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MARTIN MPO Hobe Sound North Corridor Shared-Use Nonmotorized (SUN) Trail Feasibility Study

Bridge Road to Gomez Avenue Entrance to Seabranch Preserve

FDOT Financial Project 443500-1-54-01
A Florida East Coast Greenway (ECG) Segment

PREPARED FOR:
Martin Metropolitan
Planning Organization (MPO)

PREPARED BY:
MARLIN



East Coast
Greenway

MARTIN MPO

Hobe Sound North Corridor Shared-Use Nonmotorized (SUN) Trail Feasibility Study

South of Seabranh Preserve State Park to CR-708/Bridge Road

A Florida East Coast Greenway (ECG) Segment

PREPARED FOR:

Martin Metropolitan
Planning Organization (MPO)
2401 SE Monterey Road
Stuart, FL 34996
(772) 221-1498

PREPARED BY:

MARLIN Engineering, Inc.
Christina Fermin, AICP
Kathryn Marinace
Suom Francis

Table of Contents

ACRONYMS AND ABBREVIATIONS..... 1

EXECUTIVE SUMMARY..... 2

1. INTRODUCTION..... 2

 1.1. Background..... 5

 1.2. Study Area 6

 1.3. Purpose & Need Statement..... 7

 1.4. Local Agency Coordination 7

 1.4.1. Stakeholder Meetings..... 7

 1.4.2. Agency Public Meetings..... 7

 1.5. SUN Trail..... 8

 1.6. East Coast Greenway..... 10

2. PUBLIC INVOLVEMENT AND OUTREACH..... 10

3. LITERATURE REVIEW..... 12

 3.1. Transportation Improvement Program FY 2021/22 – 2025/26..... 12

 3.2. Martin MPO 2045 Long Range Transportation Plan (2020)..... 12

 3.3. Florida Greenways and Trails System (FGTS) Plan (2019 - 2023)..... 13

 3.4. Martin County Bicycle and Pedestrian Facility Map (2019)..... 14

 3.5. Martin MPO Bicycle, Pedestrian & Trails Master Plan (2017) 15

 3.6. Bicycle And Pedestrian Safety Action Plan (2016) 16

 3.7. Southeast Florida Regional Greenways and Trails Plan (2015)..... 16

 3.8. Florida SUN Trail Requirements 17

 3.8.1. Design Requirements 17

 3.8.2. Surfaces 18

 3.8.3. Asphalt..... 18

 3.8.4. Boardwalk..... 19

 3.8.5. Natural surface/crushed stone 20

 3.8.6. Width..... 20

 3.8.7. Grade..... 20

 3.8.8. Crossings and Intersections 21

 3.8.9. Bridges..... 22

 3.8.10. Separated On-Road Facilities..... 22

 3.8.11. Signage 22

 3.8.12. Traffic separated on-road facilities..... 24

 3.8.13. Implementing Florida’s Shared-use Nonmotorized (SUN) Trail Program 24

4. EXISTING CONDITIONS..... 25

 4.1. Demographics..... 25

 4.2. Commuting Characteristics 26

 4.3. The Built Environment 26

 4.4. Existing Roadway Conditions 27

 4.4.1. Functional Classification 27

 4.4.2. Access Management 28

 4.4.3. Context Classification 28

 4.4.4. Right-Of-Way..... 29

 4.4.5. Intersections, Signalization and Railroad Crossings 30

- 4.4.6. Typical Sections 31
 - 4.4.6.1. SE Gomez Avenue..... 31
 - 4.4.6.2. CR-A1A/SE Dixie Highway 33
 - 4.4.6.3. SR-5/ US-1/ SE Federal Highway 36
 - 4.4.6.4. CR-708 / SE Bridge Road..... 38
 - 4.4.6.5. SE Crossrip Street 40
 - 4.4.6.6. SE Osprey Street 41
- 4.4.7. Non-Motorized Network 43
- 4.5. Safety Review 46
 - 4.5.1. Crash Analysis for All Types of Vehicles..... 46
 - 4.5.2. Pedestrian and Bicycle crash analysis 48
- 5. FEASIBILITY ANALYSIS 50**
 - 5.1. Data 50
 - 5.2. Evaluation Criteria 50
 - 5.3. Potential Alignments 51
 - 5.4. Alternatives 52
 - 5.4.1. SE Gomez Avenue..... 53
 - 5.4.2. CR-A1A / SE Dixie Highway 54
 - 5.4.3. SR-5 / Federal Highway / US-1..... 55
- 6. RECOMMENDED ALTERNATIVE..... 56**
 - 6.1. Segment 1: SE Gomez Avenue..... 57
 - 6.2. Segment 2: SE Osprey Street..... 58
 - 6.3. Segment 3: Osprey Street..... 59
 - 6.4. Segment 4: SR-5/Federal Highway 60
 - 6.5. Segment 5: SR-5/Federal Highway 61
 - 6.6. Proposed Conceptual Plan..... 64
- 7. FUTURE CONSIDERATIONS..... 69**
 - 7.1. Drainage 69
 - 7.2. Utilities 70
 - 7.3. Access Management and Driveways 70
 - 7.4. Intersections..... 71
 - 7.5. Traffic Calming..... 73
 - 7.6. Environmental 74
 - 7.7. Amenities..... 75
 - 7.8. Maintenance 76
 - 7.9. Permits 76
- 8. COST ESTIMATES 76**
- 9. NEXT STEPS 77**

List of Figures

- Figure 1: Bicyclists Design User Profiles (Source: FHWA) 3
- Figure 2: SUN Trail Network Status, Martin County 4
- Figure 3: Proposed Trail Alignments..... 5
- Figure 4: Martin County Study Area Map 6

Figure 5: SUN Trail Statewide Network Map 9

Figure 6: East Coast Greenway Map..... 10

Figure 7: Life of a Transportation Project 11

Figure 8: Resident selection of Preferred Route Alignment 11

Figure 9: Photos from Public Meetings 12

Figure 10: Florida East Coast Greenway Trail 13

Figure 11: Martin County Bicycle & Pedestrian Map..... 14

Figure 12: Martin County Mode Share Infographic..... 15

Figure 13: Bicycle, Pedestrian and Trails Master Plan Project Recommendation Map 15

Figure 14: Southeast Florida Regional Greenways & Trail Facilities Map 17

Figure 15: Pedestrian/Bicyclist Safety Countermeasures, FHWA 21

Figure 16: Standard ECG Sign 23

Figure 17: Hobe Sound Age Groups (ACS 2021) 25

Figure 18: Hobe Sound Race & Ethnicity 26

Figure 19: Future Land Use Map 26

Figure 20: Street Network Functional Classification..... 27

Figure 21: FDOT Context Classifications 29

Figure 22: Right-of-Way Widths 30

Figure 23: Traffic Signals & Railroad Crossings 31

Figure 24: Existing Rural Typical Section for Gomez Avenue..... 32

Figure 25: Existing Conditions along Gomez Ave..... 33

Figure 26: Existing Rural Typical Section for CR-A1A/Dixie Hwy..... 34

Figure 27: Photo of Significant Pinch point for the Sidewalk along Dixie Hwy (Southbound)..... 35

Figure 28: Evidence of Sidewalk Flooding 35

Figure 29: Existing Rural Typical Section for SR-5/FEDERAL HWY..... 36

Figure 30: Intersection of SR-5 & Bridge Rd looking east from the northwest corner 37

Figure 31: SR-5 Frontage Rd & SE Church St, looking south 37

Figure 32: Existing Urban Typical Section for CR-708/Bridge Road 38

Figure 33: Bridge Rd, looking west 39

Figure 34: Existing Rural Typical Section for Crossrip St..... 40

Figure 35: Crossrip Street Sidewalk Improvements near CR-A1A..... 41

Figure 36: Existing Rural Typical Section for Osprey St..... 42

Figure 37: Sidewalk ends at gas station, does not connect to SR-5..... 43

Figure 38: Non-Motorized Network 43

Figure 39: Martin County Non-Motorized Network 44

Figure 40: Bicycle User Profiles & Preferred Facilities 45

Figure 41: Heat Map of All Crashes (2016-2020)..... 48

Figure 42: Bicycle & Pedestrian Crashes (2016-2020)..... 49

Figure 43: Potential Route Alignments..... 51

Figure 44: Alternative 1 SE Gomez Ave 53

Figure 45: Alternative 2 SE Gomez Ave 54

Figure 46: Alternative 1 CR-A1A/Dixie Highway 55

Figure 47: Alternative 2 CR-A1A/Dixie Highway 55

Figure 48: Alternative 1 SR-5/Federal Highway..... 56

Figure 49: Alternative 2 SR-5/Federal Highway..... 56

Figure 50: Preferred Route Alignment Map for SR-5/Federal Highway..... 57

Figure 51: Proposed Typical Section - Gomez Avenue 58

Figure 52: Proposed Typical Section, Osprey St 59

Figure 53: Proposed Typical Section, Osprey St 60

Figure 54: Proposed Typical Section, SR-5/Federal Hwy 61

Figure 55: Proposed Typical Section, SR-5/Federal Hwy 62

Figure 56: Frontage Road Proposed Typical Section 63

Figure 57: Frontage Road Proposed Typical Section 63

Figure 58: Conceptual Plan View (CR-708/Bridge Road to SE Pine Cir) 64

Figure 59: Conceptual Plan View (SE Pine Cir to SE Evergreen St)..... 65

Figure 60: Conceptual Plan View (SE Evergreen St to south of SE Medalist Pl) 65

Figure 61: Conceptual Plan View (SE Medalist Pl to Medalist Golf Course Maintenance Facility)..... 66

Figure 62: Conceptual Plan View (east border of Medalist Golf Course)..... 66

Figure 63: Conceptual Plan View (east border of Medalist Golf Course)..... 67

Figure 64: Conceptual Plan View (SE Federal Hwy to SE Osprey St) 67

Figure 65: Conceptual Plan View (SE Osprey St to SE Dixie Hwy) 67

Figure 66: Conceptual Plan View (SE Osprey Street to SE Gomez Ave) 68

Figure 67: Conceptual Plan View (east border of Loblolly Golf Course) 68

Figure 68: Conceptual Plan View (east border of Loblolly Golf Course connecting to existing SUN Trail)..... 69

Figure 69: Examples of Green Infrastructure 70

Figure 70: Bike Box (Source: NACTO) 72

Figure 71: Bicycle Intersection Crossing Markings (Source NACTO)..... 72

Figure 72: Examples of Traffic Calming..... 74

Figure 73: Port St. Lucie Multimodal Plan 74

Figure 74: Examples of Street Furniture 75

List of Tables

Table 1: Summary of Traffic Data 28

Table 2: Context Classifications 29

Table 3: Signalized & Unsignalized Intersections..... 30

Table 4: Crash Data..... 46

Table 5: Data Review for Evaluation Criteria 50

Table 6: Summary Comparative Matrix 52

Table 7: FDOT Context-Based Design Speeds for Arterials and Collectors 73

Table 8: Cost Estimate 77

Appendices

[Appendix A. Stakeholder & Agency Presentations and Meeting Notes](#)

[Appendix B. Martin MPO Meeting Minutes](#)

[Appendix C. Public Involvement & Outreach](#)

[Appendix D. Existing Condition Photos](#)

Appendix E. Evaluation Criteria

Appendix F. Concept Plan Sheet

Appendix G. Cost Estimate

Appendix H. Funding Programs

ACRONYMS AND ABBREVIATIONS

AADT	Annual Average Daily Traffic	GIS	Geographic Information Systems
AASHTO	American Association of State Highway and Transportation Officials	I-95	Interstate 95
ACS	American Community Survey	LOS	Level of Service
ADA	American with Disabilities Act	L RTP	Long Range Transportation Plan
BPAC	Bicycle & Pedestrian Advisory Committee	MPH	Miles Per Hour
CAC	Citizens' Advisory Committee	MPO	Metropolitan Planning Organization
CR-708	County Road 708	MUTCD	Manual of Uniform Traffic Control Devices
CR-A1A	County Road A1A	N/A	Not Applicable
CRA	Community Redevelopment Area	NACTO	National Association of City Transportation Officials
ECG	East Coast Greenway	PD&E	Project Development and Environment
ECGA	East Coast Greenway Alliance	ROW	Right-of-Way
FDEP	Florida Department of Environmental Protection	SE	Southeast
FDOT	Florida Department of Transportation	SR-5	State Road 5
FDM	Florida Design Manual	SUN	Shared Use Non-Motorized
FEC	Florida East Coast Railroad	SUP	Shared Use Pathway
FGTS	Florida Greenways and Trails	TAC	Technical Advisory Committee
FHWA	Florida Highway Administration	TIP	Transportation Improvement Plan
F.S.	Florida Statutes	UPWP	Unified Planning Work Program
FWC	Fish & Wildlife Commission	US-1	U.S. Highway 1

EXECUTIVE SUMMARY

The Hobe Sound North Corridor Shared Use Non-Motorized or SUN Trail Feasibility Study identified potential alignments and feasible alternatives connecting a non-motorized trail from Seabranche Preserve State Park to Jonathan Dickinson State Park in Martin County. This study was included in the Martin MPO Unified Planning Work Program (UPWP) in 2020 and included data collection, analysis, evaluation, public and stakeholder outreach.

SR-5/Federal Highway was the selected preferred route alignment for this segment of the Florida Shared Use Non-Motorized (SUN) Trail and East Coast Greenway (ECG). The proposed shared use pathway (SUP) will travel south along SE Gomez Avenue and cross over to SR-5/Federal Highway via SE Osprey Street. The proposed typical condition will include a 12-foot shared use pathway on the west side of SE Gomez Avenue, a 12-foot shared use pathway on the south side of SE Osprey Street, and a 14-foot pathway on the west side of SR-5/Federal Highway. This alternative was selected through public participation, stakeholder engagement, MPO committee meetings, and approval by the MPO Policy Board. The report outlines public involvement, a literature review, existing conditions, feasibility analysis of alternatives, recommended alternative, future considerations, a cost estimate, and next steps for this segment of the Florida SUN Trail in Martin County.

1. INTRODUCTION

On May 17, 2021, the Metropolitan Planning Organization (MPO) Policy Board approved Resolution 21-05 that authorized the execution of a SUN Trail Program Agreement between the MPO and the Florida Department of Transportation (FDOT) to fund a Feasibility Study for a SUP on SE Gomez Avenue from SE Osprey Street to CR-708/Bridge Road. This pathway when complete will serve as a segment of the ECG. The ECG is a 3,000-paved trail from Maine to Key West that will provide a safe walking and biking route along the Atlantic coast. Marlin Engineering was the selected consultant for this Feasibility Study for the proposed SUP. According to FDOT in their SUN Trail handbook, a Feasibility Study, also referred to as a planning or corridor study, includes the development of a purpose and need; an evaluation of existing conditions in the study area; the development and evaluation of trail routes, also known as corridors or alternatives; identification of logical termini; an agreed upon course of action; public involvement and agency coordination.

A SUP as defined by the Federal Highway Administration (FHWA), are facilities with exclusive right-of-way (ROW) and minimal crossflow by motorized vehicles. SUPs meet a specific design criterion that differentiate this kind of facility from a trail. Shared-use paths are improved facilities that accommodate all kinds of users including and not limited to: bicyclists, in-line skaters, roller skaters, pedestrians, and personal conveyance devices (i.e., wheelchair, scooters, etc.). Shared-use pathways contribute to a healthy and active community by providing residents and visitors with a safe and comfortable alternative mode of transportation, and are common in Low-Stress Networks.

Low-Stress Networks, also referred to as an “all ages and abilities network” are designed to be safe and comfortable for all users; SUPs are typically considered low-stress and these are the types of facilities people typically feel most comfortable using, see **Figure 1**. Low-Stress Networks have been found to increase rates of bicycling 5-15% in the U.S. and 15-50% in areas with a robust network which is complemented by transit, land

use, and other policies.¹ Additionally, Low-Stress Networks are an important component of a community's transportation network as they provide an alternative for children, the elderly, the disabled, and others who cannot or do not want to drive a motor vehicle. In order to provide a more robust, sustainable, livable, equitable all-ages community, Low-Stress Networks are necessary for communities.

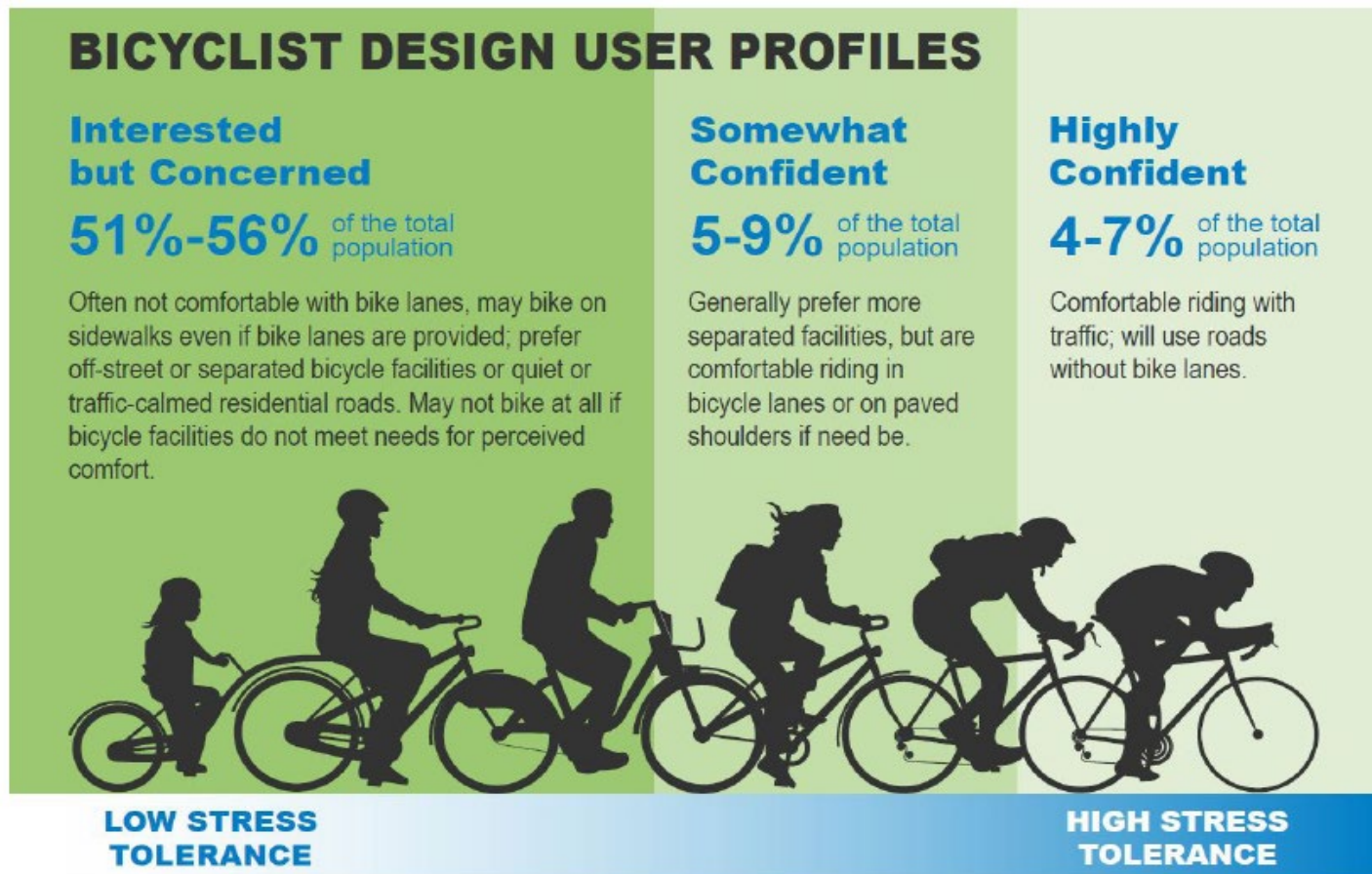


Figure 1: Bicyclists Design User Profiles (Source: FHWA)

In Florida, the SUN Trail Program provides dedicated funding through an annual allocation from new vehicle tag revenues for the development of a statewide system of interconnected paved multi-use trails (SUN Trail Network) for non-motorized users, physically separated from vehicular traffic. FDOT defines a multi-use trail as a paved, shared-use path, which is typically 12 feet wide, but may vary from 10 feet to 14 feet wide, or larger depending upon physical or environmental constraints, or usage. In some areas of extreme constraints, such as at bridges or in environmentally sensitive lands, a multi-use trail may be as narrow as eight (8) feet wide. The Department works with partners (cities, regional agencies, and counties) to advance the SUN Trail Network by closing gaps between existing multi-use trails.

