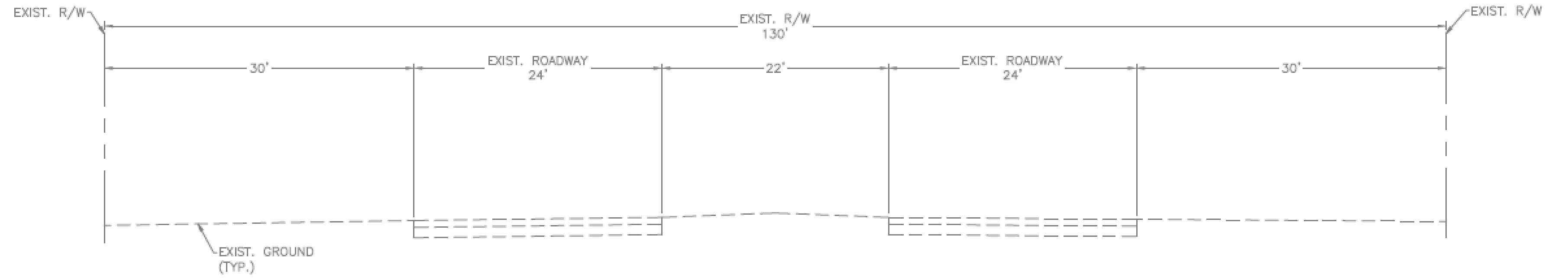
A new six-foot wide sidewalk will connect the Foxwood neighborhood at SW Hawkview Circle and run north 1050-feet on SW Pratt Whitney Road.

It will travel down the south side of SW Bulldog Way 2600-feet then north 750-feet to connect to the entrance of South Fork High School. The current drainage system will remain with a pipe extension and minor adjustment to the current swale. New pavement markings and updated signs will be included.

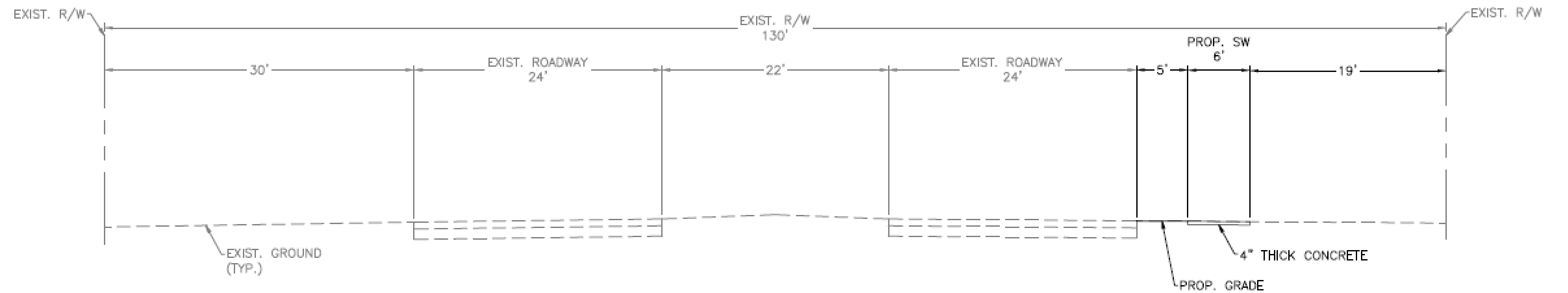
The Martin County School Board has requested this proposed project and has provided a Letter of Support.



# EXISTING & PROPOSED TYPICAL SECTION



EXIST. TYPICAL SECTION



PROP. TYPICAL SECTION





# FUNDING ALLOCATION

TOTAL CONSTRUCTION COST  
ESTIMATE:

\$ 902,310.00

GRANT REQUESTED FUNDS:  
\$ 876,310.00

LOCAL FUNDS:  
\$ 26,000.00



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# LOCAL SUPPORT

The project will be presented at the following meetings for public input:

- MPO TAC meeting 2/5/24
- MPO CAC meeting 2/7/24
- MPO BPAC meeting 2/12/24
- MPO Policy Board meeting 2/26/24
  
- A Resolution of Support will be heard by the Martin County Board of County Commissioners at the February 6, 2024 meeting.
  
- The Martin County School Board has provided a Letter of Support for this project.





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# QUESTION & ANSWER







**TECHNICAL ADVISORY COMMITTEE (TAC) MEETING  
AGENDA ITEM SUMMARY**

<b>MEETING DATE:</b> February 5, 2024	<b>DUE DATE:</b> January 29, 2024	<b>UPWP#:</b> 4
<b>WORDING:</b> 2050 LONG RANGE TRANSPORTATION PLAN (LRTP) SCOPE OF SERVICES		
<b>REQUESTED BY:</b> MPO	<b>PREPARED BY:</b> Ricardo Vazquez / Beth Beltran	<b>DOCUMENT(S) REQUIRING ACTION:</b> 2050 LRTP Scope of Services

**BACKGROUND**

The Long-Range Transportation Plan (LRTP) is a Federal and State requirement with a 25-year planning horizon. The LRTP must be updated every five years, to ensure a continuous, cooperative, and comprehensive transportation planning process. The intent and purpose of the LRTP is to encourage and promote the safe and efficient management, operation, and development of a cost-feasible transportation system that will serve the mobility needs of people and freight; and foster economic growth and development within the Martin County Planning Area. The LRTP must include long- and short-range strategies consistent with Federal, State, and local goals and objectives.

**ISSUES**

At the February 2024 advisory committee meetings, MPO staff will present the draft 2050 LRTP Scope of Services.

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**RECOMMENDED ACTION**

- a. Approve the draft 2050 LRTP Scope of Services, as presented.
- b. Approve the draft 2050 LRTP Scope of Services with comments.

**FISCAL IMPACT**

\$325,000

**APPROVAL**

MPO

**ATTACHMENTS**

2050 LRTP Scope of Services

## EXHIBIT A

# MARTIN METROPOLITAN PLANNING ORGANIZATION (MPO) 2050 LONG RANGE TRANSPORTATION PLAN SCOPE OF SERVICES

### INTRODUCTION

For urbanized areas exceeding a population of 50,000, the existence of a Metropolitan Planning Organization (MPO) is necessary to meet federal requirements for obtaining and expending federal transportation funds. Specifically, the federal government requires that each urbanized area, as a condition to the receipt of federal capital or operating assistance, have in place a continuing, cooperative, and comprehensive transportation (3-C) planning process. This 3-C process must result in plans and programs consistent with the comprehensively planned development of the urbanized area. To satisfy federal planning requirements the Martin MPO has prepared a Scope of Services to hire a consultant team (hereby known as the CONSULTANT) to assist the MPO with the development and adoption of the 2050 Long Range Transportation Plan (LRTP) with a deadline scheduled for October 2025.

### BACKGROUND

The Martin Metropolitan Planning Organization (MPO) is the organization responsible for the planning and programming of federal and state transportation funds for Martin County. The MPO is the primary forum where local governments and citizens voice concerns, identify priorities and plan for improvements to all modes of transportation – roadway, public transportation, and bicycle and pedestrian facilities. The MPO Policy Board is comprised of elected officials representing unincorporated Martin County (4), the City of Stuart (2), the Town of Sewall's Point (1), and the Village of Indiantown (1). The MPO Board is supported by several advisory committees that include technical staff as well as citizen representatives who review information and make recommendations to the Board. The MPO currently operates under signed MPO and interlocal agreements with all member governments.

## PROJECT MANAGEMENT

Per the Code of Federal Regulations Title 23, Part 450.104, part of the metropolitan transportation planning process includes MPOs developing a transportation plan that addresses at least a 20-year horizon. The CONSULTANT shall ensure the plan includes both long-range and short-range strategies/actions that lead to the development of an integrated intermodal transportation system that facilitates the efficient movement of people and goods. The CONSULTANT will ensure the plan complies with provisions in the Bipartisan Infrastructure Law (BIL), enacted as the Infrastructure Investment and Jobs Act (IIJA) regulations. The plan must also meet all state requirements for LRTPs specified in Section 339.175.

The CONSULTANT will be responsible for the overall project management necessary to ensure the satisfactory completion of the 2050 LRTP, according to the established schedule and budget. The CONSULTANT will develop an LRTP addressing all tasks identified in this Scope of Services. The CONSULTANT will be expected to ensure that adequate resources are available and that submittals are of high quality and submitted on time.

Responsibilities of the CONSULTANT include, but may not be limited to:

- Prepare 2050 LRTP schedule/outline of tasks expected completion date(s);
- Prepare budget amount per task based on set total amount of Contract;
- Review applicable regulations;
- Review and inclusion of FHWA and FTA's 2021 Planning Emphasis Areas (PEAs) issued on December 30, 2021 as well as FDOT's Florida PEAs 2021, incorporating any new requirements set forth;
- Review other local and regional transportation studies (Including the 2045 Regional Long Range Transportation Plan, the Bicycle, Pedestrian and Trails Master Plan, and local government's comprehensive plans) identified by the MPO as relevant to the 2050 LRTP update effort;
- Lead monthly Project Team meetings;
- Lead LRTP Steering Committee meetings, which will include representatives such as the Martin County Engineer, and representatives from the Martin County Growth Management Department, City of Stuart, and Florida Department of Transportation (FDOT);
- Prepare chapters for Final 2050 LRTP Report and Technical Memorandums;
- Present various drafts and memoranda to MPO Committees and Policy Board; and
- Present the Final 2050 LRTP to MPO Committees and Policy Board for adoption.

In addition to overseeing the overall production and management of the project from start to adoption by the MPO Policy Board, the CONSULTANT is required to perform all tasks hereby stated in this Scope of Services.

### **TASK 1 – PUBLIC INVOLVEMENT PLAN (PIP)**

#### **1.2 Public Involvement Plan**

The CONSULTANT shall develop a public involvement plan (PIP) and provide public involvement materials to be utilized throughout the development of the 2050 LRTP. The LRTP PIP will be consistent with the Martin MPO's Public Participation Plan (PPP). The public involvement process shall include private transportation providers for reasonable opportunity to comment during the LRTP process. The plan shall identify the specific public participation processes to be used throughout the project, including outreach procedures, suggested meeting formats, and the utilization of feedback and comments throughout the project. The participation process will involve engaging citizens in a series of workshops (with Spanish translator available), whereby they "see" a variety of transportation options through the use of illustrations, drawings, photographs, 3-D simulations, and other techniques. Techniques may include, but are not limited to:

- Open Houses
- Focus Groups
- Visual preference surveys
- Introductory video
- Video simulations
- 3-D project renderings
- Key-person interviews
- Interactive project website and survey/Social Media (inclusive of version suitable for viewing and interaction via mobile devices)
- Press packets and releases
- Meetings with traditionally under-represented populations
- Media outreach
- Publications/Newsletters
- Evaluation of the Public Involvement activities
- Documentation

### **1.2 Public Participation Process**

The CONSULTANT shall participate in the public involvement process. Individuals without a computer/internet will have access to the LRTP development materials through methods noted below, such as Focus Group meetings, targeted outreach, and Open House meetings. The CONSULTANTS participation may include, but is not limited to:

- Attendance and presentations at community meetings, such as Chambers of Commerce, Community Redevelopment Area (CRA) Neighborhood Advisory Committees, Homeowners Associations (HOA's), and Focus Groups;
- Targeted outreach to traditionally underserved communities;
- Attendance and presentations at local municipality meetings such as: Martin County, City of Stuart, Town of Sewall's Point, Town of Jupiter Island, Town of Ocean Breeze, and the Village of Indiantown; and
- Leading and hosting publicly advertised Open Houses, with amount set by the MPO.

### **1.3 Equity and Environmental Justice**

"Environmental Justice" is the fair treatment of all groups within the community. Environmental Justice (EJ) provides a framework for conducting assessments on matters

of equity and nondiscrimination. To ensure Environmental Justice is achieved, it's important to consider the comparative impact of an action on different population groups, rather than simply identifying a specific population by size, geographic grouping or concentration. The CONSULTANT will:

- Document how the 2050 LRTP will meet the principles and requirements of Environmental Justice including Equity and Justice40 (Executive Order 14008 and Executive Order 13985) ;
- Identify areas with a high concentration of under-represented populations to focus and target outreach efforts to solicit input from such population groups. Higher concentration areas will be defined as geographic areas with percentages higher than the county average by census tract for low income households and minorities;
- Be responsible for making every effort to include all groups of persons in Martin County as part of the 2050 LRTP development process; and
- Ensure consistency with the Martin MPO's Title VI and Other Nondiscrimination Policy and Plan, as well as the MPO's Community Characteristics Report (2023).

#### **1.4 Visualization/Use of Technology**

- The CONSULTANT shall develop innovative strategies to utilize available visualization tools;
- The CONSULTANT is recommended to also utilize:
  - Survey platforms
  - Social Media such as Facebook and Instagram for public input
  - Direct Mailings
  - Brochures/Pamphlets
  - 3-D Project Renderings
  - Interactive Mapping exercises
  - Street design software
  - Video production

#### **1.5 Project Website Development**

- The CONSULTANT shall setup a website for the distribution of LRTP information to receive public feedback and track website traffic utilizing Google Analytics. The CONSULTANT will maintain the website throughout the development duration of the LRTP. The website should be ADA accessible, easy to understand/access, and provide illustrations of the key tasks. The website should include the project schedule, public meeting calendar, newsletters developed, and announcements of latest information/events.

#### **1.6 Deliverables**

The CONSULTANT shall prepare a Technical Memorandum #1 – 2050 LRTP PIP - that includes:

- LRTP Public Involvement Plan (PIP);
- Summary of comments obtained during the public participation process;
- Summary of activities performed during the LRTP process;
- Summary of persons reached throughout the LRTP process; and
- Findings and results determined throughout the entire public participation process.

## **TASK 2 – DATA COMPILATION, REVIEW, AND SUMMARY**

### **2.1 Existing Data Compilation**

The CONSULTANT shall coordinate with technical staff from Martin County, municipalities, FDOT, and the Treasure Coast Regional Planning Council to collect and review all adopted local, regional, and state long range transportation plans and comprehensive plans. The CONSULTANT shall review other local and regional transportation studies (including freight and airports) identified by the MPO as relevant to the 2050 LRTP update effort. The CONSULTANT is required to develop, collect, and review all data necessary to support development of the LRTP, which includes, but may not be limited to:

- FDOT Five-Year Work Program;
- MPO Transportation Improvement Program;
- MPO List of Project Priorities;
- FHWA Expectations Letter (November 2018) provided to Florida MPO's, incorporating any new requirements set forth;
- Federal and state comments on 2045 LRTP and most recent MPO Certification;
- 2020 Socioeconomic Zonal data by new TAZ's (Household size, Household Income, Employment Data, School Enrollment, Journey to Work Data, Population Demographic Data);
- Census data (low income households, Limited English Proficiency (LEP) population and low-income population) for EJ analysis;
- Existing Roadways and Conditions;
- Intelligent Transportation Systems (ITS) Martin County Network;
- Crash data points for previous five (5) years;
- Non-Motorized facilities such as Bicycle, Pedestrian, Greenway, and Blueways facilities available data;
- Transit route data for all fixed route services, transit stop infrastructure, and potential future routes determined in the currently adopted Transit Development Plan;
- Freight network and capacity (airport, railway and truck highway);
- FDOT Strategic Intermodal System (SIS) data;
- Martin County, City of Stuart, Town of Sewall's Point, Town of Ocean Breeze, Town of Jupiter Island, and Village of Indiantown Comprehensive Plan and Land Development Regulations;
- Land Use/Future Land Use for all municipalities;
- State and local conservation plans, inventories of natural and historic resources available from resource agencies;
- Recently adopted planning documents, such as the MPO Bicycle, Pedestrian and Trails Master Plan, the FEC Railroad Grade Separation Feasibility Study, the City of Stuart Tram Business Plan, the Bicycle and Pedestrian Facilities Map, the Bicycle and Pedestrian Safety Action Plan, Vision Zero Plan, the Public Participation Plan, the Community Characteristics Report 2023, the Martin County adopted Transit Development Plan, FDOT Transportation System Management and Operations (TSM&O) Master Plan, FDOT Airport

- Master Plan, FDOT’s LRTP Citizen-Friendly Best Practices, FHWA Volpe Center’s Best Planning Practices: Metropolitan Transportation Plans, Center for Urban Transportation Research (CUTR) Review of LRTP’s and Estimate of Statewide 2045 Metropolitan Area Financial Shortfall, and the Treasure Coast Regional Planning Council (TCRPC) relevant documents;
- Health statistics related to transportation;
- Air pollution and greenhouse gas (GHG) emissions available data;
- FDOT Performance Measure data (Safety, Pavement, Bridge, System Performance); and
- Transit operator assessment management (TAM) Performance Measure data;
- Relevant GIS shapefiles.

**2.2 Emerging Mobility in Transportation Data Compilation**

- The CONSULTANT will research studies into Emerging Mobility options ranging from automated and connected transport, electric vehicles, ridesharing, and micromobility from both private and public sectors.
- The CONSULTANT will review the guidance outlined in FDOT’s Office of Policy Planning “Florida Planning Emphasis Areas – A Resource Guide to Notable Practices” to determine how best to account for Emerging Mobility within the long-range plan.
- The CONSULTANT will consider Emerging Mobility during scenario planning runs.
- The CONSULTANT will determine potential fuel tax and municipal fiscal impacts as a result of Autonomous Vehicles/Connected Vehicles (AV/CV).
- The CONSULTANT will determine the County’s readiness to accommodate Emerging Mobility options in providing transportation choices as well as ability of the County’s Roadway ITS Network to provide connection to ACES (Automated, Connected, Electric and Shared Use) for future enhancement.

**2.3 Data Review and Summary**

The CONSULTANT will review available data as stated in Task 2.1 as well as review and provide projections of the impacts of Emerging Mobility in the Transportation Industry stated in Task 2.2. The CONSULTANT will develop a database comprised of Census data, traffic count and roadway performance data, survey data, and other data as appropriate. In addition, the CONSULTANT will provide a summary of data file findings.

**2.4 Deliverable**

The CONSULTANT shall prepare a Technical Memorandum #2 - Data Compilation, Review, and Summary - that includes:

- Methodology for data collection and development;
- Summary of collected data and findings;
- Electronic inventory of collected data sets and associated data library for future reference and periodic updating (including as part of future LRTP development); and
- GIS Map Packages and shapefiles of data sets.

## **TASK 3 – ESTABLISH LRTP GOALS, OBJECTIVES, POLICIES & PERFORMANCE MEASURES (GOPPMs)**

### **3.1 Establish 2050 LRTP Goals and Objectives**

The CONSULTANT shall work with the LRTP Steering Committee to develop Goals and Objectives for MPO Policy Board approval to guide the entire long range planning process. In addition, the CONSULTANT shall:

- Review the 2045 LRTP goals and objectives to determine changes or deletions necessary as well as update;
- Review and consider the 2045 RL RTP goals and objectives;
- Review applicable federal, state, and local policies for consistency and discretionary;
- Recommend revisions to the 2050 LRTP goals/objectives based on review of recent planning documents and applicable policies, which will serve as the Goals and Objectives for the 2050 LRTP.
- Review the goals and objectives of the local Comprehensive Plans, the Florida Highway Safety Plan, the Florida Transportation Plan, the Strategic Intermodal System Plan and any corridor studies previously adopted or currently underway. The Martin MPO 2050 LRTP GOPPMs developed will be consistent with these plans to the extent feasible; and
- Compile and obtain ideas from the MPO Board, the Technical Advisory Committee, the Citizens Advisory Committee, the Bicycle and Pedestrian Advisory Committee, the Freight Transportation Advisory Committee, the Local Coordinating Board for the Transportation Disadvantaged, and the citizens of Martin County.

### **3.2 Performance Measures**

As part of IIJA, (previously FAST Act and MAP-21, MPOs are required to adopt Performance Measure targets as part of new federal legislation. The Performance Measures under the FAST Act address Highway Safety, System Performance, Bridge and Pavement Conditions, and Transit Asset Management and Safety. The MPO will be using FDOT's and Martin County's Transit targets for transportation performance evaluation. As a result, the CONSULTANT will:

- Incorporate Performance Measure and targets set by the MPO, FDOT, and Martin County Transit within the LRTP;
- Integrate the goals, objectives, performance measures and targets of the State Freight Plan as well as the Martin County Transit Asset Management (TAM) Plan;
- Use available data provided by FDOT for system performance report;
- Develop strategies as ways to improve the existing transportation system-wide performance in Martin County;
- Review FDOT's Guidance for Incorporating Performance Measures into the LRTP Process;
- Re-evaluate the performance measures used in the 2045 LRTP to determine changes or deletions necessary based on updated Goals and Objectives, Policies and FAST Act Performance Measure requirements; and

Incorporate a system performance report in the LRTP that evaluates and updates the condition of the transportation system relative to the performance measures and targets.



This system performance report will include targets for various performance measures, baseline conditions, and progress achieved in meeting the targets based on the available data set.

### **3.3 Deliverable**

The CONSULTANT shall prepare Technical Memorandum #3 – GOPPMs - that includes:

- Summary of federal and state requirements and local priorities;
- Evaluate the performance of set Performance Measure targets;
- Analysis of cost feasible projects and financial expenditures that achieve targets;
- Technical Memorandum #3 shall document the development of the 2050 LRTP GOPPMs, the public participation method used to obtain feedback regarding the GOPPMs, and the revisions made to the GOPPMs from prior LRTP based on comments; and
- System performance report consistent with Code of Federal Regulations §450.324(f)(4).

## **TASK 4 – TRAVEL DEMAND FORECASTING**

### **4.1 Treasure Coast Regional Planning Model (TCRPM) Support**

- The CONSULTANT shall prepare an overview of the base year model and identify strengths and weaknesses to determine how model outputs should be adjusted to develop the Needs Assessment and Cost Feasible Plan.
- The CONSULTANT will coordinate with FDOT District 4 modeling consultant during the development of the 2050 LRTP.
- CONSULTANT will develop the 2050 LRTP in Cube format and will work with FDOT consultant to convert the model to PTV Vissum.
- The CONSULTANT will provide dataset definitions including base year (2020), horizon year (2050), Existing plus Committed (E+C) Network, Needs Plan, and Cost Feasible Plan (CFP).
- The CONSULTANT will develop the Existing plus Committed (E+C) Network, Needs Plan network, and Cost Feasible Plan network.
- The CONSULTANT will provide technical support to the Martin MPO to operate and perform model runs.

### **4.2 TCRPM6 Utilization**

- The CONSULTANT shall forecast travel demand.
- The CONSULTANT will determine Transit Service potential based on model inputs.
- The CONSULTANT will make efforts to determine bicycle and pedestrian demand.
- The CONSULTANT will perform Freight-truck forecasting with available FDOT truck highway datasets for demand determination.
- The CONSULTANT will evaluate the potential impacts of Emerging Mobility include ACES on travel demand and transit service potential under one increased VMT per capita 2050 year and one decreased VMT per capita 2050 year.

- The CONSULTANT will review base year 2020 Socioeconomic data provided for TCRPM, such as Household and Employment by TAZ to assist with developing Needs Plan.
- The CONSULTANT will develop the 2050 LRTP Needs Plan based on results determined for horizon year 2050.

### **4.3 Scenario Planning Runs**

Scenario Planning is an analytical framework that considers the impact of policy transformation and various investments in the transportation system. The CONSULTANT shall develop a scenario planning process to evaluate if changes in travel and infrastructure, land use patterns, policies, and funding availability/uses will positively impact the transportation network. The CONSULTANT will:

- Develop up to three (3) scenarios determined by MPO staff, LRTP Steering Committee, and CONSULTANT;
- Establish consensus regarding policy and/or changes to travel and infrastructure, land use relative to the Goals, Objectives and Performance Measures of the 2050 LRTP; and
- Research potential changes/impacts to forecasted revenue sources.

### **4.4 Deliverable**

The CONSULTANT shall prepare a Draft Technical Memorandum #4 – Travel Demand Forecasting - that includes:

- Estimate of demand for travel modes;
- Existing plus Committed (E+C) Network files;
- Travel forecast results and vehicular traffic projections;
- Summary of project needs based on forecasting projections; and
- Summary of Scenario runs and analysis of policy/funding modification impacts.

## **TASK 5 – CONGESTION MANAGEMENT PROCESS UPDATE**

As part of the 2050 LRTP, the Congestion Management Process (CMP) update will occur to develop strategies for managing congestion and assess alternative strategies for congestion management that meet State and local needs. Required by federal regulation, CMPs are required in metropolitan areas with population exceeding 200,000, with Martin County exceeding that as part of the Port St. Lucie Urbanized Area. This task, in compliance with 23 CFR 450.322 and 324, also ties into Task 3 - Data Compilation, Review and Summary. The previous Martin MPO CMP Update occurred in 2020.

### **5.1 CMP Update Requirements**

The CONSULTANT will:

- Develop Objectives for Congestion Management;
- Define the system elements that will establish the network to be analyzed (such as the major/minor arterials, major collectors, highways, and freeways);
- Develop a Martin County 2050 Roadway Level of Service Inventory Report;
- Develop Multimodal Performance Measures that will be used to measure congestion on both a regional and local scale;

- Collect Data/Monitor System Performance; and
- Analyze Congestion Problems and Needs using data and analysis techniques, to classify (e.g., recurring, unanticipated non-recurring, planned event-related) and address what congestion problems are present or anticipated;
- Identify and assess potential multimodal strategies appropriate to mitigate congestion and coordinate with FDOT and Martin County Traffic Engineering Division to identify and assess Transportation Systems Management and Operations (TSM&O) strategies and improvement needs.
- Determine funding sources, prioritization strategies, and project and programmatic recommendations along congested corridors - projects identified will be programmed for implementation in the LRTP and TIP;
- **Evaluate Strategy Effectiveness** – The effectiveness of the strategies will be measured closely by monitoring system performance specified in Task 3.

### **5.2 Deliverable:**

The CONSULTANT will prepare, revise, and finalize a complete Congestion Management Process Update. All supporting information including CMP Network determination, traffic level of service analysis, Volume to Capacity (V/C) ratio, and public input findings will serve as Technical Memorandum #5 - CMP.

## **TASK 6 – ADDITIONAL ELEMENTS**

In addition to addressing the specified elements in the above tasks, the CONSULTANT will also examine ways to incorporate projects that will improve freight movement, support Complete Streets practices and design methods, and address potential climate change impacts on the Transportation Network.

### **6.1 Freight Movement**

The CONSULTANT will:

- Analyze the efficiency of the movement of goods;
- Evaluate Strategic Intermodal Systems (SIS) designated corridors;
- Evaluate generalized impacts of Witham Field's Customs facility;
- Determine where there are freight bottlenecking issues on SIS and Non-SIS arterials;
- Review the Martin MPO Freight and Goods Movement Study;
- Incorporate freight stakeholders as part of the LRTP update, including attending freight stakeholder meetings;
- Review the FEC Railroad Grade Separation Feasibility Study; and
- Review the 2045 RL RTP Freight Plan.

### **6.2 Complete Streets and Vision Zero**

The CONSULTANT will:

- Review and incorporate recommendations from the Martin MPO Complete Streets: Access to Transit Study within the Needs Assessment section;
- Consider context classification and improvements for arterials not noted in the development of the Complete Streets: Access to Transit Study;
- Research the economic impact and benefit of complete streets initiatives; and
- Review and incorporate recommendations from the Martin MPO Vision Zero Plan – Safe Streets.

### **6.3 Resiliency and Climate Change Impacts on the Transportation Network**

The CONSULTANT will:

- Research best practices and tools for identifying and addressing climate change, particularly sea level rise impacts on all roadways;
- Develop strategies to improve the resiliency and reliability of the transportation network and to mitigate stormwater impacts; and
- Review the Martin MPO Transportation Network Resiliency Study
- Score projects in LRTP using the Transportation Network Resiliency Study scoring criteria.

### **6.4 Enhancing Travel and Tourism**

The CONSULTANT will:

- Determine travel and tourism impacts on roadway capacity;
- Identify in-county activity center hubs determination (areas of attraction for local residents and visitors alike);
- Identify consulting agencies/organizations responsible for tourism; and
- Develop methods to increase and/or improve tourism as it relates to the transportation network.

### **6.5 Deliverable**

The CONSULTANT shall prepare a Technical Memorandum #6 – Additional Elements – that includes:

- Summary of key findings that will aid in the movement of freight and goods, Complete Street project implementation, counter strategies for the impact of climate change on roadways, and methods to increase and/or enhance travel and tourism;
- Summary displaying findings and comparisons among the specified MPO Planning documents noted in this task; and
- A list of project improvements identified in the MPO Planning documents noted in this task that could serve in the Needs Assessment.

## **TASK 7 – NEEDS ASSESSMENT**

### **7.1 Development of Existing plus Committed (E+C) Network**

- The CONSULTANT will be responsible for developing the Existing plus Committed (E+C) Network in addition to identifying its deficiencies. The CONSULTANT shall use the output from the model, the most current Martin Roadway Capacity and Level of Service Report, the most current Highway Capacity Manual, and other

software necessary to perform this task. The MPO Board and Advisory Committees, with guidance from the LRTP Steering Committee, will approve it prior to providing it to FDOT modeling consultant.

- The CONSULTANT, by reviewing the E+C Network, shall determine future travel demand and will develop the 2050 Needs Plan.
- The CONSULTANT may use the adopted year 2045 LRTP Cost Feasible Plan as a starting point to develop the 2050 needs assessment project list.

## **7.2 Multimodal Needs Assessment**

The CONSULTANT must include a needs analysis of the following:

- Pedestrian walkways;
- Bicycle facilities;
- Congestion Management Process (CMP) Update findings;
- Public transportation improvements, including Park and Ride facilities;
- Multimodal facilities in support of intermodal system;
- Transportation disadvantaged services;
- Intermodal transportation facilities, including railroad crossings;
- Recreational destinations;
- ITS strategies and applications
- TSM&O strategies and projects;
- Improvements to existing roadways;
- Intercity bus facilities; and
- Employer-based commuting programs and vanpools.

## **7.3 Development of 2050 Needs Plan**

- The CONSULTANT will assess the future transportation needs using the E+C Network, loaded highway and transit network model outputs, results from scenario runs, and guidance from the MPO Board, Advisory Committees, and LRTP Steering Committee to analyze travel patterns/network deficiencies to create the 2050 Needs Plan.
- The CONSULTANT will perform scenario runs as specified in Task 4.3 in developing the Needs Plan.

## **7.4 Deliverable**

The CONSULTANT shall prepare a Technical Memorandum #7 – Needs Assessment – that includes:

- Identified needed projects and planning level cost estimates for all phases of the projects including operations and maintenance; and
- A list of transportation improvement projects including various modes and CMP projects identified based on forecasted demands, a summary of methodology, and estimated costs for projects.



## **TASK 8 – FINANCIAL RESOURCES**

The CONSULTANT shall develop the Financial Plan for the 2050 LRTP. This task will assess the financial resources that may be available to Martin County for funding transportation improvements through the 2050 LRTP horizon year.

### **8.1 2050 Revenue Forecast**

- The CONSULTANT will evaluate the 2050 Revenue Forecast: Martin MPO/Metropolitan Area and include it as an appendix of the 2050 LRTP.
- The CONSULTANT will review all components of the 2050 Revenue Forecast, including but not limited to:
  - State and federal revenues estimated from current sources;
  - County level estimates from other roads and transit programs, and other estimates for other funding categories of interest to Florida MPO's;
  - Statewide forecasts and Metropolitan forecasts for capacity programs;
  - Statewide and county level capacity program estimates and state and federal funds from the 2050 Revenue Forecast;
  - Transportation Management Area (TMA) funds estimates;
  - Districtwide Transportation Regional Incentive Program estimates; and
  - Transportation Alternatives Funds estimates.
- The CONSULTANT will identify and evaluate the existing and prospective transportation improvement funding sources and assess the funding available during the interim year sets of the LRTP.
- The CONSULTANT will recognize that the 2050 Revenue Forecast does not forecast funds that do not “flow-through” the FDOT five-year work program; therefore, the CONSULTANT must review and determine other sources such as *Florida's Transportation Tax Sources: A primer, and the Local Government Financial Information Handbook*.
- To the extent that transit, bicycle/pedestrian, ITS, CMP, operation and maintenance cost, and other improvements are incorporated in the preferred projects set, the CONSULTANT shall estimate the implementation costs for these projects.
- The CONSULTANT shall identify funding eligibility for each source used in the plan.
- The CONSULTANT shall investigate the use of “flex” funding as allowed to shift from funding highway projects to other modes.
- The CONSULTANT shall coordinate with MPO and FDOT staff to project the maintenance, operating, and life cycle costs in current year dollars through the interim year sets and horizon year 2050.

### **8.2 Deliverable**

The CONSULTANT shall prepare a Draft Technical Memorandum #8 – Financial Resources – that includes:

- A detailed summary of forecast revenue projections, including breakdown of current sources, county level estimates, and state and federal funds for 2050; and

- A comparison of cost estimates developed in Task 7.4 with the forecasted revenue estimates determined in Task 8.1.

## **TASK 9 – 20 YEAR COST FEASIBLE PLAN**

### **9.1 Development of 2050 Cost Feasible Plan**

The CONSULTANT shall develop a prioritization process across all modes for developing the Cost Feasible Plan (CFP). The feasibility of projects identified in the CFP will be based on estimated future revenues expected to be available from private and public sources from year 2025 to horizon year 2050. In addition, the CONSULTANT shall:

- Prepare the Cost Feasible Plan using the results from previous tasks. The CFP shall include transit, pedestrian facilities, greenways, bikeways, roadways, maintenance and improvements, freight transportation, CMP and ITS/TSM&O, as identified in the Needs Assessment, that are fiscally constrained and reasonably accepted by the public and elected officials;
- Use the 2050 Revenue Forecast Report and cost data generated in Task 7 (Needs Assessment);
- Match projected revenue with projects for both interim year sets and horizon year;
- Ensure the CFP is consistent with Goals and Objectives, applicable comprehensive plans, and MPO Planning Studies;
- Screen and consider identified projects under the Efficient Transportation Decision Making (ETDM) process;
- Document planning level environmental justice analysis using GIS and Census data;
- Develop draft and Final Cost Feasible Plan for horizon year 2050;
- Determine Unfunded Needs projects;
- Present the 2050 Cost Feasible Plan (Technical Memorandum #9) to the MPO Board, all Advisory Committees and LRTP Steering Committee for review and approval;
- Determine steps needed for Cost Feasible Plan project implementation; and
- Integrate system performance report developed in Task 3.1 along with trend analysis to the extent data is available for various performance measures.

### **9.2 Deliverable**

- The CONSULTANT shall prepare Technical Memorandum #9 – CFP - summarizing the methodology for estimating and matching forecasted revenue with identified potential projects. Technical Memorandum #9 must also include:
- Recommended revisions to the MPO's List of Project Priorities;
- Description of how the Cost Feasible Plan achieves the goals, objectives, and performance measure targets of the LRTP; and
- A Final list of Cost Feasible Plan projects for horizon year 2050.

## **TASK 10 – 2050 LONG RANGE TRANSPORTATION PLAN DRAFT SUBMITTAL AND FINALIZATION**

### **10.1 Meetings and Presentations**

The CONSULTANT will attend all meetings in conjunction with this study, including meetings with the MPO, LRTP Steering Committee, MPO Advisory Committees, participation workshops with the general public, and other meetings as agreed upon by the MPO and the CONSULTANT. For all meetings, the CONSULTANT is expected to prepare graphic displays, handouts, and any other appropriate presentation aids as deemed necessary by the MPO.

### **10.2 Prepare Draft 2050 LRTP**

- The CONSULTANT will compile the significant components of each Technical Memorandum and will incorporate them into the Draft 2050 LRTP. The draft plan shall also incorporate all previous comments received from MPO staff and their advisory committees, LRTP Steering Committee, FDOT, and citizens. Staff will review the Draft 2050 LRTP and provide guidance for necessary revisions;
- The CONSULTANT will present the Draft 2050 LRTP to the MPO Board and all MPO Advisory Committees for input solicitation.

### **10.3 Prepare Final 2050 LRTP**

The CONSULTANT shall prepare the Final 2050 LRTP based on all tasks noted in this Scope of Services in addition to other elements that may be determined throughout the development of the Plan. The CONSULTANT must submit the Final LRTP at the date specified in the schedule in order for the MPO to meet the adoption date deadline of October 2025. The MPO Board will review the Draft and Final submittal of the LRTP for adoption. The final plan shall include the following tasks and all related documentation:

- PUBLIC INVOLVEMENT PLAN (PIP);
- DATA COMPILATION, REVIEW AND SUMMARY;
- ESTABLISH LRTP GOALS, OBJECTIVES, POLICIES AND PERFORMANCE MEASURES (GOPPMs);
- TRAVEL DEMAND FORECASTING;
- CONGESTION MANAGEMENT PROCESS (CMP) UPDATE;
- ADDITIONAL ELEMENTS;
- NEEDS ASSESSMENT;
- FINANCIAL RESOURCES;
- 20 YEAR COST FEASIBLE PLAN;
- 2050 LONG RANGE TRANSPORTATION PLAN DRAFT SUBMITTAL AND FINALIZATION

### **10.4 Accessibility of Final 2050 LRTP**

Martin MPO is committed to ensuring the accessibility of its products to people with disabilities. As such, the CONSULTANT shall actively work to increase the

accessibility and usability of the Final 2050 LRTP and in doing so will adhere to many of the standards and guidelines, such as the Americans with Disabilities Act (ADA).

### **10.5 Quality Control/Quality Assurance**

The CONSULTANT shall be responsible for making use of quality assurance/quality control (QA/QC) procedures to enable work products to conform to MPO and FDOT standards and criteria. This shall be accomplished through an internal quality control process performed by the CONSULTANT and support by the MPO staff.

### **10.6 Progress Reporting and Invoicing**

The CONSULTANT shall invoice the MPO according to the schedule of deliverables and provide written progress reports describing the work performed on each task to date. The invoice package shall consist of an invoice, progress report, and project schedule. Judgment on whether work of sufficient quality and quantity has been accomplished will be made by the MPO's Project Manager(s) using a comparison of the reported percent of work completed against actual work accomplished.

### **10.7 Technical Standards**

As indicated in the appropriate tasks and subtasks, the CONSULTANT shall develop numerous maps as part of this project. Maps to be prepared include base maps, network maps, transportation improvement maps, and others. All maps shall be TAZ and Census geography compatible. All maps developed as part of the 2050 LRTP update project will utilize ArcGIS format and be compatible with the MPO's GIS database. Upon conclusion of the project, the CONSULTANT shall furnish all electronic map files to the MPO and FDOT.

### **10.8 Deliverables**

The CONSULTANT shall submit the following specific Work products as a hard copy report with the accompanying software files:

- All GIS maps (and linked database files) created for this project;
- TCRPM6 and model output files;
- Scenario model run(s) output files;
- Other files/databases utilized for this project (as feasible); and
- All public involvement comments and recommendations, Open House sign-in sheets, recommendations, and list of public input results gathered throughout the long range planning process.

In addition, the CONSULTANT shall provide copies of the required documents listed below. These are the anticipated printing requirements for the Project. This tabulation shall be used for estimating purposes, and the Project Manager(s) will determine the actual number of copies required prior to each submittal.

Technical Memoranda (each) .....	1 copy
Draft 2050 Long Range Transportation Plan.....	1 bound color copies
Final 2050 Long Range Transportation Plan.....	5 bound color copies

Final 2050 LRTP Executive Summary ..... 20 bound color copies  
Public Information Materials .....bound copies

All documents, graphics, charts, and supporting material generated during the course of this project will be furnished to the MPO in an editable electronic format (as agreed upon) at the conclusion of the project.

DRAFT





**TECHNICAL ADVISORY COMMITTEE (TAC) MEETING  
AGENDA ITEM SUMMARY**

<b>MEETING DATE:</b> February 5, 2024	<b>DUE DATE:</b> January 29, 2024	<b>UPWP#:</b> 6
<b>WORDING:</b> TRANSIT DEVELOPMENT PLAN (TDP) PROGRESS REPORT UPDATE		
<b>REQUESTED BY:</b> MPO	<b>PREPARED BY:</b> Lucine Martens / Beth Beltran	<b>DOCUMENT(S) REQUIRING ACTION:</b> TDP Existing Conditions and Transit Gap Analysis Report and Plan Goals/Objectives

**BACKGROUND**

In Florida, a Transit Development Plan (TDP) is required by the State for recipients of Public Transit Block Grant program funding and is regulated by the Florida Department of Transportation (FDOT). A TDP serves as the basis for defining public transit needs, which is a prerequisite to receive State Block Grant funds. Beyond regulatory and administrative requirements, the TDP is intended to serve as 10-year strategic plan for MARTY. The TDP will define public transportation needs, solicit broad input by coordinating with other plans, involve substantial public participation and explore community goals with decision-makers and other stakeholders, define alternative courses of action, and develop a systemic plan and monitoring program.

**ISSUES**

At the February 5, 2024, Technical Advisory Committee meeting, the consultant will present the:

- MARTY Existing Conditions Summary and Transit Gap Analysis Report
- Highlights of the TDP Survey

The consultant will share the direction received from the stakeholders and members of the public during the Open Houses/ Listening Sessions in (5) Commission Districts, ((2) in District 3) and from the rider intercept surveys.

As specified in the TDP Public Involvement Plan (PIP), key stakeholders include:

- The Regional Workforce Board (RWB);
- FDOT - Office of Modal Development
- Project Review Committee
- Community Stakeholder Group
- Public Agencies including Health and Human Services

## **RECOMMENDED ACTIONS**

- Approve the Existing Conditions Summary and Transit Gap Analysis Report
- Approve the Existing Conditions Summary and Transit Gap Analysis Report with comments.

## **APPROVAL**

MPO

## **ATTACHMENTS**

- PowerPoint Presentation
- Existing Conditions Summary and Transit Gap Analysis Report



# Marty Transit Development Plan >>>

MAJOR UPDATE FROM 2024 – 2033



Martin MPO  
TAC Meeting **TAC 02/05/2024**



**February 5, 2024**

# Agenda

- 1 Project Team Introductions
- 2 What is a Transit Development Plan?
- 3 Marty Routes & Schedules
- 4 Travel Patterns and Ridership Trends
- 5 Analysis
- 6 Public Involvement
- 7 Opportunities
- 8 Goals and Objectives
- 9 Next Steps





# What is a TDP

A Transit Development Plan (TDP) is being developed by the Martin Metropolitan Planning Organization (MPO) for, and in partnership with, Martin County Public Transit (Marty). The TDP will guide the future of public transportation in Martin County from 2024 to 2033. It will represent the County's **vision** to promote transit ridership growth and improvement over the next decade.

TDPs are a prerequisite required by Florida Department Of Transportation (FDOT) (Sections 339.135, and 339.155, Florida Statutes) as a recipient of State Block Grant funds.



# Scope of Work

**TASK 1:** Project Management

01



**TASK 3:** Public Involvement

03



**TASK 5:** Existing Services & Performance Assessment

05



**TASK 7:** Plan Development

07



02

**TASK 2:** Stakeholder Coordination Meetings



04

**TASK 4:** Baseline Data, Conditions & Assessments



06

**TASK 6:** Transit Demand Analysis



08

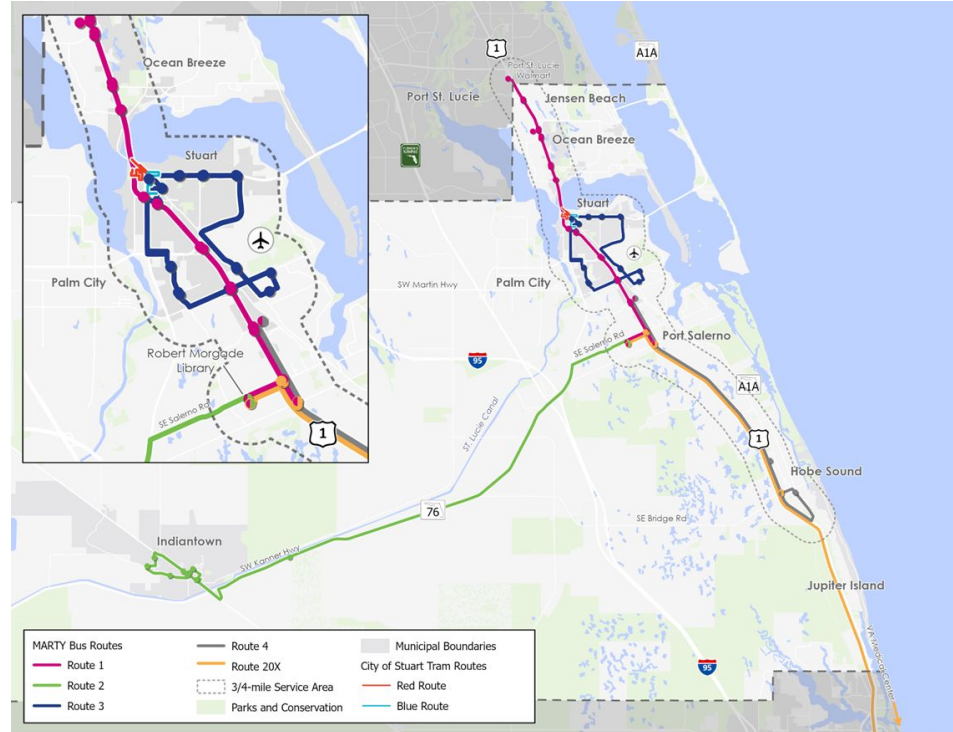
**TASK 8:** Documentation



# Study Area & Service Area

## Service Area

- Most people are **willing to walk 5 to 10 minutes**, or approximately one-quarter to one-half mile, **to a transit stop.**
- **ADA-complementary paratransit services must be provided within three-quarters of a mile** on either side of each fixed route, excluding commuter bus routes, like Route 20X, and rural routes, like Route 2.



# MARTY Routes

## Local Fixed Route

- \$1.50 per ride
- \$0.75 Discounted
- \$3.00 All day pass
- \$20 for 20 boardings

## Commuter Bus

- \$2.00 per ride
- \$1.00 Discounted
- \$20 Express Pass for 10 boardings

## Paratransit

- \$3.00 per ride

**Veterans ride free** under the County's Veterans Transportation Program.

**Discounted passes available** to seniors, passengers with disabilities, and passengers with Medicare card.

Route	Headways	Span of Service
<b>Route 1</b> US 1 Corridor	35-minutes	6 a.m. to 8 p.m. Monday-Friday
<b>Route 2</b> Indiantown	35-minutes within Indiantown 160-minutes from Indiantown to Robert Morgade Library	6 a.m. to 7:35 p.m. Monday-Friday
<b>Route 3</b> Stuart	40-minutes	6 a.m. to 8 p.m. Monday-Friday
<b>Route 4</b> South Stuart/ Hobe Sound	60-minutes	7:00 a.m. to 5:55 p.m.
<b>Route 20X</b> to Palm Beach County	Varies from 35- to 95-minutes	6:30 am to 7:25 p.m.

# Commute Travel Patterns

## TOP 10 ORIGINS OF WORKERS

Place	Total Trips	Percent
Port St. Lucie	16,765	24%
Palm City	4,265	6%
Stuart	3,015	4%
Jensen Beach	2,255	3%
Hobe Sound	1,757	2%
Port Salerno	1,665	2%
Fort Pierce	1,535	2%
Indiantown	934	1%
Jupiter	927	1%
West Palm Beach	650	1%
All other	36,628	52%

**1 in 4**

workers in Martin County live in Port St. Lucie

More workers commute from outside of Martin County than live and work in it.

**45%**

of work trips come from outside of Martin County. Only 22% of workers live and work within Martin County.

There are

**112,802**

jobs within a 3/4-mile distance to a MARTY route

but only 58% are within a three-quarter-mile distance of a bus stop.\*

*\*Includes jobs in neighboring counties.*

*Source: TBEST*

There are

**68,766**

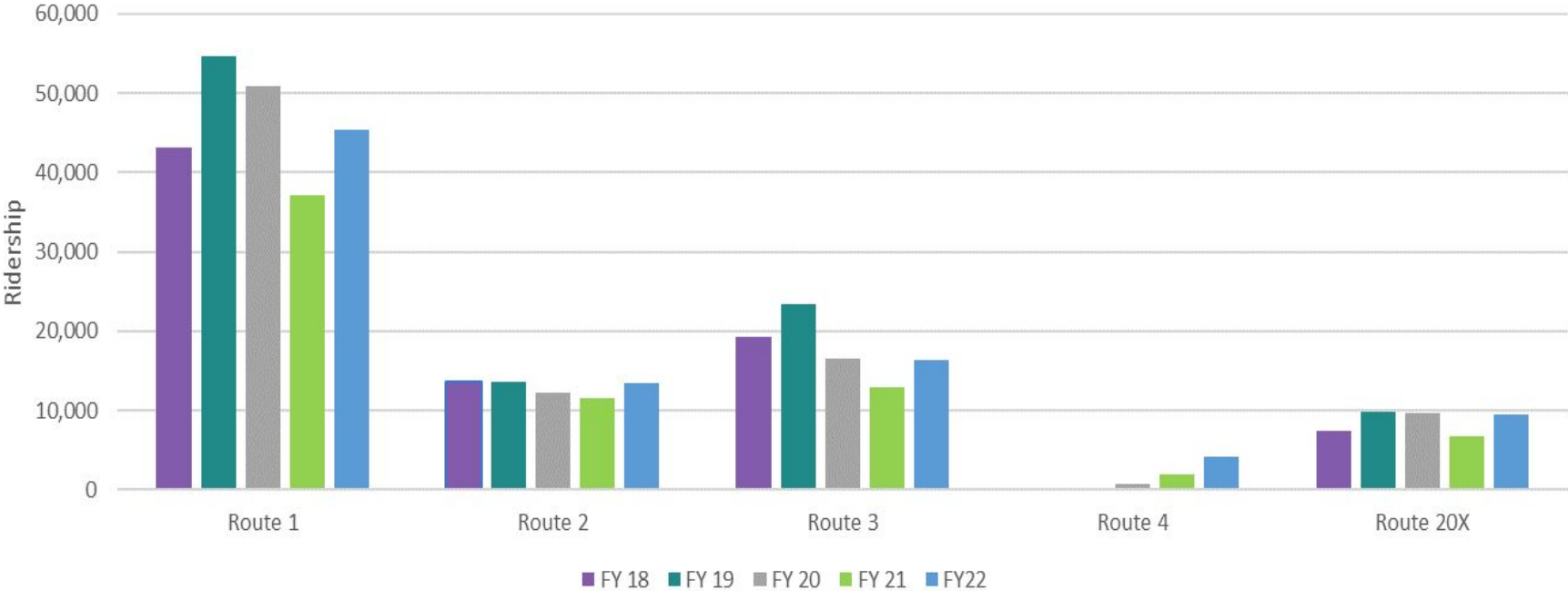
workers within a 3/4-mile distance to a MARTY route

but only 52% are within a 3/4-mile distance of a bus stop.\*

*\*Includes jobs in neighboring counties.*

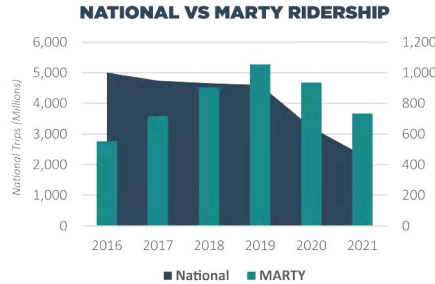
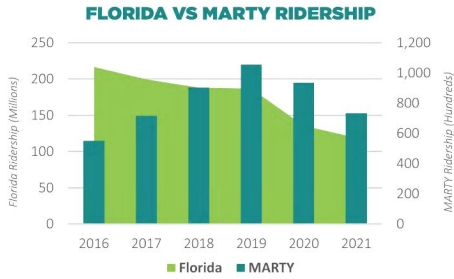
*Source: TBEST*

# Ridership by Route and Fiscal Year



# Ridership Trends

## Florida & MARTY Ridership Trends



### IN THE PAST 5 YEARS

**-55%**  
decrease in Florida Ridership

**8%**  
increase in MARTY Ridership

**-56%**  
decrease in National Ridership

**88,904** Fixed Route Trips in FY 2022

## National Trends

- Nationwide, agencies experienced a decline since 2014 and an overall **decline of 56% in the past 5 years**

## Marty Operations

- Marty Ridership **increased 8%** while Florida agencies experienced a 55% decrease.
- Effectiveness indicators such as vehicle miles per capita, revenue miles between failures showed improvements.
- Efficiency measures for vehicle utilization and energy utilization vehicle miles, revenue hours and total maintenance show improving trends over the past five years



# Ridership Trends

FY23		FY22		FY21		FY20		FY19		FY18	
Fixed route	103,642	Fixed route	88,904	Fixed route	70,247	Fixed route	90,040	Fixed route	101,698	Fixed route	83,467
Demand Response	4,101	Demand Response	3,765	Demand Response	3,186	Demand Response	3,522	Demand Response	3,798	Demand Response	6,821
<b>Total UPT</b>	<b>107,743</b>	<b>Total UPT</b>	<b>92,669</b>	<b>Total UPT</b>	<b>73,433</b>	<b>Total UPT</b>	<b>93,562</b>	<b>Total UPT</b>	<b>105,496</b>	<b>Total UPT</b>	<b>90,288</b>

**+27% FY 21 to FY 22**

**+16% FY 22 to FY 23**





# Peer Agency Review



Five transit systems were selected, four are counties in the State of Florida and one in California, the final list is as follows:

























- Indian River, FL – GoLine
- Collier County, FL – RideCAT
- Bay County, FL – Bayway
- St. Lucie County, FL – Art
- Napa County, CA – the Vine



# Peer Agency Results 2022

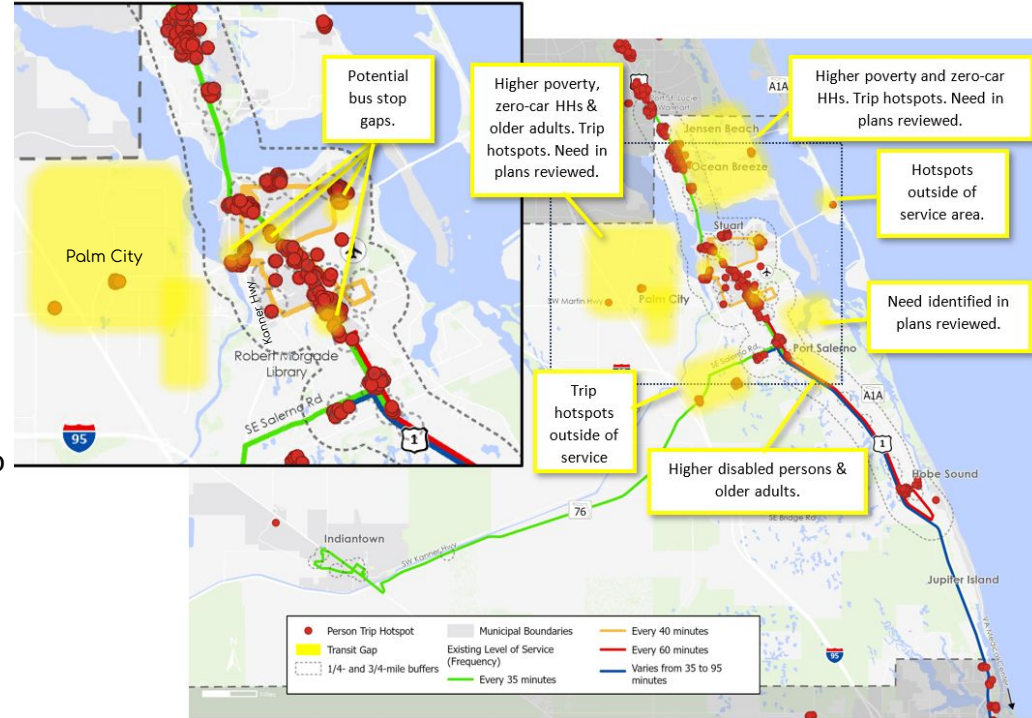
 = 50,000  
 = \$500,000

 = 50,000  
 = \$3

	Martin County Marty	Indian River GoLine	Collier County RideCAT	Bay County Bayway	St Lucie County Art	Napa County The Vine
<b>Service Area (sqm)</b>	 65	 217	 2,025	 758	 572	 45
<b>Service Population</b>	 159,942	 163,662	 384,902	 179,178	 336,584	 138,000
<b>Total Operating Expense</b>	\$\$\$\$\$\$ \$3,023,246	\$\$\$\$\$\$\$\$\$\$ \$5,402,008	\$\$\$\$\$\$\$\$\$\$\$\$\$\$ \$12,194,270	\$\$\$\$\$\$\$\$\$\$\$\$ \$5,098,436	\$\$\$\$\$\$\$\$\$\$\$\$\$\$ \$8,280,862	\$\$\$\$\$\$\$\$\$\$\$\$\$\$ \$12,215,112
<b>Passenger Trips</b>	 92,669	 1,239,241	 746,338	 349,281	 570,887	 441,265
<b>Cost per Rider</b>	 \$32.6	 \$4.35	 \$16.33	 \$14.59	 \$14.05	 \$27.8

# Transit Gap Analysis

- Demographics
  - Zero-car households
  - Households living under poverty
  - Older adults (65+)
  - Disabled adults
- Prior plans and studies (including TES)
- Hotspot analysis of person trips by parcel
  - ITE Trip generation rates based on land use, living sq ft, dwelling units
  - NHTSA vehicle occupancy rates converted to person trips



# HOW SHOULD MARTY GROW IN THE NEXT 10 YEARS?

## SERVICE TYPES



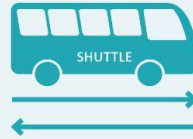
### Micromobility

Compact, eco-friendly transportation using small vehicles like scooters and bikes for short urban trips.



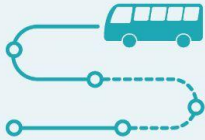
### Ridesharing/Microtransit

On-demand shared rides in a service zone that can be booked using an app or by phone call. Usually a van, small electric vehicle or shuttle bus.



### Community Shuttle

Circulators serving a small area usually in a small transit bus that connect to other fixed-route service.



### Flex Route

Deviated fixed-route transit is a mix of fixed-route and on-demand services, where riders in a set zone can request to be picked up or dropped off in advance.



### Local Bus

Fixed-route transit with a set schedule and bus stop locations.



### Commuter Bus

Long distance fixed-route transit service with limited stops.

## IMPROVE EXISTING SERVICE



### Later Service

Extend transit service to later hours for late-night commuters.



### Weekend Service

Add Saturday and Sunday Service.



### Marketing/Information

Improve and increase public transit information and marketing.



### More Frequency

Adding buses to increase the frequency of service and reduce wait times.



### Free Fares

Allow riders free rides for all riders or more riders to be eligible for free rides like students and lower income households.

## INFRASTRUCTURE



### ADA

Improve ADA accessibility at transit stops, ensuring inclusivity and easy access for all passengers.



### Bike Racks

Add bike racks at transit stops, encouraging eco-friendly commuting with convenient bicycle storage.



### Trash Receptacles

Install trash bins at transit stops to maintain cleanliness.



### Bus Stop Seating

Add more bus stop seats to improve comfort during wait times.



### Shade/Landscaping

Enhance transit areas with landscaping and shade, offering comfort, aesthetics, and eco-friendly urban spaces.



### Technology

Improving mobile ticketing to include connecting transit agencies, adding ticket machines in new locations, real-time information of available bike rack spaces, real-time arrival information at stops.



### Bus Shelters

Add more bus shelters to protect riders from the sun and rain.



### Fare Payment

Install more fare payment stations for quicker and convenient access to public transit, reducing ticketing delays.



### Mid-Block Crossings

Add mid-block crossings where there are few signalized intersections for safer access to and from bus stops.



# Public Involvement - Open Houses

D1: Jensen Beach - Jammin' Jensen



D2: Golden Gate - Cassidy Center



D3: Indiantown: Council Chambers



D5: Hobe Sound (TBD)

D4: Robert Morgade Library



D5: Palm City

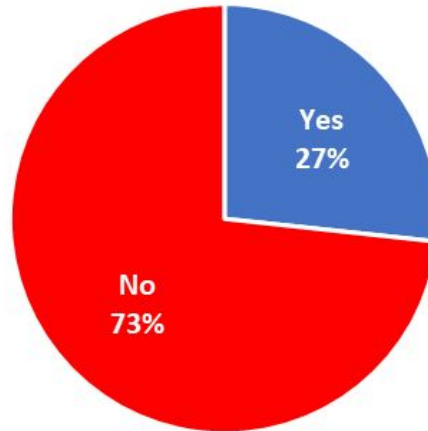




# Preliminary Survey Results

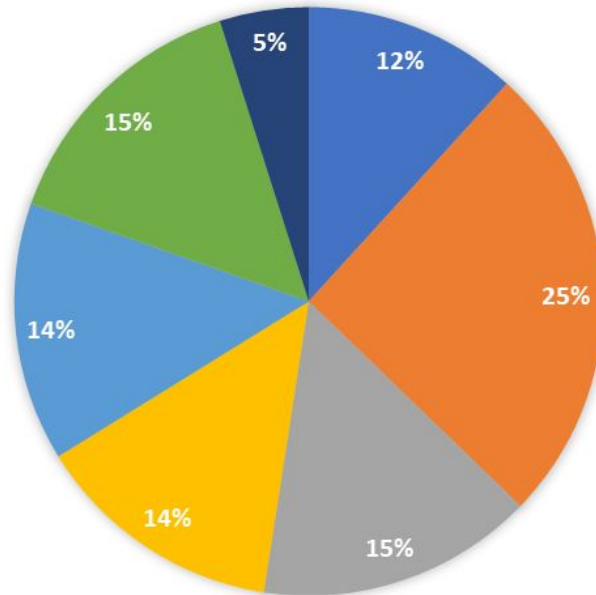
501 people have responded the Survey

Have you ever used Martin's County transit fixed route bus system (Marty)?



# Preliminary Survey Results

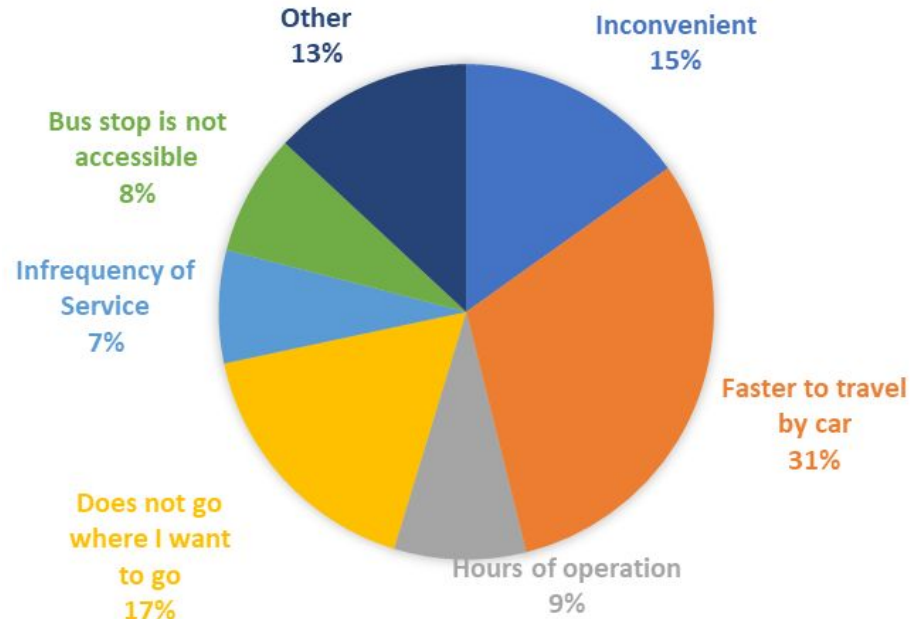
USERS - What Service improvements would make Marty Better?



- More frequent service on existing routes
- Saturday service
- Sunday service
- Later service
- New routes/services
- More benches, shelters, bike racks at bus stops
- Better sidewalk connections to bus stops

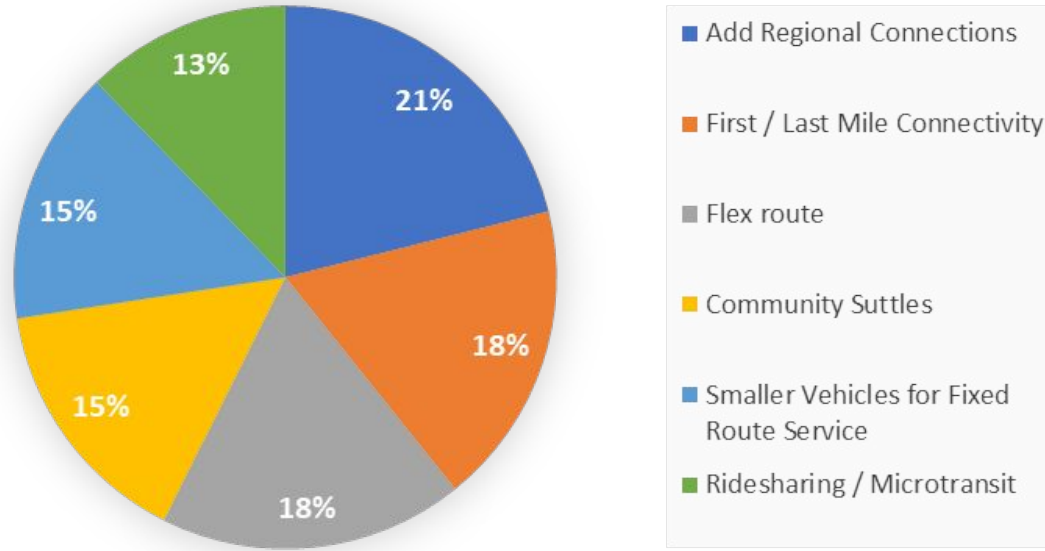
# Preliminary Survey Results

## NON-USERS - Why don't you use Marty?



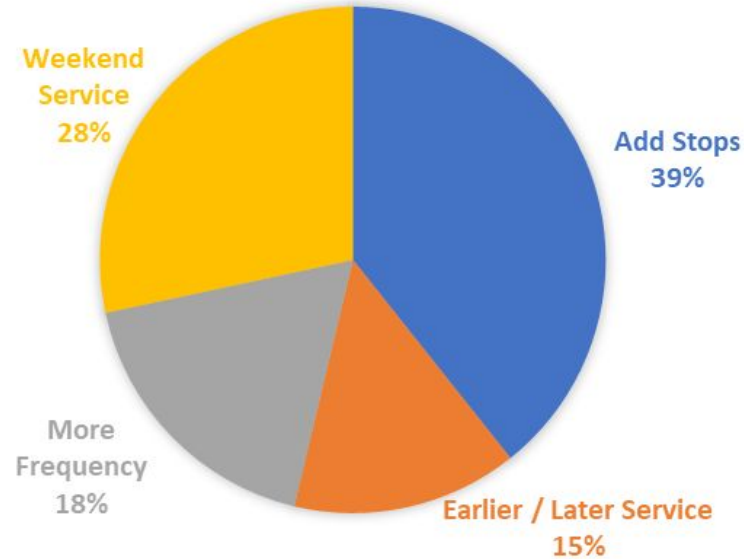
# Stakeholders -Polling Results

Choose the service types that should be increased (SELECT 3)



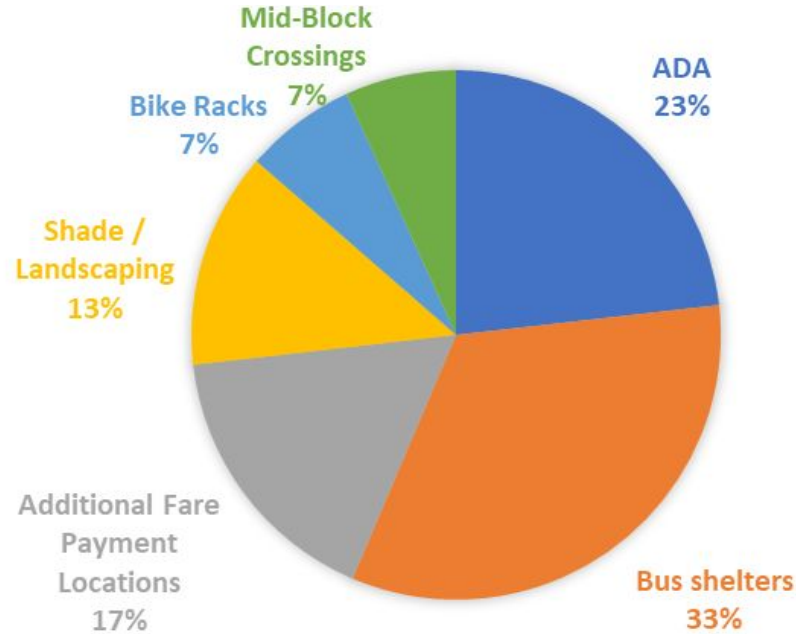
# Stakeholders -Polling Results

Identify improvements the existing service should prioritize (SELECT 2)



# Stakeholders -Polling Results

Select the infrastructure improvements that should be prioritized?