The goal of this study is to determine the feasibility of extending the existing SUP from the north terminus of SE Gomez Avenue, south to CR-708/Bridge Road and SR-5/Federal Highway in Hobe Sound, Florida. Concurrently, FDOT is conducting another feasibility study to connect the trail from Jonathan Dickinson State Park to CR-708/Bridge Road and SE Federal Highway/SR-5, where this pathway will end. Once both projects are constructed

¹ Bikeway Selection Guide, U.S. DOT, FHWA, February 2019

(+/-10 years), a person will be able to travel to/from Jonathan Dickinson State Park to Seabranh Preserve State Park and have access to approximately 80-miles of a continuous paved SUP which has been programed from feasibility to construction in Martin County and St. Lucie County. **Figure 2** provides the status of the SUN Trail Network in Martin County.

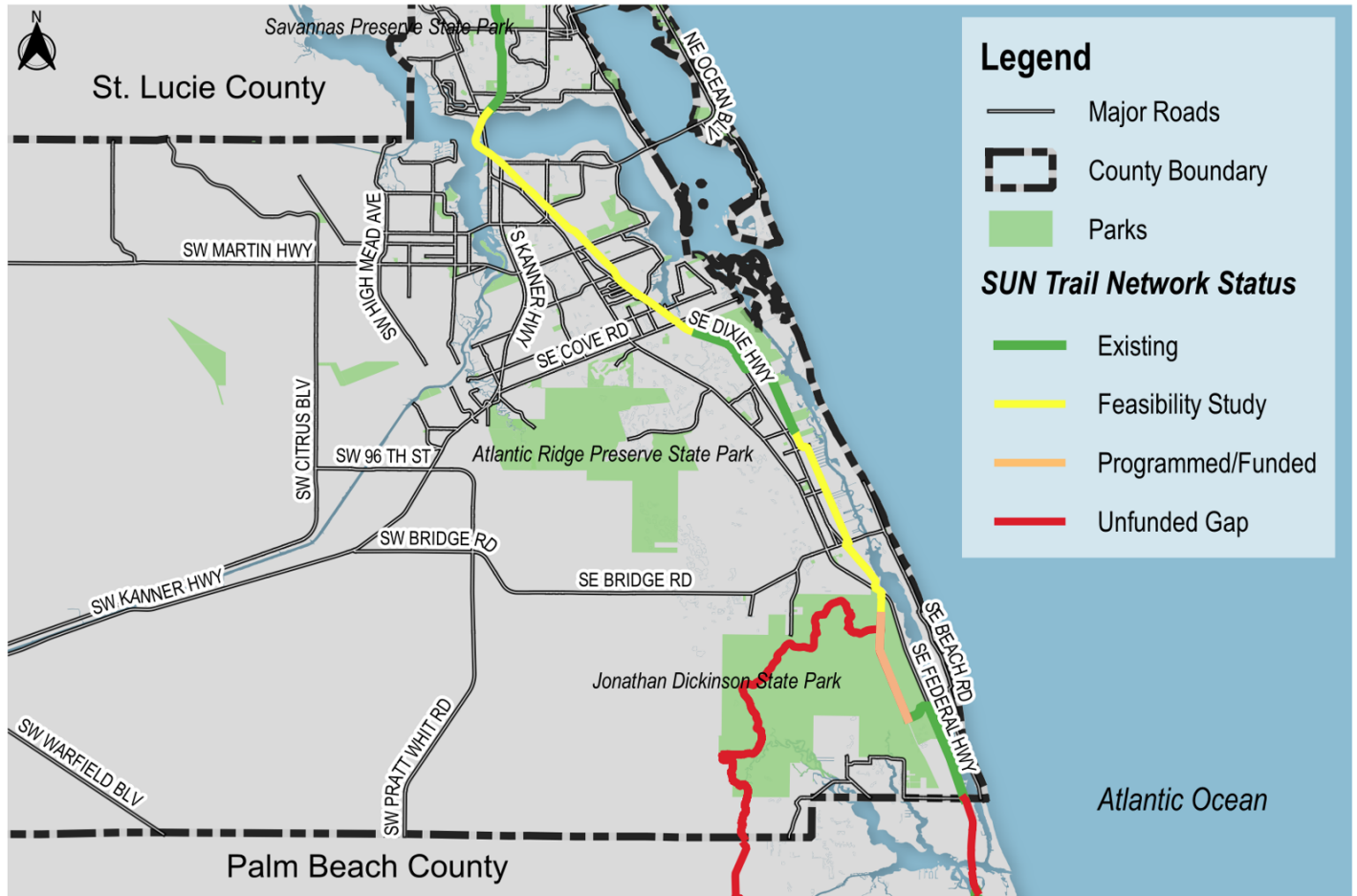


Figure 2: SUN Trail Network Status, Martin County

The FDOT has programmed a feasibility study for a 7.68-mile segment north between Seabranh Preserve State Park and north of the St. Lucie River along CR-A1A/Dixie Highway. Additionally, St. Lucie County has begun construction of a 10.6-mile segment which is to traverse through Savannas Preserve State Park and Savannas Recreation Area. Furthermore, design plans are underway for the segment through Fort Pierce. There is clearly local interest in expanding a network of SUPs.

This feasibility study includes the development of a purpose and need statement for the SUP extension, an evaluation of existing conditions in the study area, the development and evaluation of alternative SUP alignment and resulting roadway cross-section, identification of logical SUP termini; public involvement and agency coordination. The alternative SUP alignments considered were: SE Gomez Avenue, CR-A1A/Dixie Highway, and SR-5/Federal Highway, as shown in **Figure 3**. With public and stakeholder participation, a preferred SUP alignment - Gomez Avenue - was identified. This was presented at the April 18, 2022 MPO Policy Board meeting, but was not endorsed due to local opposition. This opposition was based largely on concerns with high-speed cyclists

conflicting with school children, recreational residents who utilize the existing sidewalks, and fear of attracting crime into their community.



Figure 3: Proposed Trail Alignments

SR-5/Federal Highway was then selected as the preferred SUP alignment, due primarily to ROW restrictions along CR-A1A/Dixie Highway. This alignment, presented to the MPO Policy Board in February 27, 2023, was endorsed with the provision that the Board was concerned with the volume and speed of traffic on SR-5/Federal Highway adjacent to the proposed SUP’s alignment. The study team has taken this into consideration during the development of the SUP design concept that was reflected in two alternative cross-sections. The report includes, for the endorsed SR-5/Federal Highway SUP alignment, the study team’s review and analysis of existing conditions, preferred route alignment, cost estimate, and conceptual plan of the preferred alignment.

1.1. BACKGROUND

The State of Florida established the SUN Trails program in 2015, which provides \$25 million annually for the development of regionally significant greenways and trails Projects. The SUN Trail Network is the statewide system of high priority (strategic) paved trail corridors for bicycles and pedestrians. Criteria required for projects to be eligible for funding through the SUN Trails program includes the following:

- Must be located on the SUN Trail Network (FGTS Land Trails Priority Map)

- Priority of the Metropolitan Planning Organization
- Entity must be identified that will operate and maintain the constructed trail
- Ready to be programmed and to begin first/next phase of work

The Martin MPO conducted several studies evaluating the need for bicycle and pedestrian facilities within the County including the Martin County Bicycle and Pedestrian Facility Map (2019), *Martin MPO Bicycle, Pedestrian & Trail Master Plan (2017)* and the *Bicycle and Pedestrian Safety Action Plan (2016)*. These studies, discussed later under the Literature Review section, identified the ECG, as part of the SUN Trail Network. This feasibility study includes a segment of the ECG included in the Martin MPO 2040 & 2045 Long Range Transportation Plan, the Martin County Comprehensive Plan, the *Florida Greenways and Trail System (FGTS) Plan (2019 – 2023)* and the *Southeast Florida Regional Greenways and Trails Plan (2015)*.

1.2. STUDY AREA

The study area for the SUP is located between CR-708/Bridge Road and Seabrook Preserve State Park, see **Figure 4**; with SR-5/Federal Highway as the westernmost boundary, and SE Gomez Avenue as the easternmost boundary. A portion of the study area is located within a Community Redevelopment Area (CRA) boundary, also known as the Hobe Sound CRA.

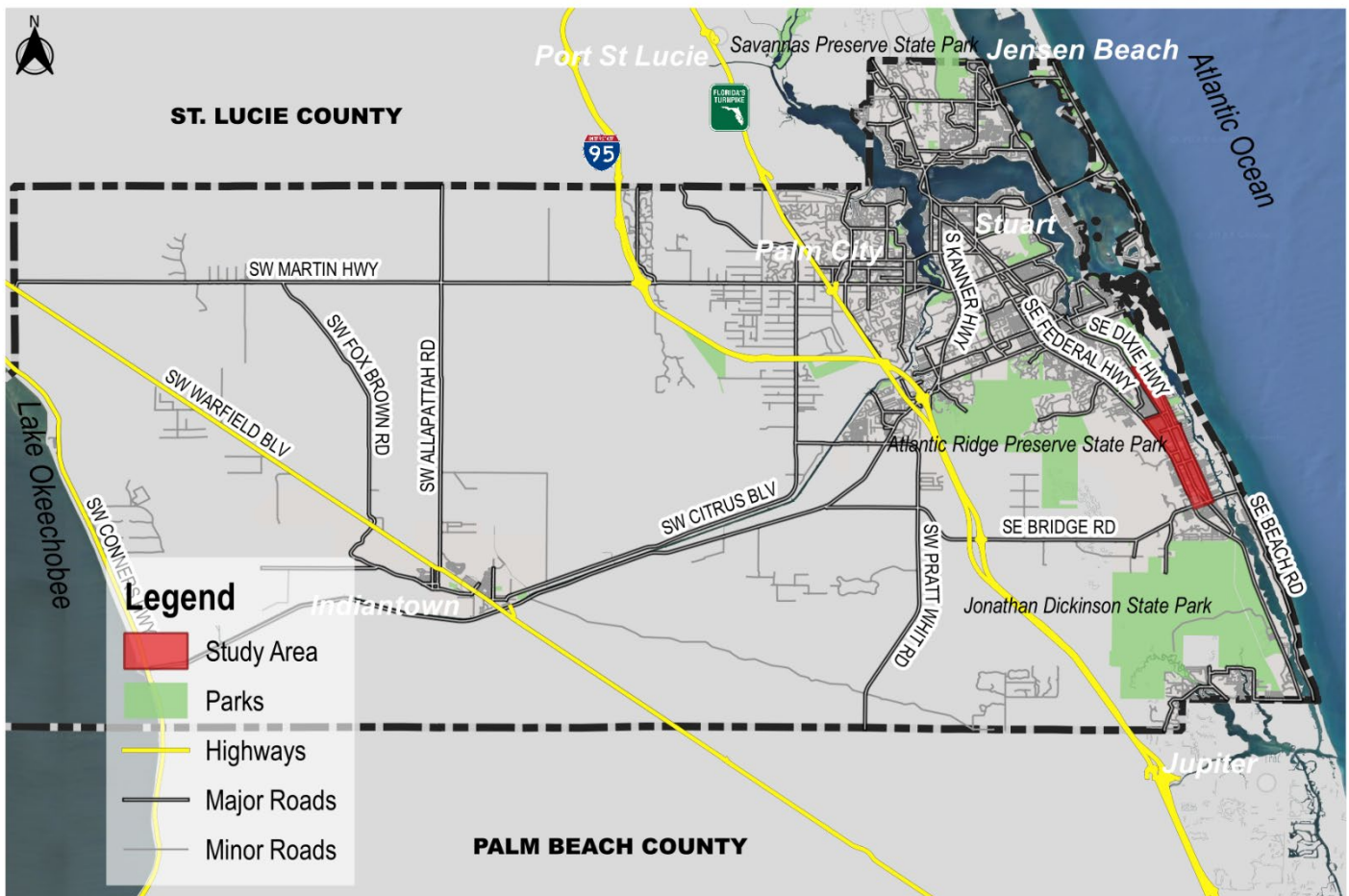
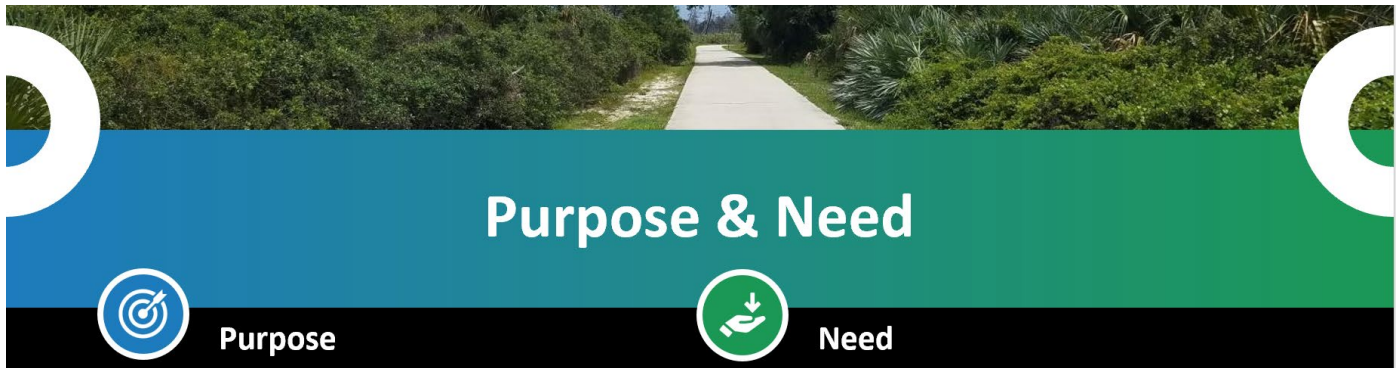


Figure 4: Martin County Study Area Map

1.3. PURPOSE & NEED STATEMENT



The **purpose** of this study is to provide for a safe, comfortable, equitable and accessible multipurpose pathway for non-motorized use.

The **need** is to complete a separated facility which implements a portion of the Florida SUN Trail in Martin County, connecting Jonathan Dickinson State Park to the Seabranck Preserve State Park.

1.4. LOCAL AGENCY COORDINATION

Local agency coordination was crucial for this study as the potential routes involved multiple stakeholders including public agencies, community members, bicyclists, pedestrians, and businesses. The East Coast Greenway Alliance (ECGA) was also involved in the early parts of the coordination process.

1.4.1. STAKEHOLDER MEETINGS

The Project Team held a total of three (3) stakeholder meetings. Two of which included agency stakeholders and one which included community stakeholders. These meetings were held to solicit feedback, visioning and input on November 5, 2021, November 8, 2021, and March 2, 2022. Agencies represented included the Martin MPO, the CRA, County Public Works, County Parks and Recreation, County Engineer, Growth Management, and utilities. Community stakeholders represented included the Martin MPO, Cycle Association, Chamber of Commerce, Tourist Development, Hobe Sound Community Chest, Hobe Sound Woman's Club, and Hobe Sound Neighborhood Association Committee (NAC).

The discussions among stakeholders served to inform the assessment of the initial alternative and ultimately preferred SUP alignments. The first two (agency and community) stakeholder meetings, included a discussion on existing conditions, current projects within the study area, and overview of the feasibility study. The third (agency) stakeholder meeting reviewed potential alternatives along the three proposed alignments, attendees provided insights and information, and discussed preferences for the facility type and location.

Some of the agency stakeholder comments recorded in the second meeting mentioned that cyclists and pedestrians already use Gomez Avenue and was the safest and most feasible alternative. Agency stakeholders also agreed CR-A1A/Dixie Highway is the least feasible alignment due to missing sidewalk easements and constrained ROW.

The presentation and summary notes for each of the stakeholder meetings can be found in **Appendix A**.

1.4.2. AGENCY PUBLIC MEETINGS

In addition to stakeholder coordination, several public meetings were held with the Citizen's Advisory Committee (CAC), Technical Advisory Committee (TAC), Bicycle and Pedestrian Advisory Committee (BPAC), and MPO Policy

Board. In June 2021, a scope of services for the Hobe Sound North Corridor SUN Trail Feasibility Study was reviewed by the CAC, TAC and BPAC, and approved by the MPO Policy Board on June 21, 2021.

At the April 4, 2022 Joint Advisory Board (CAC/BPAC/TAC) meeting, the Consultant Team presented an update to the existing conditions, analysis, and selected alternatives, which included the SUP alignment along SE Gomez Avenue and a proposed typical section which included a 10-foot two-way protected bikeway on the east side of SE Gomez Avenue. This was approved at the Joint Advisory Board meeting by a 22:6 vote.

On April 18, 2022, the selected alternative was presented for approval to the MPO Policy Board. This initial recommendation was denied by a 5:0 vote, due to public objection. Public objection was based primarily on concern for the placement of the pathway along Gomez Avenue by three individuals in attendance at the meeting; despite an additional two individuals in attendance who supported it, and majority who supported the alignment along Gomez Avenue at previous public meetings. The Consultant Team was then directed to do further community outreach to the Gomez Avenue community, and further review CR-A1A/Dixie Highway and SE Federal Highway as an alternative to SE Gomez Avenue.

On February 27, 2023, the Consultant Team returned to the MPO Policy Board for approval of the proposed SUP alignment along SR-5/SE Federal Highway. This alternative was approved by a 4:1 vote, with the provision that the Board may not accept the final route alignment. Concerns expressed by the Board were related to pedestrian and bicycle safety along SR-5/SE Federal Highway where vehicle speeds are posted at 45 and 55 MPH. The meeting minutes from each of the public meetings can be found in **Appendix B**.

1.5. SUN TRAIL

The SUN Trail Network is the statewide system of high-priority (strategic) paved trail corridors for bicyclists and pedestrians, see **Figure 5**. The SUN Trail Network is a refined version of the Florida Greenways and Trails System (FGTS) Plan's Land Trail Priority network.

[Section 339.81, F.S.](#) established the SUN Trail Program and [Section 335.065, F.S.](#) establishing funding for the program. [Section 339.81, F.S.](#) includes what is eligible and ineligible for funding under the SUN Trail Program, components not funded through the program include:

- Sidewalks, nature trails, or loop trails within a single park or natural area;
- On-road facilities (i.e., bike lanes no longer than ½-miles);
- Benches, trail furniture, seating areas, or tables;
- Bicycle racks or lockers, bicycle air or repair stations;
- Buildings or enclosed structures, restroom, wayside structures, shade structures, overlooks, platforms, boat ramps, ride share or transit facilities, shelters or similar;
- Kiosks, interpretive panels, or placemaking signs (safety controls are allowed);
- Landscaping;
- Litter or recycle receptacles, or dog bag dispensers;
- Parking areas, trailheads, or camping areas;
- Playground or playing fields, fitness equipment, or fitness structures;
- Promotional, marking, or educational materials;
- Sculptures, monuments, or art; and

- Water fountains, splash zones, spigots, showers, water features, or irrigation equipment.

The [Manual on Uniform Traffic Control Devices \(MUTCD\)](#), [FDOT Design Manual \(FDM\)](#), and [Construction and Maintenance for Streets and Highways \(aka Florida Greenbook\)](#) are the criteria's which are applied to SUN Trail projects. More information is available at www.FloridaSunTrail.com.

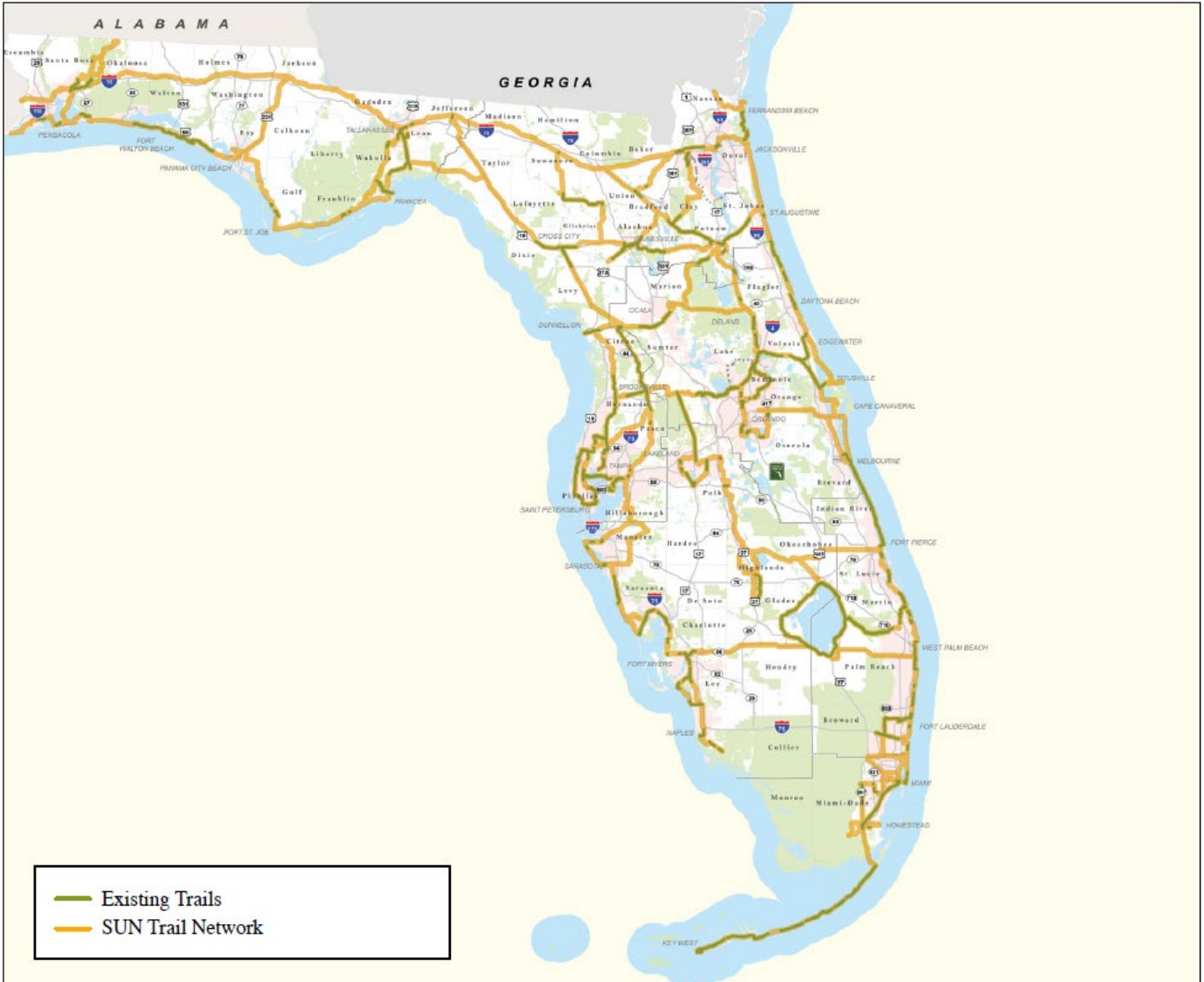


Figure 5: SUN Trail Statewide Network Map

This study encompasses a +/- 5-mile segment of the Florida SUN Trail Network that would help to connect Jonathan Dickinson State Park to the Seabranh Preserve State Park. It is important to note a parallel effort referred to as the Hobe Sound South Corridor Study is also in development to connect Jonathan Dickinson State Park to CR-708/Bridge Road.

1.6. EAST COAST GREENWAY

The [East Coast Greenway \(ECG\)](#) connects 15 states and 450 cities and towns for 3,000 miles from Calais, Maine to Key West, Florida, see **Figure 6**. The ECG is currently 35% complete with approximately 1,050 miles of off-road, protected multi-use paths now designated as part of the ECG network. Florida has the longest segment of the ECG with 651 miles of coastline, there are 268 miles of protected paved trails today. The ECG is a once-in-a-generation, ambitious linear park project that forecasts a return on investment to be ten-fold in economic, social, health and environmental benefits for millions of Americans, according to Dennis Markatos-Soriano, executive director of the ECGA. This project will complete a segment of the ECG in Martin County.

2. PUBLIC INVOLVEMENT AND OUTREACH

An important step in the process includes obtaining input from residents, public officials and other interested parties. This provides both the MPO and the consultant team an understanding of the public's vision for the project, their concerns, and any information they can share that is relevant to the project. Community outreach is made possible through open house meetings and their respective advertisement components including yard signs, brochures, emails and postcards to inform the public and encourage participation in the public process. Outreach for this project included the creation of a project brochure which was utilized by the MPO, email blasts and social media posts, and yard signs placed in strategic locations throughout the study area approximately 5 days prior to each scheduled meeting. Additionally, the second public meeting included a mailed postcard about the event to households who lived within the study area.

An initial public meeting was held on November 10, 2021. The Project Team's presentation addressed the typical life of a transportation project, from the planning phase to the construction phase (**Figure 7**), and situated the community in the current planning stage of 1-2 years. In addition, the presentation covered the project schedule, purpose, existing conditions, initial data analysis and presented route options. The presentation also included an overview of the reviewed plans and documents, a summary of potential crossings, as well as photos depicting pros and cons of various locations considered in the scope.

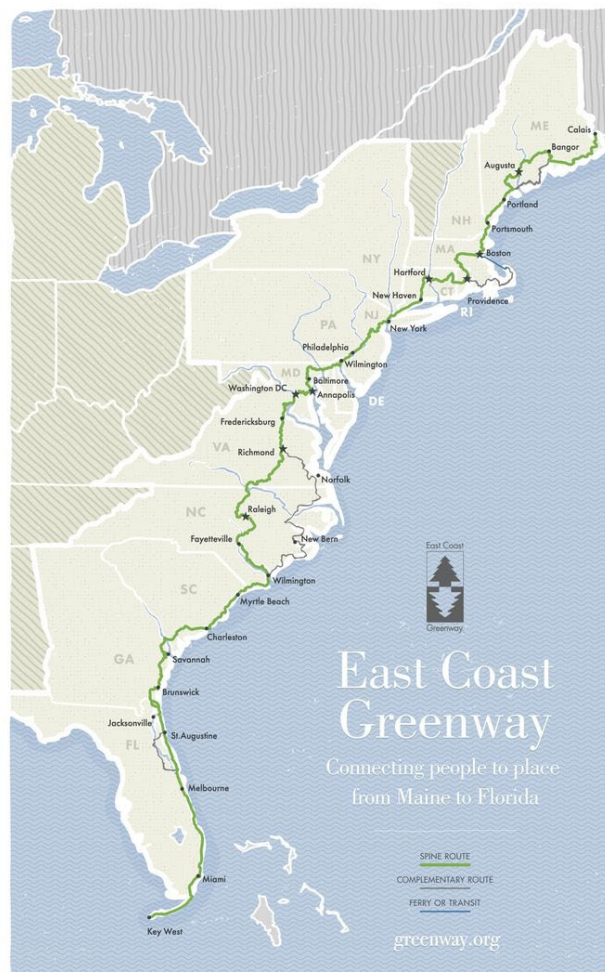


Figure 6: East Coast Greenway Map

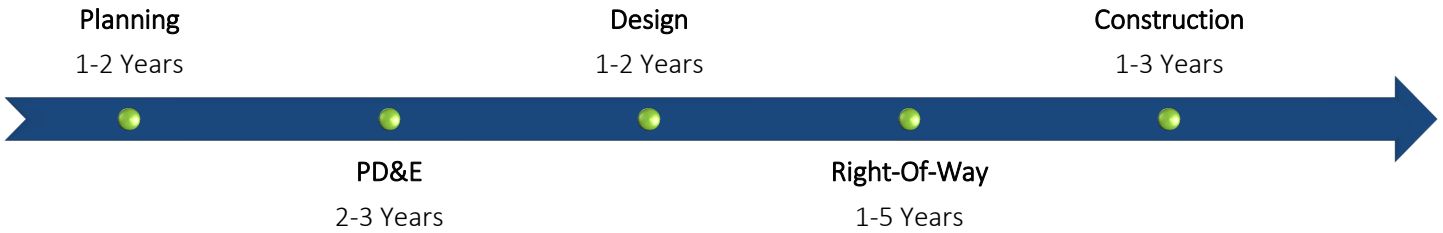


Figure 7: Life of a Transportation Project

A second public meeting was held on March 9, 2022 where proposed alignments, typical sections, and an evaluation matrix was shared with attendees. For this meeting, the Consultant Team provided posters to scale each of the three (3) proposed route alignments. Residents were given the opportunity to use the evaluation matrix and assess a variety of possible SUP alignment and typical section combinations on both sides of each of the evaluated roadways. The residents used this forum to express their concerns and discuss potential solutions with the consultant and other residents present. Additionally, residents had the opportunity to select the preferred typical section, provide alternatives via comment cards, post-it notes and dots. The majority of the attendees supporting the Gomez Avenue alignment, see Figure 8.

A third public meeting was held on January 11, 2023. The presentation provided a comprehensive recap of the first two meetings; it also highlighted how implementing the trail section would:

- Connect local and regional residents to the parks at each end of the segment
- Provide multimodal access to multiple community regional assets along the route
- Contribute to the continuous connectivity goals of the Florida SUN Trail Network and ECG
- Have the potential to contribute to social, health, and economic development



Figure 8: Resident selection of Preferred Route Alignment

During the third meeting, the Consultant Team shared the preferred selected alignment for the trail, two proposed typical section alternatives, and discussed next steps. Attendees also had the opportunity to select their preferred alternative to move forward with conceptual design. There were several in attendance who again preferred the alignment along Gomez Avenue, but overall, the majority of attendees supported Alternative 1 along SR-5/Federal Highway, which will be discussed later. Presentations, sign-in sheets, and comment cards can be found in Appendix C.



Figure 9: Photos from Public Meetings

3. LITERATURE REVIEW

3.1. TRANSPORTATION IMPROVEMENT PROGRAM FY 2021/22 – 2025/26

A Transportation Improvement Program (TIP) is a U.S. federally mandated requirement providing short-range transportation projects within an MPO's metropolitan planning area that seeks federal transportation funding within at least a four-year horizon.

The major multi-modal projects are prioritized by the Martin MPO Policy Board and included in the FDOT Tentative Work Program for federal and state funding. The 2021 – 2026 TIP includes the following projects within our study area:

- CR-708/ SW Bridge Road from Pratt Whitney to SR-5/US-1: Resurfacing and bicycle lanes construction
- FEC RR Crossings at SE Pettway Street: Pedestrian Facilities
- SE Shell Avenue Realignment
- Jonathan Dickinson State Park – Flap Grant for Trail and SR-5/US-1 Signalization

There are no projects included for Gomez Avenue or CR-A1A/Dixie Highway within the 2021/2022 to 2025/2026 TIP. FDOT has a project (FPID – 4435051) in the TIP to construct a bike path/trail starting in FY25 on SR-5/Federal Highway from CR-70/SE Bridge Road to the Hobe Sound Wildlife Refuge.

3.2. MARTIN MPO 2045 LONG RANGE TRANSPORTATION PLAN (2020)

The 2045 Long Range Transportation Plan (LRTP) is an analysis of the impact on the transportation network for current and projected conditions in the region. The Plan contains an evaluated list of transportation improvements that will be necessary to maintain an adequate level of mobility and to accommodate anticipated population growth for the county. The goals contained in the LRTP guide the transportation planning process in

the MPO Planning Area and help to establish project priorities for the TIP. The LRTP includes one project within the study area - the ECG (Main) project at SE Gomez Ave from CR-708/Bridge Road to SE Osprey Street, the length of this project is 3.28 miles. This project is a part of the ECG main or the Florida’s SUN Trail.

3.3. FLORIDA GREENWAYS AND TRAILS SYSTEM (FGTS) PLAN (2019 - 2023)

The FGTS Plan provides a new vision for the FGTS System for 2019 - 2023. Included in the Plan is a vision for implementing a connected statewide system of greenways and trails for recreation, conservation, alternative transportation, healthy lifestyles, a vibrant economy, and a high quality of life.

The ECG is a developing trail system, nearly 3,000 miles long, connecting Calais, Maine to Key West, Florida. The ECG route traverses the Atlantic coast, connecting communities, small towns, major cities and various state parks throughout the eastern coast of the U.S. Florida has the longest stretch of the ECG, with 600 miles of trails, of which 200 miles is located off-road, and is connected with shared use paths and trails, see **Figure 10**. Much of the ECG trails/shared use pathways within Florida are on side paths which run parallel to CR-A1A/Dixie Highway.



Figure 10: Florida East Coast Greenway Trail

3.4. MARTIN COUNTY BICYCLE AND PEDESTRIAN FACILITY MAP (2019)

The main purpose of the bicycle and pedestrian facilities map is to increase awareness among the general public and potential users of these facilities, see **Figure 11**.

Within our study area, the map highlights existing facilities, parks and locations of interest. These locations include a SUP on Gomez Avenue, north of SE Osprey Street to Seabranche Preserve State Park. The Gomez Avenue SUP connects to existing sidewalks along Gomez Avenue south of SE Osprey Street to CR-708/Bridge Road east to the beach.

Other facilities within our study area include bicycle lanes along CR-A1A/Dixie Highway between Seabranche Preserve State Park and SE Crossrip Street, these bike lanes are connected to paved shoulders between Crossrip Street and Pettway Street.

Points of interest within the study area include: Seabranche Preserve State Park, Gomez Preserve, Peck Lake Park, Jimmy Graham Park, Eastridge Park, William G. “Doc” Myers Park, Hobe Sound Bible College, Hobe Sound Elementary, Restrooms and a bicycle shop.



Figure 11: Martin County Bicycle & Pedestrian Map

3.5. MARTIN MPO BICYCLE, PEDESTRIAN & TRAILS MASTER PLAN (2017)

The Master Plan provides a vision for Martin County becoming a pedestrian and bicycle friendly, walkable and livable community. The main goal of the Master Plan is to establish a multimodal transportation system in the county. **Figure 12** highlights work trips in Martin County.

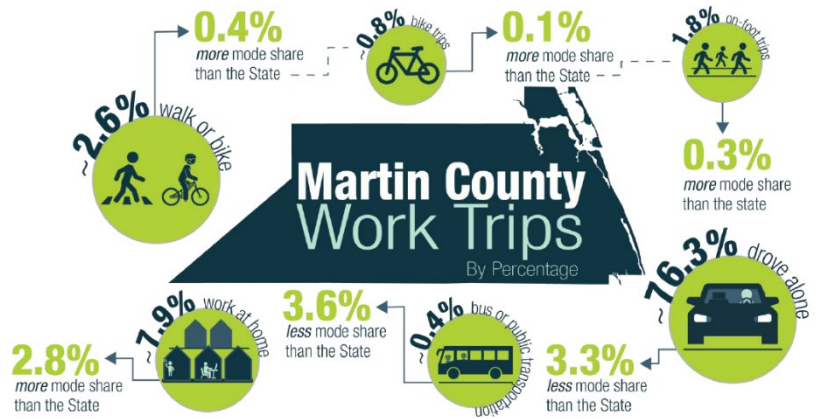


Figure 12: Martin County Mode Share Infographic

The Master Plan describes existing bicycle and pedestrian facilities in Martin County and also include recommendations for improvements. Improvements include bicycle and pedestrian facilities, safety improvements, policy recommendations, and outreach efforts to encourage people to walk and bike, see **Figure 13**.

The Master Plan also includes a few recommended projects for regional trail facilities. Project number 12 is the East Coast Greenway – Main – SE Gomez Ave from SE Bridge Rd to SE Osprey St – 3.28 miles. The approximate cost of this facility was calculated at \$323,538 per mile.

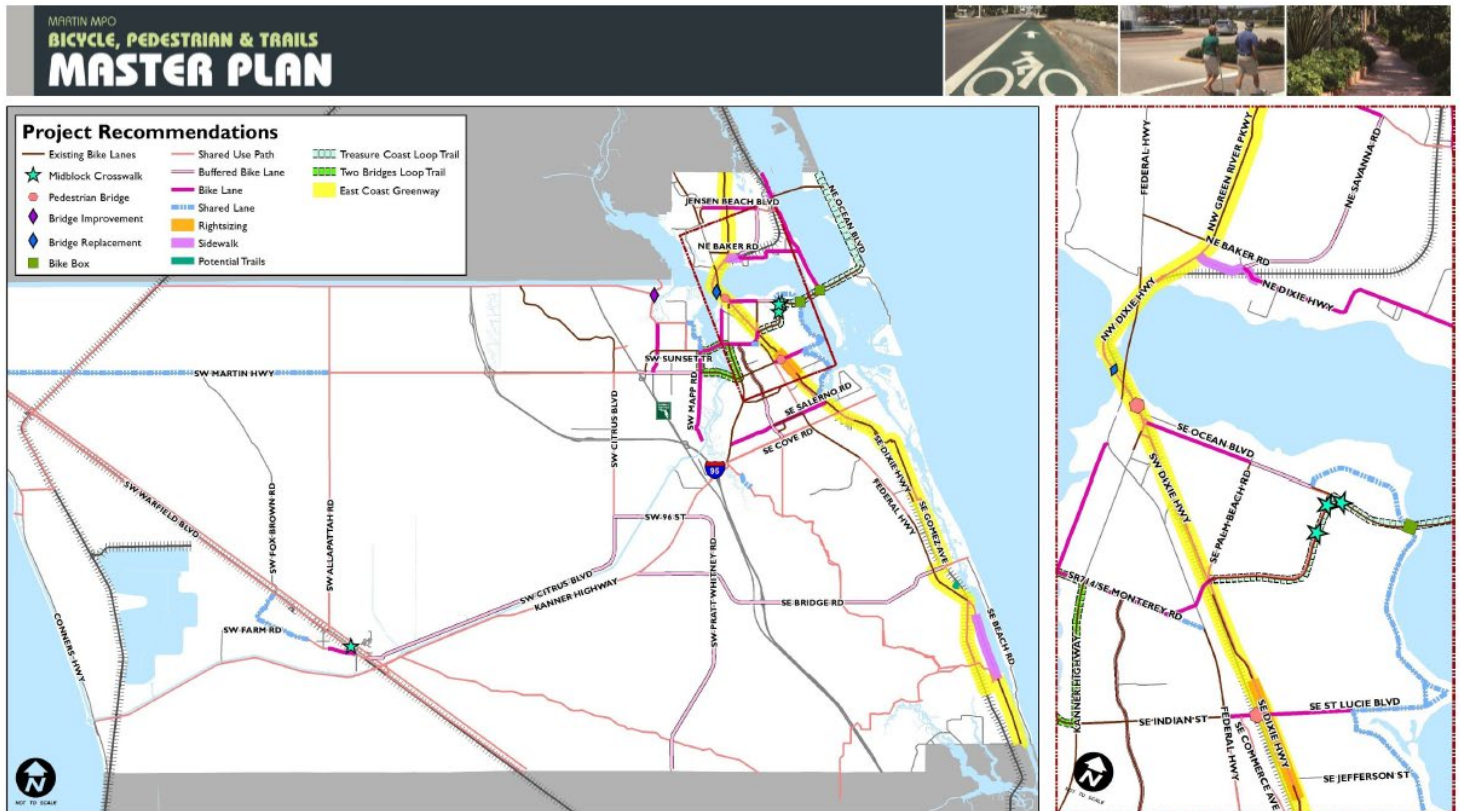


Figure 13: Bicycle, Pedestrian and Trails Master Plan Project Recommendation Map

3.6. BICYCLE AND PEDESTRIAN SAFETY ACTION PLAN (2016)

The purpose of Martin County’s Bicycle and Pedestrian Safety Action Plan is:

- To meet requirements set forth by the Florida Department of Transportation (FDOT) which require each MPO to prepare a pedestrian safety action plan.
- To identify bicycle and pedestrian safety problems and crash hot spots in Martin County, based on data-driven analysis and public input.
- To develop and select appropriate strategies using the “4Es” (Engineering, Enforcement, Encouragement, and Emergency Medical Services (EMS)) concept to enhance bicycle and pedestrian safety.
- To assist local and state agencies in further enhancing their existing bicycle and safety programs and activities.