# Microtransit Opportunities

- Fixed Route smaller vehicles
- First - mile/last - mile services
- Flex Route
- Paratransit services
- Cost efficient results
- Requires clarification on Federal Funding Impacts
- W-2 Employees
- Private Drivers
- Electric Fleet
- Local economic development opportunities



# 2024 Vision/Goal(s)

**2014 TDP** - “To enhance the overall quality of life of Martin County residents and workers by providing safe, accessible, reliable, interconnected, and attractive public transportation system that is effective and efficient in meeting their mobility and accessibility needs.”

**2019 TDP** - “Enhance the overall quality of life of Martin County residents, workers, and visitors by providing a safe, accessible, reliable, interconnected, and attractive public transportation system with growth to meet the community’s needs.”

**Draft Proposed 2024 TDP** - “Improve the overall quality of life for Martin County residents, workers and visitors by providing a safe, efficient, convenient public transportation system that is well understood by the public.”

# Objectives

## 2014 TDP

- Service Quality
- Efficiency & Effectiveness
- Ridership
- Public Awareness
- Intergovernmental Coordination

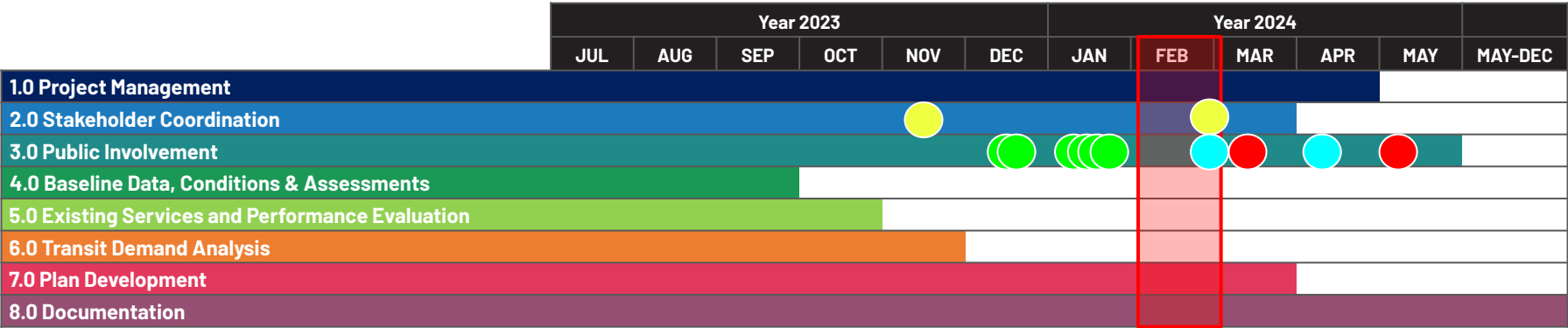
## 2019 TDP

- Service Quality
- Efficiency & Effectiveness
- Ridership
- Public Awareness
- Intergovernmental Coordination

## Draft Proposed 2024 TDP

- Safety
- Efficiency & Effectiveness
- Targeted Opportunities for Underserved Communities
- Resilient
- Technologically Advanced
- Well-Recognized
- Coordinated System

# Next Steps



- Stakeholder Working Group Meeting
- Public Open Houses
- MPO Committees and Policy Board Meetings
- County Commission



# Q&A

THANK YOU







# Marty Transit Development Plan >>>

MAJOR UPDATE FROM 2024 – 2033

## Baseline Data, Existing Transit Services and Gap Analysis



*Executive Summary*  
January 29, 2024





# MARTY Transit Development Plan >>>

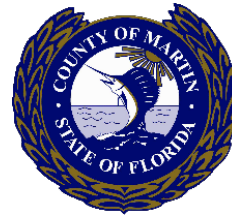
MAJOR UPDATE FROM 2024 – 2033

## Baseline Data, Conditions and Assessments

Executive Summary

PREPARED FOR:

Martin County Public Transit (MARTY)



PREPARED BY:





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## Background and Introduction

A Transit Development Plan (TDP) identifies a community’s need for public transit services. This plan serves as a guide for how a transit agency will strategically grow over the next 10 years and results in a financially feasible implementation plan. TDPs are a state requirement for transit agencies to be State block grant recipients.

This study was initiated by the Martin County Metropolitan Planning Organization (MPO) to conduct a major update to the Transit Development Plan (TDP) for its transit service, MARTY, for Fiscal Years (FY) 2024-2033. Prior to this update, the MPO conducted a Transit Efficiency Study (TES). The TES provided stakeholder coordination and initial public outreach efforts to explore ridership and coverage strategies that could improve passenger experience and efficiently expand community transit services to areas not currently served.

### WHAT ARE THE TDP REQUIREMENTS?

- Major updates every five years, covering a 10-year planning horizon.
- A Public Involvement Plan, developed and approved by FDOT or consistent with the approved MPO Public Involvement Plan.
- FDOT, the Regional Workforce Development Board, and the Martin MPO must be advised of all public meetings at which the TDP is presented and discussed. These entities must be allowed to review and comment on the TDP during the development of the mission, goals, objectives, alternatives, and 10-year implementation program.
- Estimation of the community’s demand for transit service (10-year annual projections)
- Situation Appraisal
- Mission and Goals
- Review of relevant plans and policies for consistency
- Ten-year implementation plan
- Minor annual updates documenting the agency’s progress.

*Source: Florida Administrative Code Rule 14-73.001 Public Transit*



# MARTIN COUNTY, FLORIDA

Your County. Your Community.



In 1974, the Martin County Council on Aging (COA) was founded to provide paratransit services to older adults within Martin County. During the mid-1980s, the COA sought and was designated as the Community Transportation Coordinator (CTC) for Martin County by the Florida Commission for the Transportation Disadvantaged (CTD). Services were expanded to service-disabled and low-income persons, as well as the public.

The need to improve the quality of life for Martin County residents with cost-efficient and accessible transportation, combined with the continued growth in population, prompted local leadership to move forward with implementing more robust public transit services using available Federal and State funding programs. In 2005, Martin County contracted the COA to operate a small, fixed-route bus system. Since then, several enhancements to the public transit service ensued, including a rebranding of the transit system, procuring heavy-duty vehicles, implementing an Americans with Disabilities Act (ADA) eligibility program, constructing ADA-compliant bus stops, developing a bus stop amenity program, and contracting with a transportation provider to perform on-road support services.

MARTY services are currently provided by Martin County under the Public Works Department. The system offers four local fixed-routes with ADA-complementary services and one commuter bus route, as shown in **Figure 1**.

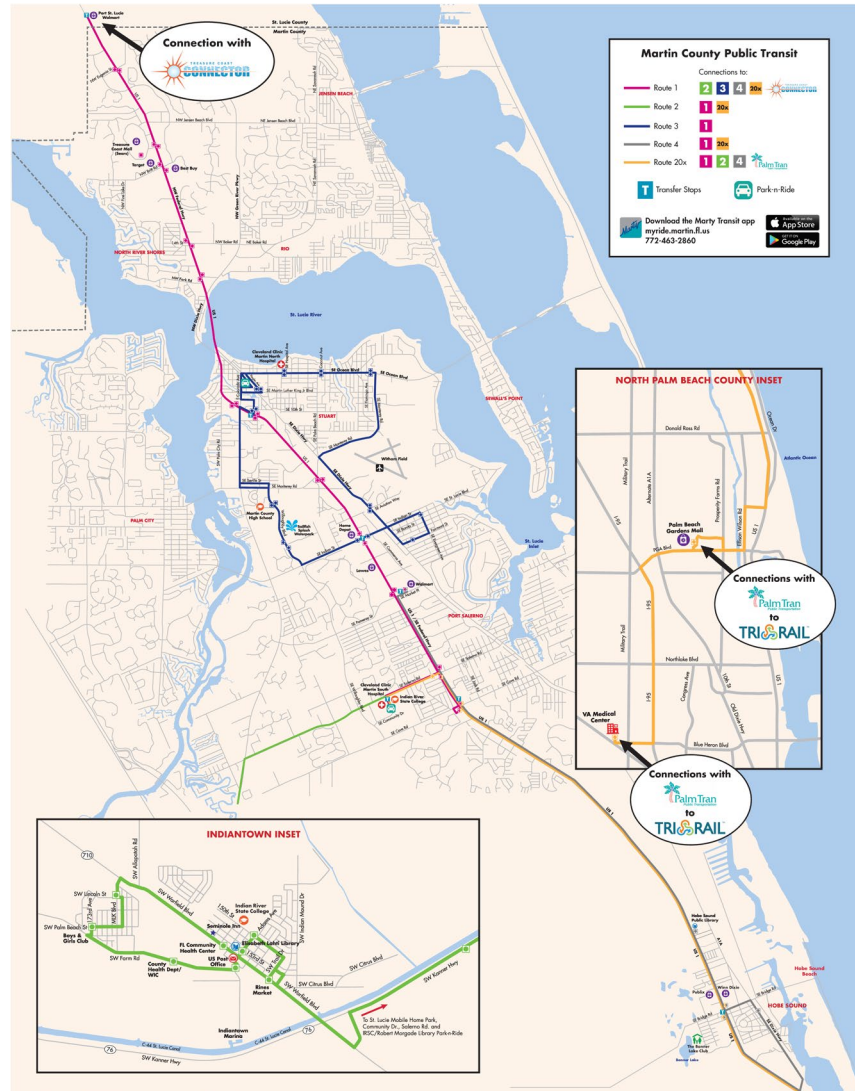


Figure 1. System Map





This report includes a review of base data to help gain an understanding of the existing environment in which MARTY is operating, including:

- study area
- socioeconomic data
- land use, urban design characteristics
- growth trends
- travel patterns
- plans and policy review

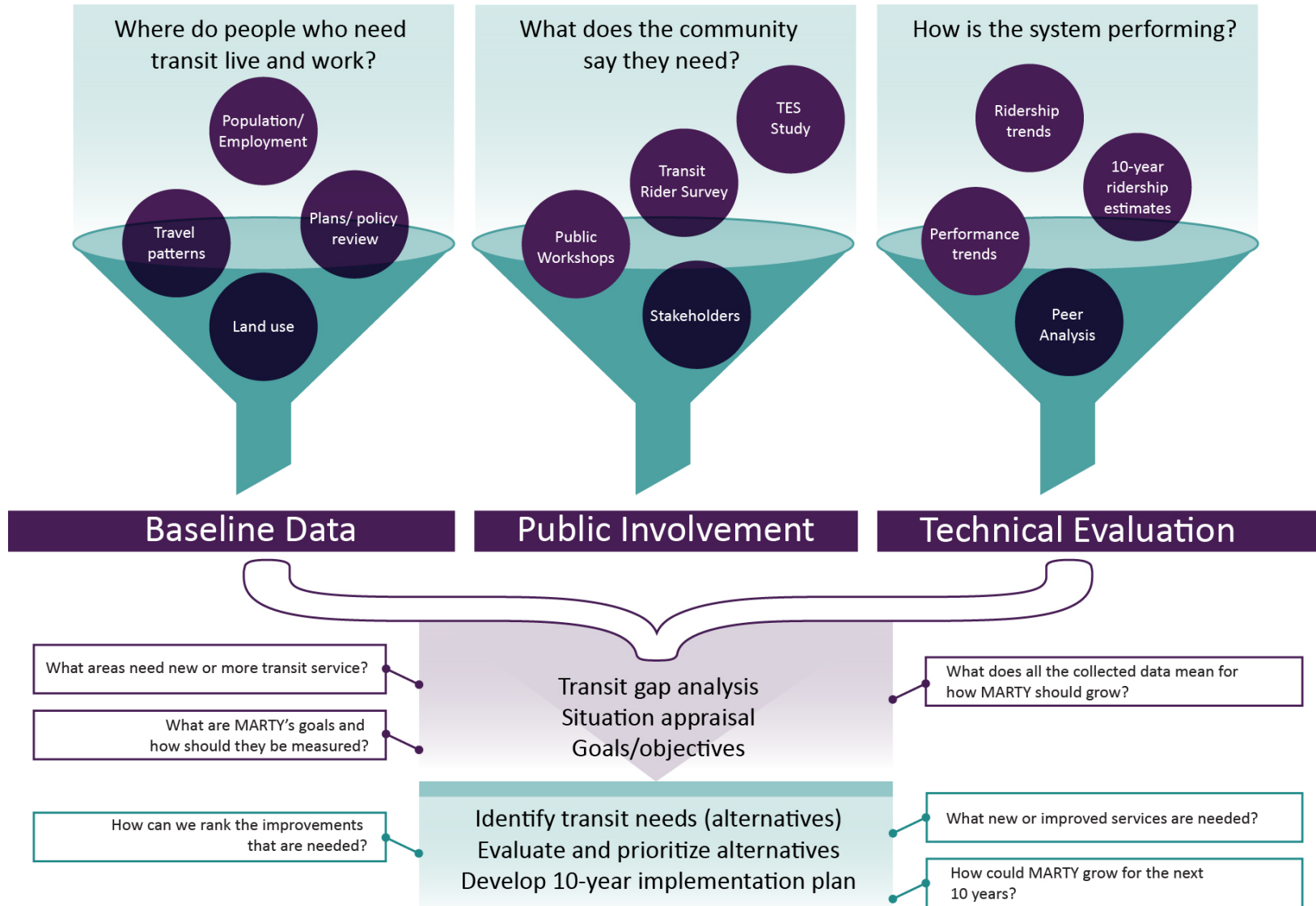
This information will feed into later phases of the project, including the identification of transit needs, as shown in **Figure 2**.

**Figure 2: Transit Development Plan Process**





**Figure 3: Transit Development Plan Process (Continued)**







## Study Area

Martin County is part of the Treasure Coast region of Florida. It is known for its coastal lifestyle and fishing, and it is home to the Indian River Lagoon, St Lucie River, Jonathan Dickinson State Park, Halpatiokee Regional Park, Savannas Preserve State Park, and St. Lucie Inlet Preserve State Park. Major roadways that provide regional access to the county include I-95, Florida’s Turnpike, and U.S. 1.

In 2022, there were 158,400 residents in Martin County. Stuart is the county seat and is the largest city in Martin County, with a population of 17,300; however, Palm City is the largest and most populated census-designated place, with a population of 25,200 residents, followed by Hobe Sound, with 14,000 residents according to 2022 American Community Survey (ACS) estimates.

Most urbanization has occurred east of I-95, with rural, agricultural, or conservation tracts dominating Martin County’s western portions.

## Community Populations

### CITY

Stuart (17,300)

### TOWNS

Sewall’s Point (2,000)

Jupiter Island (900)

Ocean Breeze (300)

### VILLAGES

Indiantown (6,600)

### CENSUS-DESIGNATED PLACES

Palm City (25,200)

Hobe Sound (14,000)

Jensen Beach (13,100)

Port Salerno (11,400)

North River Shores (3,700)

Rio (900)

### UNINCORPORATED PLACES

Hutchinson Island (4,500)

*Data Source: 2022 ACS 5-Year Estimates, Census Quick Facts*

## MARTY Transit Routes

### ROUTE



#### U.S. 1

**Corridor:**  
Connects to Treasure Coast Connector in Port St. Lucie Walmart and to Robert Morgade Library via U.S. 1

### ROUTE



#### Indiantown:

Connects Indiantown to Stuart via SW Kanner Highway

### ROUTE



#### Stuart:

Circulator serving the City of Stuart.

### ROUTE



#### South Stuart/ Hobe Sound:

Connects from Robert Morgade Library to Hobe Sound via U.S. 1.

### ROUTE



#### Palm Beach County:

Express from Stuart to Palm Beach County via U.S. 1 with connections to PalmTran at Palm Beach Gardens Mall and the VAMC in Palm Beach County



Source: [StuartLife.com](http://StuartLife.com)



Source: [www.discovermartin.com](http://www.discovermartin.com)



Source: [Martin County Property Appraiser](#)

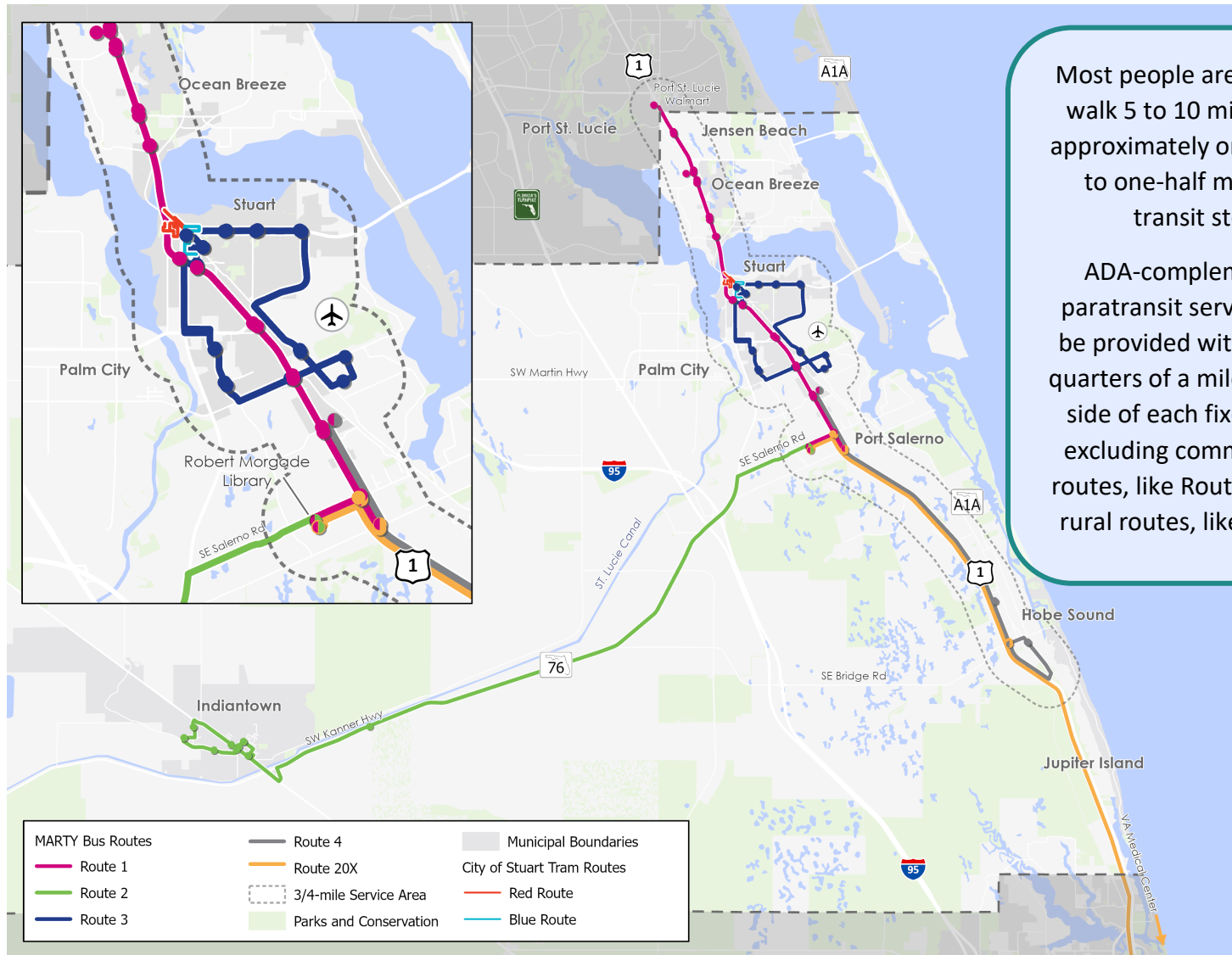


Source: [Stuart/Martin County Chamber of Commerce](#)





**Figure 4: Study Area**





## Socioeconomic Data

Understanding where people live and work helps determine where, when, and how transit should serve the community.

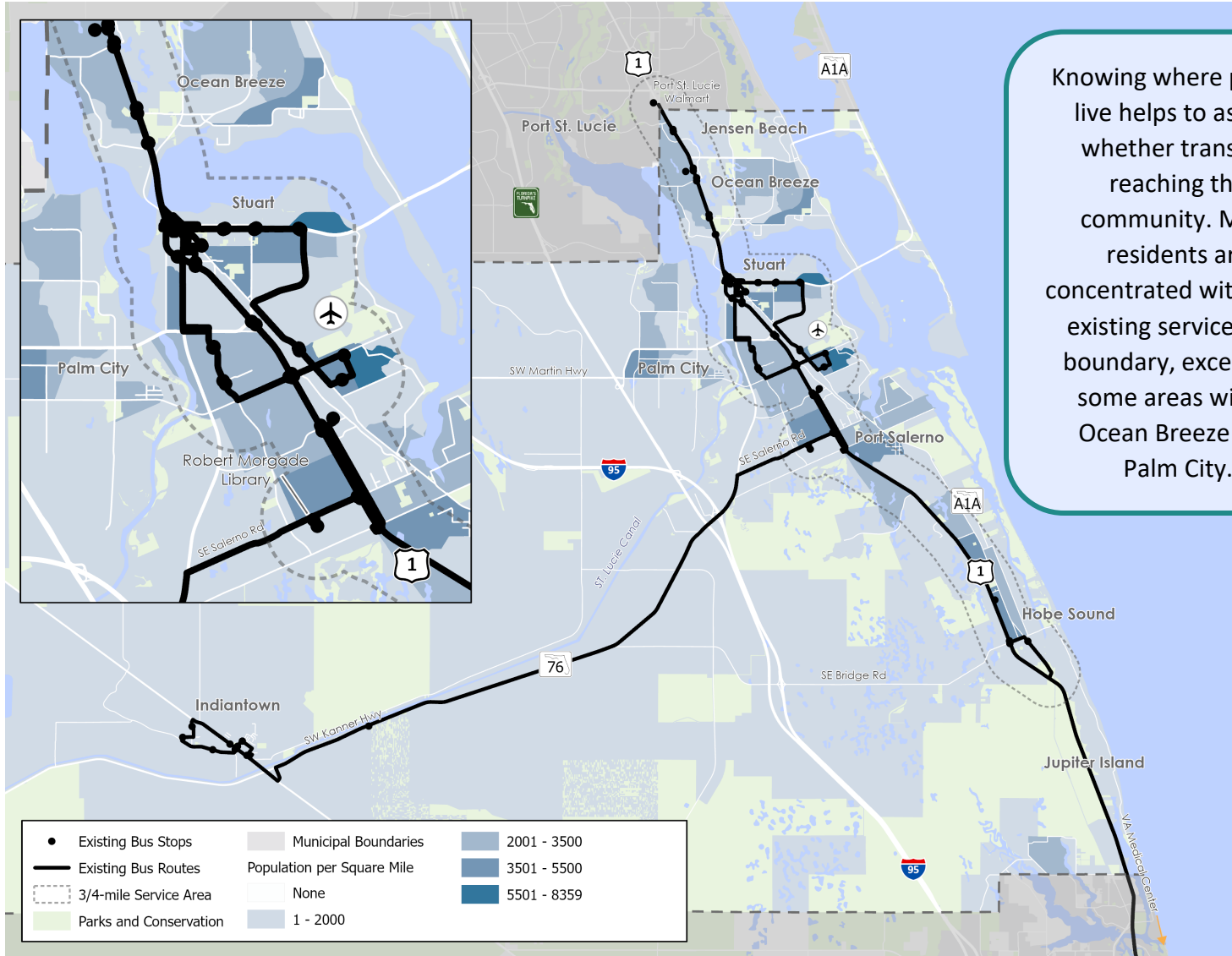
Figure 5: Martin County Population Profile







**Figure 6: Population Density (Persons per Square Mile)**

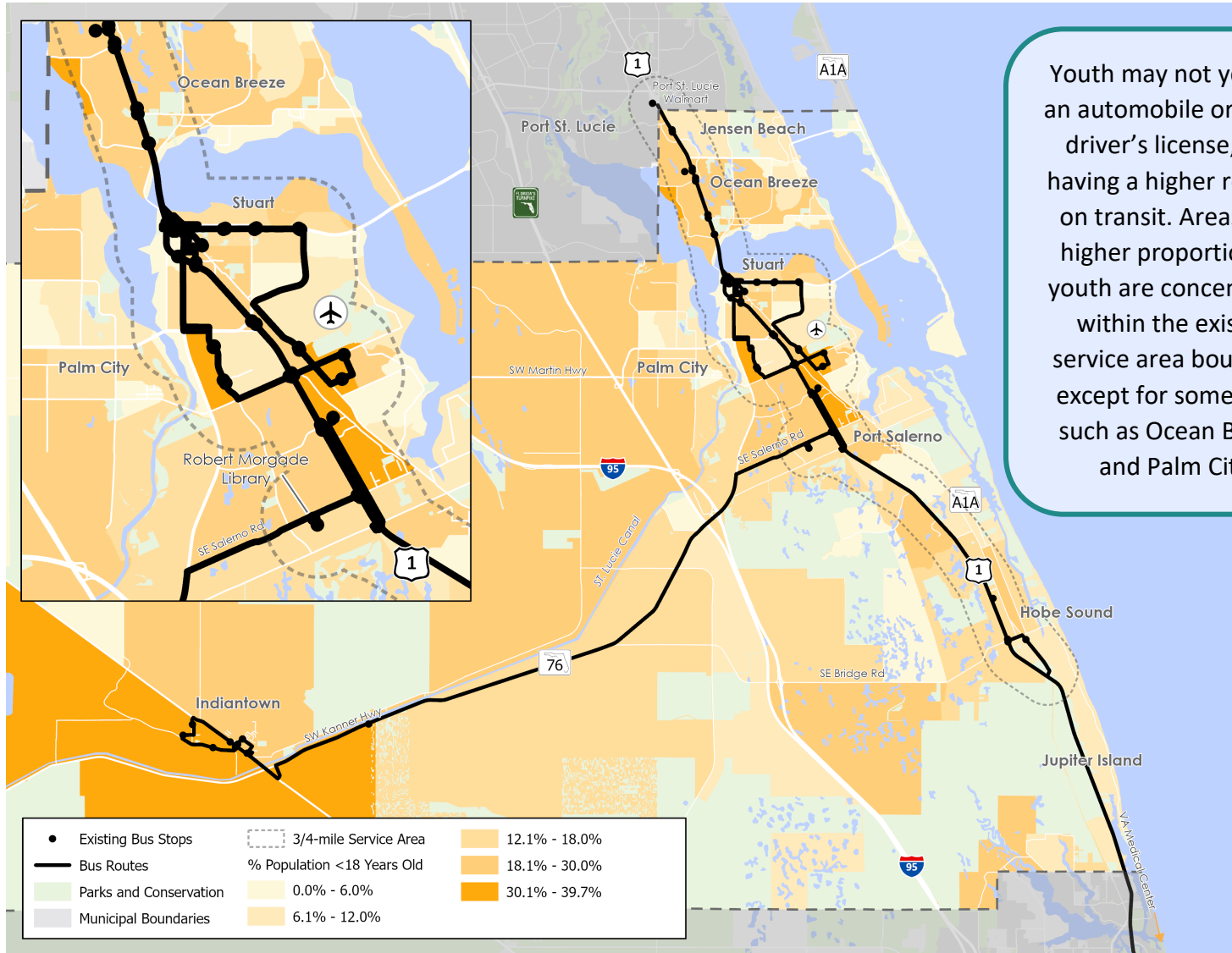


Knowing where people live helps to assess whether transit is reaching the community. Most residents are concentrated within the existing service area boundary, except for some areas within Ocean Breeze and Palm City.

Source: ACS 2021 5-Year Estimates



**Figure 7: Population under 18**

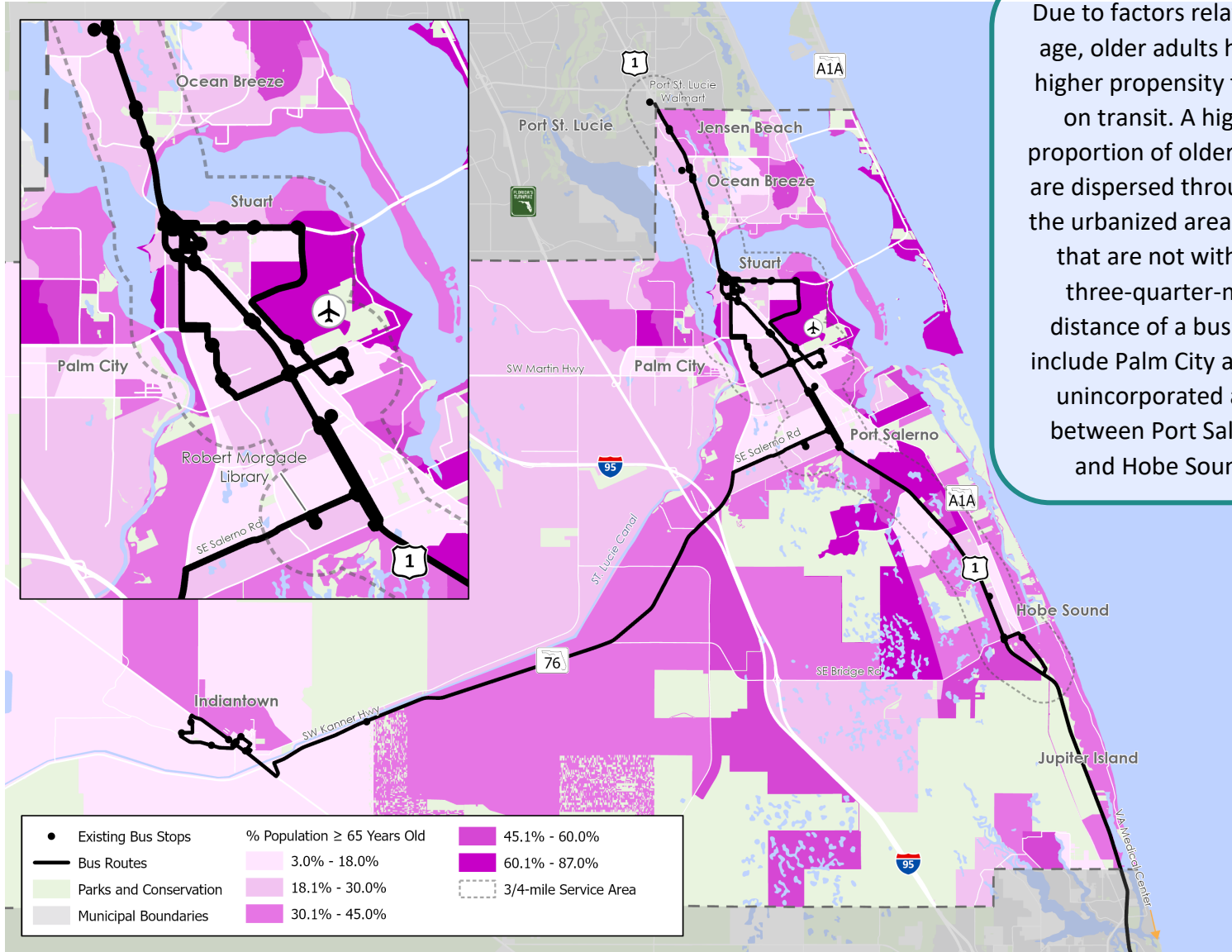


Source: ACS 2021 5-Year Estimates





**Figure 8: Adults over 65**

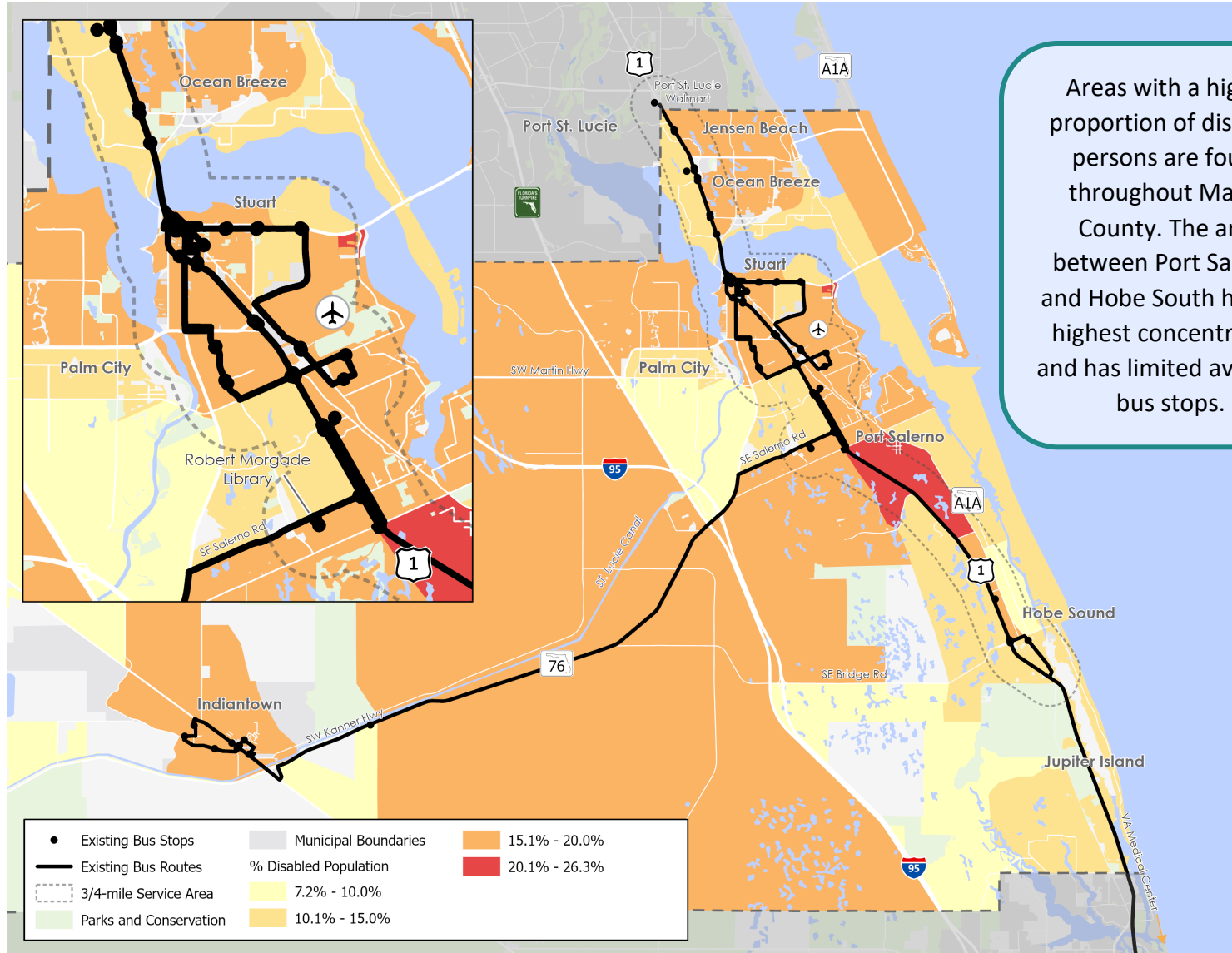


Due to factors relating to age, older adults have a higher propensity to rely on transit. A higher proportion of older adults are dispersed throughout the urbanized area. Areas that are not within a three-quarter-mile distance of a bus stop include Palm City and the unincorporated area between Port Salerno and Hobe Sound.