The Plan identified nearly 68 crash hotspots (41 intersections, 12 corridors and 15 streets/roads) based on quantitative and qualitative analysis, stakeholder and public input. The Plan also includes recommended countermeasures based on the 4Es for the purpose of increasing safety and mobility in the county.

3.7. SOUTHEAST FLORIDA REGIONAL GREENWAYS AND TRAILS PLAN (2015)

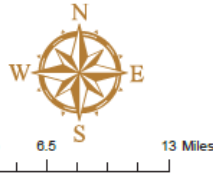
Greenways and trails are a growing part of multimodal transportation networks across Florida and the U.S. This Plan provides a desired vision for a greenways and trails system in Palm Beach County with consideration of the Southeast Florida regional context (from Indian River County to Monroe County).

The Plan is intended to serve as a conceptual guide for the Palm Beach MPO and others for prioritizing and advancing projects over time to help develop an integrated network of non-motorized connections throughout the South Florida region. Additionally, the regional perspective is designed to further inform facility development in an effort to align facilities across county lines where feasible. The Plan recommends three types of facilities:

- **Multi-Use Paved Trails:** A minimum of 10’ in width and for use by pedestrians & cyclists.
- **Multi-Use Unpaved Trails:** A minimum of 10’ in width and for use by pedestrians, cyclists, and equestrians.
- **Unpaved Hiking Trails:** A minimum of 5’ in width and for use by pedestrians exclusively.

The facilities and preferred design width based on type of users provides an overall guide to the development of trails for the region. Our study area is included as a proposed multi-use paved trail (MC8) as part of the East Coast Greenway, see **Figure 14**.

Southeast Florida
REGIONAL
GREENWAYS
& TRAILS
Multi-Use & Hiking Facilities



Existing Facilities	Proposed Facilities	Rev 9/30/2015
Multi-use, Paved 10' minimum width Pedestrians & cyclists permitted	Multi-Use, Paved 10' minimum width Pedestrians & cyclists permitted	
Multi-use, Unpaved Bicycle and pedestrian access	Multi-Use, Unpaved Bicycle and pedestrian access	
Hiking, Unpaved Pedestrians, cyclists & equestrians permitted	Hiking, Unpaved Pedestrians, cyclists & equestrians permitted	
Pedestrian access only Only pedestrians permitted	Pedestrian access only Only pedestrians permitted	



Martin County

- MC1, Allapattah Flats Management Area - Equestrian Trail
- MC2, Atlantic Ridge
- MC3, Beeline Highway Corridor
- MC4, Bridge Road
- MC5, Connector of Robert B. Jenkins C-23 & 714
- MC6, Connector of Robert B. Jenkins C-23 & Florida National Scenic Trail
- MC7, Cypress Creek Natural Area - Jesup Trail
- MC8, East Coast Greenway
- MC9, Florida National Scenic Trail
- MC10, Historic Jupiter-Indiantown Trail
- MC11, Hutchinson Island
- MC12, Indian River Drive
- MC13, Marine East/West Corridor
- MC14, Ocean-to-Lake Trail
- MC15, Robert B. Jenkins C-23 Trail Corridor
- MC16, SR714 Indian St to OK County Line
- MC17, St. Lucie Canal
- MC18, Treasure Coast Loop Trail



This information was compiled from state and local agencies including Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Florida Trail Association, St. Johns River Water Management District, Southwest Florida Water Management District, South Florida Water Management District, Indian River County, St. Lucie County, Martin County MPO, Palm Beach MPO, Broward County, Miami-Dade County and Monroe County.

Figure 14: Southeast Florida Regional Greenways & Trail Facilities Map

3.8. FLORIDA SUN TRAIL REQUIREMENTS

3.8.1. DESIGN REQUIREMENTS

The SUN Trail Network includes a combination of existing, planned, and conceptual multiple-use trails; which is typically 12-foot wide, but may vary from 10-foot to 14-foot wide, or larger, depending upon physical or environmental constraints, or usage. In some areas of extreme constraints, such as at bridges or in environmentally sensitive lands, a multi-use trail may be as narrow as 8-foot wide. In general, development of SUN Trail funded projects will be 12-foot wide, asphalt, multi-use trails. Implementing projects in the SUN Trail network increases the reliability of Florida’s transportation system.

The [Greenway Criteria and Design Guide](#), released by the ECGA, provides information and resources for the planning, design, construction, promotion, and maintenance of local ECG segments. This Guide defines our vision of a protected, connected series of safe facilities for a continuous non-motorized route from Maine to Florida. The Guide explains allowable on-road facilities and offers a new section on potentially allowable on-road facilities. The *Greenway Criteria and Design Guide* concludes with a list of technical resources and a glossary of common terms and acronyms related to the Greenway. The ECG’s permanent route criteria:

- **Traffic separated:** Includes a physical barrier that combines both horizontal spacing and vertical elements to protect trail users from motor vehicles.
- **Firm surface:** Easily navigable by a touring bicycle or wheelchair; may be paved or fine stone dust surface or other natural surface that a touring bicycle can easily and comfortably navigate.
- **Publicly accessible:** Open and free to the public every day of the year. In a few areas, we have incorporated fee-charging ferry service, but we seek crossings that minimize cost and provide frequent service.
- **Wide enough for shared use:** We aim for a 12-foot-wide pathway but understand that may not always be achieved initially. In more rural areas, where use may be lower, a narrower width may suffice. All new trails are expected to be designed and built according to best practices (E.g., AASHTO standards for shared-use paths).
- **Avoids steep grades and steps:** That prohibit wheelchair access and make bicycle access difficult. See AASHTO guidelines on the acceptable grade of a shared-use path.
- **Integrated recreation and transportation infrastructure:** The trail must route through a town or city center. Connects people to where they work, live, and play.
- **Responsive to new design:** In addition to shared-use path designs, an on-road facility that provides a physical barrier separating users from motor vehicles may also be designated. The term “physical barrier” will be interpreted to include firm, fixed objects such as concrete barriers, planters, guard rail or vehicle railing or bollards. Bicycle lanes separated from motor vehicle traffic by flexible vertical delineators are generally not eligible for designation, although our new design exceptions may allow for designation of such facilities upon further review of the roadway context. In an instance where the facility prohibits pedestrian and wheelchair use, it may be designated as East Coast Greenway provided that there is a parallel facility for pedestrians and wheelchair users which is designated as well.

3.8.2. SURFACES

A trail’s surface should be easily navigable by all users. It may be paved or a fine stone dust surface or other natural surface that a touring bicycle can comfortably navigate. All trails should be planned and designed to comply with the ADA, which requires trail surfaces to be firm and stable. Firmness means the surface “does not give way significantly under foot.” Stability means surfaces “do not shift from side-to-side or when turning.” For broad conceptual purposes, cost ranges for common trail surfaces (not including right-of-way acquisition) are:

- **Less expensive:** \$150k - 350k per mile
- **Moderately expensive:** \$350k - 750k per mile
- **More expensive:** \$750k - 1.5 million per mile

3.8.3. ASPHALT

Asphalt trails typically have a longer-term service life with lower required maintenance than a natural surface trail. Asphalt provides a surface that is smooth, quiet, and continuous with no joints, which is more enjoyable for bicycling, skateboard/rollerblading, pushing strollers, and people with disabilities.

Construction Considerations

- **Material type:** Hot mix asphalt, the type of mix used for a state highway, may not be the appropriate mix for a multi-use trail. The asphalt binder specified will depend on the climatic conditions of the region; check with your local DOT for material, gradation, and binder specifications. Porous or permeable asphalt can offer better drainage but can be more expensive up front and require more maintenance.
- **Proper drainage:** Efficient removal of excess water from the trail is important. Surface water runoff should be handled using swales, ditches, and sheet flow. Catch basins, drain inlets, culverts and underground piping may also be necessary. These structures should be located off of the pavement structure.
- **Proper sub-grade thickness & compaction:** Minimum thickness of a high-quality aggregate base should be a minimum of six inches for an asphalt trail. Thicker base courses should be used for poorer quality sub-grade material. Compacted sub-grade should extend a minimum of two feet beyond the edge of pavement. Sub-grade should be compacted to a minimum of 95% of standard Proctor density, AASHTO T 99, and the moisture should be maintained within 3% of optimum. If aggregate base course is used in the pavement section, it should be compacted to a minimum of 95% of modified Proctor density, AASHTO T 180, ASTM D 1557. Depending on the soil conditions, compaction and moisture criteria may vary. After compaction, a soil sterilant and/or root inhibitor should be applied. Consult your landscape architect or geotechnical engineer for site-specific information.
- **Adequate pavement thickness:** A minimum 3”.
- **Adequate pavement compaction:** It is recommended the hot mix asphalt be compacted to between 92% and 96% of the Theoretical Maximum Specific Gravity, AASHTO designation T 209, ASTM designation D 2041.

3.8.4. BOARDWALK

Boardwalks are typically considered for multi-use trails in areas that are difficult to traverse because of wetlands and waterways or rough conditions, areas prone to flooding, or where a typical trail cross section would adversely impact fragile habitats. Boardwalks allow for continuous drainage and unimpeded stream flow. They generally consist of decking, curbing or railings, and piers.

Construction Considerations

- **Common material types:** Timber, composite, concrete.
- **Railing height:** Forty-two (42) inches measured from the walking surface to be used if surface of boardwalk is 30-inches above finish grade. Extend boardwalk railing past abutment as needed to protect trail users from fall hazards, minimum 6’, typical.
- **Curb height:** Six (6) inches from walking surface to be used when boardwalk is less than 30-inches above finish grade (secondary path only).
- **Minimum rail to rail clearance:** Twelve (12) feet.
- **Minimum above water clearance:** Twelve (12) inches above anticipated 10-year storm elevation measured from the lowest structural member.

3.8.5. NATURAL SURFACE/CRUSHED STONE

Non-paved trail surfaces generally cost about the same as paved because the base preparation and materials are identical. Also, the installation is identical (dump truck, paving machine and compactors). Non-paved surfaces need to be accurately graded to avoid standing water. They are not useable during the spring thaw season. They are more prone to erosion than paved surfaces.

Construction Considerations

- **Common stone types:** Limestone, sandstone, granite.
- **Stone dust material:** Shall consist of hard, durable, uncoated particles of rock free from deleterious substances. The rock particles should range in size from dust to 3/8-inch. The stone dust surface will be prepared and placed in accordance with local DOT specifications and meet compaction requirements of 95% of optimum density (AASHTO T-180).
- **Crusher fines:** Should be applied over landscape fabric to a depth of 4 to 6-inches. The preferred geotextile is a continuous filament non-woven needle-punched engineering geo-fabric.

3.8.6. WIDTH

The aim generally is for a 12-foot-wide pathway but that may not always be achieved initially. In more rural areas, where use may be lower, a narrower width may suffice. All new trails are expected to be designed and built according to best practices. The ECGA follows AASHTO standards for SUPs:

Width and Clearance: The minimum paved width for a two-directional shared use path is 10-feet. Wider pathways, 11-to-14-feet are recommended in locations that are anticipated to serve a high percentage of pedestrians (30 percent or more of the total pathway volume) and higher user volumes (more than 300 total users in the peak hour). In very rare circumstances, a reduced width of 8-feet may be used where the following conditions prevail:

- Bicycle traffic is expected to be low, even on peak days or during peak hours.
- Pedestrian use of the facility is not expected no more than occasional.
- Horizontal and vertical alignments provide frequent, well-designed passing and resting opportunities.
- The path will not be regularly subjected to maintenance vehicle loading conditions that would cause pavement damage.

Occasionally, providing separate, parallel shoulders or treads alongside a trail for different users may be desirable. For example, a primary, hard-surfaced path (asphalt or concrete) can be provided exclusively for bicyclists, with softer shoulders set aside for pedestrians and equestrians. Single shoulders should be at least 5-feet wide, while dual shoulders (one on each side) should be a minimum of 2-feet wide.

3.8.7. GRADE

Trails should avoid steep grades and steps that prohibit wheelchair access and make bicycle access difficult. The ECGA aims to follow AASHTO guidelines on the grade of a SUP:

5.2.7 Grade - The maximum grade of a shared use path adjacent to a roadway should be 5 percent, but the grade should generally match the grade of the adjacent roadway. Grades steeper than 5 percent are undesirable because the ascents are difficult for many path users, and the descents can cause some users to exceed the speeds at which they are competent or comfortable.... Grades on paths in independent rights-of-way should also be limited to 5 percent maximum. – AASHTO

3.8.8. CROSSINGS AND INTERSECTIONS

Crossings should be marked where a trail intersects with a roadway. Crosswalk markings are also preferred where trails cross driveways and railroads. The ECGA follows AASHTO standards for crossings along shared use paths. The guide addresses various types of crossing and intersection designs and the striping and safety features associated with each crosswalk treatment. Whenever feasible, crossing should be complemented by traffic calming features, e.g., curb extensions, medians/islands, raised crosswalks, etc. In general, the more motor vehicle traffic lanes there are to cross, and/or the greater the volume and speed of motor vehicles, the greater the need for robust traffic calming treatments.

For crossings on quiet rural roads with sufficient line-of-sight distances, for instance, a “Trail Crossing” sign and striped crosswalk may be sufficient. For busier suburban and urban crossing situations, physical mid-crossing protection, demand activated signals, and proactive traffic calming treatments may be warranted. This could include “High Intensity Activated Crosswalk” (HAWK) or “Rectangular Rapid Flashing Beacon” (RRFB) signals to alert drivers.

Intersections should be well-lit (where trail use is permitted in low-light conditions) and crosswalk timers must be calibrated to allow for comfortable crossing by trail users of all abilities. AASHTO provides guidance on crosswalks, but more detail can be found in NACTO’s *Don’t Give Up at the Intersection* for protected and dedicated intersection treatments. **Figure 15** includes proven safety countermeasures for treatments that can assist to design for slow speeds. FHWA’s [Making Our Roads Safer I One Countermeasure at a Time](#) and [Safe Transportation for Every Pedestrian \(STEP\) program](#) provides guidance on safety measures for bicycle and pedestrian facilities.

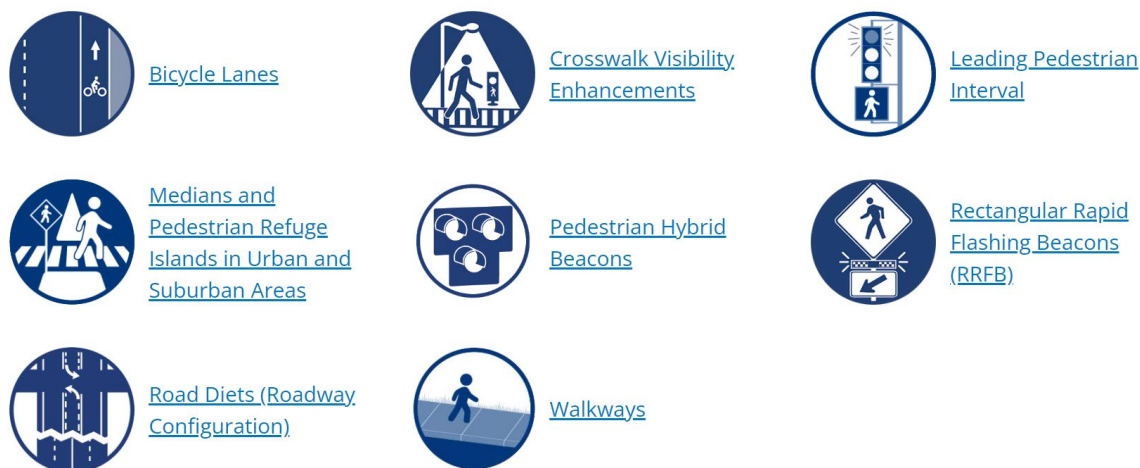


Figure 15: Pedestrian/Bicyclist Safety Countermeasures, FHWA

3.8.9. BRIDGES

Given the many waterways, highways, train tracks, and other obstacles that must be crossed on the envisioned route of the Greenway, thoughtful bridge design is important. There is no one-size-fits-all bridge design endorsed by the Alliance, as there are a wide variety of bridge types and crossing contexts communities may encounter, from getting over a small creek or canal to spanning major rivers and interstate highways. Bridges can be stand-alone or attached to existing bridges, and they may be new construction or re-purposed bridges no longer open to motor vehicles. Reallocating an automobile lane can be an option. In some circumstances, an underpass may be preferred.

In general, follow AASHTO or NACTO guidance for bridge design specifications. Ensure that transitions onto and off of bridges is safe, comfortable and intuitive for both pedestrians and bicyclists. There may be limited crossing options in some areas where the few existing bridges are narrower and deserve special consideration. These bridges should be reviewed on a case-by-case basis, but generally 8' is the minimum width for a shared-use path on a bridge. In some cases, with narrow passage, it may help to require that cyclists drastically reduce speeds or dismount and walk their bike across the bridge to reduce conflicts with other bridge users. When traversing busy roads such as arterials, at-grade design solutions should be prioritized instead of a bridge where possible. Creating a safe, direct, and convenient passage at grade for pedestrians and cyclists across these roads will benefit all users by reducing speeds and encouraging more efficient, multi-modal, and sustainable transportation. Safe at-grade crossings will provide a more convenient option to trail users, helping them avoid climbing and descending a bridge that might have inconveniently located entrances. This is particularly helpful for those with physical disabilities and issues with mobility. Additionally, at-grade crossings will formalize pedestrian and cyclist crossings that would otherwise still likely occur, despite being illegal and less safe.

3.8.10. SEPARATED ON-ROAD FACILITIES

In addition to shared-use path designs, an on-road facility that provides a physical barrier separating users from motor vehicles may also be designated. The term “physical barrier” will be interpreted to include firm, fixed objects such as concrete barriers, planters, guard rail, vehicle railing, bollards, and, in appropriate contexts, flexible vertical delineators. In an instance where the facility prohibits pedestrian and wheelchair use, it may only be designated as East Coast Greenway if there is a parallel facility for pedestrians and wheelchair users which is designated as well.

3.8.11. SIGNAGE

The primary purposes of signing the ECG are to establish a unique brand, to inform users that they are on the ECG, and to identify route direction changes, enabling proper wayfinding. Because much of the Greenway is still on road, providing appropriate route signage is crucial to guiding users along the route. Trail signs also serve to raise public awareness of the ECG by identifying a given local trail segment as part of the ECG.

Standard Greenway Route Signs



Greenway

ECGA stocks 5.5" x 15" signs to mark the route, **Figure 16**. The standard sign is our preferred model for identifying our route. These signs are made of .063-gauge aluminum with the graphic and text silkscreened onto the engineer grade reflective vinyl sheeting. Signs are pre-drilled with 3/8" holes at intervals permitting mounting on steel u-channel posts or square steel tubes. Brackets or mounting clamps may be used to attach these signs to tubular posts (aka "pipe posts"), which do not have pre-drilled holes for sign installation. These signs may be installed on trail and road segments pending permission.

Figure 16: Standard ECG Sign

Standard Greenway Arrow Plaques

Where appropriate, ECG route signs should be used in tandem with directional arrow plaques. The ECGA stocks five types of arrow plaques. Standard-sized directional arrow plaques measure 5.5" x 5.5" and have a bold black outline for visibility. They should be placed directly below the ECG standard sign.

Non-Standard ECG Wayfinding Signs

In some circumstances, signs of a different size may be preferred, or partnering agencies may want to incorporate the ECG graphic into other wayfinding signage. The ECGA only stocks the standard route sign, but following consultation with ECGA staff, artwork will be made available to agencies which wish to fabricate non-standard signs in their own sign shops.

MUTCD-Compliant ECG Route Signs

Chapter 9 of the MUTCD is specific to traffic control devices for bicycle and pedestrian facilities. Signs and plaques may be demanded in specific states and used to mark the ECG as a bicycle route, or if on shared-use paths, as a bicycle and pedestrian route. The type of MUTCD guide sign that permits the ECGA and partnering agencies to brand a route as the ECG is the M1-8a sign with the addition of the ECG logo, the letters "ECG," or the words "East Coast Greenway." Dimensions of the M1-8a are 18"x18" if installed on road and 12"x12" if installed on greenway.

MUTCD-Compliant ECG Arrow Plaques

Where appropriate, the ECG branded M1-8a signs should be used in tandem with the directional arrow plaques. The range of MUTCD directional arrow plaques to accompany M1-8a are as follows: M5-1, M5-2, M6-1, M6-2, M6-3. State DOTs may and have exempted ECG signs to include standard makers when posted on existing MUTCD sign posts.

Mileage Signs with Icons

The ECGA may provide "mileage signs" for installation on trailside kiosks or other structures. This type of sign is great for branding the length and breadth of the Greenway as well as drawing attention to the specific venue. Contact the ECGA if you have an interest in this type of signage.

Informational Kiosk

An informational kiosk is a wooden structure, typically field-fabricated of pre-cut pieces of dimensional lumber. Cedar is recommended due to its natural rot resistance. Fasteners should be stainless or galvanized steel. Where required due to local regulations (e.g., hurricane resistance standards), other designs may be implemented.

“Billboard” Signs

These types of signage are becoming popular in state and county parks.

Bridge Identification Signs

The ECGA strongly encourages the installation of special identification signs to be installed on or adjacent to trail bridges, notifying drivers passing beneath that the bridge overhead is part of the ECG. To date, all Greenway bridge ID signs have generally followed MUTCD standards and have been approved and installed by highway maintenance personnel or their contractors.

3.8.12. TRAFFIC SEPARATED ON-ROAD FACILITIES

In addition to the shared-use path design, the ECGA may also designate on-road bikeway facilities that separate users from traffic by a physical barrier, as long as the bikeway is parallel to a wheelchair-accessible sidewalk. The term “physical barrier” includes firm, fixed objects such as concrete barriers, planters, guard rail, vehicle railing, bollards, and, in appropriate contexts, flexible vertical delineators, often in tandem with parked vehicles. However, bicycle lanes separated from motor vehicle traffic by flexible vertical delineators alone are generally not eligible for designation—the ECGA staff will assist partners with further review of the roadway context to discuss options. Additionally, a design using delineators and parked vehicles should also ensure that the delineators are maintained on a frequent basis and any illegal parking or idling in the bikeway is minimized.

3.8.13. IMPLEMENTING FLORIDA’S SHARED-USE NONMOTORIZED (SUN) TRAIL PROGRAM

Ineligible project attributes for funding can be found in the handbook. “On-road facilities, such as bicycle lanes of routes other than on-road facilities that are no longer than one-half mile connecting two or more nonmotorized trails, if the provision of non-road facilities is infeasible and if such on-road facilities are signed and marked for nonmotorized use; an exception is made for on-road components of the Florida Keys Overseas Heritage Trail.”



4. EXISTING CONDITIONS

This section provides an overall review and analysis of existing conditions within the study area. Existing conditions include a review of demographics, land use, environmental, utilities and the roadway transportation network. Data was collected utilizing available data from Census, FDOT, FDEP and Martin County. Furthermore, several site visits were conducted to collect data, capture information, and assess conditions. A desktop review utilizing GIS was conducted for analysis. The following section summarize the demographics, existing roadway and environmental characteristics for the study area.

4.1. DEMOGRAPHICS

Hobe Sound is a Census Designated Place (CDP) in Martin County, Florida along Florida’s Treasure Coast. Between 2010 and 2020, the area experienced over 14% growth in population (Census 2020), and according to the 2021 ACS, the current population in Hobe Sound is 13,964. The median age in Hobe Sound is 56 years, **Figure 17** includes a breakdown of age groups who reside in Hobe Sound. Statistics show over a third of residents are over the age of 65 years, with the largest group (18.6%) between 65 to 74 years.

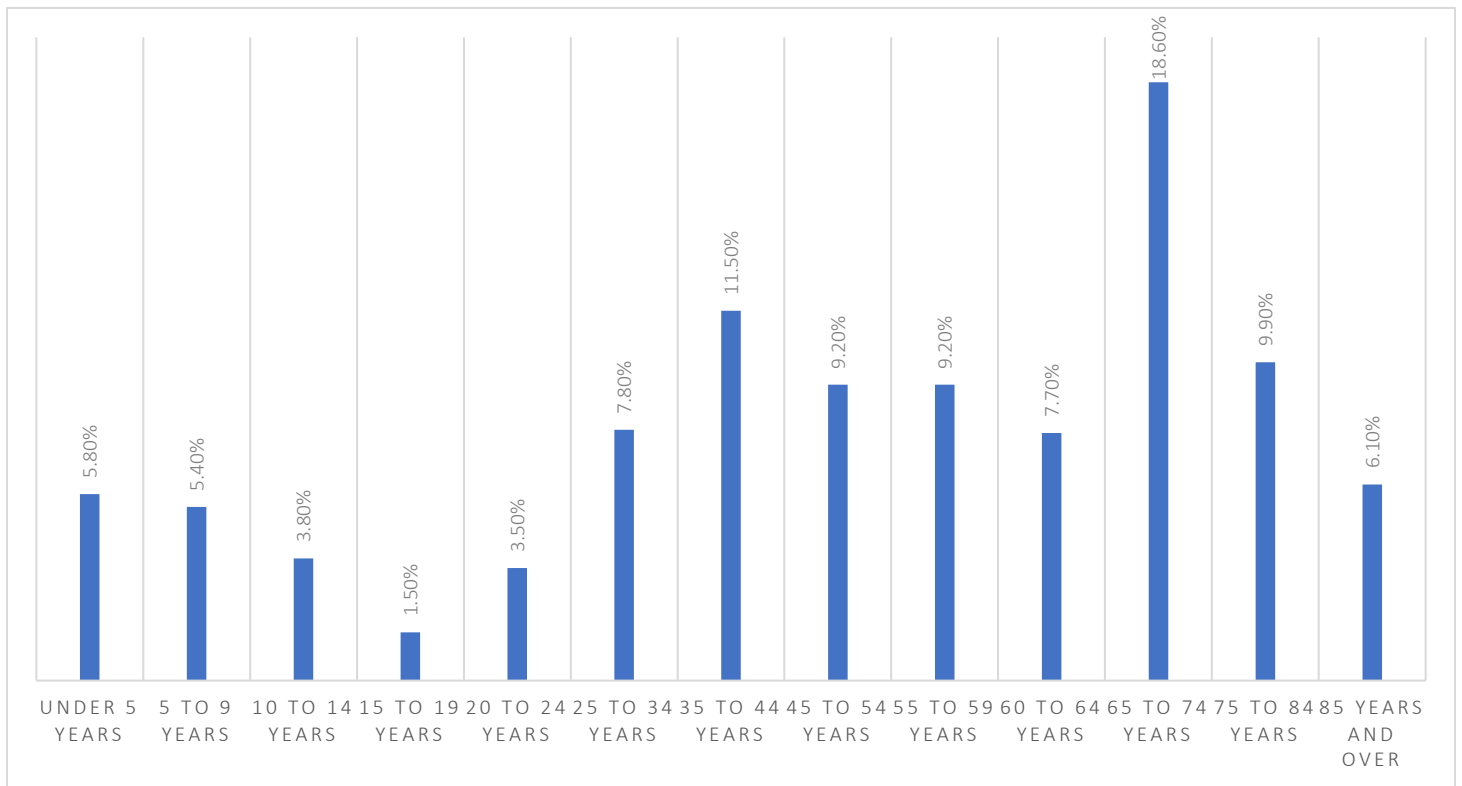


Figure 17: Hobe Sound Age Groups (ACS 2021)

Figure 18 illustrates the racial and ethnic makeup of Hobe Sound where almost 85% of residents are white, 6% of residents are black and 6% of residents are Hispanic. About 7% of households in Hobe Sound speak a language other than English at home. The poverty rate of Hobe Sound is 10% (ACS 2021).

Approximately 2% of households in Hobe Sound do not have a vehicle and almost 25% have one (1) vehicle per household. Lastly, 15.5% of residents have a disability, which is higher than the national average of 12.6%.

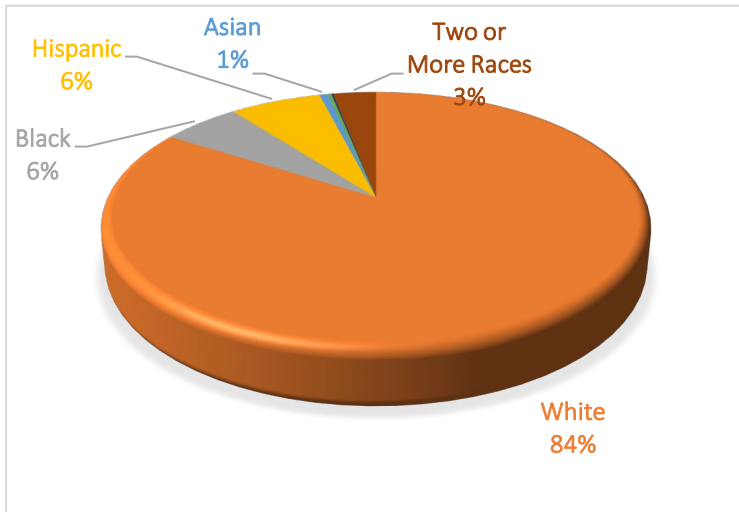


Figure 18: Hobe Sound Race & Ethnicity

4.2. COMMUTING CHARACTERISTICS

Workers 16 years and over total 5,952 or 43% of the population in Hobe Sound. Commuting characteristics for works is as follows: 70.1% of workers drive alone by car, 4.5% walk, 1.2% ride a bicycle and 14.1% work from home (ACS 2021). A review of the data illustrates more men walk and bike than women, while more women work from home than men. Mean travel time for workers in Hobe Sound is 25.5 minutes.

4.3. THE BUILT ENVIRONMENT

According to the future land use map, **Figure 19**, the study area is predominantly single-family residential uses with commercial uses concentrated along SE Federal Highway, CR-708/Bridge Road, and CR-A1A/Dixie Highway, south of CR-708/Bridge Road.

The map also highlights the numerous parks and recreational uses in the area. This includes Seabranche Preserve State Park, Indian River, Gomez Preserve, Peck Lake Park, Jimmy Graham Park, William G. “Doc” Myers Park, J.V. Reed Park, Atlantic Ridge Preserve State Park, Jonathan Dickinson State Park and Hobe Sound National Wildlife Refuge.

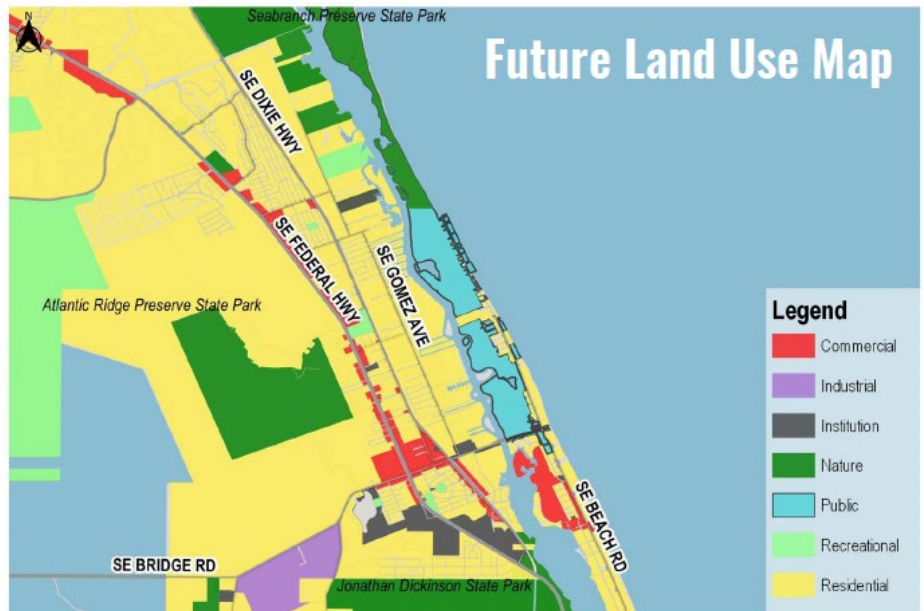


Figure 19: Future Land Use Map

The built environment within the study area includes an auto centric suburban development pattern where land uses are separated and the automobile dominates the landscape. The study area includes many vacant parcels. Gomez Avenue includes single-family housing, parks and schools; CR-A1A/Dixie Highway includes single-family housing, vacant lots, and some commercial uses with Florida East Coast (FEC) railroad parallel to CR-A1A/Dixie Highway. SR-5/Federal Highway and CR-708/Bridge Road include commercial developments with several large suburban shopping centers which include Market Place at Hobe Sound, Island Crossing, and a newly constructed Publix Shopping Center. There are several small commercial buildings peppered along SR-5/Federal Highway and

CR-708/Bridge Road. Additionally, the study area includes two large golf courses, the Loblolly Golf Course between Gomez Avenue and CR-A1A/Dixie Highway and the Medalist Golf Club west of SR-5/Federal Highway between Osprey Street and Medalist Place. Institutional uses include schools, a water treatment plant, public library, and vacant land. The study area connects to the beach and Atlantic coast via CR-708/Bridge Road.

4.4. EXISTING ROADWAY CONDITIONS

The existing roadway network in the study area consists of local roads, urban collectors and arterials. SR-5/SE Federal Highway, CR-A1A/Dixie Highway and SE Gomez Avenue are north-south oriented facilities in the study area, SR-5/Federal Highway and CR-A1A/Dixie Highway provide regional connectivity to Palm Beach and St. Lucie Counties. CR-708/SE Bridge Road, SE Pettway, SE Crossrip Street and SE Osprey are east-west oriented facilities. CR-708/Bridge Road provides access to I-95 and the Florida Turnpike. The study area includes seven signalized intersections: three along SR-5, three along CR-A1A/Dixie Highway, and one at Gomez Avenue. There are three at-grade railroad crossings at CR-708/Bridge Road, SE Crossrip Street, and SE Osprey Street.

4.4.1. FUNCTIONAL CLASSIFICATION

Within the study area, SR-5/Federal Highway is functionally classified as an Urban Principal Arterial Other, CR-A1A/Dixie Highway and CR-708/Bridge Road are Urban Minor Arterials, SE Osprey Avenue and SE Pettway are classified as Urban Major Collectors, and Gomez Avenue is classified as an Urban Minor Collector. All other roadways are considered local streets, **Figure 20** includes a map of the existing functional classification. The majority of traffic flows along SR-5/Federal Highway, with most others roadways being utilized by local traffic. **Table 1** includes the traffic summary of the existing roadways within our study area.

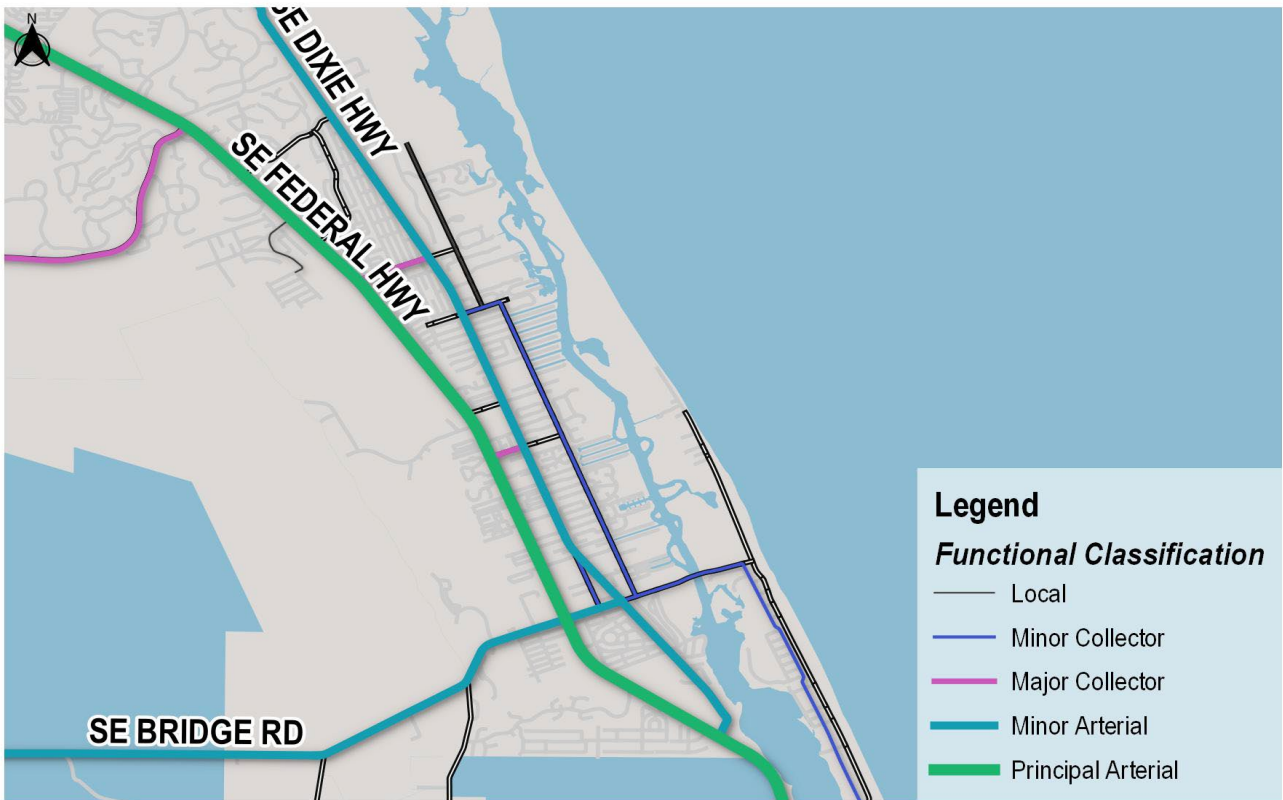


Figure 20: Street Network Functional Classification

Table 1: Summary of Traffic Data

STREET	FROM	TO	AADT (2021)	POSTED SPEED LIMIT (MPH)	NO. OF LANES (EACH DIRECTION)	LOS
CR-708/Bridge Rd	SR-5	CR-A1A	9,373*	25	1	D
	CR-A1A	Gomez Ave	8,053*	30	1	D
Pettway St	SR-5	Gomez Ave	N/A	25	1	N/A
Osprey St	SR-5	CR-A1A	4,794	35	1	C
	CR-A1A	Gomez Ave	2,042	25	1	C
SR-5/Federal Hwy	CR-708	Osprey St	24,987	45 – 55	2	C
CR-A1A/Dixie Hwy	CR-708	Osprey St	7,350	30 – 45	1	C
Gomez Ave	CR-708	Crossrip St	3,563	35	1	C
	Crossrip St	Osprey St	1,142	35	1	C
<i>Source: Martin County Roadway LOS Inventory Report, 2021 *Martin County Roadway LOS Inventory Report, 2019</i>						

Transportation in the area is predominantly performed by single-occupant vehicles. The study area includes one transit stop at SR-5/Federal Highway and CR-708/Bridge Road, which is also a transfer stop. This stop includes Routes 4 and 20x; Route 4 connects Hobe Sound north to Port Salerno with accessibility to transfer to Route 1, which connects north to Stuart and Port St. Lucie, allowing connectivity to the Treasure Coast Connector (TCC). Route 20x also connects north to Port Salerno, Cleveland Clinic and Indian River College, with accessibility to transfer to Routes 1 or 2. Route 2 connects to Indiantown located in western Martin County. Route 20x also connects south to Palm Beach County with accessibility to the Tri-Rail and Brightline stations, Palm Beach Gardens Mall, VA Medical Center and Palm Tran. There are no other transit stops in the area.