Source: ACS 2021 5-Year Estimates



Figure 9: Disabled Populations

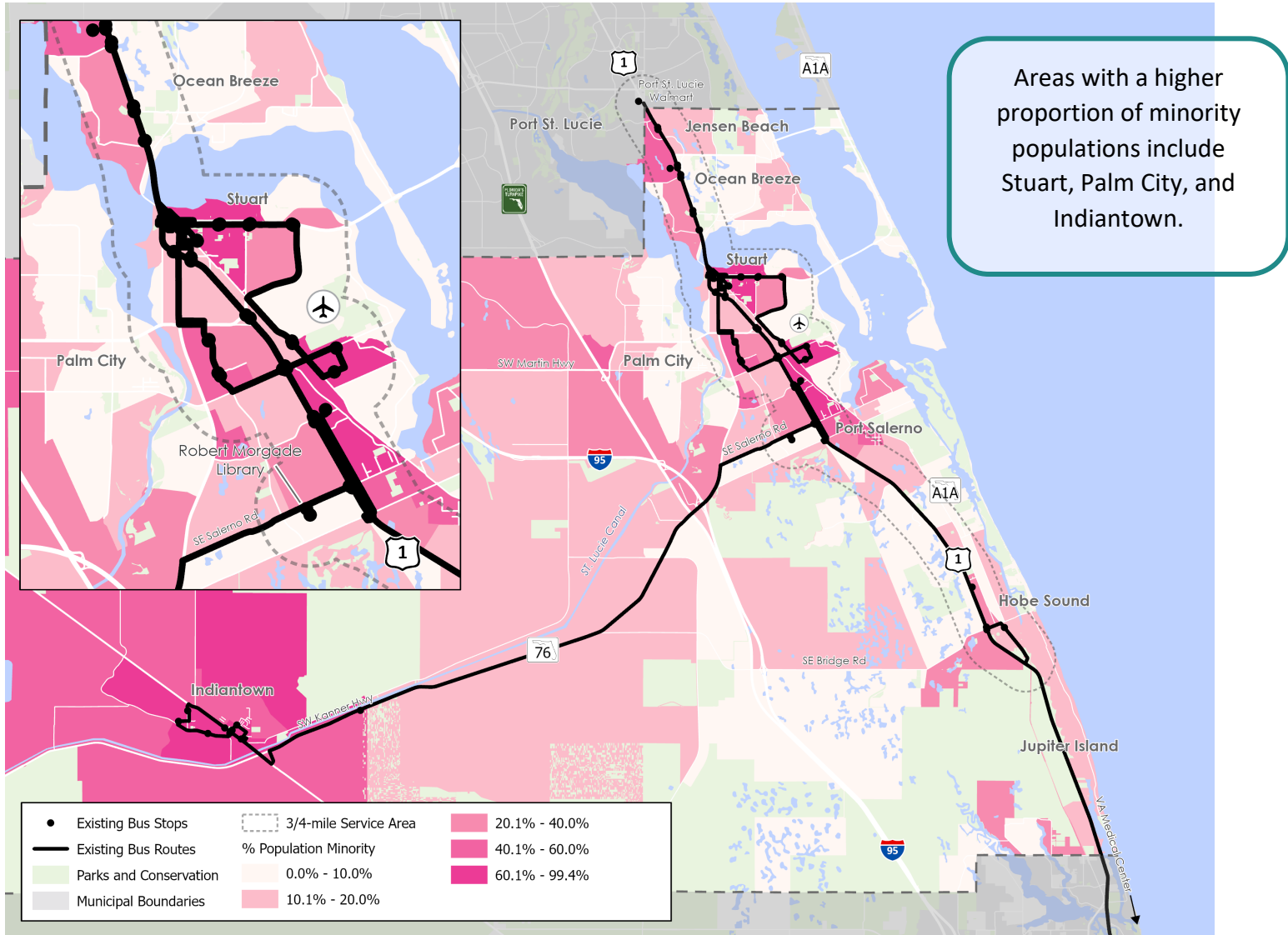


Source: ACS 2021 5-Year Estimates





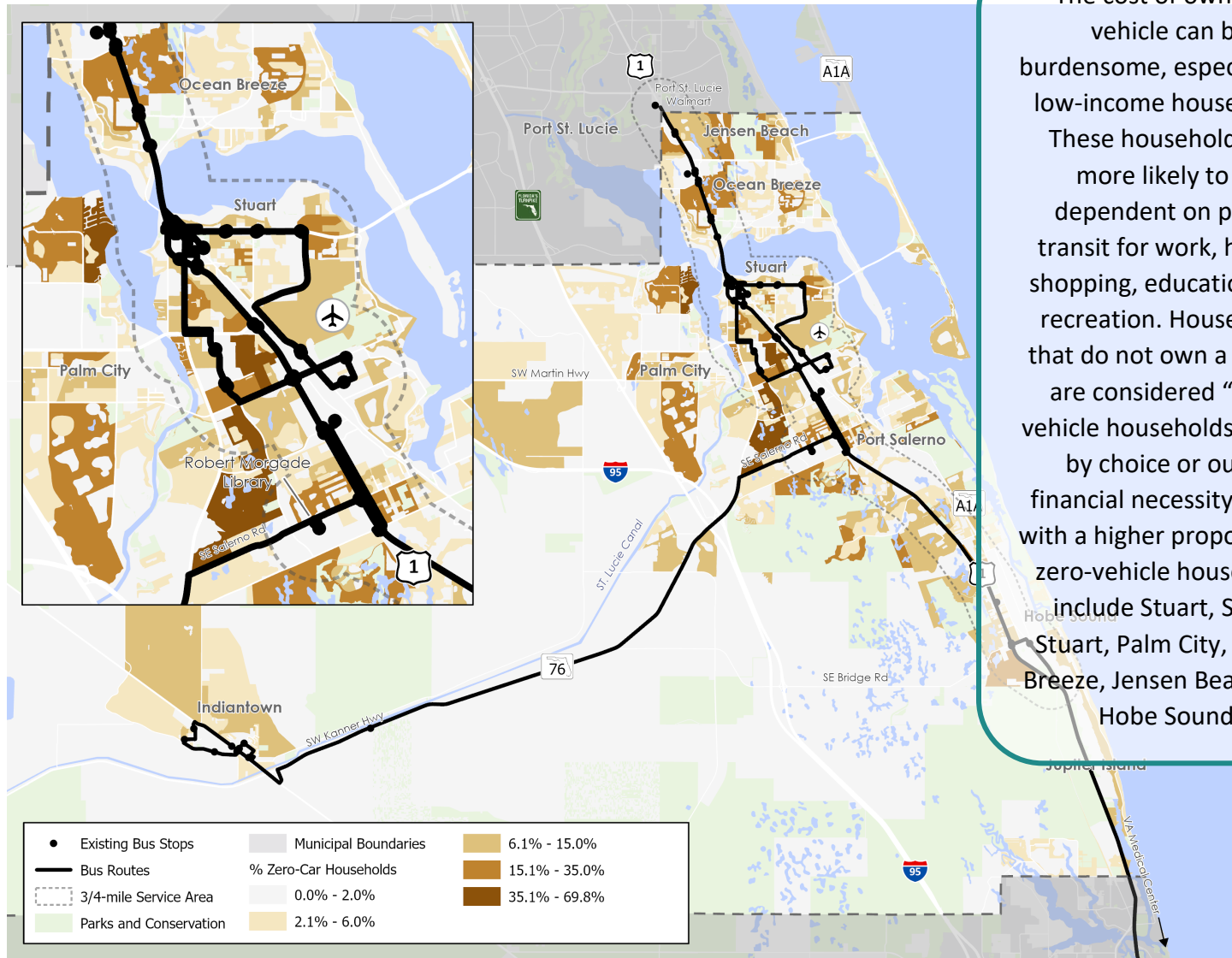
**Figure 10: Minority Populations**



Source: ACS 2021 5-Year Estimates



**Figure 11: Zero-Vehicle Households**



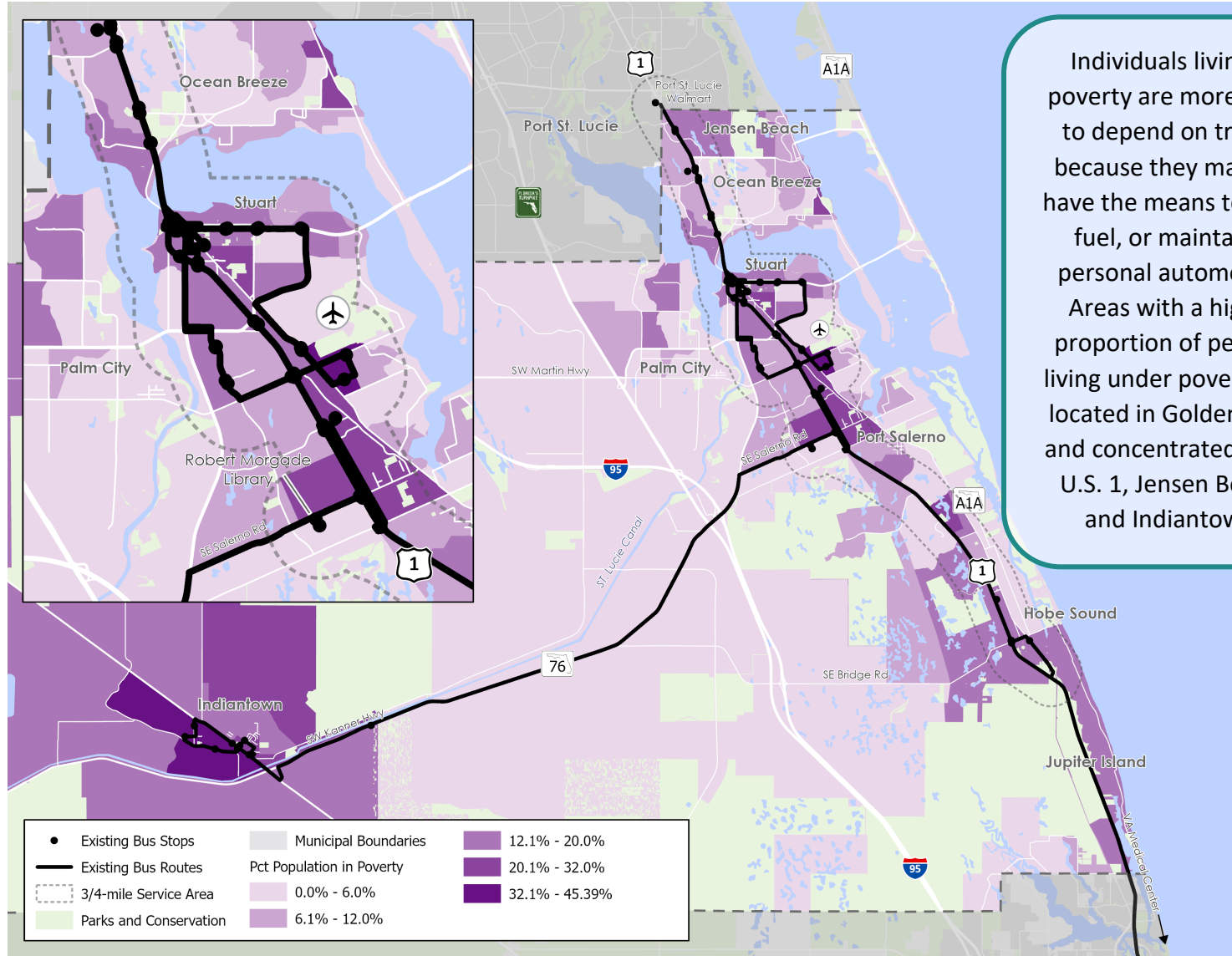
The cost of owning a vehicle can be burdensome, especially for low-income households. These households are more likely to be dependent on public transit for work, health, shopping, education, and recreation. Households that do not own a vehicle are considered “zero-vehicle households” either by choice or out of financial necessity. Areas with a higher proportion of zero-vehicle households include Stuart, South Stuart, Palm City, Ocean Breeze, Jensen Beach, and Hobe Sound.

Source: ACS 2021 5-Year Estimates





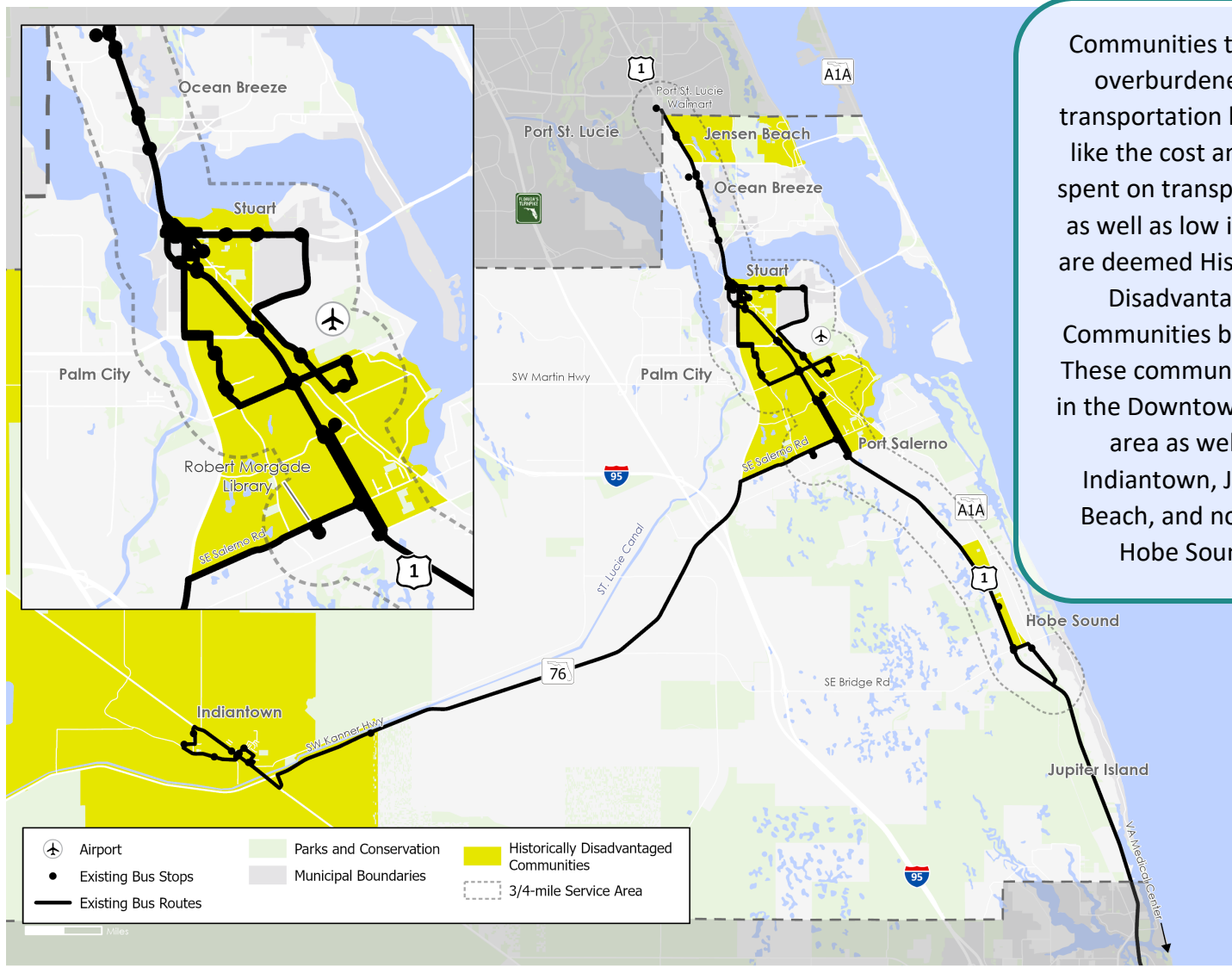
**Figure 12: Persons or Households Living under Poverty**



Source: ACS 2021 5-Year Estimates



**Figure 13: FDOT Historic Disadvantaged Communities or Communities of Concern**



Communities that are overburdened by transportation barriers, like the cost and time spent on transportation as well as low income, are deemed Historically Disadvantaged Communities by FDOT. These communities are in the Downtown Stuart area as well as Indiantown, Jensen Beach, and north of Hobe Sound.

Source: FDOT - Justice40 Initiative



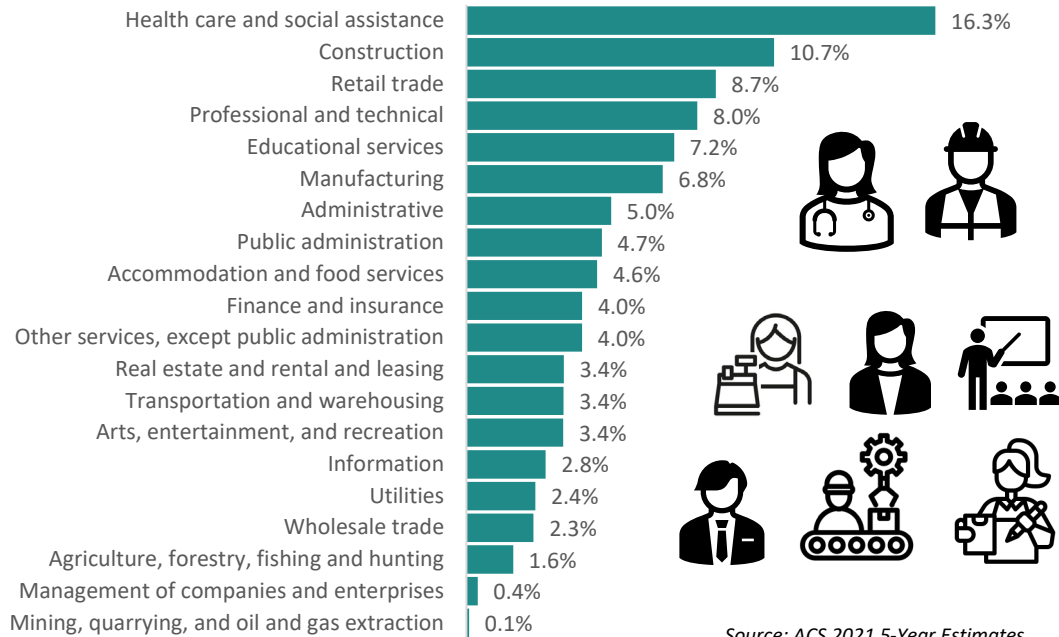


## Employment Profile

Access to transit provides opportunities for jobs, medical services, and education. **Figure 13** lists the major industries within Martin County. The healthcare and social assistance industry is the largest in the County.

Ensuring access to jobs benefits the local economy. **Figure 14** illustrates employment density concerning jobs per square acre.

**Figure 14: Civilian Workers by Industry in Martin County (Full Time)**



Source: ACS 2021 5-Year Estimates

There are

**73,056**

jobs in Martin County. The average wage per employee is

**\$54,800**

Source: Bureau of Labor Statistics

There are

**112,802**

jobs within a 3/4-mile distance to a MARTY route

but only 58% are within a three-quarter-mile distance of a bus stop.\*

\*Includes jobs in neighboring counties.  
Source: TBEST

There are

**68,766**

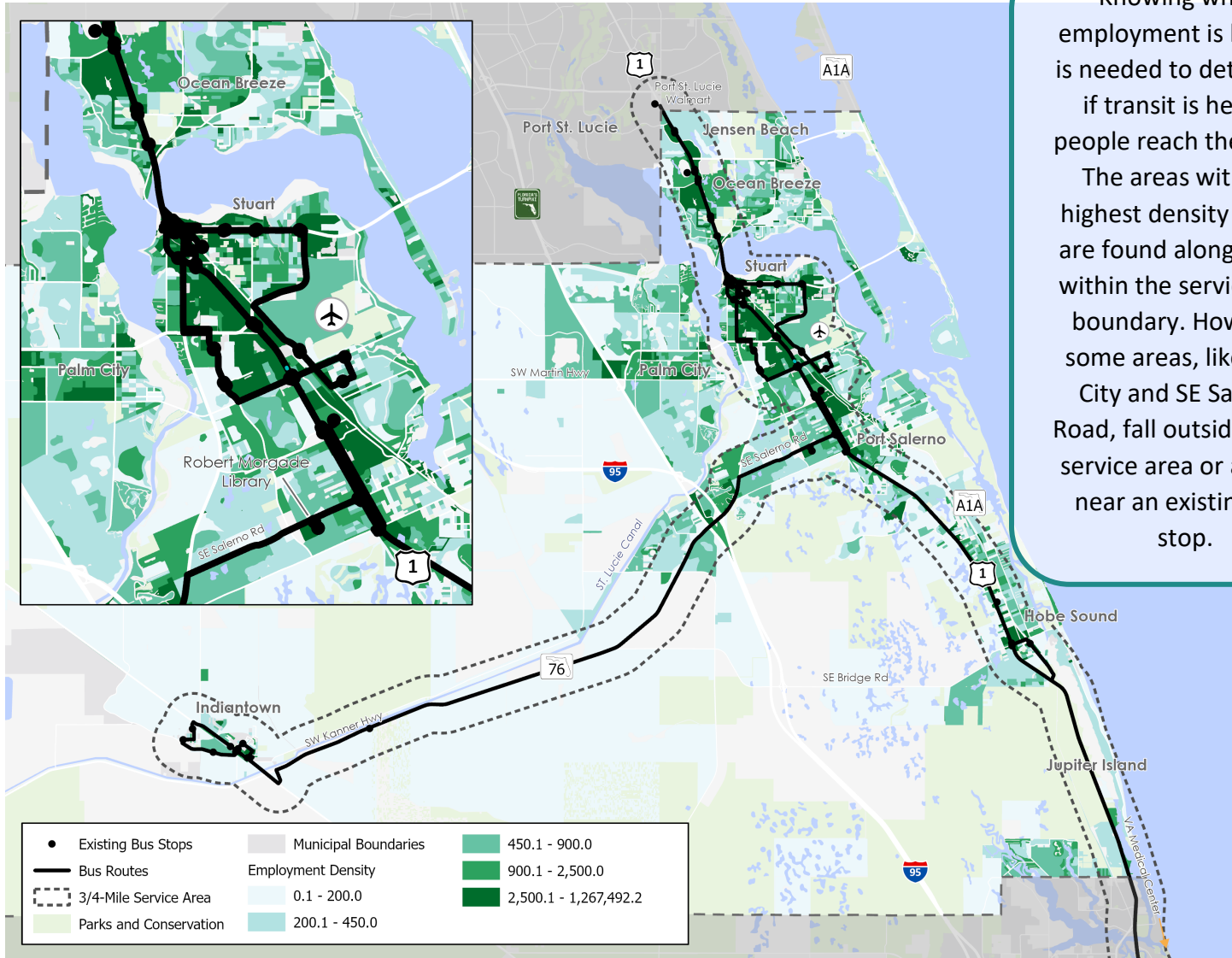
workers within a 3/4-mile distance to a MARTY route

but only 52% are within a 3/4-mile distance of a bus stop.\*

\*Includes jobs in neighboring counties.  
Source: TBEST



**Figure 15: Employment Density (Jobs per Square Mile)**



Knowing where employment is located is needed to determine if transit is helping people reach their jobs. The areas with the highest density of jobs are found along U.S. 1, within the service area boundary. However, some areas, like Palm City and SE Salerno Road, fall outside of the service area or are not near an existing bus stop.

Source: TBEST





## Land Use, Urban Design, and Growth Characteristics

A comprehensive study of both existing and future land uses was conducted to evaluate their role in supporting transit development within the County. Land use emerges as a critical factor significantly influencing the efficiency and effectiveness of the transit system, particularly concerning elements such as land use types, residential and employment densities, and development patterns.

To assess whether existing land use policies and regulations align with transit development, the following map and analysis were carried out. Future land uses that promote transit development include high-density multifamily residential areas, mixed-use zones, and office areas. This section offers a summary of the county's land use patterns and their impact on transit services within the county.

As previously noted in this document, the county has experienced a 10% population growth since 2010, with a majority of the population dispersed throughout urbanized areas. Martin County maintains a relatively low population density, with only 256 people per square mile. Urban areas are concentrated in Stuart, Port Salerno, Jensen Beach, and on the west side in Indiantown. Most of the residential developments consist of single-family homes. Being a coastal county, Martin County boasts a substantial stretch of land along the Atlantic Ocean, the Indian River Lagoon, and the St. Lucie River, fostering waterfront properties and associated land uses such as marinas, beachfront developments, and recreational areas.

To the west of the turnpike, the county predominantly remains dedicated to agriculture and conservation, representing 55% of the land. Agriculture plays a vital role in the county's economy and land use. Conservation and natural parks, including Jonathan Dickinson State Park, Savannas Preserve State Park, and Hobe Sound National Wildlife Refuge, emphasize the county's commitment to preserving its natural environment.

The County's comprehensive plan encourages the development of mixed-use plans and establishes policies within the Future Land Use Element to ensure the fulfillment of the county's residential needs while limiting urban sprawl. The county sets forth strict environmental and suitability requirements, which include location within the Primary or Secondary Urban Service District, protection of natural resources, and adequate provision of facilities and services at the adopted level of service.

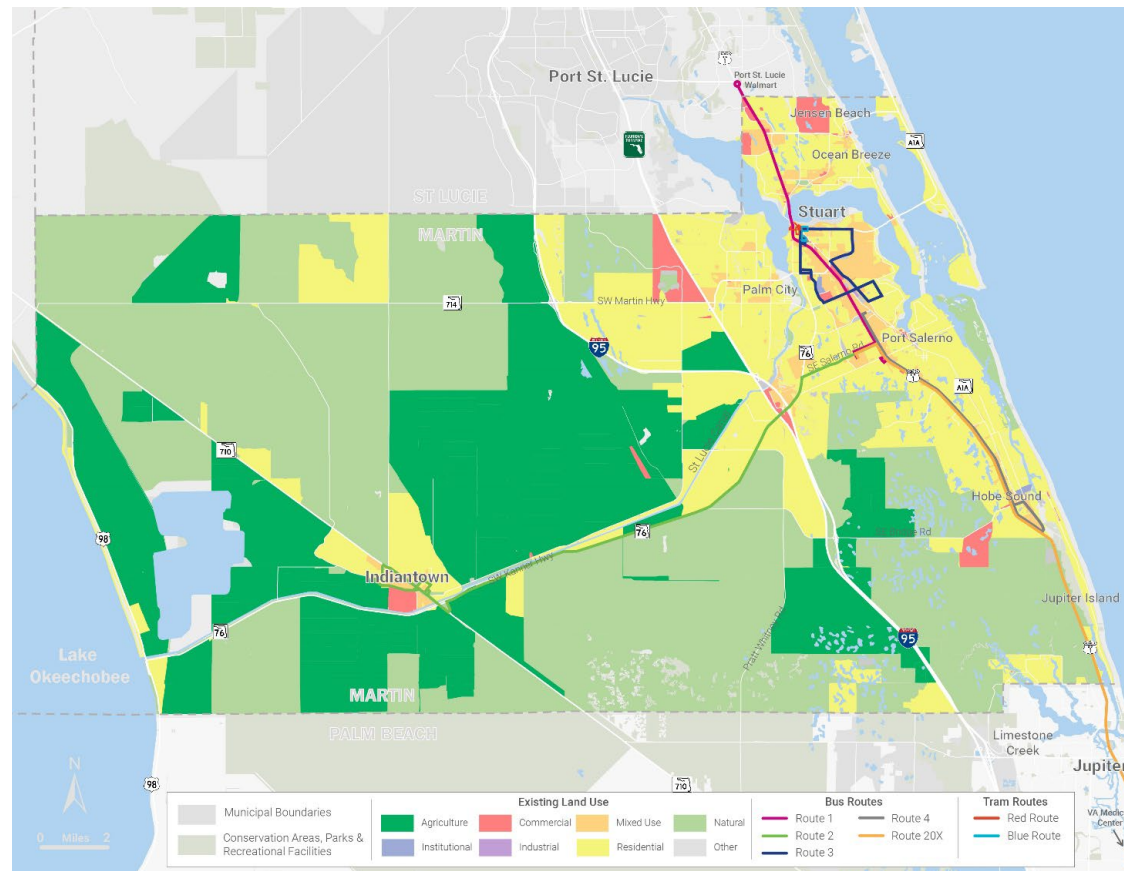
Upon a review of the approved development plans in the County and the Community Redevelopment Agency (CRA) areas, mixed-use areas are predominantly concentrated in downtown Stuart, adjacent to the coastline. Several projects are anticipated to be developed in the southwest area of Stuart. Further development is expected in the area, including the expansion of golf courses, the



establishment of new polo grounds, and the construction of residential units. Additionally, other significant developments include the establishment of two new solar facilities and single-family residential projects.

**Figure 15** shows Existing Land Use for Martin County. **Figure 15** shows Future Land Use and Community Redevelopment Agency boundaries.

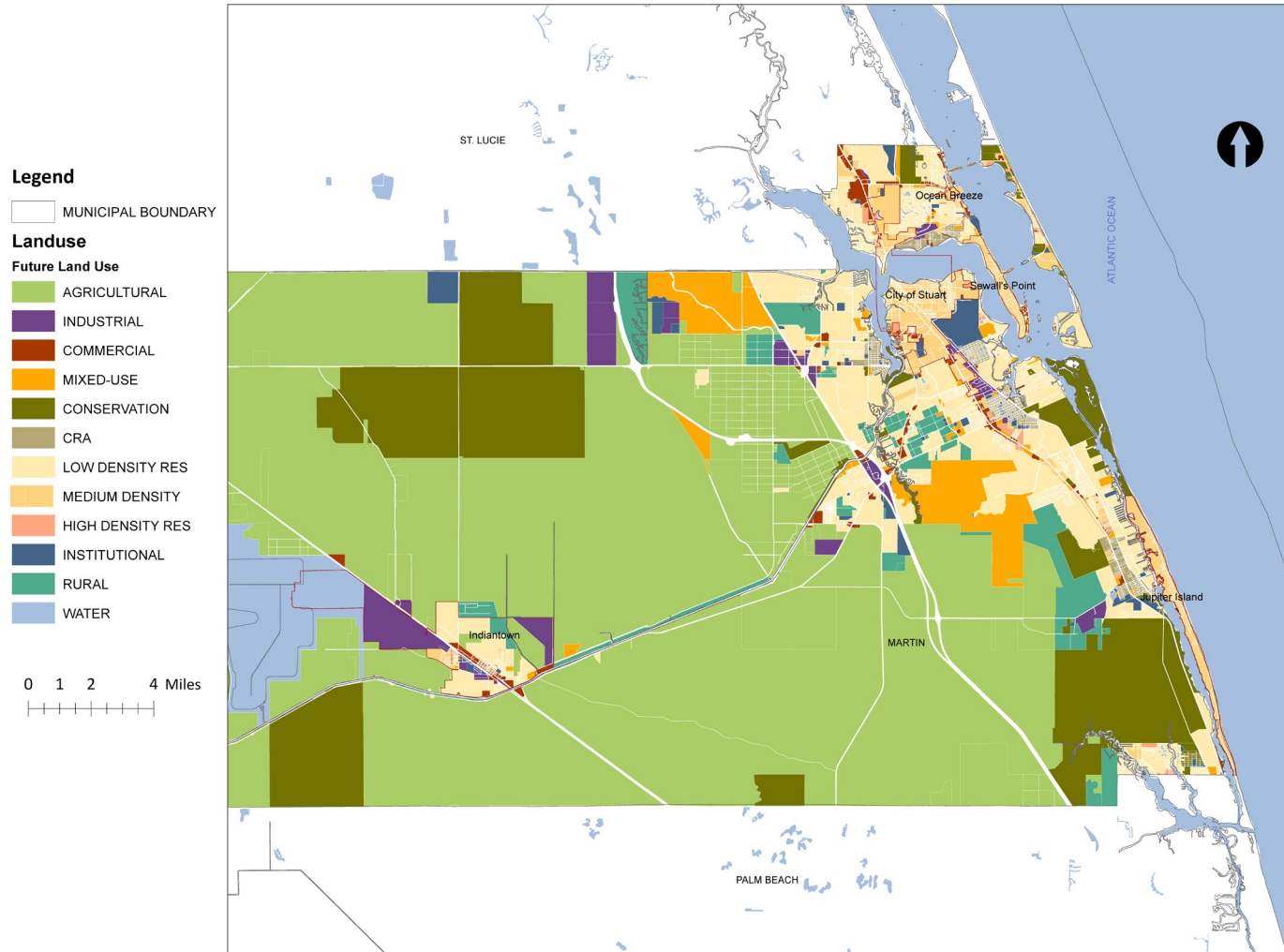
**Figure 16: Existing Land Use**



Source: Martin County



**Figure 17: Future Land Use**



Source: Martin County



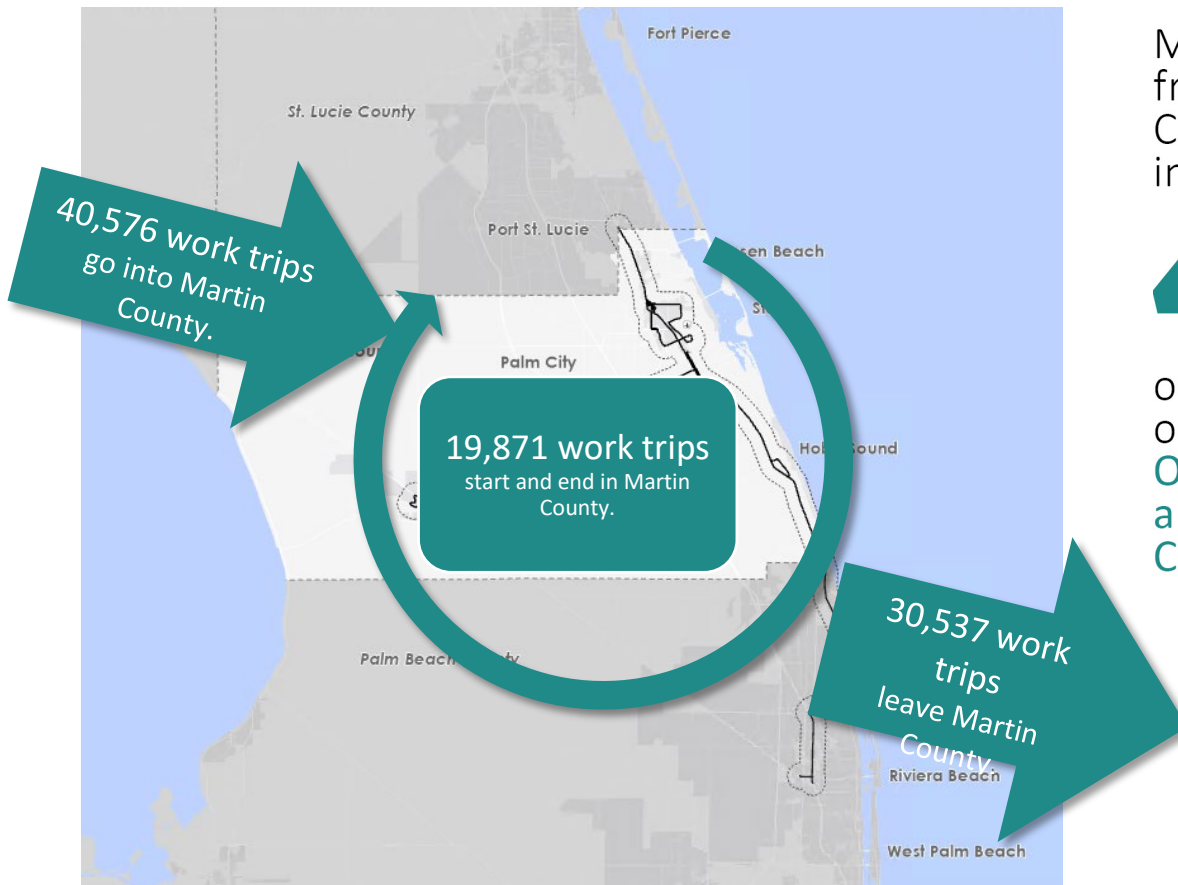


## Travel Patterns

### Commuting Flows

Understanding where people travel to and from work can help identify the community’s local and regional travel needs. LEHD OnTheMap 2020 data was used to visualize Martin County’s commuting trends in **Figure 17** to **Figure 19**.

**Figure 18: Employment Flow**



More workers commute from outside of Martin County than live and work in it.

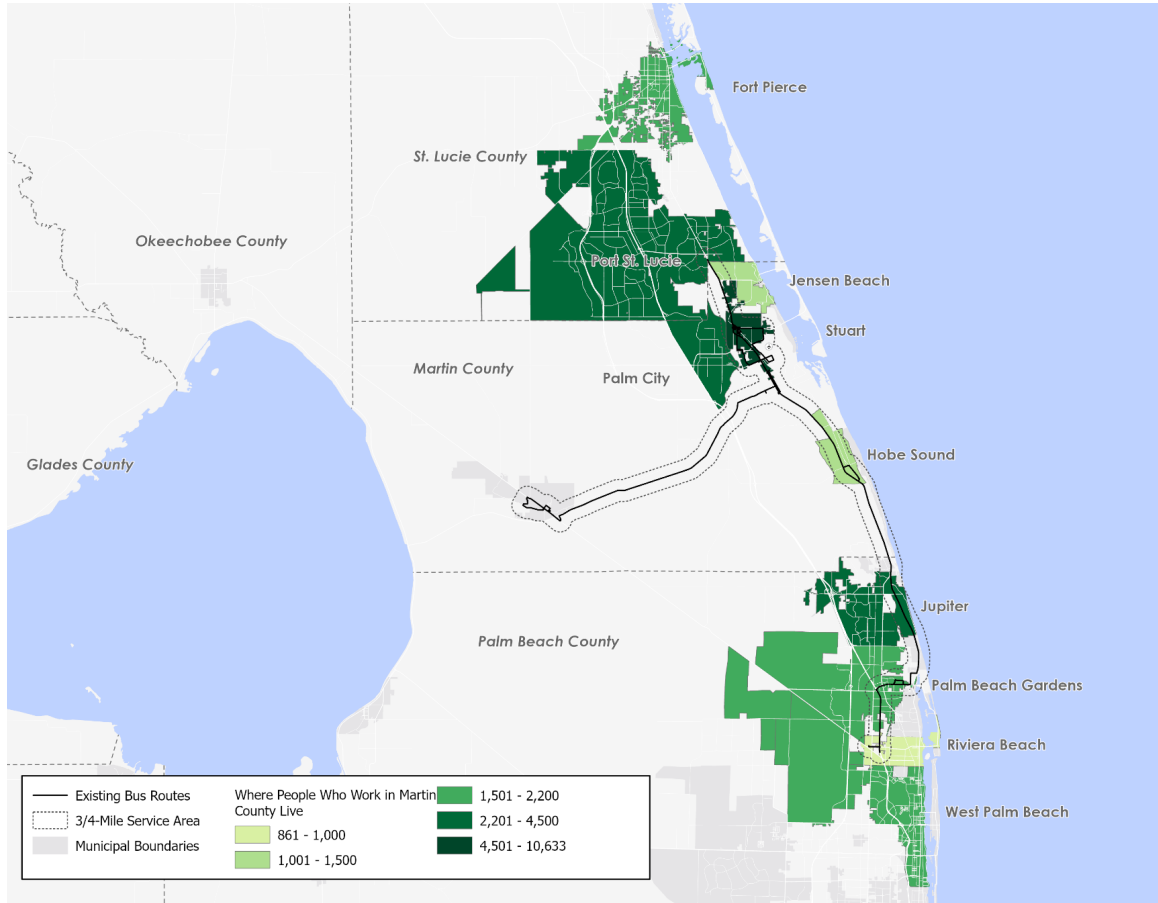
# 45%

of work trips come from outside of Martin County. Only 22% of workers live and work within Martin County.

Source: U.S. Census Bureau’s LEHD OnTheMap



**Figure 19: Where Do People Who Live in Martin County Work?**



Source: U.S. Census Bureau's LEHD OnTheMap

## TOP 10 WORK DESTINATIONS

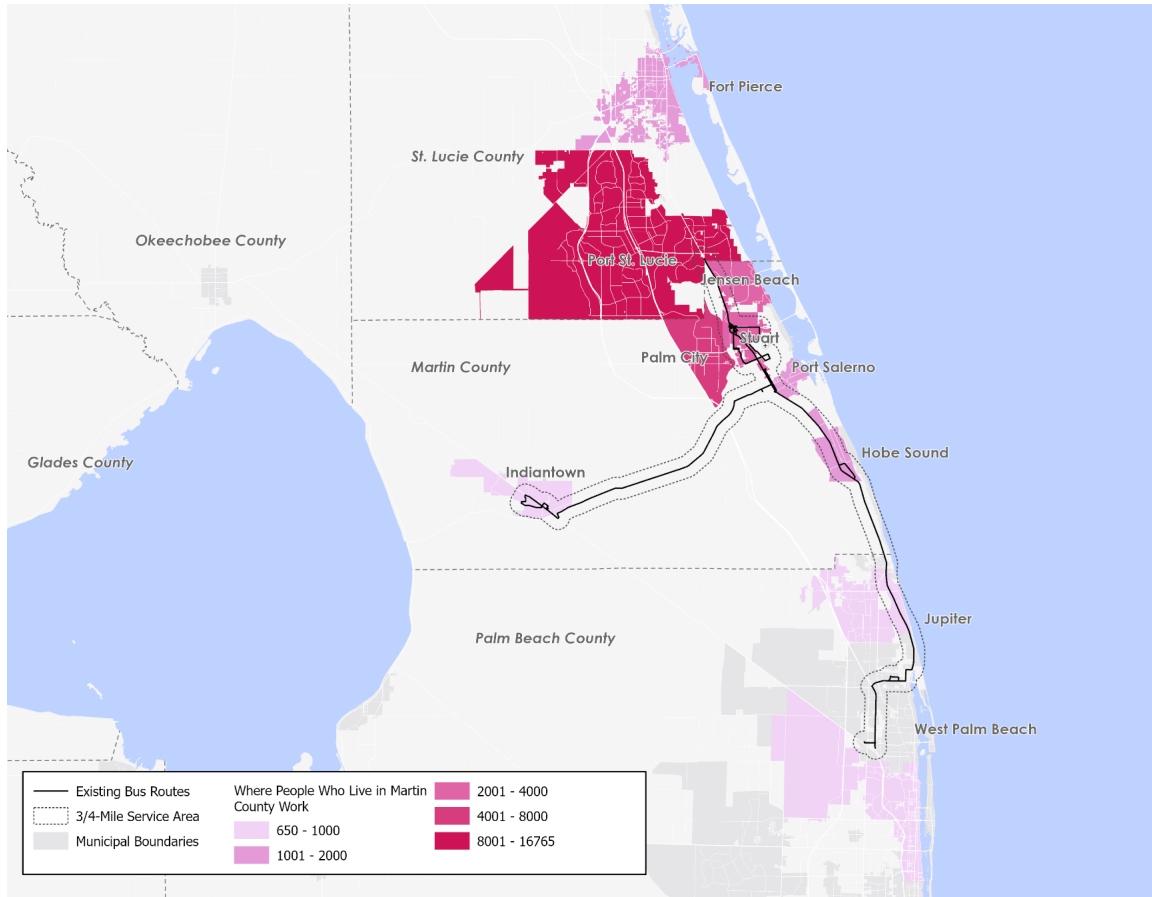
Place	Total Trips	Percent
Stuart	10,633	18%
Jupiter	2,934	5%
Port St. Lucie	2,540	4%
Palm City	2,215	4%
W. Palm Beach	2,028	3%
Palm Beach Gardens	1,820	3%
Fort Pierce	1,637	3%
Jensen Beach	1,139	2%
Hobe Sound	1,117	2%
Riviera Beach	861	1%
All others	32,865	55%

# 18%

of Martin County workers go to work in Stuart.



**Figure 20: Where Do People Who Work in Martin County Live?**



Source: U.S. Census Bureau's LEHD OnTheMap 2020

## TOP 10 ORIGINS OF WORKERS

Place	Total Trips	Percent
Port St. Lucie	16,765	24%
Palm City	4,265	6%
Stuart	3,015	4%
Jensen Beach	2,255	3%
Hobe Sound	1,757	2%
Port Salerno	1,665	2%
Fort Pierce	1,535	2%
Indiantown	934	1%
Jupiter	927	1%
West Palm Beach	650	1%
All other	36,628	52%

# 1 in 4

workers in Martin County live in Port St. Lucie

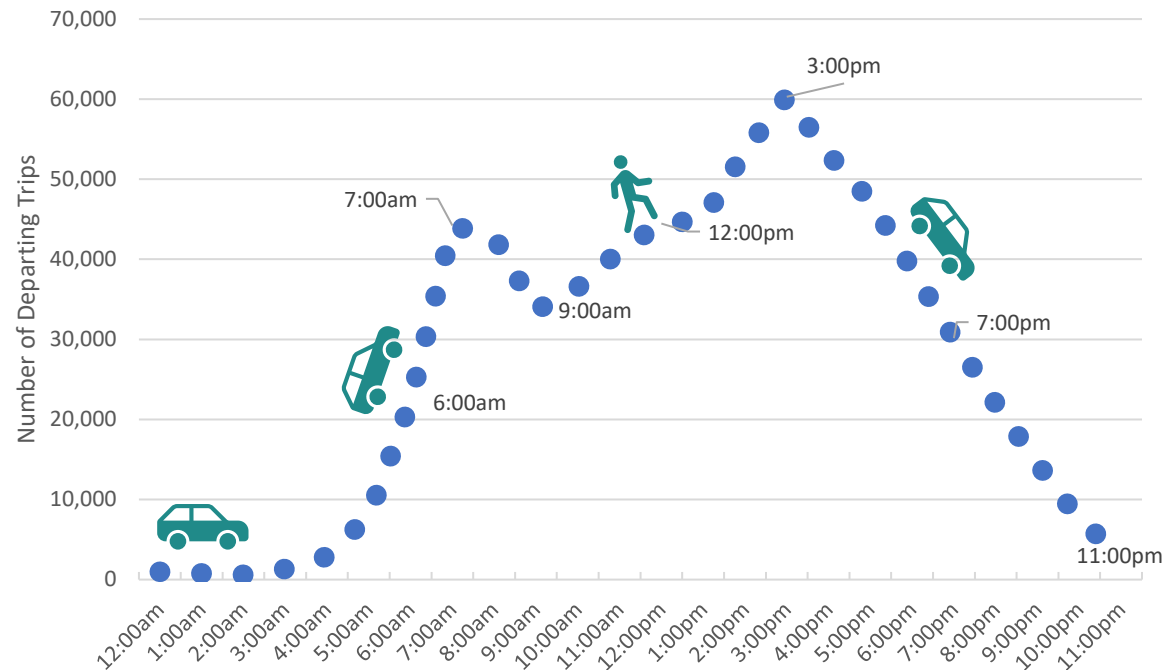




### Trip Start Times

Knowing when people need to make trips is essential for understanding how MARTY can best serve the community’s transportation needs. **Figure 20** illustrates the distribution of weekday trip start times for all trips originating in Martin County. The number of trips started to rise during the a.m. peak, from 7:00 to 9:00 a.m. The number then gradually increases until the daytime peak at 3:00 p.m.

**Figure 21: Trip Start Times**

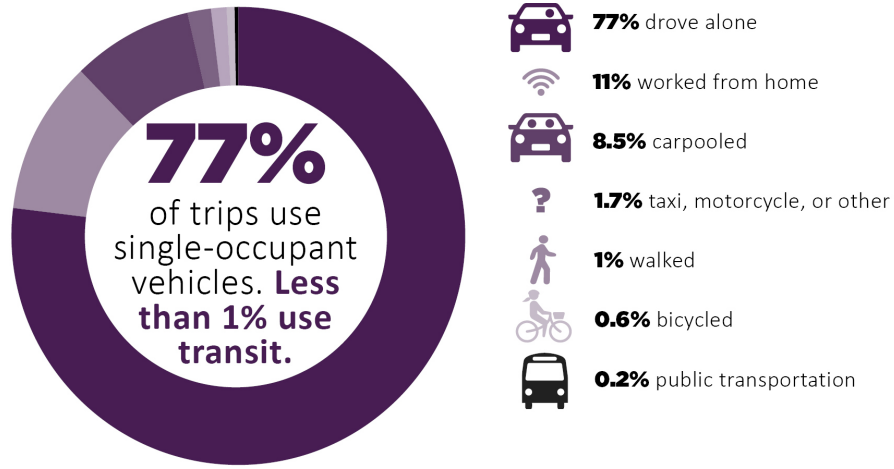


### Mode Split

Replica data was used to understand how people commute to work (“mode split”). Data from the 2021 American Community Survey 5-Year Estimates was used to show the mode split for all work trips in Martin County. **Figure 21** shows that the most popular commute mode in Martin County is driving alone (77.0 percent).

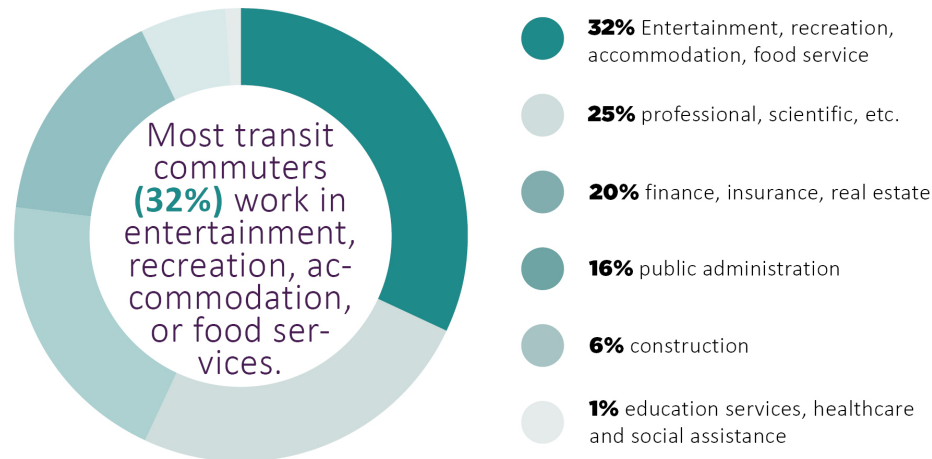


**Figure 22: Mode Split in Martin County**



Source: 2021 ACS 5-Year Estimates

**WHAT KIND OF WORKERS TAKE TRANSIT?**



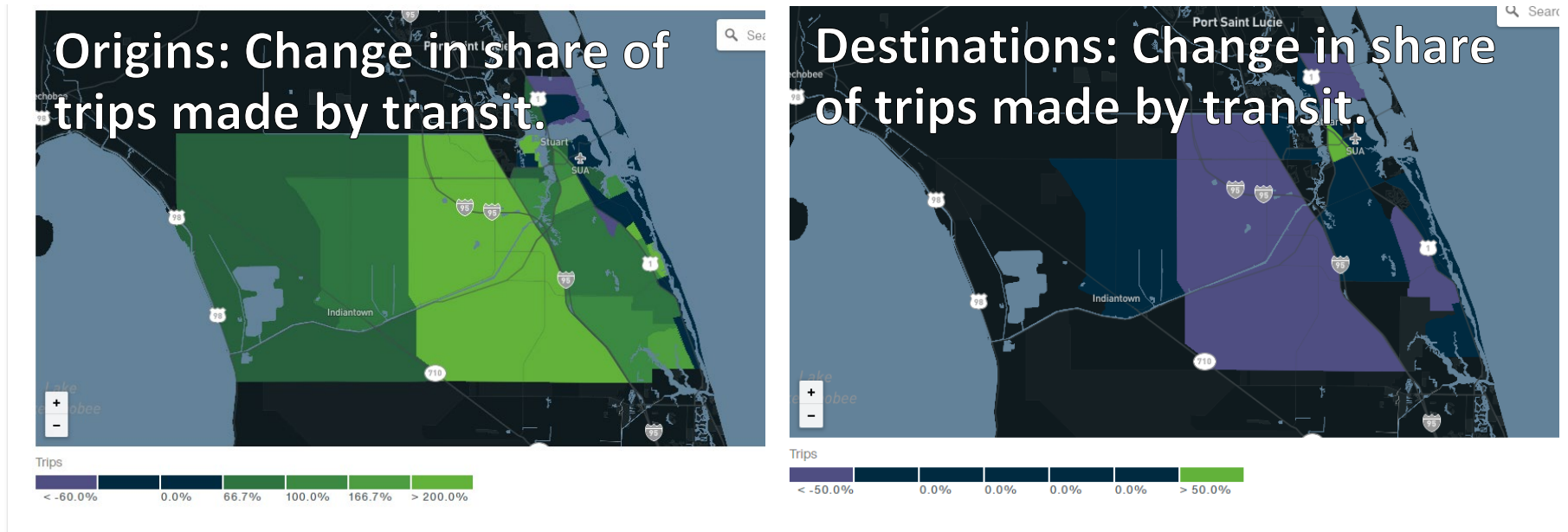
Source: 2021 ACS 5-Year Estimates



## How Has Travel Using Transit Changed since COVID-19?

**Figure 22** shows how transit’s share in mode split has changed throughout the COVID-19 pandemic from April 2020 to June 2023. With respect to transit trip origins, the less urbanized census tracts east of U.S. 1 (shown in green) have shown the highest gains in mode split. For destinations, the area west of U.S.-1 in Stuart experienced the highest gains in transit mode split, while the rest of the county saw no changes or experienced a decrease in transit mode split.

**Figure 23: Change in Share of Transit Trips since COVID-19**



Source: Replica 2023





## Plans and Policy Review

The following is a summary of Federal, State, and local plans and policies that were reviewed to ensure consistency with this TDP. The summary includes information about the document reviewed as well as key takeaways that may impact MARTY service.

### Infrastructure Investment and Jobs Act (IIJA) (2021)

**About:** Also known as the Bipartisan Infrastructure Law (BIL). This bill provides \$108.2 billion for programs administered by the Federal Transit Administration (FTA) over five years (FY 2022-2026).

Key priorities of BIL transportation funding include safety, equity, climate resiliency, and economic competitiveness. New requirements include developing carbon reduction strategies that support efforts to reduce greenhouse gas (GHG) emissions; identifying projects and strategies to reduce transportation emissions; supporting the achievement of targets for the reduction of transportation emissions; and quantifying the total carbon emissions from the production, transport, and use of materials used in the construction of transportation facilities within the State.

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) established a Transportation Performance Management Program to orient transportation investment decision-making around national transportation goals. Through this program, State Departments of Transportation (DOTs), MPOs, and transit agencies are responsible for setting targets for 28 performance measures, including four measures relating to transit asset management and seven relating to transit safety.

### FHWA's and FTA's Planning Emphasis Areas (2021)

**About:** In December 2021, in support of the IIJA, FTA, and FHWA issued updated Planning Emphasis Areas for use by MPOs, DOTs, transit agencies, and federal land management agencies in their Unified Planning Work Programs and State Planning and Research Work Programs.

Key themes include the establishment of seven planning emphasis areas:

- **Tackling the climate crisis**—By encouraging the - transition to alternative fueled vehicles, this emphasis area sets the GHG reduction goal of 50-52 below 2005 levels by 2030, targets net-zero emissions by 2050, and increases resilience to extreme weather events resulting from the increasing effects of climate change.



- **Equity and Justice40 in Transportation Planning**—This emphasis area stresses the importance of improving infrastructure for non-motorized travel and transit, managing speeds, reducing single-occupancy vehicle travel and air pollution, reducing transit fares, and fostering demand-response service, transit-oriented development, and affordable housing strategies in traditionally marginalized or underserved communities.
- **Complete Streets**—This emphasis area reviews policies and procedures for Complete Streets for improved safety.
- **Public Involvement**—This emphasis area focuses on increasing meaningful public involvement in transportation planning by integrating virtual public involvement tools into the overall public involvement approach while ensuring continued public participation by individuals without access to computers and mobile devices.
- **Strategic Highway Network (STRAHNET)/U.S. Department of Defense (DoD) Coordination** – It encompasses an extensive network of roads strategically designated for vital functions in both emergency mobilization and the routine transportation of military resources.
- **Planning and Environment Linkages (PEL)**—This emphasis area calls for early consideration of the environmental, community, and economic goals in the transportation planning process; it uses the information, analysis, and products developed during planning to inform the environmental review process.
- **Data Sharing in Transportation Planning**—State DOTs, MPOs, and providers of public transportation facilitate the transportation planning process.

### Florida Transportation Plan (FTP) 2024 (Adopted in 2020)

**About:** This is Florida’s Long-Range Transportation Plan (LRTP) under both State and Federal law. The plan is updated every five years. The FTP is a collaborative effort of State, regional, and local transportation partners in the public and private sectors.

The goals of the FTP are safety and security; infrastructure; mobility choice; and economy, community, and environment. The document defines Florida’s long-range transportation vision and goals and identifies strategies and performance measures to help Florida’s transportation partners achieve those goals. It also provides the policy framework for the expenditure of State and Federal transportation funds that flow through FDOT. The policy element calls for improved interregional passenger rail service between Florida’s major urban areas and from major highways; and improved connectivity among local transit systems, between regional and local transit systems, and between transit systems and other modes.



## FDOT Transit Strategy: Adapting to Changing Customer Mobility Needs

**About:** Part of the State Transit Initiative, this policy document outlines FDOT goals and strategies for supporting public transit.

Key FDOT public transit goals include:

- Making transit more attractive to riders, collaborating with stakeholders to develop strategies for reducing traffic congestion and travel delays, and developing seamless connections when a one-seat ride is not an efficient option. Essential to these efforts are strategies and public outreach that can define and develop programs that will meet customer needs.
- Expanding travel choices in rural areas beyond the traditional medical and senior transportation markets.
- Supporting a comprehensive and coordinated policy to guide the State’s public transportation funding. Funding priority will be given to those projects that reflect a customer-driven, multimodal approach to providing improved access. Reduce the number of program silos and increase funding flexibility.
- Ensuring all public transportation services include safety/risk management components in their operational plans.

## Martin Metropolitan Planning Organization (MPO) 2045 LRTP (2020)

**About:** The LRTP sets the vision for all modes of travel throughout the County and influences projects included in the five-year Transportation Improvement Program (TIP). The Martin MPO’s 2045 LRTP, also known as *Martin in Motion*, includes both long-range and short-range strategies/actions that provide for the development of an integrated multimodal transportation system (including accessible pedestrian walkways and bicycle transportation facilities) that facilitates the safe and efficient movements of people and goods in addressing current and future transportation demand.

The goals of Martin MPO’s 2045 LRTP are to provide an efficient multimodal transportation system that supports economic growth and enhances quality of life, meets the needs of all users, preserves the natural environment and promotes equity and healthy communities, has the ability to harness changes in the future, and reflects the community’s needs and desires. Funded transit projects identified include maintaining existing service levels, appropriate fleet replacement, adding transit/bus stop infrastructure, and adding a new park-and-ride facility that connects to Palm Beach Tri-Rail Intermodal Center.





The unfunded transit needs include a MARTY service expansion, a new Jensen Beach Route, a Saturday service, and Mobility on Demand in Jensen Beach and Palm City. These service expansion projects remain unfunded due to a lack of local funding available as “matching dollars” to support transit operations. Similarly, the unfunded transit capital improvements include new buses that are required to support expanded service, as well as a new operations and maintenance facility and an intermodal hub. In the past, this service has been supported through local funds and FDOT’s Service Development Program, which provides funding for demonstration projects for up to three years. This funding may likely be available in the future, but there are no committed funds at this time.

**I-95/SR-9 Multimodal Master Plan from Palm Beach/Martin County Line to Indian River/Brevard County Line**

**About:** A multimodal master plan that stretches 71 miles from the Palm Beach/Martin County line to the Indian River/Brevard County line. Improvements to be studied include roadway widening, interchange modification, innovative design elements, traffic signal and intersection modifications, safety improvements, express lanes, and advanced intelligent technology enhancements.

The plan is largely focused on increasing capacity for automobiles at the following I-95 interchanges: SR 76/Kanner Highway, High Meadows Avenue, and SR 714/Martin Highway.

**Martin MPO Transportation Improvement Program (TIP) (2023)**

**About:** Provides a comprehensive and prioritized listing of transportation projects for FY24-28 that is consistent with the 2045 LRTP. The Martin MPO TIP contains all transportation-related projects to be funded by Federal funds as well as regionally significant transportation projects planned for the upcoming five years. It is updated annually with funding priority given to the highest-ranked projects from the LRTP Cost Feasible Plan.

Programmed transit-related projects include operating assistance, capital for fixed-route service, and bus facilities.



### Martin MPO Transit Efficiency Study (TES) (2023)

**About:** The TES served as a precursor to this TDP and was focused on enhancing the public transit service available in Martin County. It examined how the transit system can become more efficient and seeks to determine service integration opportunities.

The goal of the study is to identify ridership and coverage-based strategies. Ridership strategies identified include:

- adding Saturday service to Routes 1, 2 and 3;
- increasing frequency of Routes 1, 2, and 3 to 20-minute headways; and
- adding bus stops.

The coverage scenario proposes two flex-route areas:

- Jensen Beach/Rio/North Stuart
- Palm City

### MARTY Transit Development Plan (TDP) (2019)

**About:** This plan is a requirement for transit agencies to be eligible for State block grant funding and represents Martin County's vision for transit in its service area from FY 20 to 29. At the same time, this plan functions as the strategic guide for future transit services in the community.

Also called Marty on the Move, this major TDP update outlines actions to be taken for the next 10 years and identifies local issues and objectives, including but not limited to lower-growth ridership, a trend experienced by many smaller transit agencies in emerging urban areas; limited local funding opportunities to improve and increase service levels; lack of a clear understanding of what services MARTY provides versus other transportation providers; regional coordination challenges for inter-county service, which have created public misconceptions and are negatively impacting MARTY operations and/or fare revenues.



**FDOT SIS Adopted First Five-Year Plan (FY 2022/2023 through FY 2026/2027) (2022)**

**About:** FDOT produced a document set known as the SIS Funding Strategy, which included three interrelated documents that identify potential Strategic Intermodal System (SIS) Capacity Improvement Projects in various stages of development. All the projects identified within the SIS Funding Strategy are considered financially feasible for implementation within the next 25-year period. The First Five Plan lists capacity projects on the State’s SIS that are funded by the legislature from FY 22 to FY 26.

Programmed projects within Martin County are PD&E studies along the I-95 corridor.

**FDOT SIS Approved Second Five-Year Plan FY 2027/2028 through FY 2031/2032 (2022)**

**About:** The second five-year plan lists funded projects in Years 6 through 10, beyond the adopted work program. Projects in this plan could move forward and to the first five-year plan as funds become available.

No projects within Martin County were identified in this plan.

**Martin County Service Analysis Technical Memorandum (2018)**

**About:** Demographic and demand assessment of Martin County and portions of St. Lucie County.

This technical memorandum included a detailed service planning analysis that reviewed existing and proposed route alignments; proposed new fixed and express routes; and assessed existing service on-time performance, ridership, and schedules. The following routes were identified and analyzed: Hutchinson Island Route, Palm City/Port Salerno, West Palm Beach Intermodal, and the West Palm Beach Veteran Affairs Medical Center (VAMC).





## Martin County Innovation Hub Recommendations Report (2023)

**About:** The Martin County Innovation Hub is generally bounded by Cove Road on the south, Monterey Road on the north, U.S.-1 on the west, and Dixie Highway on the east. The study area is along the FEC railroad. This report provides recommendations and strategies for the development of the Martin County Innovation Hub.

This Assessment provided recommendations in infrastructure, marketing and branding, regulations, aesthetics, and opportunity sites. Infrastructure goals included:

- Using Complete Streets strategies to develop multimodal transportation options (including pedestrian and bicycle connectivity, street networks, alternative transportation modes, and transit) that create connectivity between the Innovation Hub, adjacent neighborhoods, and commercial districts.
- Working with MARTY and the City of Stuart to link the city trolley system to the HUB, increasing the County level of service through enhanced transit service, infrastructure, and micromobility offerings.

Next steps include:

- Evaluating proposed routes and bus stop locations and identifying specific transit stops/transfer stations for upgraded transit stop facilities.
- Meeting with the City of Stuart to discuss future plans and/or routes for downtown transit.
- Reviewing (in conjunction with MARTY and Port Salerno CRA) the feasibility and cost of extending “Mobility on Demand” services to Port Salerno and inclusive of the HUB.
- Finalizing potential route options to connect Stuart Downtown Tram to the Innovation Hub.



### Martin County Public Facilities Analysis (2018)

**About:** This meets the Martin County Comprehensive Growth Management Plan (CGMP) requirement for an analysis of public facilities as part of any plan amendment proposal to amend either the primary or secondary urban service district boundaries.

This Public Facilities Analysis was conducted in accordance with the Martin County CGMP and describes the current level of service for public facilities, including roads. It identifies several roadway segments that will exceed adopted levels of service from 2017 to 2026, including several in Stuart and Palm City, which may impact the on-time performance of MARTY routes.

### Martin County Public Transit Business Plan (2017)

**About:** A review of the current transit operations by Martin County. Provides recommendations to maintain or enhance operations based on the identification of strengths and challenges of the existing system.

This plan identifies the need for MARTY to have a wholly owned maintenance and operations/dispatch facility; modify existing staffing levels, roles, and responsibilities; take steps towards owning paratransit and fixed-route vehicles; and increase levels of coordination with Martin MPO.

### City of Stuart Comprehensive Plan (2002)

**About:** A document that sets the context for future growth and development in the City of Stuart. Required by State Statutes that specify its overall content and structure, the Comprehensive Plan consists of a series of interrelated chapters or elements that analyze the community's future land use, transportation, parks and recreation, and other infrastructure and environmental issues, needs, challenges, and opportunities.

The purpose of this document is to implement a transportation program that provides for a safe and efficient traffic network and provides optimum access to the City's major activity centers. Its goals are to support mobility citywide through alternate modes of transportation; reduce greenhouse gas emissions by discouraging urban sprawl; promote compact development and maximize internal trips within the development; promote transit-oriented development within urban service areas; promote affordable and workforce housing in proximity of major employment centers; and promote infrastructure investment in greenhouse gas efficient projects.



## Martin County Comprehensive Growth Management Plan (2002)

**About:** This document has been prepared under Florida law with the purpose of implementing and strengthening the comprehensive plan process; protecting and restoring natural and manmade resources; maintaining the character, stability, and quality of life for present and future County residents; allowing only orderly growth and development that achieves the purposes listed in this subsection; achieving and maintaining conservative prudent fiscal management; and setting out the goals, objectives, policies, and procedures Martin County has adopted and requiring that they be strictly followed when conducting the County's business.

The transportation element of this plan serves the purpose of establishing a transportation system in Martin County that is for future motorized and non-motorized transportation modes and that is in accordance with Florida Statutes' planning for a multimodal transportation system. It establishes seven goals for transportation in Martin County:

- To develop and implement a transportation network that is coordinated and consistent with municipal, County, State, Federal, and regional planning programs and planning programs of adjacent jurisdictions.
- To develop, operate, and maintain an efficient and cost-effective roadway network that provides for ease of mobility and meets the adopted level-of-service standards.
- To establish an integrated transportation system consistent with future development plans.
- To establish the County as friendly to pedestrians and bicyclists by developing a safe bicycle and pedestrian transportation system accessible to all major public and private facilities.
- To ensure the coordination and continuation of an efficient and economical system of public transportation that, for the benefit of all County residents, reduces the reliance on single-occupancy vehicles and fuels that emit high levels of carbon, thereby reducing greenhouse gases.
- To provide for an airport transportation system consistent with the planning programs of County, State, Federal, regional, and local jurisdictions.
- To make all feasible and safe efforts to increase the capacity of navigation and weather-reporting facilities at Witham Field to meet current and projected needs of County residents while recognizing the limitations imposed by existing surrounding residential areas.





## Existing Services and Performance Assessment MARTY Fixed-Route Transit System

The current MARTY system provides three local fixed-routes (Routes 1, 3, and 4), one deviated fixed-route (Route 2), and one commuter bus route (Route 20X). The fixed-route buses generally operate from 6 a.m. to 8 p.m. and the commuter route operates from 6:30 a.m. to 7:30 p.m., as listed in **Table 1**. MARTY buses operate Monday through Friday except six holidays:

- New Year's Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Christmas Day

On those occasions when a holiday falls on a Saturday, there will be no service on the Friday before the holiday. If the holiday falls on a Sunday, there will be no service on the Monday following the holiday. All MARTY buses are equipped with wheelchair lifts and bike racks.