4.4.2. ACCESS MANAGEMENT

The FDOT currently identifies the SR-5/Federal Highway corridor within the study area as an Access Classification 3, which allows full median openings and signalized intersections with a minimum spacing of 2,640 feet and directional median openings at a minimum space of 1,320 feet. Minimum connection spacing is also allowed at 660 feet for sections posted above 45 MPH. Current speed limits posted on SR-5/Federal Highway are between 45 and 55 MPH.

4.4.3. CONTEXT CLASSIFICATION

The FDOT Context Classification system applies to all FDOT highways functionally classified as arterials or collectors and ensures projects along these highways are developed in a manner which is in context with the surrounding communities’ characteristics and intended uses of the roadway. This process assists professionals about the type and intensity of uses along various segments of a roadway, allowing roadway facilities to be planned, designed and maintained to be supportive of safe and comfortable travel for users.

There are eight (8) FDOT context classifications used to describe unique land use contexts in Florida. These contexts range from “C1-Natural” to “C6-Urban Core,” see **Figure 21**. The context classification provides insight to the types of road users that can be expected, and corresponding design criteria reflect their diversity of needs. **Table 2** summarize the context classification determinations for the study area as provided by FDOT.



Figure 21: FDOT Context Classifications

Table 2: Context Classifications

ROADWAY	FROM	TO	EXISTING CONTEXT CLASSIFICATION
SR-5/Federal Hwy	SE Osprey Street	SE Crossrip Street	C3R
SR-5/Federal Hwy	SE Crossrip Street	CR-708	C4
CR-A1A/Dixie Hwy	SE Osprey Street	CR-708	C4
SE Lares Ave	CR-708	SE Kingsley Street	C3C
Gomez Ave	SE Crossrip Street	CR-708	C3R
CR-708	SR-5	Gomez Avenue	C4
SE Pettway St	SR-5	CR-A1A	C3R
SE Osprey St	SR-5	CR-A1A	C4

4.4.4. RIGHT-OF-WAY

A review of the study area’s ROW was conducted utilizing Martin County Property Appraiser, FDOT line diagrams, and available as-built roadway plans. **Figure 22** includes a map of the ROW illustrating the differences in ROW within the study area. SR-5/Federal Highway has over 200 feet of ROW, while CR-A1A/Dixie Highway ROW varies between 30 and up to 90 feet, ROW along Gomez Avenue also varies between 60 and 90-feet. Several constraints are illustrated along CR-A1A/Dixie Highway where the ROW is limited to 30 feet, particularly between CR-708/Bridge Road and Dharlys Street where the ROW is the most constrained.

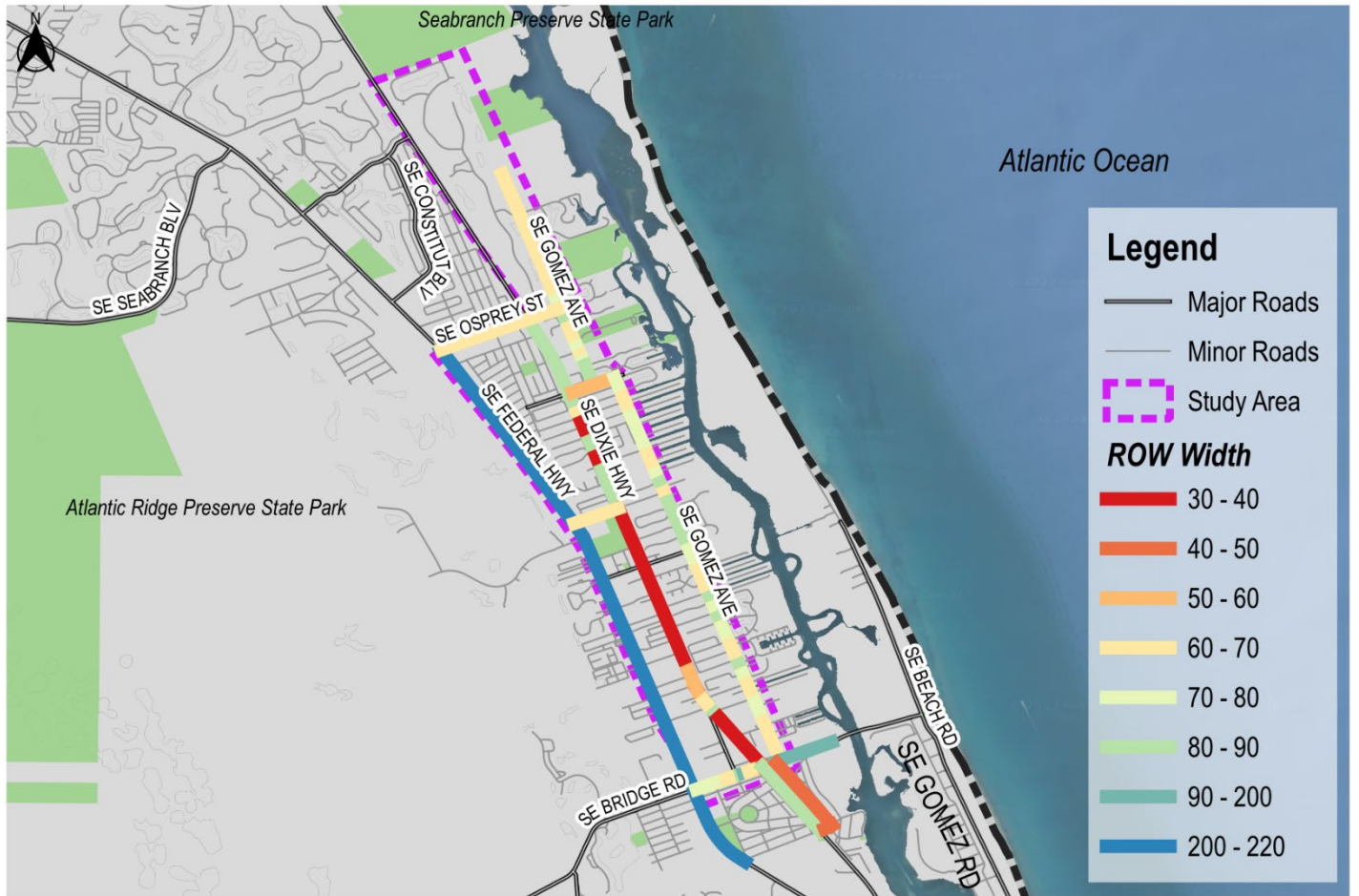


Figure 22: Right-of-Way Widths

4.4.5. INTERSECTIONS, SIGNALIZATION AND RAILROAD CROSSINGS

Figure 23 includes a map of signalized intersections within the study area. SR-5/Federal Highway and CR-A1A/Dixie Highway includes three signalized intersections, while Gomez Avenue has one signalized intersection and a school zone near CR-708/Bridge Road. Additionally, CR-708/Bridge Road, Pettway Street and Osprey Street have at-grade rail crossings. Recent safety improvements have been completed by the FEC which includes markings, signage, gates and sidewalks. Table 3 includes the number of T-intersections and signalized intersections within the study area.

Table 3: Signalized & Unsignalized Intersections

ROADWAY	FROM	TO	UNSIGNALIZED INTERSECTIONS	SIGNALIZED INTERSECTIONS
SR-5/Federal Hwy	SE Osprey St	CR-708	42	3
CR-A1A/Dixie Hwy	SE Osprey St	CR-708	30	3
Gomez Ave	SE Crossrip St	CR-708	44	1
CR-708/Bridge Rd	SR-5	Gomez Ave	5	3
SE Crossrip St	CR-A1A	Gomez Ave	4	0
SE Pettway St	SR-5	CR-A1A	2	2
SE Osprey St	SR-5	CR-A1A	6	2

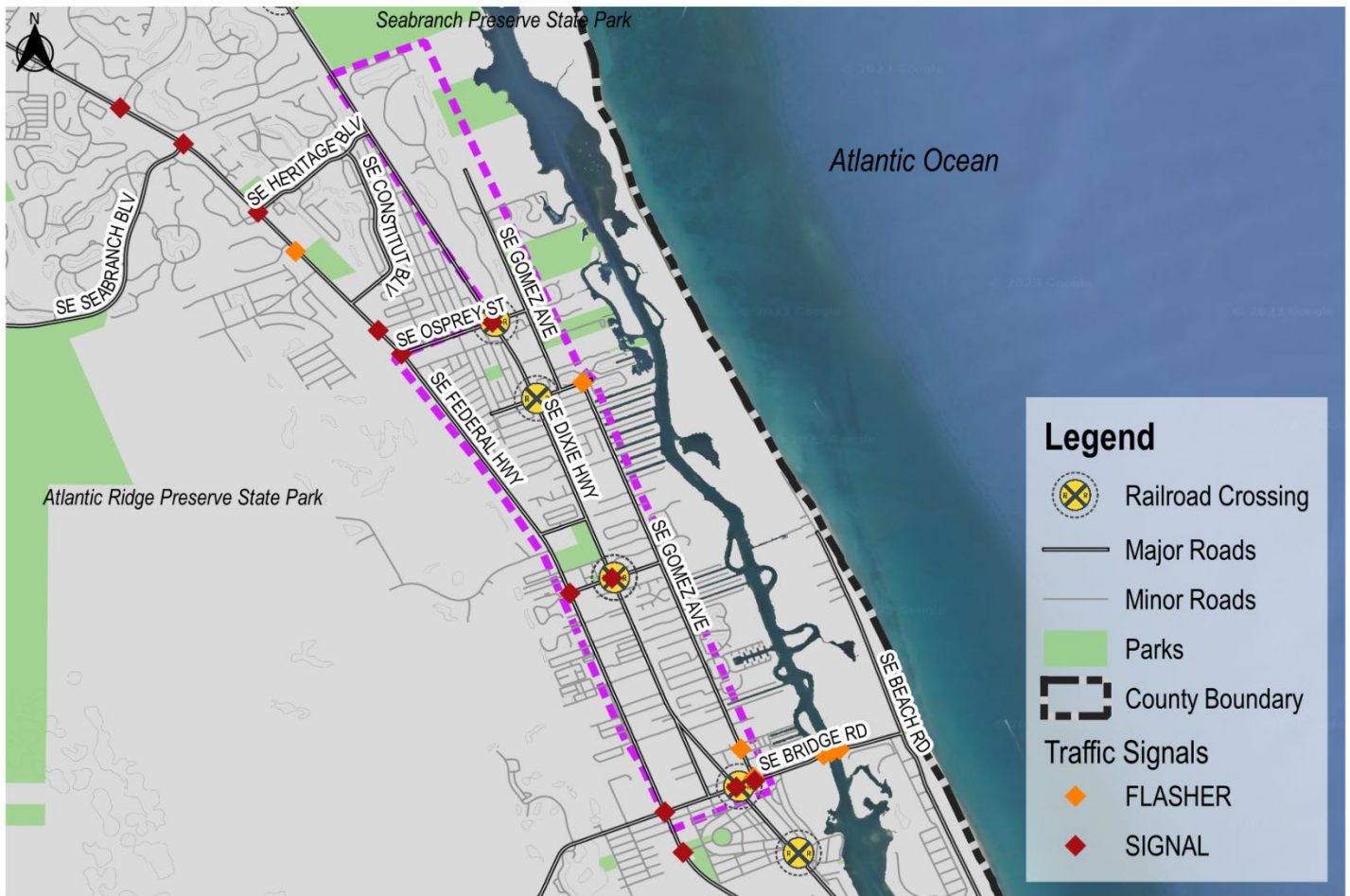


Figure 23: Traffic Signals & Railroad Crossings

4.4.6. TYPICAL SECTIONS

Typical sections were developed for the study area roadways Gomez Avenue, CR-A1A/Dixie Highway, SR-5/Federal Highway, CR-708/Bridge Road, Pettway Street, Crossrip Street and Osprey Street. This section provides an overview of the existing conditions and typical section for the study roadways.

4.4.6.1. SE GOMEZ AVENUE

Gomez Avenue is a county roadway classified as an Urban Minor Collector that runs parallel to SR-5/Federal Highway and CR-A1A/Dixie Highway. Gomez Avenue is a two-lane roadway with 11-foot vehicular travel lanes. The segment included in this study is approximately 4 miles in length between CR-708/Bridge Road and the end of the existing SUP (on Gomez Avenue). The ROW varies in width, where the minimum width is 60 feet and the maximum width is 90 feet, the posted speed limit of Gomez Avenue is 35 MPH. SE Gomez Avenue is surrounded by primarily single-family residential uses, the FDOT Context Classification is Suburban Residential (C3R), the roadway has AADT volume of 1,142 vehicles per day between SE Crossrip and SE Osprey Streets and 3,563 vehicles per day between CR-708/Bridge Road and SE Crossrip Street.

Gomez Avenue is largely a rural typical section, absent of curb and gutter, with swales for stormwater management. For the most part, there are 5 to 6-foot-wide concrete sidewalks on at least one side of the corridor

setback at least 5 feet from vehicular traffic. **Figure 24** below illustrates the typical section for existing conditions along Gomez Avenue.

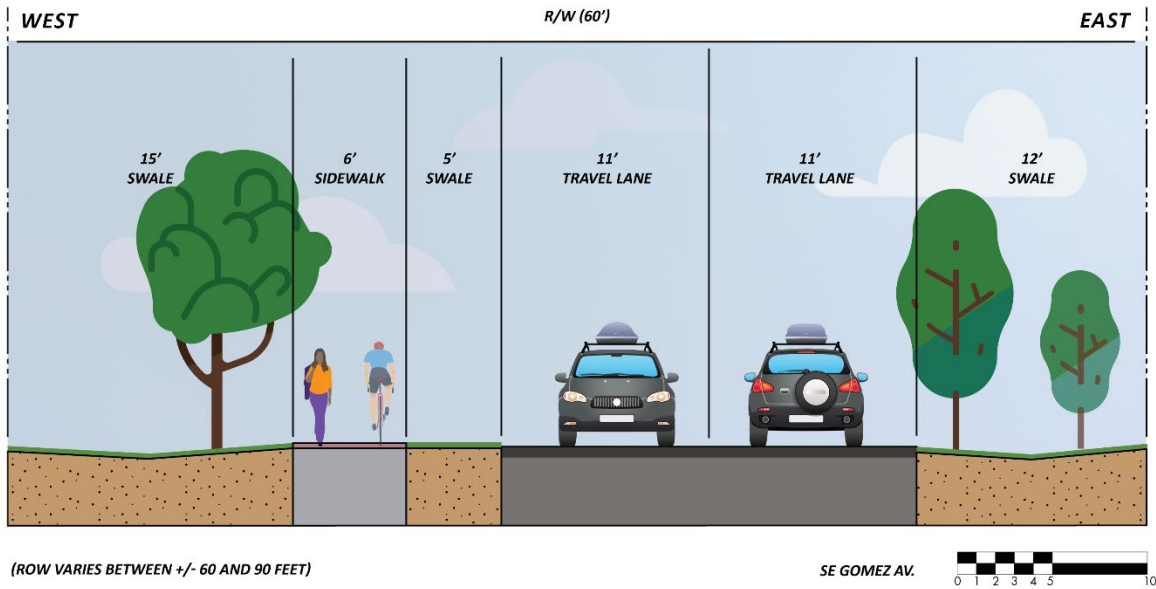


Figure 24: Existing Rural Typical Section for Gomez Avenue

Gomez Avenue is surrounded by single-family residential development, wildlife preserves and schools. Gomez Avenue does not directly connect to the south terminus at SR-5/Federal Highway and CR-708/Bridge Road, but directly connects to the north terminus south of Seabranh Preserve State Park. The parks and preserves accessible on Gomez Avenue include Jimmy Graham Park, Seabranh Preserve State Park, Peck Lake Park, and the Gomez Preserve Nature Trail. North of Hill Terrace there is a 50-foot wetland buffer that stops at the edge of the ROW near the Gomez Preserve Nature Trail. Both Seabranh Preserve State Park and Gomez Preserve Nature Trail are accessible by bike or foot only. Through and to the south of Seabranh Preserve State Park is an existing segment of the ECG and Florida SUN Trail network.

Schools along Gomez Avenue are between CR-708/Bridge Road and SE Pine Cone Lane and include: Hobe Sound Child Care Center, Hobe Sound Elementary School, Hobe Sound Bible College, and Hobe Sound Christian Academy. School crossing guards are present in this area during morning arrival and afternoon dismissal. Observations during school dismissal reported various children walking and biking, while most children are dropped off or take a bus to/from school. During the site visit conducted, there were several vehicles parked along SE Shell Avenue and CR-708/Bridge Road, where parents were observed parking their vehicles and walking to the elementary school to pick up their children.

Gomez Avenue has 5 to 6-foot-wide concrete sidewalks on at least one side of the corridor, with some segments having sidewalks on both sides of the roadway. Sidewalks are typically setback an average of 10 feet from vehicular travel lanes and are shaded along portions of the corridor. The sidewalk near SE Sabal Lane is the narrowest area along the corridor, see **Figure 25**.

There are a total of 10 midblock crossings with crosswalks and signage placed throughout the corridor, providing crossings to the sidewalk as it switches from one side of the roadway to the other. The westside of Gomez Avenue has a total of 24 single-family residential driveways, while the eastside has 6 single-family residential driveways.

There is one signalized intersection at Gomez Avenue and CR-708/Bridge Road with high-emphasis crosswalks, push-buttons, detectable warning surfaces and signals. Gomez Avenue also includes a school zone. The pavement markings for the crosswalks are in poor condition due to fading pavement markings. There is one pedestrian crossing sign alerting westbound motorists at the CR-708/Bridge Road and Gomez Avenue intersection.

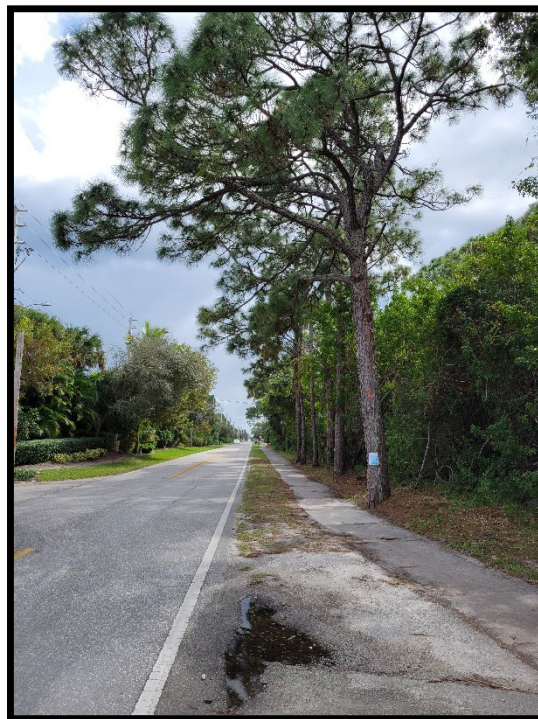


Figure 25: Existing Conditions along Gomez Ave

Between 2016 and 2020, there were three (3) crashes that involved two (2) bicyclists and one pedestrian, all three crashes were injury related crashes; there were no reported fatalities. Roadway signage is in overall good condition. Utilities include overhead powerlines which begin on the eastside of Gomez Avenue between CR-708/Bridge Road and SE Crossrip Street, then switch to the westside of Gomez Avenue north of SE Crossrip Street. Utilities include electric power poles for power transmission lines, fire hydrants, drainage and some lighting throughout the corridor.