**Table 1: MARTY Route Operating Characteristics**

Route	Major Destinations and Transfer Stations	Headways	Span of Service
<b>Route 1 US 1 Corridor</b>	<ul style="list-style-type: none"> <li>Walmart in Port St. Lucie*</li> <li>Treasure Coast Mall</li> <li>Stuart Center</li> <li>Stuart Walmart</li> <li>Indian River State College</li> <li>Cleveland Clinic Martin South Hospital*</li> </ul>	35-minutes	6 a.m. to 8 p.m. Monday-Friday
<b>Route 2 Indiantown</b>	<ul style="list-style-type: none"> <li>Rines Market</li> <li>Florida Department of Health</li> <li>U.S. Post Office</li> <li>Elisabeth Lahti Library/IRSC Indiantown Education Center</li> <li>Boys &amp; Girls Club</li> <li>Indian River State College*</li> <li>Cleveland Clinic Martin South Hospital*</li> </ul>	35-minutes within Indiantown 90-minutes from Indiantown to Robert Morgade Library	6 a.m. to 7:35 p.m. Monday-Friday
<b>Route 3 Stuart</b>	<ul style="list-style-type: none"> <li>Cleveland Clinic Martin North Hospital</li> <li>County Administration</li> <li>Downtown</li> <li>Kiwanis Park-and-ride</li> <li>Florida Department of Health</li> <li>Lamar Howard Park</li> <li>Martin High School</li> </ul>	40-minutes	6 a.m. to 8 p.m. Monday-Friday



Route	Major Destinations and Transfer Stations	Headways	Span of Service
<b>Route 4 South Stuart/Hobe Sound</b>	<ul style="list-style-type: none"> <li>• Walmart in Stuart*</li> <li>• Hobe Sound Public Library</li> <li>• Bridge Road at Hobe Sound*</li> </ul>	60-minutes	7:00 a.m. to 5:55 p.m. Monday-Friday
<b>Route 20X to Palm Beach County</b>	<ul style="list-style-type: none"> <li>• Indian River State College*</li> <li>• Cleveland Clinic South Hospital*</li> <li>• Cove Center Shopping Plaza</li> <li>• Bridge Road at Hobe Sound</li> <li>• Palm Beach Gardens Mall</li> <li>• West Palm Beach VA Medical Center</li> </ul>	Varies from 35- to 95-minutes	6:30 a.m. to 7:25 p.m. Monday-Friday

*\*Denotes transfer location*

### Regional Transit Connections / Other Transportation Providers

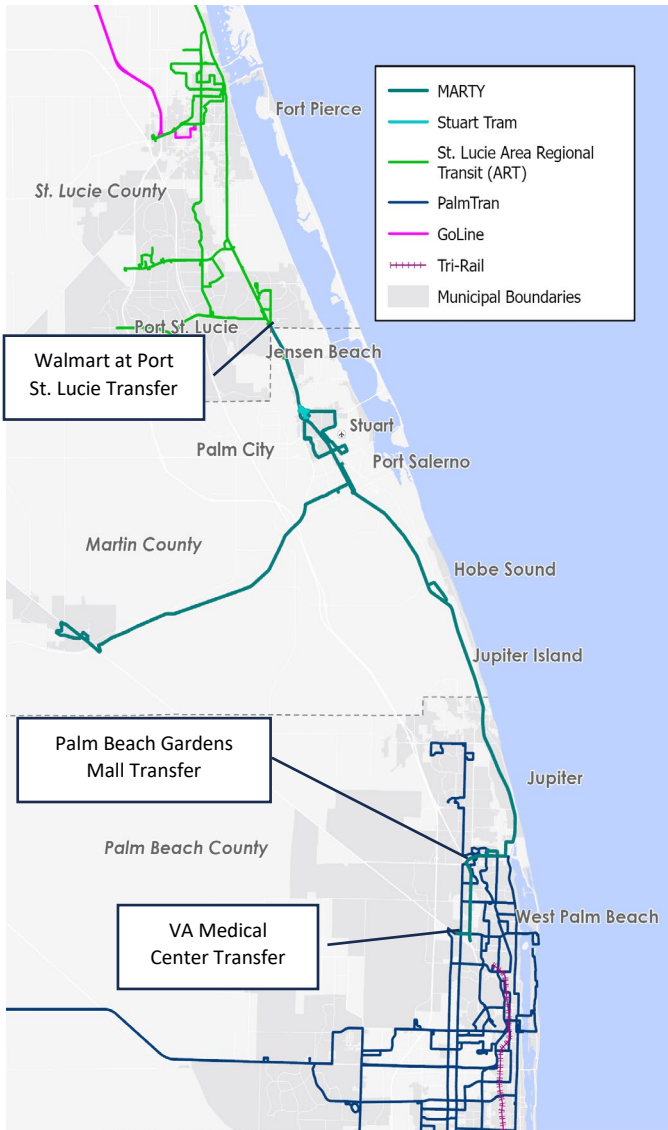
Connections can be made to the City of Stuart’s tram routes, Palm Beach County’s Palm Tran routes, and St. Lucie County’s Area Regional Transit (ART, formally known as the Treasure Coast Connector) routes, as shown in **Figure 23**.







**Figure 24: MARTY System and Transit Agencies within the Region**



**St. Lucie County**



**City of Stuart**



**Palm Beach County**



**Indian River County**



## Paratransit Services

Martin County Public Transit offers ADA-eligible complementary paratransit service, MARTY Access, which is a shared ride, door-to-door trip provided to ADA-eligible individuals whose origin and destination fall within ¾ of a mile of a scheduled fixed-route service. This service operates Monday through Friday, 6 a.m. to 8 p.m. MTM Inc. currently operates MARTY’s ADA paratransit service. To determine ADA eligibility, a vendor goes to the applicant’s home to assess the rider’s qualifications. Coordination for applications and eligibility is handled in-house within the Martin County transit department.



### The Americans with Disabilities Act (ADA) of 1990

The Americans with Disabilities Act (ADA) of 1990 helps protect the civil rights of individuals with disabilities, including the right to accessible and equal access to transportation. The act requires public transit systems provide “complementary paratransit” services to individuals with disabilities who cannot, because of their disability, access the fixed-route system. Individuals with disabilities must apply and be determined eligible for ADA paratransit services. Disability alone does not determine paratransit eligibility; the decision is based on the applicant’s functional ability to use the fixed route bus and is not a medical decision.

Outside of this MARTY ADA corridor and separate from MARTY is Martin Community Coach, which provides Transportation Disadvantaged (TD) paratransit services to eligible riders in Martin County, such as those who have no other means of transportation, are +65 years or old, are low-income, are persons with disabilities, or who are children at risk. The service is currently operated by the Senior Resource Association (SRA), which serves as the County’s Community Transportation Coordinator (CTC). The SRA was designated the CTC on October 1, 2018. Before this date, MTM Inc. served as the CTC. The Local Coordinating Board for the Transportation Disadvantaged (LCB-TD) is the administrative entity, established by Florida Statute, responsible for providing information, advice, direction, and support to the Community Transportation Coordinator (CTC) for the delivery of transportation disadvantaged services.



There is no overlap with TD and ADA paratransit, although riders occasionally use both services. A cross-referral system is in place if someone is not eligible for ADA paratransit service but might be eligible for TD paratransit. The 2018-2023 Martin County Transportation Disadvantaged Service Plan (TDSP) indicated that although there are no federal, state, or local policies that inhibit coordination between TD and ADA paratransit services, the plan identified the following barriers for the coordination of TD service:

- A lack of coordination between neighboring counties and coordination agreements to provide intercounty trips.
- A lack of training opportunities for TD passengers and the CTC customer service representative to learn how to use the fixed-route system.
- A lack of funding for the fixed-route system increased the demand for the TD system.

### **Transportation Disadvantaged**

Chapter 427, F.S. defines “transportation disadvantaged” as:

“Those persons who because of physical or mental disability, income status, or age are unable to transport themselves or purchase transportation and are, therefore, dependent on others to obtain access to health care, employment, education, shopping, social activities, or other life-sustaining activities or children who are handicapped or high-risk or at-risk as defined in s. 411.202, Florida Statutes.”





## Fare Structure and Policies

Fares can be purchased using cash only, preprinted tickets, or by using the Token Transit mobile ticketing app. **Table 2** lists the fare rates for fixed-route transit and paratransit service. Exact change is required for passes purchased with cash. MARTY does not have a transfer fare procedure or discount, so passengers must pay their regular fare amount with each boarding unless they purchase an all-day or 20-boarding pass. Discounted passes are offered to senior passengers (age 65+), passengers with disabilities, and passengers with a Medicare card and ID. Under the Veterans Transportation Program, veterans with an accepted identification card are allowed to ride for free on the local fixed routes, commuter buses, and paratransit service to the Stuart Veterans Affairs Clinic or the Veterans Affairs Medical Center in West Palm Beach. MARTY ADA's complementary service is a cash-fare payment program.

**Table 2: Fare Policy**

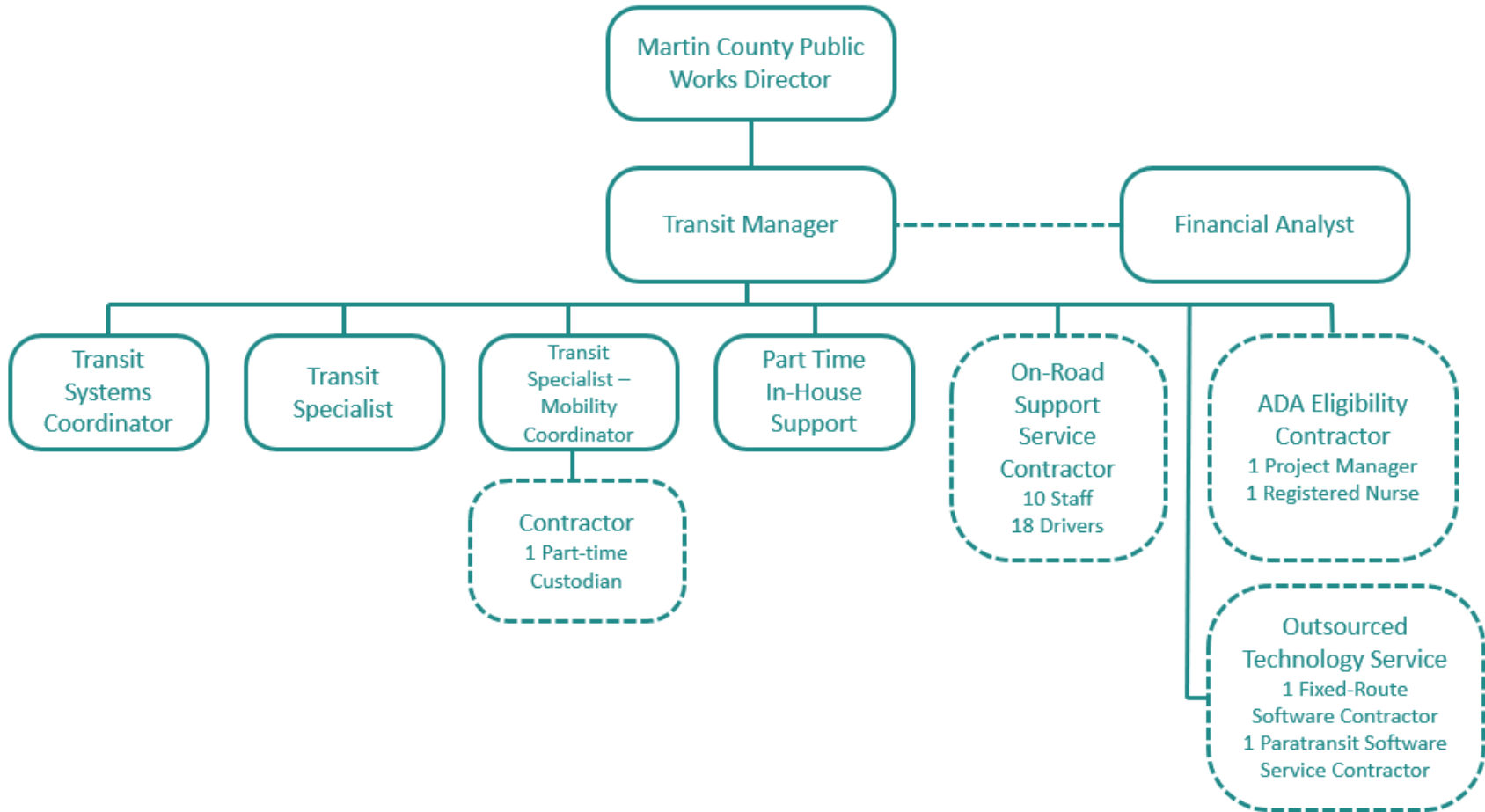
Service	Fare per Boarding	Passes	Free
<b>Local-fixed route</b>	Full \$1.50 Discount \$0.75	\$3.00 all-day pay \$20 for 20 boardings	Veterans with ID
<b>Commuter Bus</b>	Full \$2.00 Discount \$1.00	\$20 Express Pass for 10 boardings	Veterans with ID
<b>Paratransit</b>	\$3.00 per trip	N/A	Veterans with ID

## MARTY Organization Attributes

The Martin County Board of County Commissioners (BOCC) appoints the County’s Chief Administrative Officer, who implements and oversees BOCC-approved programs and the 12 county departments, including the Public Works Department. Under the direction of the Public Works Director is the Transit Management Planning and Operations (dba MARTY) Department which is staffed by seven full-time County staff and one part-time support position. **Figure 24** depicts MARTY’s current organizational structure as of December 2022. Scheduling of ADA Paratransit trips is done in-house by County staff. Contracted operations staff, including 18 vehicle operators and 10 other staff are responsible for operations and maintenance.



Figure 25: MARTY Organization Structure





MTM Transit has operated the MARTY fixed-route bus system, MARTY Access paratransit since October 1, 2020, under the On-Road Transit and Support Services (MARTY Bus System Operation) contract. The contract term is three years plus two 1-year renewal options. The county leases county-owned transit vehicles to MTM Transit for a \$1.00 fee for the use of each vehicle. MTM Transit is paid a rate per vehicle revenue hour operated for fixed-route service and a rate per trip for ADA service. ADA complimentary paratransit services are reserved and scheduled by the County in the County's trip software program.

MTM is responsible for bringing on board, training, and managing drivers, dispatchers, maintenance crew, utility workers, and support staff. The provision of a local vehicle maintenance center, the equipment needed for vehicle upkeep, a dispatch office, workstations for personnel, and communication devices is included as part of the agreement.

The current fleet consists of fourteen heavy-duty vehicles, six light-duty vehicles, three cars, one pick-up truck, and one trailer. MTM is in charge of taking care of the cost of fuel and exhaust fluid.

MTM Transit is responsible for the maintenance of equipment and transit vehicles' monthly cleaning, as well as the maintenance of bus shelters at a specified rate per shelter. The contractor, MTM Transit, is required to provide a base facility to perform vehicle maintenance and dispatching, however, the County provides a designated secured bus and support vehicle parking location at 2555 SE Avenger Circle in Stuart. The vehicles undergo regular maintenance at the MTM Transit facility located at 3210 SE Slater Street, Stuart. Martin County does not own a transit maintenance and operations/dispatch facility, but the need for one has been identified in the Martin County Public Transit Business Plan (2017) and the Martin County Transit Operations Center Feasibility Study (2018). However, there are discussions for there to be a future County Public Works facility with a potential transit facility west of I-95 and Kanner Highway in the long term. The need for a new operations and maintenance facility and an intermodal hub has been programmed as unfunded capital improvements in the 2045 LRTP.

A second amendment to the agreement with ATM was defined in 11/152 which updated the rate schedule as follows, **Table 3**:





**Table 3: MTM Rate Schedule**

REVENUE SERVICES	RATE PER VEHICLE REVENUE HOUR
Fixed Route, Deviated Fixed Route & Commuter Bus Service	\$ 75.66
ADA & Veterans Paratransit Services	\$ 63.96
EQUIPMENT MAINTENANCE SERVICES	RATE PER SHELTER
Monthly Bus Shelter Cleaning & Maintenance	\$ 121.64
Emergency Bus Shelter Cleaning	\$ 159.94
Emergency Bus Interior Cleaning	\$ 159.94
Emergency Bus Shelter Safety Call (Tape off area due to safety issues)	\$ 108.59
EMERGENCY TRANSIT SERVICES	RATE PER HOUR PER VEHICLE
Emergency Transit Services	\$ 64.62
Total Contract Cumulative Not to Exceed Amount -	\$ 2,915,390
Total Contract Cumulative Not to Exceed Amount -	\$ 5,831,390
Total Contract Cumulative Not to Exceed Amount -	\$ 8,785,390



**Figure 26: Parking Location of MARTY Vehicles**







To facilitate commuting using park-and-ride service, the Martin County BOCC has a Memorandum of Understanding with the District Board of Trustees of Indian River State College to jointly provide eight library and parking facilities at the Robert Morgade Library. The term for use of the site is from March 22, 2022, to March 22, 2025.

Total operating expenses  
in FY 21 were

**\$2,625,337**

Includes MB, CB modes

*Source: 2021 NTD Data*

A review of the Martin County comprehensive plan policies and land development regulations was conducted to identify local land use policies and regulations that may impact transit performance. Within the Martin County Comprehensive Plan Transportation Element is a policy for major industrial development within one-half mile of a public transportation corridor, as designated through the adoption of the Transit Development Plan, to incorporate at least one public transportation stop, such as a bus bay or loop (Policy 5.5A.8). MARTY plays a limited role in the development review process, however according to the Martin County Land Development Regulations, new developments must fulfill the mass transit facilities component to obtain the certificate of public facilities, to ensure that adequate public facilities will be available to service the development concurrent with the impacts of development. The component requires that “Mass transit facilities are in place to provide the proposed development sufficient services based on the adopted LOS for mass transit facilities, and Capital improvements and/or payments are in the adopted CIE that will provide for the continuation of sufficient mass transit services based on the adopted LOS for mass transit facilities.”





## Technology

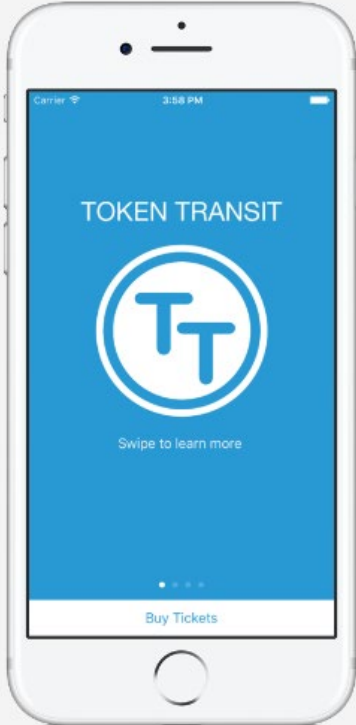
MARTY has worked to implement technology investments to improve efficiency, and rider experience and attracting new riders. The following summarizes the technology investments that have been implemented.

- **Token Transit mobile ticketing** - a free mobile ticketing app that allows you to purchase, and activate a transit fare before boarding the bus using a smartphone. Customers need to download Token Transit to use the mobile pay option. The mobile management of fares adds convenience and attracts new riders while reducing dwell times. **Figure 25** from the MARTY website shows a preview and the process for purchasing tickets on the app interface.
- **RFP 2016-2838** - was created to procure a comprehensive Bus Automated Vehicle Location solution to assure the continued growth of the transit system in a manner that is conducive to -ADA compliance measures, Florida Transit Administration compliance measures, National Transit Database compliance measures, and customer service. This bid was awarded to TripSpark, a business name and operating division of Trapeze Software. TripSpark provides In the Office, out to the Public, On the Bus, and Over the Network solutions that satisfy the requirements of the RFP and allow for the proper reporting of passenger counts, on-time performance and NTD-required data.
- **TripSpark Ranger** - is an In-vehicle Mobile Data Computer “MDC” that fits in the vehicle and links the fleet with the office. It is a device that collects information about vehicles and Driver behavior and broadcasts GPS information to the office so that Dispatch knows where the buses are.
- **XGate** - is Trapezes’ middleware communication software that connects computers with a wireless network such as Wi-Fi or Sprint. It also sends messages and data between the Ranger and the back-office software “STREETS”.
- MARTY revenue vehicles are equipped with **on-board cameras** for live and historical viewing.
- **MyRide** - a smartphone application and website interface that connects passengers to real-time bus location information and trip planning functions. Using this application, passengers can select their route and see where the bus is in real-time while also locating stops along the route. **Figure 26** shows the web interface of real-time route planning on myride.martin.fl.us website.

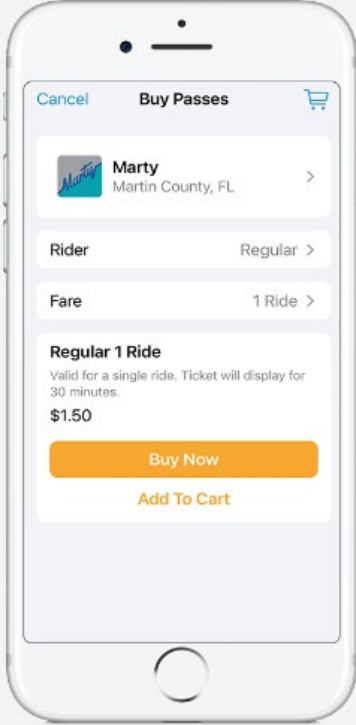


**Figure 27: Token Transit Mobile Ticketing**

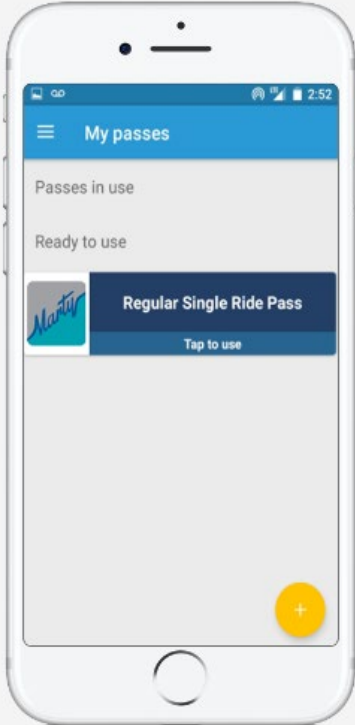
**1. Download**  
Download the free Token Transit app from the [App Store](#) (Apple) or [Google Play](#) (Android).



**2. Purchase**  
Select a MARTY fare type and pay with your credit or debit card. You can purchase passes to use immediately or store them for future rides. All passes are stored in your Token Transit account.

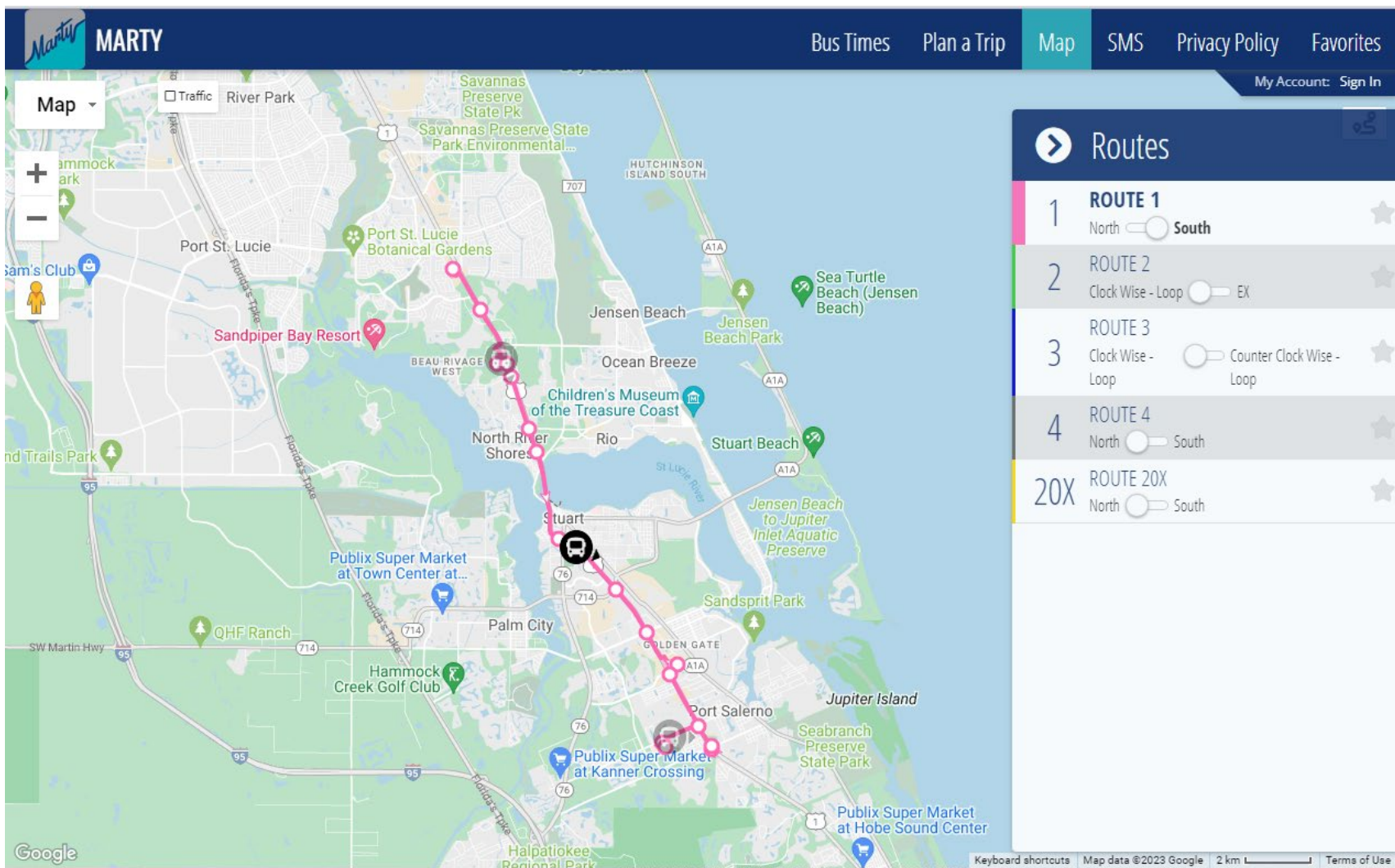


**3. Activate**  
As the bus approaches, open your app and tap your pass to activate.





**Figure 28: MARTY Realtime Bus Location Interface**







## Route Level Ridership

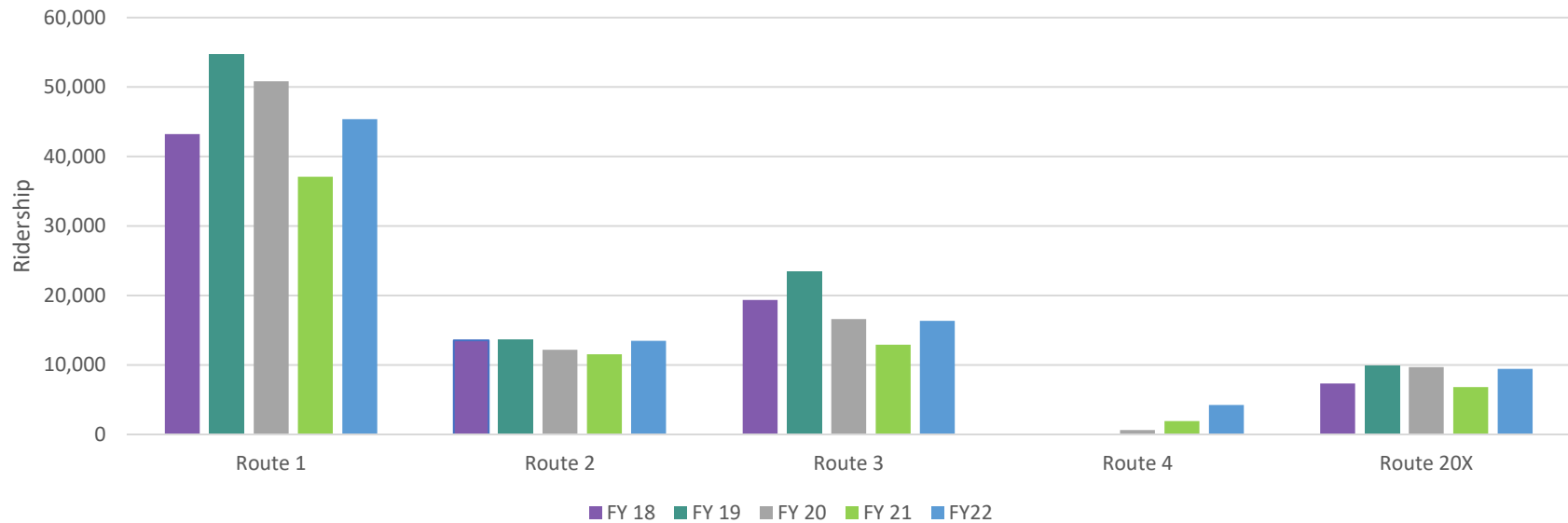
Ridership is the number of passengers who board a transit vehicle, as measured as the number of boardings. Passengers are counted each time they board, no matter how many transfers they make. Therefore, if a passenger transfers to a second route, it is counted as two trips. A review of route ridership from FY 19 to FY 22 (shown in **Figure 28** and **Table 4**) shows that, historically, ridership has been highest on Routes 1 and 3. Ridership in FY 20 began to drop, largely due to the COVID-19 pandemic, and begun to show signs of recovery in FY 22 for all routes. Route 30X (not shown), was in service during FYs 19 and 20 only, and had a ridership of 120 and 78, respectively.

88,904

fixed-route trips were take in FY 22

Source: MARTY

**Figure 29: MARTY Ridership by Route and Fiscal Year**





**Table 4: MARTY Ridership by Route and Fiscal Year**

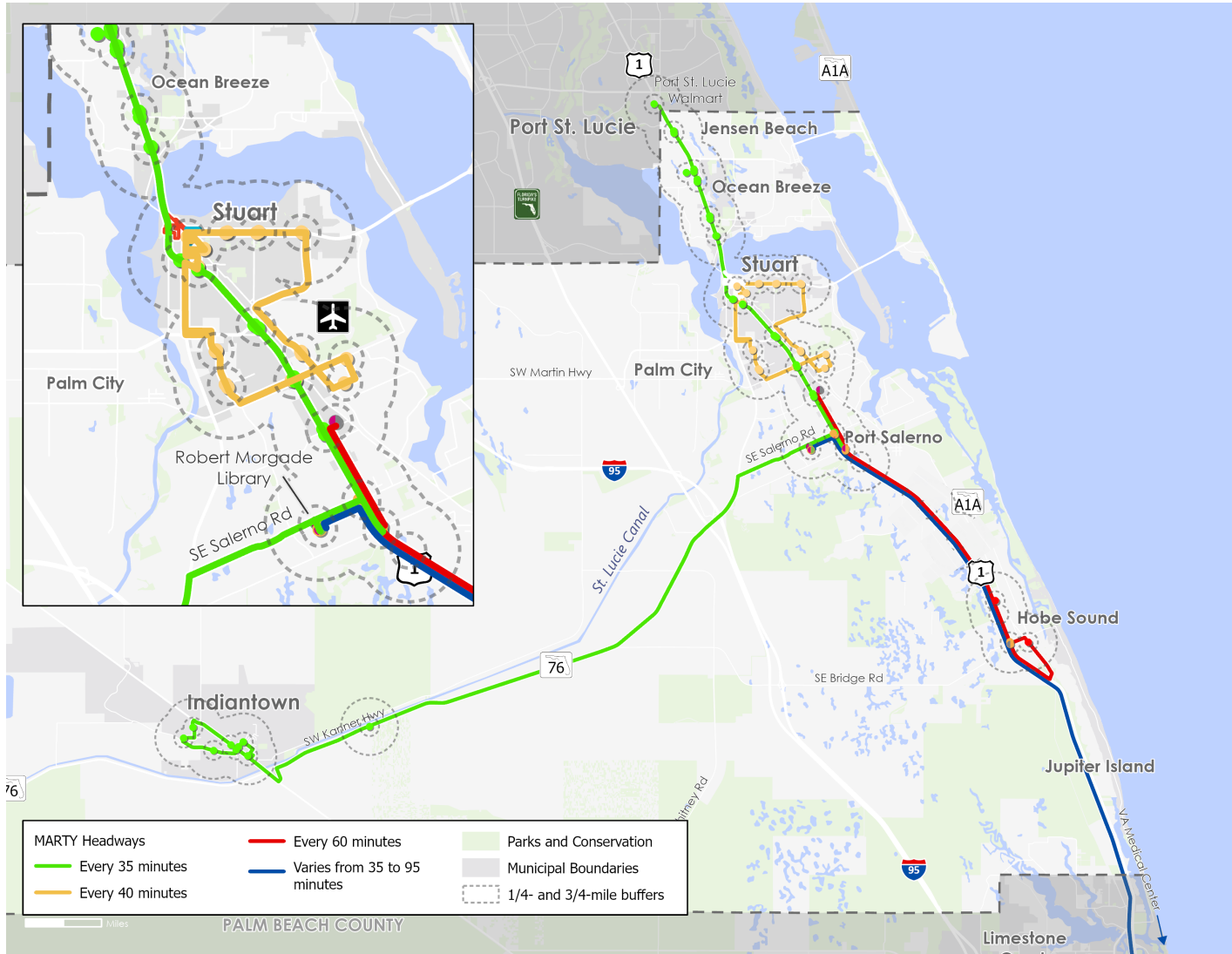
	FY 18	FY 19	FY 20	FY 21	FY22
Route 1	43,229	54,634	50,841	37,092	45,376
Route 2	13,546	13,676	12,197	11,519	13,483
Route 3	19,343	23,465	16,594	12,909	16,350
Route 4	N/A	N/A	643	1,902	4,241
Route 20X	7,349	9,803	9,687	6,825	9,454
Route 30X	N/A	120	78	N/A	N/A
<b>Total</b>	<b>83,467</b>	<b>101,698</b>	<b>90,040</b>	<b>70,247</b>	<b>88,904</b>

### Level of Service

Transit Level of Service (LOS) can be measured by route frequency and by access to bus stops. **Figure 28** shows the existing routes by headways and two buffer distances of ¼- and ¾-mile from existing bus stops that represent typical and maximum walking distances for riders to access bus stops.