Gomez Avenue was undergoing drainage improvements between CR-708/Bridge Road and SE Pilots Cove Terrace at the time we began conducting site visits and data collection, this project has since been completed. Gomez Avenue has also been identified as a potential route alignment for the East Coast Greenway in the *Martin County 2045 Long Range Transportation Plan (LRTP)*, *Martin County Bicycle and Pedestrian Facility Map*, and the *Martin MPO Bicycle and Pedestrian & Trails Master Plan (2016)*.

4.4.6.2. CR-A1A/SE DIXIE HIGHWAY

CR-A1A/Dixie Highway is a county road classified as an Urban Minor Arterial, parallel and in between SR-5/Federal Highway and SE Gomez Avenue. A1A is a two-lane road with 12-foot-wide vehicle lanes, and a 4-foot paved shoulder marked for bicycle use along portions of the corridor. The segment included in this study is approximately 3 miles in length between CR-708/Bridge Road and SE Osprey Street, and does not connect directly to the north or south terminus of the planned SUN Trail corridor at the north (Gomez Avenue) or south (SR-5/Federal Highway & CR-708/Bridge Road) terminus. The ROW width varies between a minimum width of 30 feet to a maximum width of 85 feet, the speed limit also varies between 30 and 45 MPH. CR-A1A/Dixie Highway is

surrounded by primarily single-family residential development with some commercial and institutional uses, the FDOT Context Classification is Urban General (C4) and Suburban Residential (C3C). CR-A1A/Dixie Highway has an AADT volume of 7,350 vehicles per day, it is also parallel and adjacent to the FEC Railroad. The FEC railroad actively operates 21 freight trains per day, and has at least 100 feet of ROW. The number of trains is due to increase with the development of the Orlando Brightline Station, slated to open in the Summer of 2023, which will provide none stop service from West Palm Beach to Orlando.

CR-A1A/Dixie Highway is largely a rural typical section, absent of curb and gutter, with swales for stormwater management. Between CR-708/Bridge Road and SE Crossrip Street there are no paved shoulders available for cyclists. North of SE Crossrip Street there are four-foot paved shoulders marked for bicycle lanes with no buffer between motorized vehicles. Residents and stakeholders indicated these bike lanes are utilized by recreational cyclists, especially during the weekend. For the most part, there are 4 to 5-foot-wide concrete sidewalks located along the westside of CR-A1A/Dixie Highway typically setback at least 5 feet from vehicular traffic. **Figure 26** below provides the typical section for existing conditions along CR-A1A/Dixie Highway.

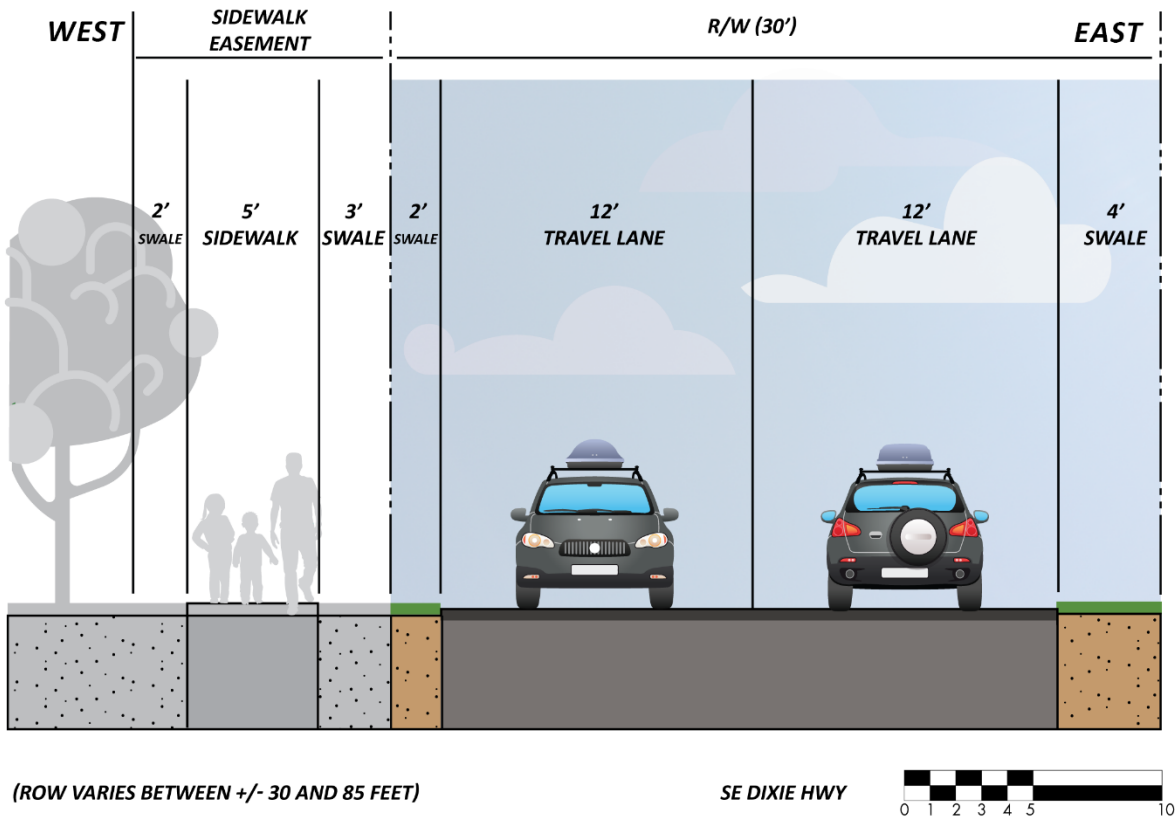


Figure 26: Existing Rural Typical Section for CR-A1A/Dixie Hwy

The existing sidewalks along the westside of CR-A1A/Dixie Highway are located outside the ROW and within a 10-foot-wide sidewalk easement along the corridor. Properties missing this easement have the sidewalk within the ROW, adjacent to vehicular traffic, see **Figure 27**. There are some areas missing sidewalks and existing sidewalks are in fair to poor condition. Few trees are planted along the sidewalks for shade. There are no sidewalks on the eastside of the roadway, where the FEC railroad is located. Utilities include electric power poles for transmission lines which are located on the westside of CR-A1A/Dixie Highway, fire hydrants, and a few light poles throughout the corridor.



Figure 27: Photo of Significant Pinch point for the Sidewalk along Dixie Hwy (Southbound)

There are historic light poles between CR-708/Bridge Road and SE Algozzini Place partially obstructing the sidewalk, this area was also missing detectable warning surfaces at many of the crosswalks. Between SE Dharlys and SE Osprey Streets, the sidewalk is 5 to 6-feet in width and in fair to good condition with few obstructions, some areas may experience flooding during the rainy season as portions of the sidewalk appeared to have been underwater after a rain event during the site visit, see **Figure 28**. North of SE Osprey Street there are no sidewalks on either side of CR-A1A/DIXIE HIGHWAY until the Seabranh Preserve State Park, where there is an existing SUP that traverses the border of the park parallel to CR-A1A/DIXIE HIGHWAY.



Figure 28: Evidence of Sidewalk Flooding

South of CR-708/Bridge Road, the ROW is approximately 85 feet and includes a frontage road with parking between SE Gleason Avenue (Saturn Avenue) and CR-708/Bridge Road. This area is walkable and includes a number of shops, restaurants and commercial establishments, there are also several mature trees that provide shade along the frontage road.

Between SE Dharlys and SE Osprey Streets, the ROW is approximately 85 feet, but there are two areas where the ROW narrows to about 30 feet. Between CR-708/Bridge Road and SE Dharlys Street, the ROW is mostly narrow with a width of 30 to 35 feet, except for an area near SE Kinsley Street, where the road curves north and the ROW widens up to about 70 feet before it narrows again to 30 feet.

The signalized intersections along CR-A1A/Dixie Highway include CR-708/Bridge Road, SE Pettway Street and SE Osprey Street – most of which do not have crosswalks, push buttons and signals. There is a high-emphasis crosswalk at the CR-A1A/CR-708 intersection along the south leg in good condition, this is the only crosswalk along CR-A1A/Dixie Highway within the

study area. Both SE Pettway and SE Osprey Street did not have pedestrian or bicycle facilities for crossings at the time the site visit was conducted. The CR-708/Bridge Road, SE Pettway Street, SE Crossrip Street and SE Osprey Street intersections along CR-A1A/Dixie Highway have railroad crossings, which recently completed safety improvements for vehicles and pedestrians. These improvements include signage, pavement markings, sidewalks and safety gates.

There are a total of 26 driveways along the westside of CR-A1A/Dixie Highway between CR-708/Bridge Road and SE Osprey Street, many of which belong to single-family homes. William G “Doc” Myers Park, Pettway Grocery, Hobe Sound Office Plaza and a number of commercial establishments can be accessed from CR-A1A.

South of CR-708/Bridge Road the speed limit is 35 MPH. Between CR-708/Bridge Road and SE Porter Boulevard the speed limit is decreased to 30 MPH, then increases to 40 MPH between SE Porter Boulevard and SE Crossrip Street, and again to 45 MPH between SE Crossrip and SE Osprey Streets. Between 2016 and 2020, there were five (5) crashes which involved two (2) bicyclists and three (3) pedestrians, four (4) of the five (5) crashes were injury related crashes and the remaining one included property damage only. Roadway signage is in overall good condition. Utilities include electric power poles for transmission lines which are located on the westside of CR-A1A/Dixie Highway, fire hydrants, and a few light poles throughout the corridor.

4.4.6.3. SR-5/ US-1/ SE FEDERAL HIGHWAY

SR-5/Federal Highway is a state roadway classified as an Urban Principal Arterial Other that runs parallel to CR-A1A and SE Gomez Avenue. SR-5/Federal Highway is a four to six-lane roadway which is divided by a curbed center island median with 12-foot lanes and a 4-foot paved shoulder marked for bicycle use along portions of the roadway, see **Figure 29**. The segment included in this study is approximately 3 miles in length between CR-708/Bridge Road and SE Osprey Street. The ROW width is typically 215 feet with posted speed limits of 45 and 55 MPH. SR-5/Federal Highway is lined with commercial and residential land uses and has an FDOT Context Classification of Urban General (C4) and Suburban Residential (C3R). The AADT volume for SR-5/Federal Highway is 24,897 vehicles per day.

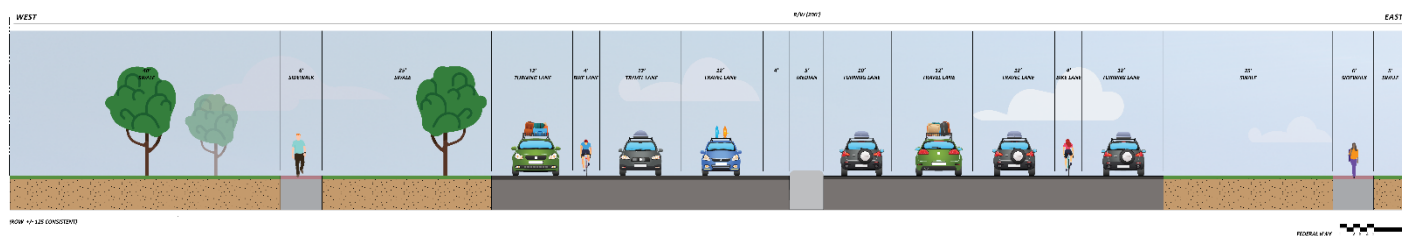


Figure 29: Existing Rural Typical Section for SR-5/FEDERAL HWY

SR-5/Federal Highway is largely a rural typical section, absent of curb and gutter, with swales for stormwater management. South of SE Dharlys Street and north of SE Osprey Street there are four-foot paved shoulders marked for bicycle lanes with no buffer between motorized vehicles. Between SE Dharlys and SE Osprey Streets there are narrow paved shoulders, not for bicycle use. For the most part, there are 5 to 6-foot-wide concrete sidewalks located on both sides of SR-5/Federal Highway setback at an average 20-feet or more from vehicular traffic. Utilities include electric power poles for power transmission lines, fire hydrants, manholes and lighting which are located on both sides of SR-5/Federal Highway throughout the corridor.

The SR-5/Federal Highway corridor directly connects to the south terminus at the SR-5/Federal Highway and CR-708/Bridge Road intersection. SR-5/Federal Highway does not connect directly to the north terminus of the planned SUN Trail corridor at Seabranh Preserve entrance on Gomez Avenue. Note that FDOT is currently performing a PD&E study to connect the SUN Trail network between the Hobe Sound Preserve and Jonathan Dickinson State Park to SR-5/Federal Highway. This study is near completion.

The signalized intersections along SR-5/Federal Highway include, CR-708/Bridge Road, SE Pettway Street and SE Osprey Street— all of which have crosswalks, push buttons and signals. The high-emphasis crosswalks at the SR-5/Federal Highway and CR-708/Bridge Road intersection are in fair to poor condition, as the pavement markings are faded and many of the flexible delineators marking pedestrian areas were missing or damaged at the time of the initial site visit. Both the SE Pettway Street and SE Osprey Street intersections include standard crosswalks in good condition, some of the ramps and push-buttons do not meet ADA requirements.

The intersection of SR-5/Federal Highway and CR-708/Bridge Road is a large intersection spanning approximately 110-feet, with various suburban style commercial developments on all four corners. The intersection experiences the highest levels of vehicular crashes within the study area, with over 100 incidents reported between 2016 and 2020. The intersection has been retrofitted with flexible delineators at the corners which appear to have been implemented as a visual separator between pedestrians and vehicles. There were observations in the field that many of the delineators have been struck multiple times and as a result many were missing, and damaged at the time of the site visit, see **Figure 30**. The northeast corner of the SR-5/Federal Highway and CR-708/Bridge Road intersection has a drainage grate partially within the walking path to/from the north leg crosswalk, tactile pads are also missing on all four corners, this should be reported to FDOT.



Figure 30: Intersection of SR-5 & Bridge Rd looking east from the northwest corner

There are no single-family residential driveways along SR-5/Federal Highway between CR-708/Bridge Road and SE Osprey Street, instead the area has several driveway accesses for the various commercial developments along both sides of SR-5/Federal Highway, with the eastside having more driveways than the westside, these driveways all have stop signs.

Additionally, there is a frontage road on the westside of SR-5/Federal Highway between SE Lake Drive (Church Street) and SE Pine Circle, see **Figure 31**. The Hobe Sound Library, William G. “Doc” Myers Park and the United State Post Office can also be accessed from SR-5/Federal Highway. Also, on the westside of SR-5/Federal Highway between SE Medalist Place and SE



Figure 31: SR-5 Frontage Rd & SE Church St, looking south

Osprey Street there is the eastern border of the Medalist Golf Club.

Shade throughout the study segment is sparse along the sidewalks, which are in fair to poor condition throughout the area. On the westside, between CR-708/Bridge Road and SE Plutos Avenue, the sidewalk measures at 9-feet 9-inches and could be classified as a shared use path.

The speed limit between CR-708/Bridge Road and SE Pettway Street is 45 MPH and increases to 55 MPH between SE Pettway Street and SE Osprey Street. Between 2016 and 2020, there were a total of 13 crashes that involved seven (7) bicyclists and six (6) pedestrians, ten (10) of the thirteen crashes were injury related crashes, and the remaining three (3) included property damage only. Roadway signage is in overall good condition. Utilities include electric power poles for power transmission lines, fire hydrants, utility boxes, manholes and lighting which are located on both sides of SR-5/Federal Highway throughout the corridor.

4.4.6.4. CR-708 / SE BRIDGE ROAD

CR-708/Bridge Road is a county road classified as an Urban Minor Arterial west of CR-A1A and an Urban Minor Collector east of CR-A1A. CR-708/Bridge Road is two-lane roadway with 10 to 11-foot lanes. The segment included in this study is approximately half a mile in length between SR-5/Federal Highway and SE Gomez Avenue. The ROW width varies between a minimum width of 40 feet and a maximum width of 80 feet and has a posted speed limit of 25 to 30 MPH. CR-708/Bridge Road is surrounded by primarily commercial uses and has an FDOT Context Classification of Urban General (C4), it also intersects the FEC railroad and includes a crossing at CR-A1A. CR-708/Bridge Road has an AADT volume of 9,373 vehicles per day west of CR-A1A, and 4,633 vehicles per day between CR-A1A and SE Gomez Avenue.

CR-708/Bridge Road between SR-5/Federal Highway and CR-A1A/Dixie Highway has an urban typical section with curb and gutter for stormwater management and a rural typical section between CR-A1A/Dixie Highway and SE Gomez Avenue. The segment with a rural typical section is absent of curb and gutter and has swales for stormwater management. For the most part, there are 5 to 9-foot-wide concrete sidewalks located on at least one side of CR-708/Bridge Road typically setback at least 10 feet from vehicular traffic. **Figure 32** illustrates the existing typical section for CR-708/Bridge Road.

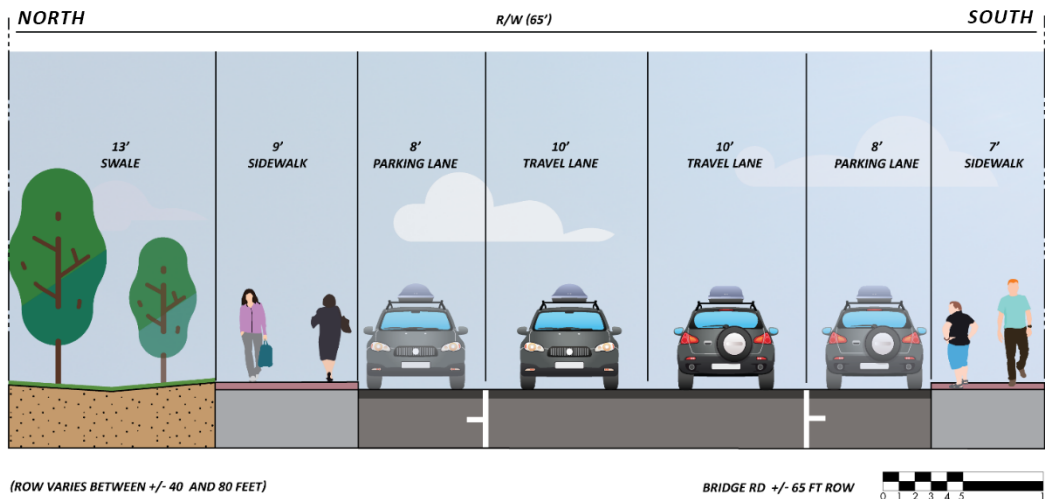


Figure 32: Existing Urban Typical Section for CR-708/Bridge Road

CR-708/Bridge Road has several commercial establishments between SR-5/Federal Highway and CR-A1A/Dixie Highway, but land is vacant between CR-A1A/Dixie Highway and SE Gomez Avenue. CR-708/Bridge Road directly connects to the south terminus of the planned SUN Trail corridor at SR-5/Federal Highway. The segment between SR-5/Federal Highway and SE Hercules Avenue includes a 5-foot concrete sidewalk in good condition on the southside, canopy trees have recently been planted here and when matured will provide shade to users. The sidewalk on the northside along the border of the Marketplace at Hobe Sound Shopping Center is missing, see **Figure 33**.

Between SE Hercules Avenue and CR-A1A, Martin County completed its main street improvements which included undergrounding the overhead utilities, improving drainage, promoting walkability through sidewalk additions, landscape and lighting enhancements, on-street parking, and roadway resurfacing. This segment is walkable and includes compact development that is pedestrian friendly. This segment also includes a recently constructed 9-foot-wide concrete sidewalk which narrows to a 5-foot upon approaching SE Plutos Avenue on the northside due to ROW restrictions, the sidewalk is in excellent condition. There are 5 to 6-foot-wide concrete sidewalks on the south side also in excellent condition. Parking in this segment consists of parallel parking and back-in angled parking utilizing pavers on both sides of the road. Other utilities include utility boxes, fire hydrants and light poles scattered throughout the corridor.