**Figure 30: Transit Level of Service (LOS)**



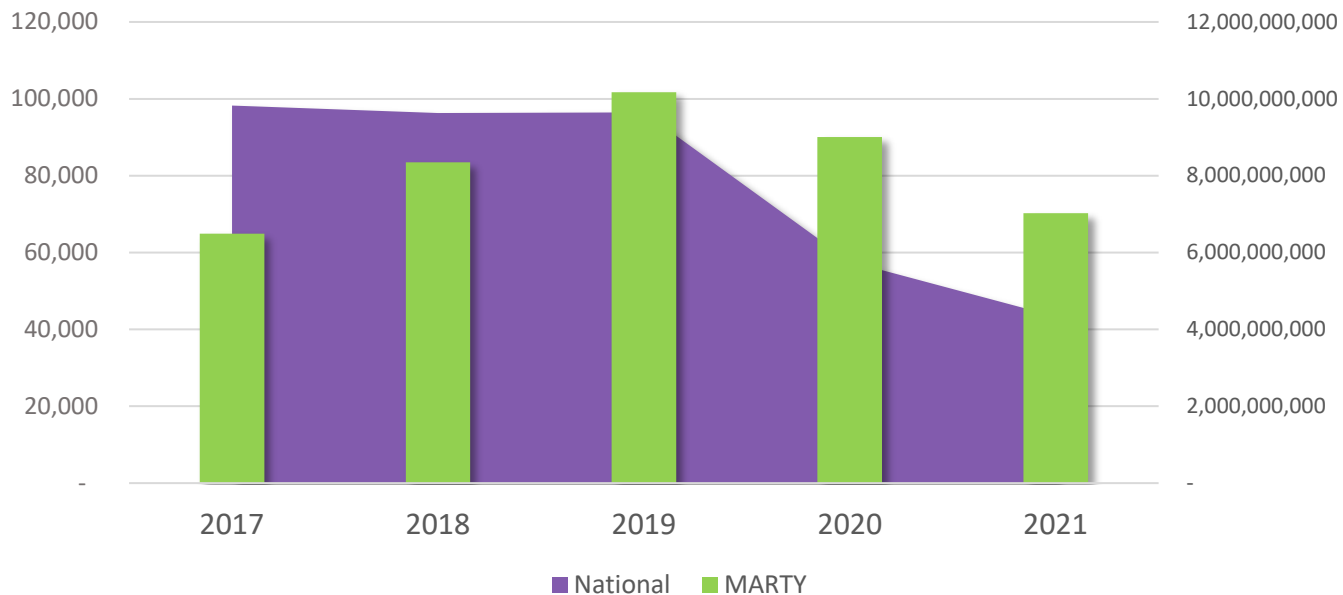




## Operating Statistics and Trend Analysis

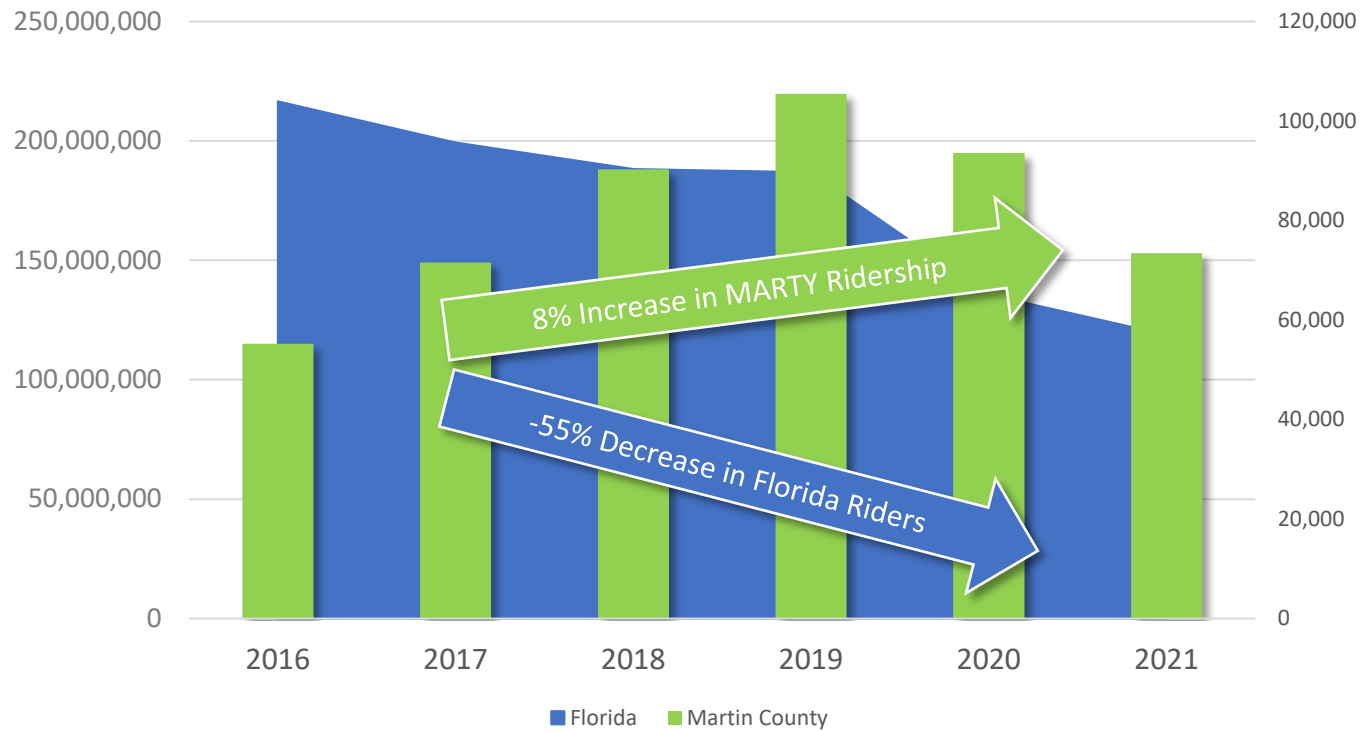
A review of MARTY’s operating statistics was conducted to assess how efficiently and effectively MARTY supplies fixed-route transit service using validated 2017-2021 National Transit Database (NTD) data. Several general indicators such as passenger trips, vehicle miles, revenue hours, and total maintenance show improving trends over the past five years. In fact, over the past five years, MARTY experienced an 8% increase in ridership, while transit agencies nationwide experienced an overall decline of 58%, as shown in **Figure 29**. In comparison with Florida’s overall ridership, the same trend can be observed as shown in **Figure 30**. Effectiveness measures for service supply and quality of service have also experienced improvements, while service consumption had mixed results. Concerning efficiency measures, all cost efficiency indicators show decreased efficiency due to rising operating expenses, a trend that transit agencies experienced nationwide. Measures concerning vehicle utilization and energy utilization indicate improvements. The results of the trend analysis for MARTY’s fixed route system are provided in **Table 5**.

**Figure 31: National and MARTY Ridership Trends**





**Figure 32: Florida and MARTY Ridership Trends**





\*National includes all agencies reported in FTIS – Directly Operated and Purchased Transportation, Fixed-Route Total (all except DR)

**Table 5: MARTY Fixed-Route Trend Analysis, 2017-2021**

Performance Measure	2017	2018	2019	2020	2021	% Change 2021 - 2016	Trend
<b>General Indicators</b>							
Passenger Trips	64,883	83,467	101,698	90,040	70,247	8.3%	Improving
Passenger Miles	570,375	648,671	845,286	694,277	536,619	-5.9%	No upward tendency
Vehicle Miles	389,118	510,854	574,574	618,906	627,605	61.3%	Improving
Revenue Miles	376,516	494,181	556,612	604,330	609,205	61.8%	Improving
Vehicle Hours	20,307	25,968	28,667	30,194	31,048	52.9%	Improving
Revenue Hours	19,822	25,479	27,782	29,389	30,175	52.2%	Improving
Route Miles	139	145	201	164	164	18.4%	Improving
Total Operating Expense	\$1,189,595	\$1,518,803	\$1,796,708	\$2,145,181	\$2,625,337	120.7%	No upward tendency
Total Maintenance Expense	\$297,554	\$312,837	\$353,001	\$573,543	\$260,357	-12.5%	Improving
Passenger Fare Revenues	\$56,714	\$82,657	\$106,515	\$55,319	\$87,626	54.5%	Improving
Vehicles Available for Maximum Service	11	13	15	17	13	18.2%	Improving
Vehicles Operated in Maximum Service	7	8	9	12	9	28.6%	Improving
Total Gallons Consumed	67,835	78,000	87,747	96,159	105,662	55.8%	No upward tendency
<b>Effectiveness Measures</b>							
<b>Service Supply</b>							
Revenue Miles Per Capita	2.50	3.28	3.51	3.81	3.84	53.9%	Improving
Vehicle Miles Per Capita	2.58	3.39	3.62	3.90	3.96	53.4%	Improving
<b>Service Consumption</b>							
Passenger Trips Per Capita	0.43	0.55	0.64	0.57	0.44	3.0%	Improving
Passenger Trips Per Revenue Mile	0.17	0.17	0.18	0.15	0.12	-33.1%	No upward tendency
Passenger Trips Per Revenue Hour	3.27	3.28	3.66	3.06	2.33	-28.9%	No upward tendency
<b>Quality of Service</b>							





Performance Measure	2017	2018	2019	2020	2021	% Change 2021 - 2016	Trend
Revenue Miles Between Failures	25,101	38,014	42,816	54,939	76,151	203.4%	Improving
<b>Efficiency Measures</b>							
<b>Cost Efficiency</b>							
Operating Expense Per Capita	\$7.88	\$10.07	\$11.33	\$13.53	\$16.55	109.9%	No upward tendency
Operating Expense Per Passenger Trip	\$18.33	\$18.20	\$17.67	\$23.82	\$37.37	103.8%	No upward tendency
Operating Expense Per Revenue Mile	\$3.16	\$3.07	\$3.23	\$3.55	\$4.31	36.4%	No upward tendency
Operating Expense Per Revenue Hour	\$60.01	\$59.61	\$64.67	\$72.99	\$87.00	45.0%	No upward tendency
<b>Operating Ratios</b>							
Farebox Recovery (%)	4.77	5.44	5.93	2.58	3.34	-30.0%	No upward tendency
<b>Vehicle Utilization</b>							
Revenue Miles Per Vehicle Mile	0.968	0.967	0.969	0.976	0.971	0.3%	Slightly Improving
Revenue Miles Per Total Vehicle	34,229	38,014	37,107	35,549	46,862	36.9%	Improving
Revenue Hours Per Total Vehicle	1,802	1,960	1,852	1,729	2,321	28.8%	Improving
<b>Energy Utilization</b>							
Vehicle Miles Per Gallon	5.74	6.55	6.55	6.44	5.94	3.5%	Improving
<b>Fare</b>							
Average Fare	\$0.87	\$0.99	\$1.05	\$0.61	\$1.25	42.7%	N/A

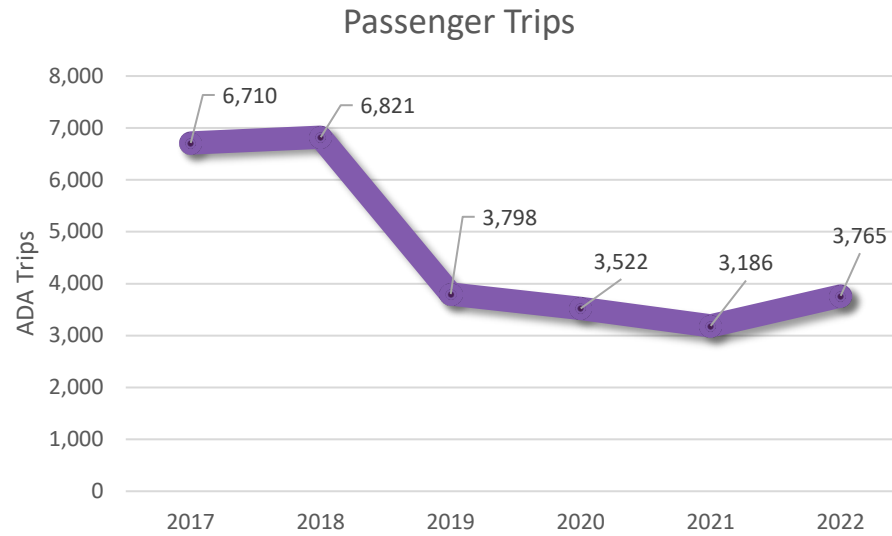
Source: NTD

## ADA Paratransit Trends

ADA Service is a door-to-door paratransit service that can be requested within a ¾-mile distance of MARTY’s fixed routes for qualifying individuals with disabilities. As shown in next page **Figure 32**, ridership has declined 52.3% from 2017 to 2021, although operating expenses have increased slightly during that period. **Table 6** lists the additional general indicators for MARTY’s ADA paratransit service.



**Figure 33: MARTY ADA Annual Ridership, 2017-2021**





**Table 6: MARTY ADA Service Trend Analysis, 2017-2021**

GENERAL INDICATORS	2017	2018	2019	2020	2021	% Change
Passenger Trips	6,710	6,821	3,798	3,522	3,186	-52.5%
Vehicle Miles	83,685	81,689	40,767	31,076	24,990	-70.1%
Revenue Miles	73,440	73,005	36,197	27,065	21,543	-70.7%
Vehicle Hours	4,925	5,422	2,855	2,765	2,612	-47.0%
Revenue Hours	4,361	4,788	2,533	2,429	2,378	-45.5%
Total Operating Expense	\$356,389	\$374,863	\$300,974	\$275,767	\$388,811	9.1%
Total Maintenance Expense	\$72,751	\$57,845	\$37,615	\$51,027	\$10,795	-85.2%
Passenger Fare Revenues	\$19,818	\$20,259	\$11,388	\$6,108	\$9,099	-54.1%
Vehicles Available for Maximum Service	6	6	6	5	5	-16.7%
Vehicles Operated in Maximum Service	4	4	3	2	2	-50.0%
Spare Ratio (%)	50.00	50.00	100.00	150.00	150.00	200.0%
Total Gallons Consumed	9,982	10,230	6,210	6,261	4,961	-50.3%

Source: NTD

### Peer Review

The peer review analysis involves the critical evaluation and assessment of transit agencies. The purpose is to recognize strengths and weaknesses, identify best practices, and ensure quality and effectiveness. This analysis will lead to a more robust assessment of alternatives for the plan and more comprehensive insights and solutions that may not have been considered otherwise.

Understanding other transit agencies' experience in the area and the country contributes to a culture of continuous improvement within the transit industry to meet changing needs and technologies.

This analysis provides a systematic and critical evaluation process that will help Marty improve its efficiency, and develop goals for the future of Marty.





## Methodology

A pre-selection of peer transit systems was conducted, examining counties in Florida and the Southern States nationwide that are similar in population size and per capita income. Using these criteria, the team proceeded to assess the transit system of fifteen counties using FTIS data from 2021.

The initial States assessed were the following:

- Texas
- South Carolina
- North Carolina
- Utah
- California
- Georgia
- Arizona

The parameters assessed for each examined County are the following:

- **Population:** U.S. Census Bureau, 2020 Census of Population and Housing. The resident population of a specific geographic location includes all people living in that location at the time of the census. The 2020 Census resident population also includes military and civilian employees of the U.S. government who are deployed outside the United States.
- **Per Capita Income:** U.S. Census Bureau, American Community Survey (ACS) and Puerto Rico Community Survey (PRCS), 5-Year Estimates. Per capita income is the mean income computed for every man, woman, and child in a particular group including those living in group quarters. It is derived by dividing the aggregate income of a particular group by the total population in that group. This measure is rounded to the nearest whole dollar.
- **Transit System available:** The type of transit describes the types of systems available in each County, which are defined as Commuter Bus (CB), Fixed Route Motorbus (MB), and paratransit on demand.
- **Name:** Name of the County’s public transit Agency.
- **Average speed:** Average speed of vehicles in revenue service operation calculated by dividing total revenue miles by total revenue hours.



- **Passenger trips:** Annual number of passengers boardings on the transit vehicles. A trip is counted each time a passenger boards a transit vehicle.
- **Revenue miles:** number of annual miles of vehicle operation while in active service (available to pick up revenue passengers).
- **Service area population:** the population in the service area as defined in the Americans with Disabilities Act (ADA), the US Department of Transportation.
- **Service Area Size (square miles):** The size of the areas as defined in the Americans with Disabilities Act (ADA), the US Department of Transportation.
- **Service area population density:** total population per square mile of service area
- **Total operating expense:** Reported total spending on operations, including administration, maintenance, and operation of service vehicles.
- **Vehicles operated for maximum service:** number of vehicles available for use by the transit agency to meet the annual maximum requirement. Vehicles available for maximum service include spares, out of service vehicles. And vehicles in or awaiting service. But exclude vehicles awaiting sale and emergency contingency vehicles.
- **Revenue hours:** total hours of operation by revenue service vehicles in active revenue service.

The resulting pre-selection was presented to the Martin MPO for review and comment.

Five transit systems were selected, four are counties in the State of Florida and one in California, the final list is as follows:

- Indian River, FL – GoLine
- Collier County, FL – RideCAT
- Bay County, FL – Bayway
- St. Lucie County, FL – Art
- Napa County, CA – the Vine

Table 7 provides an overview of Marty’s performance in comparison with the selected peer systems.



Table 7: Peer Analysis Overview

= 50,000     = 50,000  
 = \$500,000     = \$3

	Martin County Marty	Indian River GoLine	Collier County RideCAT	Bay County Bayway	St Lucie County Art	Napa County The Vine
<b>Service Area (sqm)</b>	65	210	2,025	758	572	45
<b>Service Population</b>	158,942	159,923	384,902	175,216	336,584	138,000
<b>Total Operating Expense</b>	\$3,014,148	\$4,357,226	\$10,827,417	\$4,504,810	\$7,882,660	\$9,669,342
<b>Passenger Trips</b>	73,433	1,162,905	649,409	368,905	491,475	314,793
<b>Cost per Rider</b>	\$41.05	\$3.75	\$16.67	\$12.21	\$16.04	\$30.72

Source: NTD Data 2023





## Transit Ridership Demand Projections

Transit ridership demand projections for MARTY’s existing transit network were estimated using TBEST, the FDOT-recommended and approved ridership estimation software for TDPs. This analysis helps gauge route-level and systemwide demand for the existing system in 10 years. Average weekday ridership from May 2023 to July 2023 obtained from MARTY were used to calibrate the model. Additionally, TBEST accounts for the following at the stop level:

- demographic data (2021 ACS 5-Year Estimates)
- socioeconomic data (2020 InfoUSA, 2020 Block-Level LEHD)
- socio-economic growth (TCRPM 2045 Forecast)
- existing land use (2022 FDOR)
- transit network connectivity (transfer stations)
- temporal accessibility (transit travel times)
- route span and frequency
- peak periods
- route competition and complementarity
- special transit generators (shopping malls, hospitals, transfer stations, and universities)

The model may overestimate demand in some cases as it cannot consider other factors that impact transit ridership such as travel speeds compared to other modes, congestion, roadway connectivity, walkability, parking supply, real-time economic conditions, fuel prices, and marketing.

**Table 7** shows the projected 10-year ridership for 2024 and 2033 at the route- and system level. Overall ridership is estimated to increase by 13%, with the highest increases in ridership occurring on Routes 1, 2, and 20X. Note that the ridership levels used to validate the model were based on February 2020, but were not adjusted to consider seasonal fluctuations in ridership levels.

### **10-Year ridership projections are a requirement for TDP major updates**

FDOT’s guidance for forecasting ridership includes the following:

*“An estimation of the community’s demand for transit service using the planning tools provided by the Department, or a department approved transit demand estimation technique with supporting demographic, land use, transportation, and transit data. The result of the transit demand estimation process shall be a ten-year annual projection of transit ridership.”*



**Table 8: Annualized 10-Year Ridership Estimates**

Route	2024 Boardings	2033 Boardings	Additional Boardings	Percent Change
Route 1	56,975	65,275	8,300	14.6%
Route 2	14,143	15,942	1,799	12.7%
Route 3	18,555	20,475	1,920	10.3%
Route 4	5,393	5,685	292	5.4%
Route 20X	11,367	12,884	1,517	13.3%
<b>Total</b>	<b>106,433</b>	<b>120,261</b>	<b>13,828</b>	<b>13.0%</b>

TBEST is an effective tool to compare ridership productivity in various scenarios, as such, it will be used in evaluating alternative scenarios later in this TDP.

## Mobility Needs and Demand Identification

To gain an understanding of the existing demand for transit in Martin County, a review of the mobility needs and transit demand was conducted by using a combination of quantitative and qualitative data, including the following:

- Review of areas with a high proportion of transit-dependent characteristics such as zero-vehicle households, households living in poverty, disabled populations, and older adults.
- Plans review including the 2045 LRTP, prior TDP, and the Martin County Innovation Hub Recommendations Report, among others.
- Results from public outreach conducted as a part of the TES and this TDP.
- Person trips hotspot analysis

## Hotspot of Person Trips Analysis

Identification of areas with high person-trip activity assists in determining which areas and corridors have more potential to support transit services due to the higher presence of activity. Person trips represent the number of trips, including automobile and alternative modes like walking, generated by persons on a given parcel on a typical weekday. Person trip rates a land-use-based analysis that considers the following variables:

- Parcel data (dwelling units and living square footage) and their corresponding land-use categories developed from the 2022 Florida Department of Revenue (DOR) land-use classifications.
- Vehicle trip ends by land use code from the ITE Trip Generation Manual 10th Edition.
- National Highway Traffic Safety Administration (NHTSA) vehicle occupancy rates to convert vehicle trips to personal trips

The resulting output of the person-trip analysis was further analyzed using the ArcGIS Pro Optimized Hot Spot Analysis. The Optimized Hot Spot Analysis creates a map of statistically significant hot spots using the Getis-Ord Gi statistic to identify significant spatial clusters of high person-trip values with a 99% confidence level.

## Transit Service Gaps

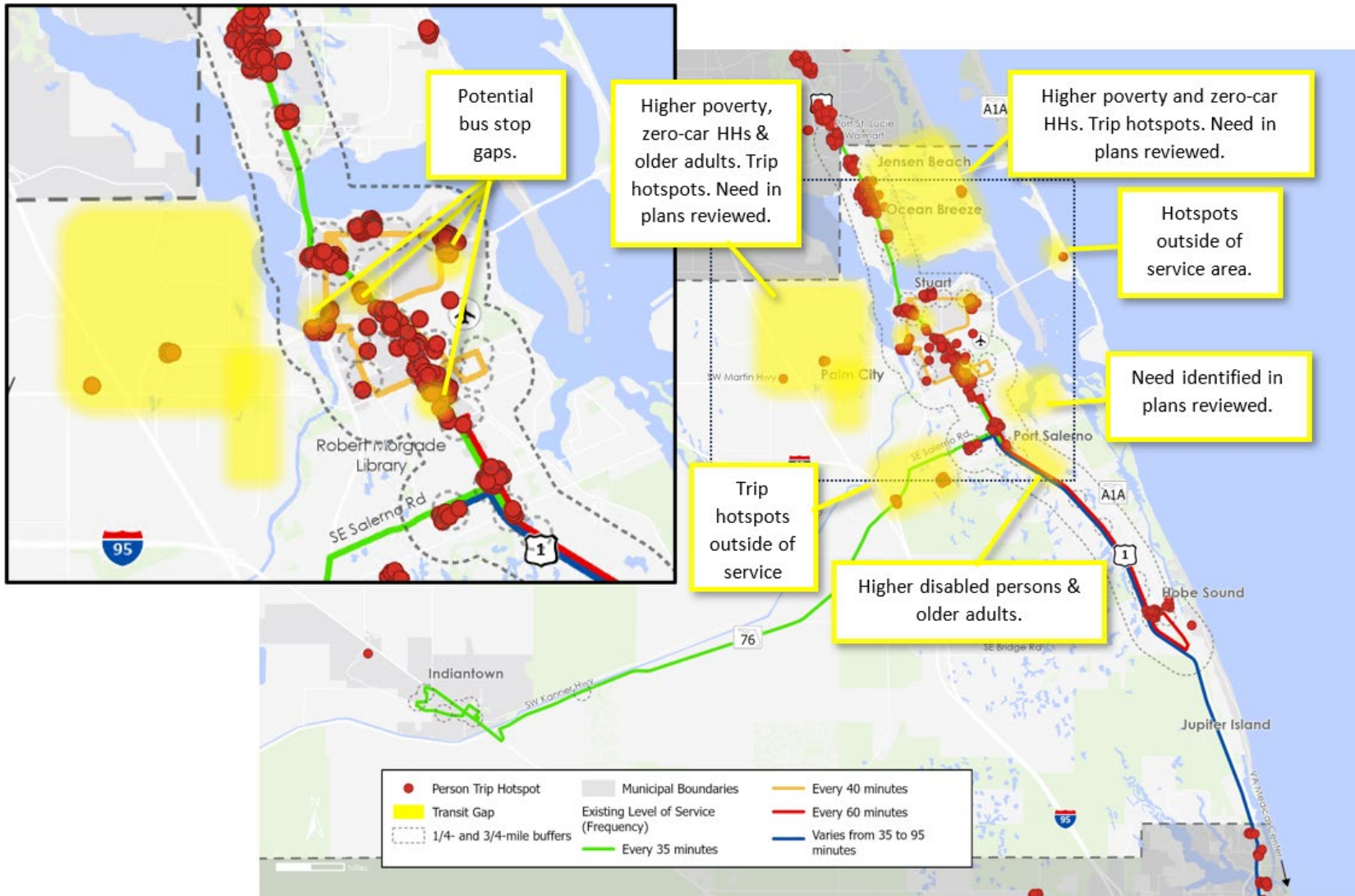
Figure 33 illustrates the hotspots of weekday person trips as well as gaps in transit service highlighted in yellow. In general, activity hotspots are concentrated within the MARTY ¾-mile service area with a few hotspots outside of the service area such as Ocean Breeze, the SeaBreeze Shoppes near Stuart Beach, Palm City, SE Cove Road, and the area of SW Kanner Highway and the I-95 exit. A review of hotspots lying outside of the ¾-mile service area shows a few areas within Stuart that have the potential to benefit from





additional bus stops along existing routes. Other notable areas showing transit service gaps include Palm City, Jensen Beach, and Ocean Breeze.

**Figure 34: Person Trip Hotspot and Transit Gap Analysis**





## Appendix A Farebox Recovery Report

An additional requirement for the TDP was added by the Florida Legislature in 2007 as part of House Bill 985 which requires transit agencies to: "... specifically address potential enhancements to productivity and performance which would have the effect of increasing farebox recovery ratio." The farebox recovery ratio refers to the percentage of a transit system's total operating expenses that are funded by passenger fares.

### Prior Year Fare Studies and Changes

The following summarizes the timeline of fare policy changes for the MARTY fixed-route system:

- On April 1, 2011, Martin County Public Transportation removed the \$1.50 fixed-route fare as a temporary marketing strategy. The strategy increased fixed-route ridership by 148% in 2 years.
- On March 19, 2013, \$1.50 fares for fixed-route service were reinstated as well as half fares (\$0.75) for seniors, those with disabilities, and those with a Medicare card. Paratransit service fares increased from \$1.50 to \$3.00 due to impending decreases in Section 5307 federal funding for operations and to maintain the level of service.
- On January 30, 2019, the MARTY fare structure was updated to include fare-free service for Veterans with an approved form of identification as a part of a Martin County-funded program. The free fare applies to all MARTY fixed routes and the commuter bus service.
- Fares were suspended between March 18, 2020, and August 31, 2020, due to the COVID-19 pandemic.
- On September 1, 2020, fares were reinstated.

### Proposed Fare Changes

No fare studies have been conducted and there are no proposed changes to the fare policy.

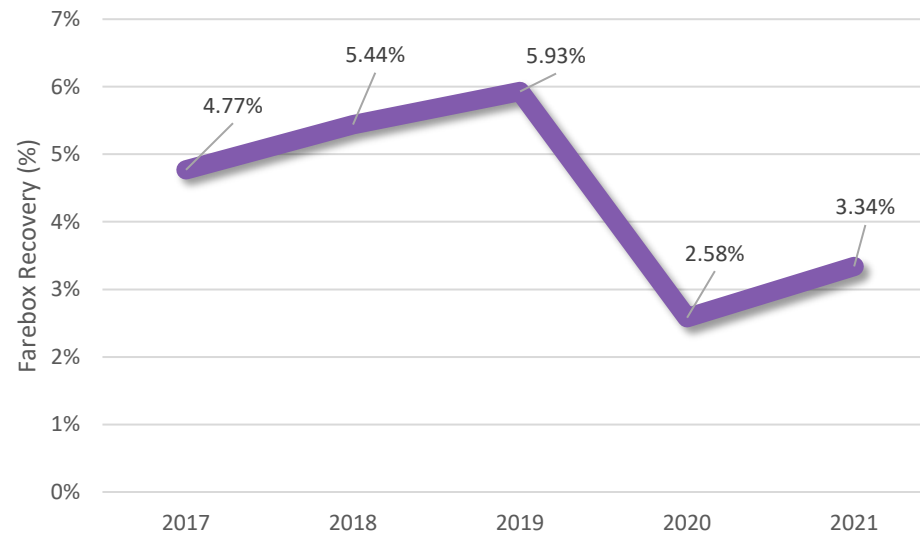




## Current and Prior Farebox Recovery Ratio

The current farebox recovery ratio, as reported to NTD in FY 2021, was 3.34% for fixed-route services, 2.34% for demand-response service, and 3.21% systemwide. **Figure A-1** shows the five-year history of the MARTY farebox recovery ratio for fixed-route services, as reported to NTD. The farebox recovery ratio between 2017 to 2019 from 4.77% to 5.93%, but declined to 2.58% in 2020, largely due to the fare suspension during the COVID-19 pandemic.

**Figure A-1: Farebox Recovery Ratio for Fixed-Route Service**



Source: NTD



## Strategies to Improve Farebox Recovery Ratio

The farebox recovery ratio can be improved by increasing ridership, increasing revenue fares, and by reducing operating costs. The following is a list of strategies for MARTY to consider improving the farebox recovery ratio:

- Continuously monitor performance to determine if adjustments need to be made, such as discontinuing service for underperforming routes and determining the most cost-effective service type on major corridors and community areas.
- Minimizing costs required to operate and administer transportation services.
- Evaluating fare structure to analyze opportunities for instituting additional passes.
- Increasing marketing through innovative outlets like social media and working with key employers, community organizations and homeowner associations to increase fixed-route ridership.
- Adding bus stops to increase service effectiveness and improve visibility.
- Increase ridership while maintaining costs to operate and administer transportation services by engaging the public to refine services and aim to better meet the needs of customers.



## Appendix B: Rolling Stock

**Table B-1** lists the revenue vehicles for the fixed route/commuter bus and paratransit service.

**Table B-1: Rolling Stock of Transit Vehicles**

Asset Name	Make	Model	Serial No.	Asset Owner	Acquisition Year	Vehicle Mileage	Replacement Cost/Value
<b>Fixed Route/Commuter Bus Vehicles</b>							
30' Bus (50)	Gillig Bus	Low Floor	59165	MCBOCC	2015	272,960.00	\$ 380,740.00
30' Bus (51)	Gillig Bus	Low Floor	60039	MCBOCC	2016	243,159.00	\$ 392,643.00
30' Bus (52)	Gillig Bus	Low Floor	60271	MCBOCC	2016	267,560.00	\$ 392,964.00
30' Bus (53)	Gillig Bus	Low Floor	61412	MCBOCC	2016	204,445.00	\$ 399,826.00
30' Bus (54)	Gillig Bus	Low Floor	61604	MCBOCC	2017	229,913.00	\$ 407,425.00
30' Bus (55)	Gillig Bus	Low Floor	61605	MCBOCC	2017	244,738.00	\$ 407,425.00
30' Bus (56)	Gillig Bus	Low Floor	61603	MCBOCC	2017	219,901.00	\$ 407,425.00
30' Bus (57)	Gillig Bus	Low Floor	61718	MCBOCC	2018	241,891.00	\$ 409,597.00
30' Bus (58)	Gillig Bus	Low Floor	61835	MCBOCC	2018	248,957.00	\$ 409,597.00
30' Bus (59)	Gillig Bus	Low Floor	62003	MCBOCC	2018	159,678.00	\$ 410,105.00
30' Bus (60)	Gillig Bus	Low Floor	62004	MCBOCC	2018	216,818.00	\$ 410,105.00
30' Bus (61)	Gillig Bus	Low Floor	62871	MCBOCC	2019	116,440.00	\$ 410,105.00
30' Bus (62)	Gillig Bus	Low Floor	62872	MCBOCC	2019	116,654.00	\$ 410,105.00
30' Bus (63)	Gillig Bus	Low Floor	63383	MCBOCC	2020	110,559.00	\$ 422,304.00
<b>Paratransit Vehicles</b>							
23' Bus (7)	Turtletop	Cutaway	62850	MCBOCC	2019	4825	\$89,229.00
23' Bus (8)	Turtletop	Cutaway	62778	MCBOCC	2019	3132	\$89,229.00





Asset Name	Make	Model	Serial No.	Asset Owner	Acquisition Year	Vehicle Mileage	Replacement Cost/Value
23' Bus (9)	Turtletop	Cutaway	62779	MCBOCC	2019	4856	\$89,229.00
23' Bus (10)	Turtletop	Cutaway	62812	MCBOCC	2019	4244	\$89,229.00
23' Bus (11)	Turtletop	Cutaway	62780	MCBOCC	2019	5586	\$89,229.00
23' Bus (7)	Turtletop	Cutaway	62850	MCBOCC	2019	4825	\$89,229.00



**TECHNICAL ADVISORY COMMITTEE (TAC) MEETING  
AGENDA ITEM SUMMARY**

<b>MEETING DATE:</b> February 5, 2024	<b>DUE DATE:</b> January 29, 2024	<b>UPWP#:</b> 6
<b>WORDING:</b> FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) MONTEREY ROAD GRADE SEPARATION AT FEC RAILROAD CROSSING PD&E PRESENTATION		
<b>REQUESTED BY:</b> MPO	<b>PREPARED BY:</b> Ricardo Vazquez / Beth Beltran	<b>DOCUMENT(S) REQUIRING ACTION:</b> N/A

**BACKGROUND**

In September 2017, the MPO Board adopted the FEC Railroad Grade Separation Feasibility Study that recommended a grade separation on Monterey Road at FEC Railroad. Since then, the Monterey Road Grade Separation at FEC Railroad Crossing project has been on the Martin MPO List of Project Priorities (LOPP).

FDOT is currently developing the Project Development and Environment (PD&E) Study for the grade separation project. A PD&E Study is conducted to meet the requirements of the National Environmental Policy Act. During the study, FDOT will determine the location and conceptual design of feasible build alternatives for roadway improvements and their social, economic, and environmental effects.

**ISSUES**

At the February 2024 advisory committee meetings, FDOT staff will present on the Monterey Road at FEC Railroad Grade Separation PD&E Study.

**RECOMMENDED ACTIONS**

Provide Comments

**APPROVAL**

MPO

**ATTACHMENTS**

Monterey Road Grade Separation PD&E PowerPoint presentation

# PD&E Study for SR-714/Monterey Road at FEC Railroad Crossing Martin County, Florida

Florida Department Of Transportation District Four

Financial Project ID: 441636-2-22-02

February 5, 2023



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## Transportation Development Process

- 1 PLANNING
- 2 PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
- 3 DESIGN
- 4 RIGHT OF WAY ACQUISITION (IF NEEDED)
- 5 CONSTRUCTION
- 6 MAINTENANCE

### Why is a PD&E Study performed?

- To determine the best alternative to address the purpose and need
- To evaluate the potential environmental and social effects
- To include public participation to help shape the project
- To comply with federal, state, and local laws

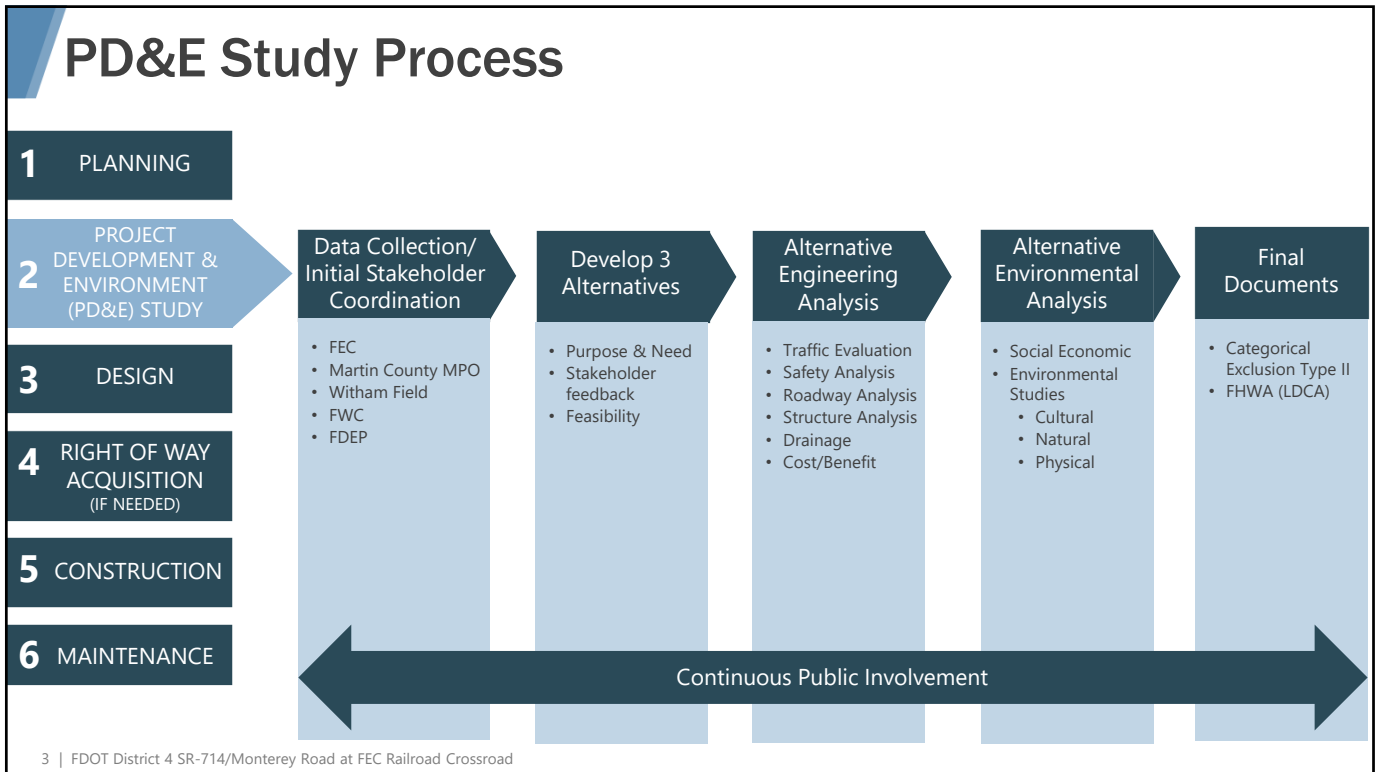
### During the PD&E Study:

- The community will have several opportunities for input on the project
- Project effects to the environment will be avoided or minimized
- Coordination with federal, state and local agencies will occur
- Project reports and plans will be available for public view

2 | FDOT District 4 SR-714/Monterey Road at FEC Railroad Crossroad

2





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# Project Location

**Project Is Located**

- Partially within the City of Stuart boundary and Martin County

**Project Study Area of Influence**

- Along SR 714 from SR 76/S. Kanner Hwy to SE Flying Fortress Lane

**Project Focus**

- The project focus will be to address the SR 714 at the FEC Railroad Crossing

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# Purpose and Need

## Purpose

- Improve traffic operations
- Support transportation demand
- Provide more efficient system linkage
- Provide enhanced emergency evacuation
- Enhance multimodal connectivity to support social and transportation related demands

## Need :

- System Linkage
  - SR 714 connects Federal Highway to Dixie Highway
  - FEC Railroad is designated as an FDOT SIS railroad
  - Historically, situation is further complicated by traffic backups along US 1 and Dixie Highway
- Transportation Demand
  - SR 714 currently operates at a Level of Service (LOS) of a D and is expected to operate at a LOS of an E by 2040, (*Martin County MPO FEC Railroad Grade Separation Feasibility Study (2017)*)
  - A contributing factor is the threshold for the maximum control delay at the signalized intersection of SR 714 and CR A1A

## Need cont':

- Modal Interrelationships
  - SR 714 has a sidewalk on north side east & west of CR A1A; south side is only west of CR A1A
  - No designated bicycle lanes on SR 714 within project limits
  - Bicycle & pedestrian crashes along SR 714 within project limits
  - No crashes included a train
  - Study area served by two bus transit routes
- Emergency Evacuation
  - SR 714 is classified as an evacuation route within project limits (*Martin County's Evacuation Routes Map*).
  - SR 714 is within a designated hurricane evacuation zone
  - City of Stuart Fire Rescue Station #2 located directly south of project limits, on SR 714.

## Objectives

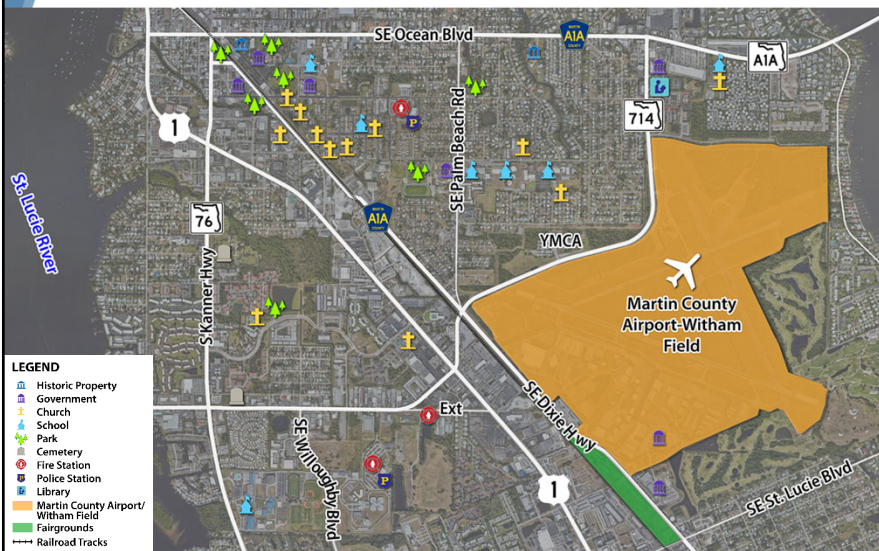
- Evaluate alternatives to improve operations by eliminating or reducing conflicts at SR-714 and the Florida East Coast (FEC) Railway
- Analyze build alternatives in addition to the "No Build"
- Long-term and short-term TSM&O improvements, including LOS at signalized intersections within the area of influence:
 

Kanner Hwy	Monterey Ext Rd	CR A1A/Dixie Hwy
Willoughby Blvd	US 1/Federal Hwy	
- Obtain **LDCA** for a proposed alternative that meets the purpose and need

5 | FDOT District 4 SR-714/Monterey Road at FEC Railroad Crossroad

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# Existing Conditions - Roadway



## SR-714

- Four-lane Urban Typical Section (outside curb and gutter)
- West of CR A1A: Two-way Left Turn Lane Median, sidewalks on both sides
- East of CR A1A: Paved Median, sidewalk on the north side

## CR A1A

- South of SR-714: Four-lane Divided Urban Typical Section
- North of SR-714: Two-lane Undivided Rural Typical Section

## SR-714 Roadway Characteristics

- C4 (Urban General) Context Classification
- Urban Minor Arterial (East of US 1/Federal Hwy)
- Access Management Class:
  - 6 West of A1A, 5 East of A1A
- Posted, Design, and Target Speed: 40 MPH
- Evacuation Route
- 12 UAOs

## Community Resources

- |  |                            |                                       |
|--|----------------------------|---------------------------------------|
| • 9 Schools<br>(15 buses cross RR/day) | • 2 Police Stations        | • 2 Cemeteries                        |
| • 3 Fire Stations                      | • 8 Parks plus Fairgrounds | • 9 Government (incl. YMCA & Library) |
|  | • 12 Churches              | • 2 Historic Properties               |

6 | FDOT District 4 SR-714/Monterey Road at FEC Railroad Crossroad

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# Safety Analysis

Total Crashes\* (2016-2022): 303

## Crashes at Signalized Intersections

- S. Kanner Hwy: 47 (16%)
- SE Willoughby Blvd: 45 (15%)
- US 1/SR 5/Federal Hwy: 54 (18%)
- CR A1A/Dixie Hwy: 57 (19%)

## Most Prevalent Collision Types

- Rear-End: 140 (46%)
- Sideswipe: 44 (15%)
- Left Entering: 24 (8%)

## Severity

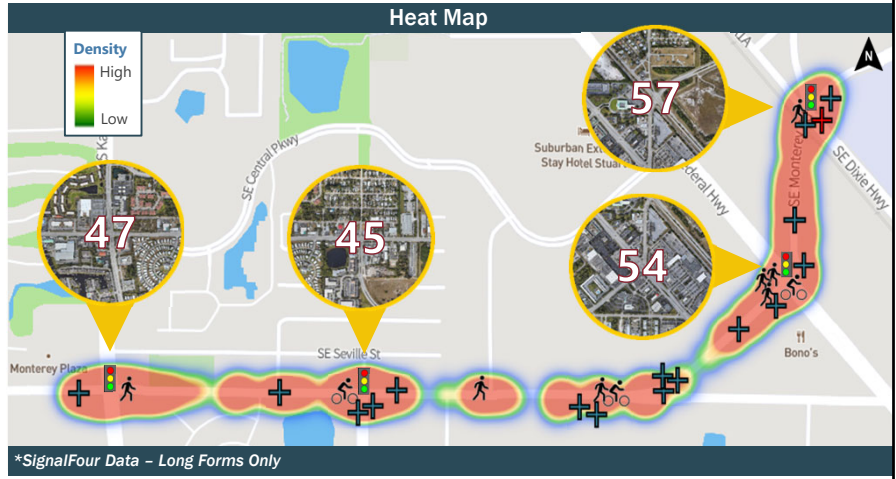
- Fatalities: 1 (0.3%)
- Severe Injury: 16 (5%)

## Pedestrian/Bicycle Collisions

- Ped: 7 (2%)
- Bike: 3 (1%)

## Common Crash Conditions

- Day: 264 (87%)
- Dry: 272 (90%)



\*SignalFour Data - Long Forms Only



7 | FDOT District 4 SR-714/Monterey Road at FEC Railroad Crossroad

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# Existing Conditions - Witham Field

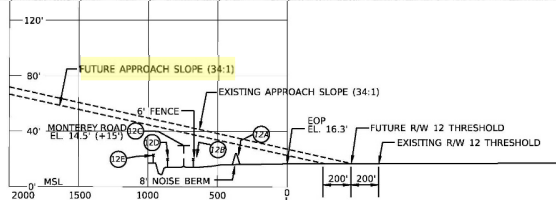
## Considerations for Potential Alternatives

- Primary Runway: 12-30
- Engineered Materials Arresting System (EMAS) installation on Runway 12 reduced the displaced threshold to 464'
- Each 1' of elevation of SR-714 may increase this displaced threshold by 34'



OBSTRUCTION DATA TABLE - RUNWAY 12									
REF#	DESCRIPTION	TOP ELEV (AMSL)	MAX. ALLOWABLE PART 77 ELEV. (EXISTING)	PART 77 PENETRATION (FEET)	(YES/NO)	SEE NOTE	OFFSET FROM RUNWAY 12 C/L	PART 77 SURFACE	MITIGATION
12A	FUTURE NOISE BERM	23.6'	30.3'	34.9'	-6.7'	NO	-11.3'	NO	APPROACH NONE REQUIRED
12B	FENCE	19.4'	41.8'	36.9'	-22.4'	NO	-17.5'	NO	APPROACH NONE REQUIRED
12C	ROAD CENTERLINE	29.5'	43.9'	36.5'	-13.9'	NO	-14.0'	NO	APPROACH NONE REQUIRED
12D	FENCE	19.4'	45.9'	41.0'	-26.5'	NO	-21.8'	NO	APPROACH NONE REQUIRED
12E	FENCE	22.3'	48.2'	43.1'	-25.9'	NO	-21.0'	NO	APPROACH NONE REQUIRED
12F	FENCE	20.2'	36.5'	30.8'	-15.3'	NO	-10.8'	NO	269.22' R APPROACH NONE REQUIRED
12G	ROAD CENTERLINE	29.9'	36.9'	32.0'	-6.8'	NO	-7.1'	NO	278.18' R APPROACH NONE REQUIRED
12H	FENCE	20.8'	37.2'	32.0'	-6.8'	NO	-11.9'	NO	279.37' L APPROACH NONE REQUIRED
12I	FUTURE NOISE BERM	23.7'	31.8'	27.0'	-4.5'	NO	-385.11' R	7.1 TRANS	APPROACH NONE REQUIRED
12J	FUTURE NOISE BERM	24.4'	44.8'	36.4'	-24.4'	NO	-11.26' L	APPROACH	APPROACH NONE REQUIRED

NOTE: (-) INDICATES FEET BELOW PART 77 SURFACE  
INDICATES FEET ABOVE PART 77 SURFACE



8 | FDOT District 4 SR-714/Monterey Road at FEC Railroad Crossroad

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# Florida East Coast Railway

## Geometry/Network Layout

- SR-714/A1A (Dixie Hwy) is 118' from crossing
- SR-714/US 1 is 0.22 miles from crossing

## Railroad

- Designated as an FDOT SIS railroad
- Approximately 25 train crossings daily:
  - Through trains: 21
  - Switching trains: 4
- 15 additional trains per day for the new Brightline service
- Basis of County's desire for this project, historically:
  - Trains are major contributing factor to traffic congestion
  - Deliveries to Super Ready Mix and Cemex intensify delays



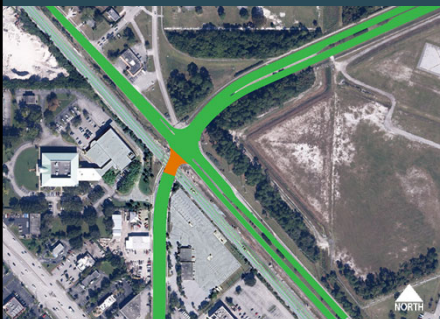
*Recent sidetrack improvements by Brightline has greatly enhanced the conditions at the railroad crossing potentially alleviating the historical condition of traffic backups caused by gates staying down while concrete plants receive materials.*

9 | FDOT District 4 SR-714/Monterey Road at FEC Railroad Crossroad

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# Feasibility Alternatives Under Consideration

Feasibility 1 - Elevated Intersection



### Pros

- Improves traffic flow for SR-714

### Cons

- Approach slope and RPZ
- Long detour duration
- Severs connection to SE Palm Beach Rd and Christie Way

### Structures

- Single-span bridge over 100' FEC ROW
- Approach embankment contained with retaining wall structures

Feasibility 2 - Elevated SR 714 over RR



### Pros

- Improves traffic flow for SR-714
- Maintains access to SE Palm Beach Rd

### Cons

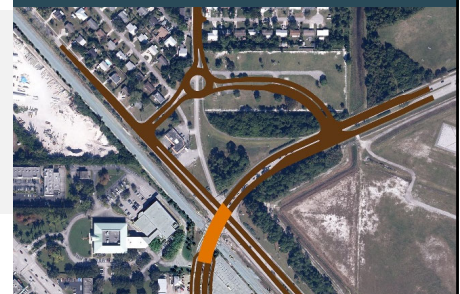
- Approach slope and RPZ
- U-turn movements
- Severs Christie Way connection

### Structures

- Concrete/Steel Bridges - FEC & Dixie Hwy
- MVC & MHC meeting FDM Section 260

### Option: Jug handles

Feasibility 3 - Elevated SR 714 with New Alignment Connecting to SE Palm Beach Rd



### Pros

- Improves traffic flow for SR-714
- Maintains access to SE Palm Beach Rd
- Maintains access to adjacent community

### Cons

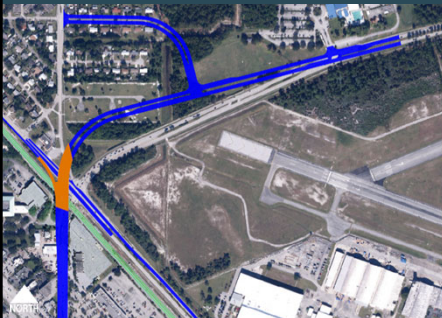
- Approach slope and RPZ
- Christie Way becomes divided roadway
- Some additional ROW acquisition

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# Feasibility Alternatives Under Consideration

## Feasibility 4 - Realign Elevated SR 714



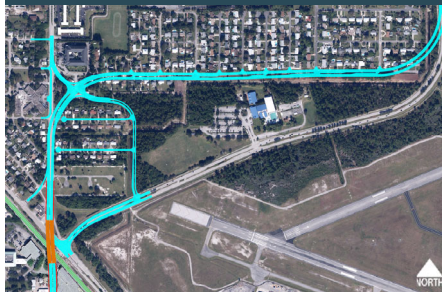
**Pros**

- Improves traffic flow for SR-714
- Mobility - access road to Dixie Hwy
- Phased construction

**Cons**

- Approach slope and RPZ
- Additional ROW acquisition compared to Alt 1

## Feasibility 5 - Elevated Realignment to SE 14th St



**Pros**

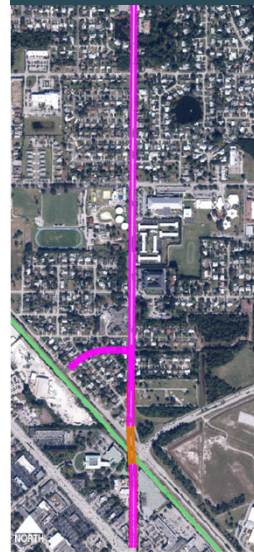
- Improves traffic flow for SR-714
- No encroachment approach slope and RPZ
- Decommission SR-714 south of SE 14 St enhances airport clearances
- Maintains access to adjacent community

**Cons**

- ROW acquisition required along SE Palm Beach Rd and SE 14th St
- Construction costs

- **Option:** Roundabout

## Feasibility 6 - Elevated Realignment to SE Palm Beach Rd



**Pros**

- Improves traffic flow for SR-714
- No approach slope and RPZ encroachments

**Cons**

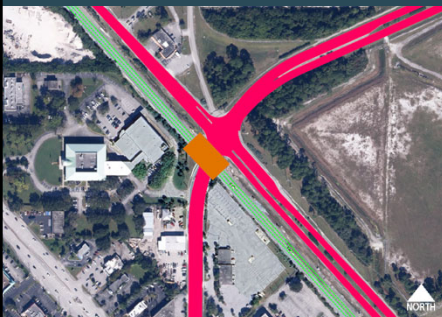
- Significant ROW impacts along Palm Beach Rd
- High construction costs

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# Feasibility Alternatives Under Consideration

## Feasibility 7 - Depressed Intersection



**Pros**

- Improved traffic flow for SR-714
- No encroachment approach slope and RPZ

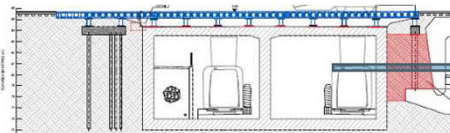
**Cons**

- Requires temp closure of RR tracks
- Long construction duration
- Severs connection to SE Palm Beach Rd and Christie Way

**Structures**

- Section retained by anchored wall
- Rail bridge structure over SR-714

## Feasibility 8 - Box Jacking



**Pros**

- Improves traffic flow for SR-714
- No encroachments approach slope and RPZ
- No impacts to rail operation

**Cons**

- Severs access to SE Palm Beach Rd & Christie Way
- Longer construction duration
- Highest construction costs

## Feasibility 9 - Monterey Extension Flyover



**Pros**

- Improves traffic operations
- No encroachment approach slope and RPZ
- Current SR-714 remains active at the FEC crossing
- Provides improved mobility options for motorist accessing Dixie Hwy

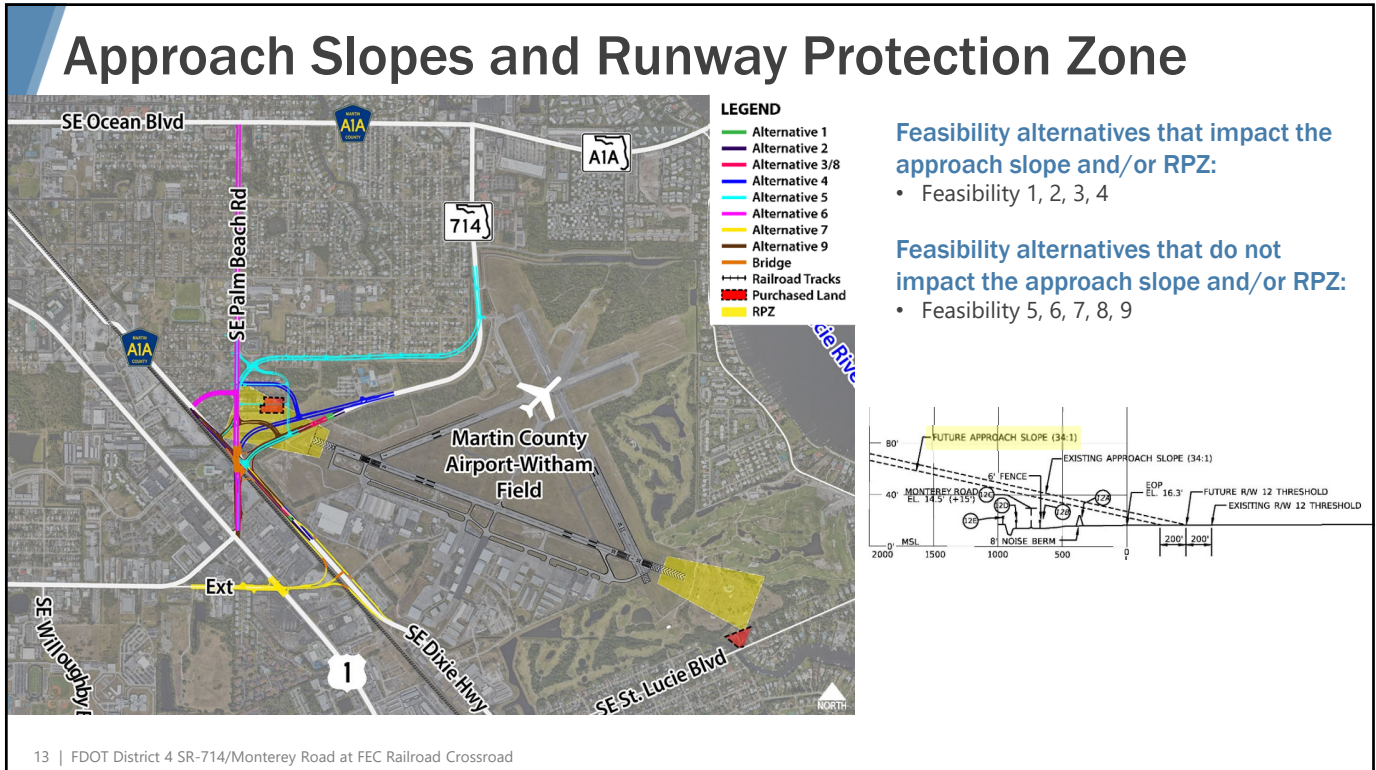
**Cons**

- ROW impacts along Monterey Rd Ext., Dixie Hwy, and Witham Field Airport

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# Environmental

Natural	Cultural	Physical	Social & Economic
<ul style="list-style-type: none"> <li>• Protected Species and Habitat</li> <li>● Wetlands and Other Surface Waters</li> <li>• Essential Fish Habitat</li> <li>• Floodplains</li> <li>• Sole Source Aquifer</li> <li>● Water Resources (Water Quality and Quantity)</li> <li>• Aquatic Preserves</li> <li>• Outstanding FL Waters</li> <li>• Wild and Scenic Rivers</li> <li>• Coastal Barrier Resources</li> </ul>	<ul style="list-style-type: none"> <li>● Section 106 (NHPA)                             <ul style="list-style-type: none"> <li>• Historic Sites/Districts</li> <li>• Archaeological Sites</li> </ul> </li> <li>● Section 4(f)</li> <li>• Section 6(f)</li> <li>• Recreational Areas</li> </ul>	<ul style="list-style-type: none"> <li>● Highway Traffic Noise</li> <li>• Air Quality</li> <li>● Contamination</li> <li>● Utilities and Railroads</li> <li>• Construction</li> </ul>	<ul style="list-style-type: none"> <li>● Social</li> <li>• Economic</li> <li>• Land Use Changes</li> <li>● Mobility</li> <li>● Aesthetic Effects</li> <li>● Relocation Potential</li> <li>• Farmland</li> </ul>

● Key Project Issue

Required Agency Coordination

PD&E Manual Update Effective July 1, 2023

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# Environmental

## Natural

### Wetlands

- Freshwater forested wetlands
- Channelized water conveyances (associated with the surface water management systems)



### Protected Species & Habitat Consultation Area

- Snail Kite, Scrub Jay, Red-Cockaded Woodpecker, Manatee, Caracara, Piping Plover, Florida Bonneted Bat, Atlantic Coast Plants

### Other Species

- Wood Stork Core Foraging Area
- Gopher Tortoise

Potential involvement with protected species and habitat is low.



## Cultural

### Historic/Archaeological

#### Florida Master Site File Review

- 3 recorded historic resources
  - FEC Railroad (MT01450): NRHP-eligible
  - Dixie Highway (MT01621): NRHP-eligible
  - Witham Field (MT01573): Not Evaluated
- More than 50 parcels contain unrecorded historic-aged resources



### Section 4(f)

#### Public Parks, Recreation Areas, and Wildlife/ Waterfowl Refuges

- East Coast Greenway: Priority corridor/ SUN Trail Network

"No Use" or "Enhancement" determination is anticipated



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# Environmental

## Physical

### Noise

- Noise sensitive sites:
  - Single and multi-family residential areas
  - YMCA
  - Churches
  - Schools
  - Recreational areas
  - Restaurants with outdoor seating
- Noise barriers to be evaluated for reasonableness and feasibility



### Contamination

- Potential contamination sites in project vicinity
  - 2 Petroleum clean-up sites
  - Numerous tanks and petroleum monitoring sites

## Social & Economic

### Mobility

- Bicycle/pedestrian connectivity via shared use path



### Farmlands

- Natural Resources Conservation Service (NRCS) Prime Farmland – Farmland of Unique Importance

### Aesthetic Effects

- Potential viewshed impacts resulting from grade separation

### Relocation Potential

- Impacts vary by alternative

### Social

- 28% minority population
- > 10% limited English proficiency



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# Contact Information

We are in the process of creating a project website. Once it is established, we will provide the address.

## CONTACT US

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# THANK YOU

PD&E Study for SR-714/Monterey Road at FEC Railroad Crossing  
 Martin County, Florida



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**TECHNICAL ADVISORY COMMITTEE (TAC) MEETING  
AGENDA ITEM SUMMARY**

<b>MEETING DATE:</b> February 5, 2024	<b>DUE DATE:</b> January 29, 2024	<b>UPWP#:</b> 3
<b>WORDING:</b> DEVELOPMENT REVIEW INTERACTIVE MAP UPDATE		
<b>REQUESTED BY:</b> MPO	<b>PREPARED BY:</b> Ricardo Vazquez / Beth Beltran	<b>DOCUMENT(S) REQUIRING ACTION:</b> N/A

**BACKGROUND**

The FY23-FY24 Unified Planning Work Program (UPWP) states that the MPO will support data collection efforts that address multimodal planning, including land use, roadway, rail, transit, and bicycle/pedestrian, and to analyze social and economic factors as well as land use during the planning process. The Martin MPO Policy Board requested that MPO staff work with local government staff and review approved and proposed land developments. A map was developed showing County and municipal land developments. This information will assist the MPO Board in making decisions related to transportation project priorities.

**ISSUES**

At the February 2024 Advisory Committee meetings, MPO staff will present the update to the Development Review Interactive Map, which can be viewed by visiting the following link:  
<https://experience.arcgis.com/experience/b1364d1c59e44fdb9189918c8158816e>.

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**RECOMMENDED ACTION**

Provide comments on the Development Review Interactive Map

**ATTACHMENTS**

Screenshot of Development Review Interactive Map Homepage

Approved Status Filter:

- All
- Approved
- Approved for Construction
- In Construction
- In Review

Agency Filter:

- All Agencies
- County
- Indiantown
- Jupiter Island
- Ocean Breeze
- Sewalls Point
- Stuart

Permit Date Range  
No date selected

Project Name  
None

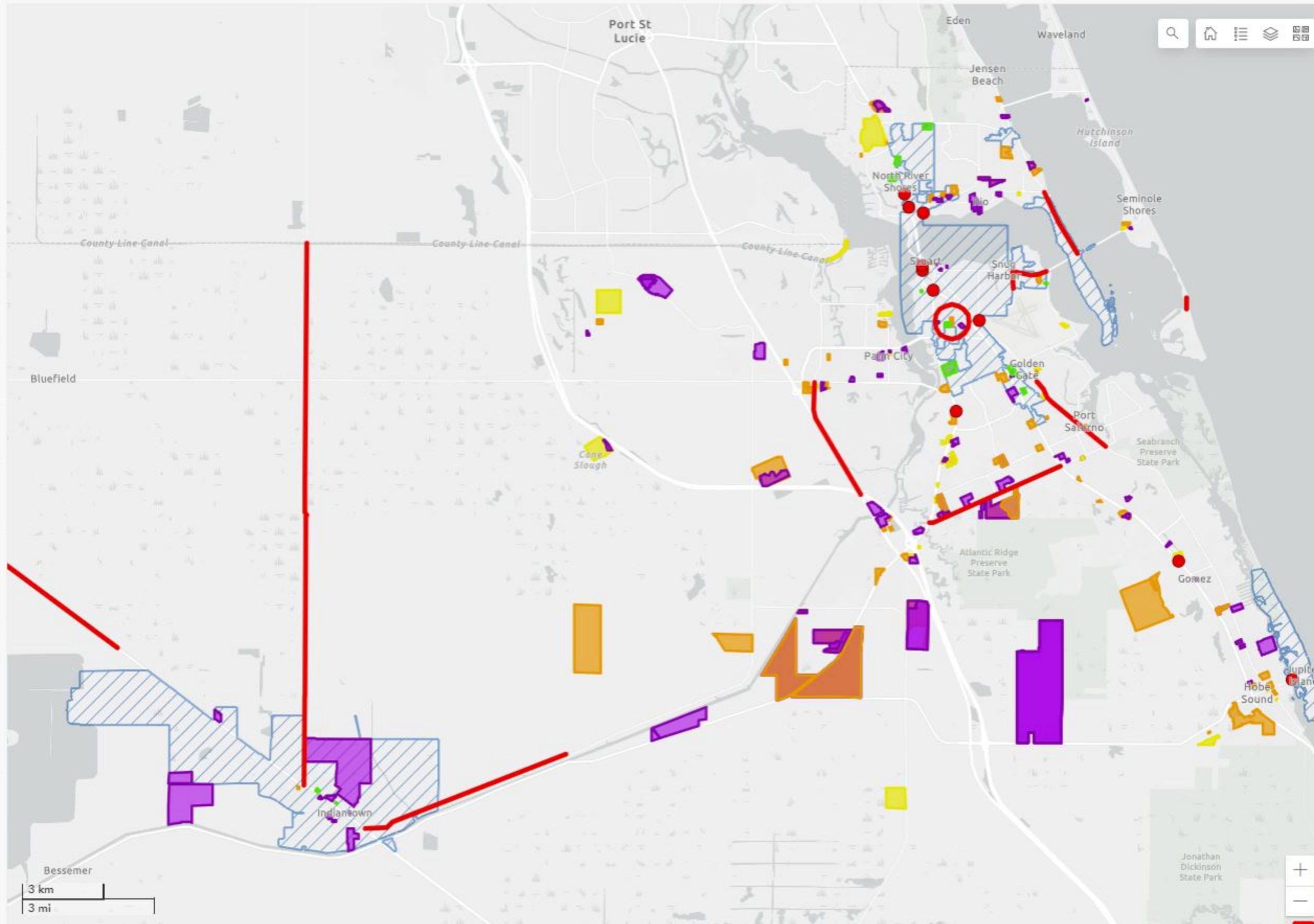
Permit Number  
None

Urban Service District

- All
- Primary
- Secondary

Select a category

- All
- Indiantown, FL
- Jupiter Farms, FL
- Miami, FL
- Port St. Lucie, FL



- NNA East Minor Final Site Plan  
In Review
- 1st Amendment South Florida Gateway PUD  
In Review
- 311 Osceola  
In Review
- 37 SE Seminole St  
In Review
- 95 Riverside PUD Pulte I-95 Rev PUD  
In Review
- Abundant Life Ministries  
In Construction
- Animal Grassfed Processing Facility  
In Review
- Avonlea 10  
In Review
- Avonlea 12  
In Construction
- Avonlea 13  
In Review
- Avonlea 16  
In Construction
- Avonlea 2  
In Construction
- AxisOne  
Approved
- Banyan Bay Ph 3  
Approved for Construction
- Banyan Bay Revised Master and Phasing Plan 9th PUD  
AMD PH 2C FSP  
In Construction
- Blue Water (fka TCCC Lot 17 & 18)  
In Construction
- Bridgewater Preserve  
In Construction
- Caliber Car Wash Hobe Sound  
In Review
- Casa Bella  
Approved
- Cassidy Center  
Approved for Construction
- Central Parkway Lofts  
In Construction
- Chabad Jewish Center Administrative Amendment  
In Construction