Between CR-A1A and SE Gomez Avenue there is a 5-foot-wide concrete sidewalk on the southside, canopy trees have recently been planted here and again when matured will provide shade to users, the sidewalk is in good to fair condition. East of SE Gomez Avenue there are no sidewalks on the southside. The northside of this segment is missing a sidewalk, but there is a sidewalk east of SE Gomez Avenue connecting to the beach.

The signalized intersections along CR-708/Bridge Road include SR-5/Federal Highway, CR-A1A and SE Gomez Avenue, both intersections at SR-5/Federal Highway and CR-708/Bridge Road have crosswalks, push-buttons and signals on all approaches. The CR-A1A/CR-708 intersection has only one high-emphasis crosswalk, signal, and detectable warning surfaces on the south leg of the intersection. It is important to note that the northwest corner includes a historic building with no sidewalks or easements to build a sidewalk, therefore there is a missing sidewalk segment +/-135 feet. Many of the intersection crosswalks are in fair to poor condition due to fading pavement markings.

Between SR-5/Federal Highway and SE Gomez Avenue, there are a total of 7 driveways on the southside and 7 driveways on the northside. CR-708/Bridge Road provides options for residents and visitors to different businesses and amenities which includes a grocery store, hardware store, laundry facilities, drugstore, Hobe Sound Chamber of Commerce, bicycle store, restaurants and personal services.



Figure 33: Bridge Rd, looking west

The speed limit between SR-5/Federal Highway and CR-A1A is 25 MPH and increases to 30 MPH east of CR-A1A. Between 2016 and 2020, there were a total of four (4) crashes involving pedestrians and bicyclists, two (2) of the four (4) crashes were injury related crashes, and the remaining two (2) included property damage only; there were no reported fatalities during this timeframe. Roadway signage is in overall good condition. Utilities include electric power poles for transmission lines which are located on the east side of CR-708/ Bridge Road between SR-5/Federal Highway and SE Hercules Avenue and again between CR-A1A and SE Gomez Avenue. The powerlines between SE Hercules Avenue and CR-A1A have been undergrounded, this segment also includes roadway lighting, and streetscaping. Other utilities include utility boxes, fire hydrants and light poles scattered throughout the corridor.

CR-708/Bridge Road has been identified for resurfacing and bicycle lane construction between Pratt Whitney and SR-5/Federal Highway, which is west of our study area, in the FY22 TIP. CR-708/Bridge Road is one of three potential east/west alignments for the SUP.

4.4.6.5. SE CROSSRIP STREET

Crossrip Street is a county roadway classified as a local street which runs parallel to CR-708/Bridge Road and SE Osprey Street. SE Crossrip Street is a two-lane road with 10-foot lanes, the segment included in this study is approximately one quarter mile in length between CR-A1A/DIXIE HIGHWAY and SE Gomez Avenue. The ROW is estimated between a minimum of 50 feet to a maximum width of 60 feet, and has a posted speed limit of 25 MPH. Crossrip Street is surrounded by single-family residential uses, the FDOT Context Classification for SE Crossrip Street is Suburban Residential (C3R). Traffic volumes/data was not available for this segment.

Crossrip Street has a rural typical section, absent of curb and gutter, with swales for stormwater management. The roadway transects the FEC railroad, where several safety improvements have been completed and include signage, pavement markings, safety gates and a sidewalk on the northside. There is a 5 to 6-foot-wide concrete sidewalk on the northside of SE Crossrip Street in good to fair condition, setback at least 20-feet from vehicular traffic. **Figure 34** illustrates the typical section for existing conditions along SE Crossrip Street.

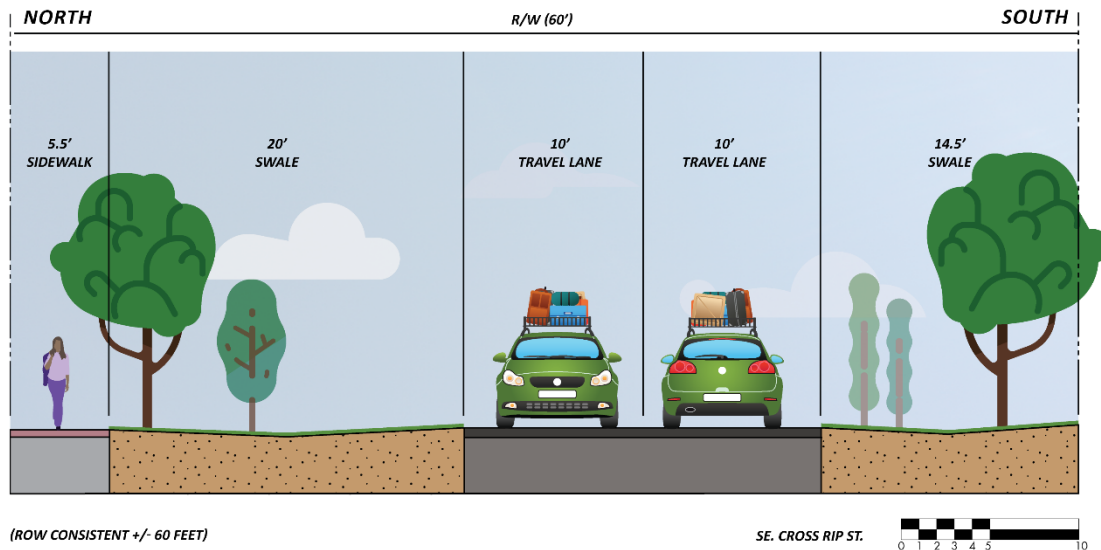


Figure 34: Existing Rural Typical Section for Crossrip St

Crossrip Street does not connect to either terminus of the planned SUN Trail corridor. There are no signalized intersections along SE Crossrip Street. The intersection at CR-A1A/Crossrip Street is stop controlled for traffic flowing east/west. Traffic flowing south and north along CR-A1A is free flowing. There are no crosswalks or signage for pedestrians to cross this intersection, but there are recent safety improvements which have been constructed at the railroad tracks and includes a sidewalk with detectable warning surfaces and gates for pedestrians on the northside of SE Crossrip Street, see **Figure 35**. The Gomez Avenue intersections includes standard crosswalks.



Figure 35: Crossrip Street Sidewalk Improvements near CR-A1A

The southside of this segment includes fifteen (15) residential driveways, the northside includes only the sidewalk with some existing canopy trees along portions of the sidewalk.

Between 2016 and 2020 there were no reported injuries involving pedestrians or bicyclists. Roadway signage is in overall good condition. Utilities include electric power poles for transmission lines which are located on the southside of SE Crossrip Street, the northside of SE Crossrip includes several mailboxes for the homes located on the southside. SE Crossrip Street is one of three potential east/west alignments for the SUP.

4.4.6.6. SE OSPREY STREET

Osprey Street is a county roadway classified as an Urban Major Collector west of CR-A1A, and a local road east of CR-A1A/Dixie Highway, Osprey Street runs parallel to CR-708/Bridge Road and SE Crossrip Street. Osprey Street is a two-lane roadway with 10-foot travel lanes, the segment included in this study is less than one-mile in length between SR-5/Federal Highway and SE Gomez Avenue. The ROW is approximately 65 to 70 feet with a posted speed limit of 25 to 35 MPH. Osprey Street is surrounded primarily by single-family residential development. The FDOT Context Classification is Suburban Residential (C3R). The AADT volumes between SR-5/Federal Highway and CR-A1A/Dixie Highway is 4,794 vehicles per day, and 2,042 vehicles per day between CR-A1A/Dixie Highway and SE Gomez Avenue.

Osprey Street is largely a rural typical section, absent of curb and gutter, with swales for stormwater management. For the most part, there is a 5 to 6-foot-wide concrete sidewalk on the southside of Osprey Street, setback at least 20-feet from vehicular traffic. **Figure 36** illustrates the typical section for existing conditions along SE Osprey Street.

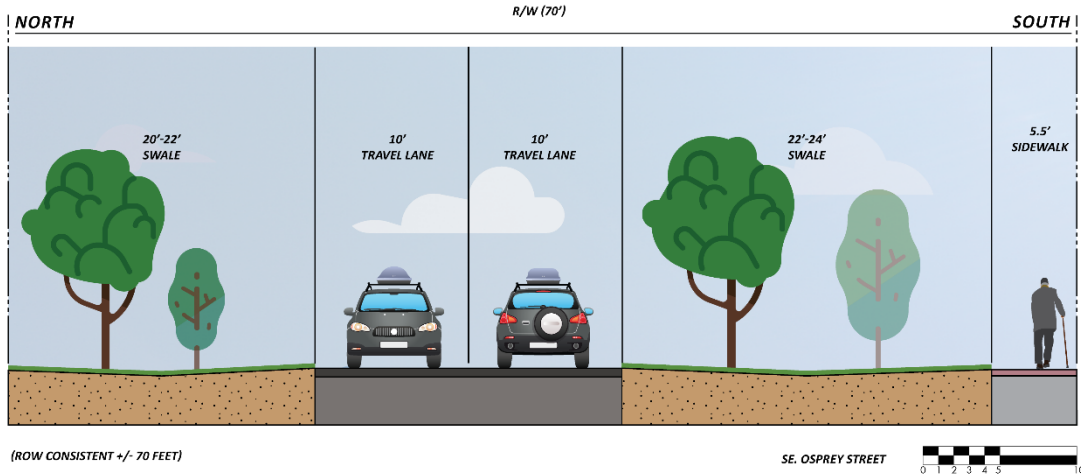


Figure 36: Existing Rural Typical Section for Osprey St.

Osprey Street has some commercial uses at the SR-5/Federal Highway and Osprey Street intersection. The southern border of the Loblolly Golf Course is on the northside of Osprey Street, between CR-A1A/Dixie Highway and SE Gomez Avenue. Osprey Street does not directly connect to the north or south terminus of the planned SUN Trail corridor.

The signalized intersections along Osprey Street include SR-5/Federal Highway and CR-A1A. The SR-5/Federal Highway and Osprey Street intersection includes standard crosswalks, push buttons, detectable warning surfaces, signals, and a guardrail on the southeast corner. The northeast corner of this intersection recently underwent development of a Publix Shopping Center. The CR-A1A/Osprey Street intersection does not have crosswalks, signals, or push-buttons for pedestrians crossing at this time, but has recently completed improvements at the railroad crossing which includes sidewalks, pavement markings, safety gates, ADA and safety improvements. These improvements include a sidewalk which begins at the northeast corner of the intersection near the railroad crossing and dead ends just east of the railroad. The northwest corner of the intersection is vacant land.

There is a 6-foot-wide concrete sidewalk on the southside of Osprey Street with a sidewalk gap +/-160 feet near SR-5/Federal Highway, see **Figure 37**, in good to fair condition. There are no sidewalks on the northside, with the exception of the recently developed Publix parcel. Between SR-5/Federal Highway and CR-A1A there is a mobile home park and seven (7) driveways along the northside of the corridor, there are no driveways on the southside of the corridor. The posted speed limit for this segment is 35 MPH and there is little shade along this segment of Osprey Street.



Figure 37: Sidewalk ends at gas station, does not connect to SR-5

The segment between CR-A1A and SE Gomez Avenue includes an existing southside concrete sidewalk 6-feet in width and in good condition, this segment is well shaded by canopy trees. There are no driveways in this segment and the posted speed limit is 25 MPH. At the intersection of Osprey Street/Gomez Avenue, two crosswalks lead to the southside sidewalk of Osprey Street.

Between 2016 and 2020, there were a total of two (2) crashes involving pedestrians, both crashes were injury related; there were no reported fatalities during this timeframe. Osprey Street is one of three potential east/west alignments for the SUP.

4.4.7. NON-MOTORIZED NETWORK

The non-motorized network in our study area includes sidewalks, a SUP, and bicycle lanes. There are trails within the major parks and a paddle trail along the Intracoastal Waterway. Figure 38 includes a map of the existing network within and around the study area illustrating the lack of sidewalks throughout the community. Bike lanes are available along SR-5/Federal Highway and CR-A1A, but both roadways have gaps with the bike lane ending. Additionally, there is a SUP along the western and southern border of Seabranche Preserve State Park, where our pathway will connect.

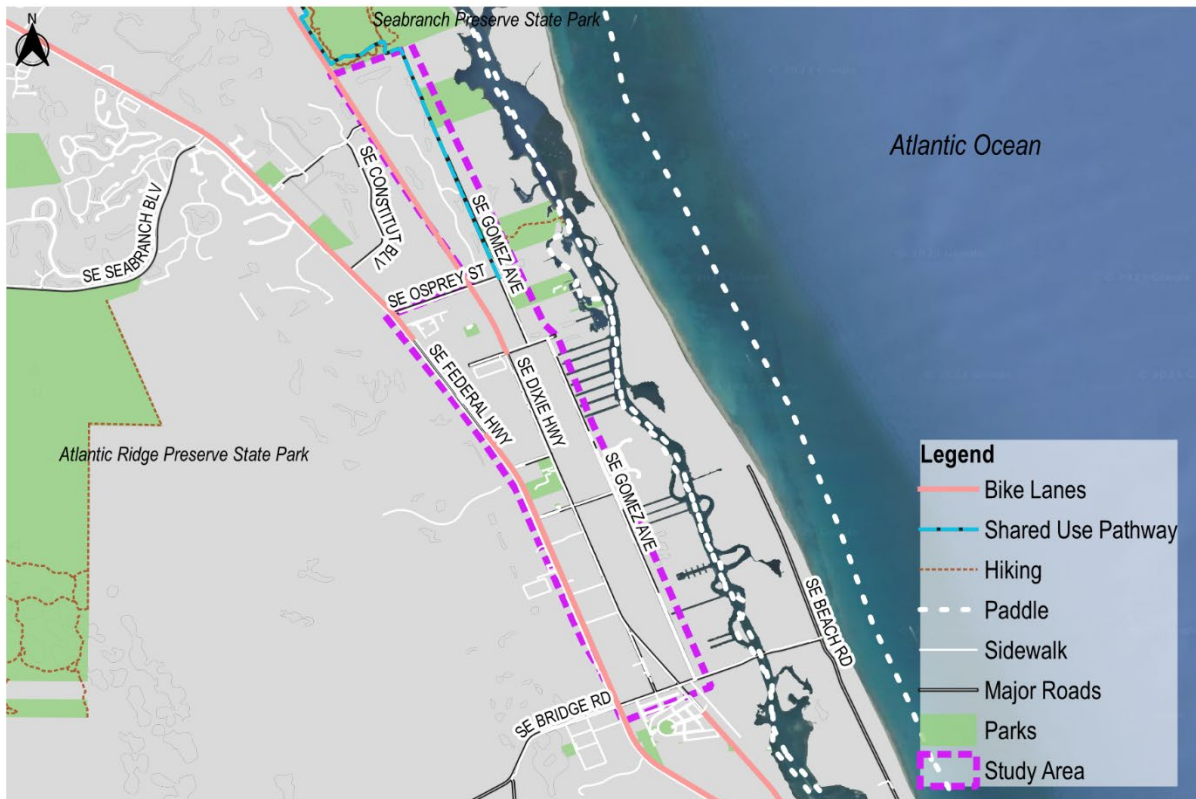


Figure 38: Non-Motorized Network

Figure 39 illustrates the regional multimodal network within Martin County which lacks connectivity and adequate facilities for bicyclists and pedestrians. Many areas lack a connected sidewalk network, and many of the bicycle facilities include 4 to 7-foot on-road bike lane adjacent to vehicular traffic. Research conducted by the U.S. DOT show these facilities often serve the highly confident bicycle user who will bike in the road with or without a facility present, these cycle enthusiasts represent a small segment of the population (5-10%). According to the FHWA, the majority of individuals who are interested (51-56%) in biking prefer a facility separated from traffic, such as a SUP (Figure 40). Providing Low-Stress Networks is an important component of transportation networks and ensuring communities have access to facilities that are safe, comfortable, convenient, and inclusive to accommodate individuals who cannot drive and allow for people of all ages and abilities to utilize. The Center for Disease Control (CDC) estimates that 1 in 4 Americans have a disability, many of whom cannot drive, therefore are dependent upon other modes of travel. Constructing facilities which can accommodate all users despite their age or ability is an important role which public agencies are beginning to address.

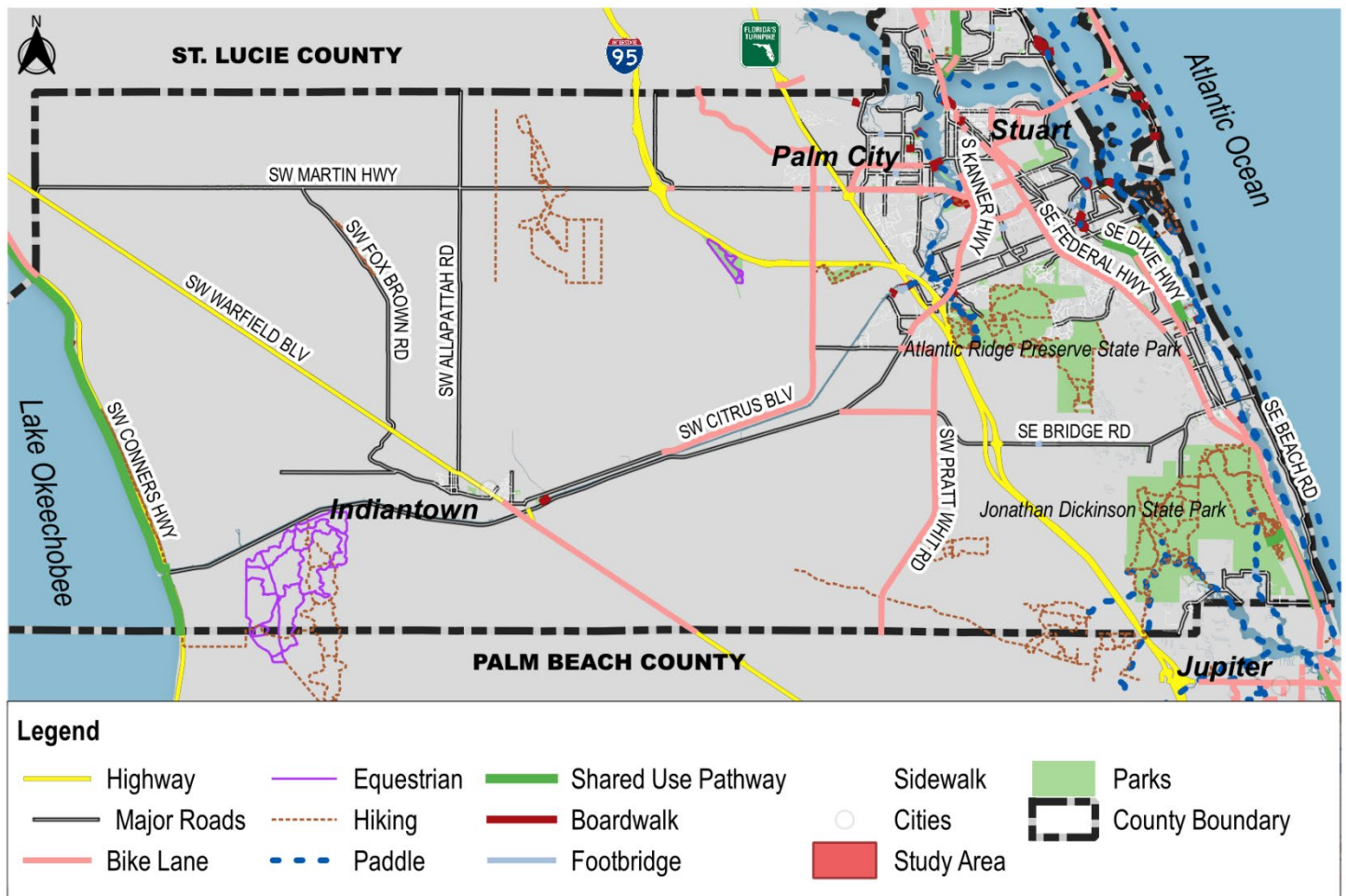
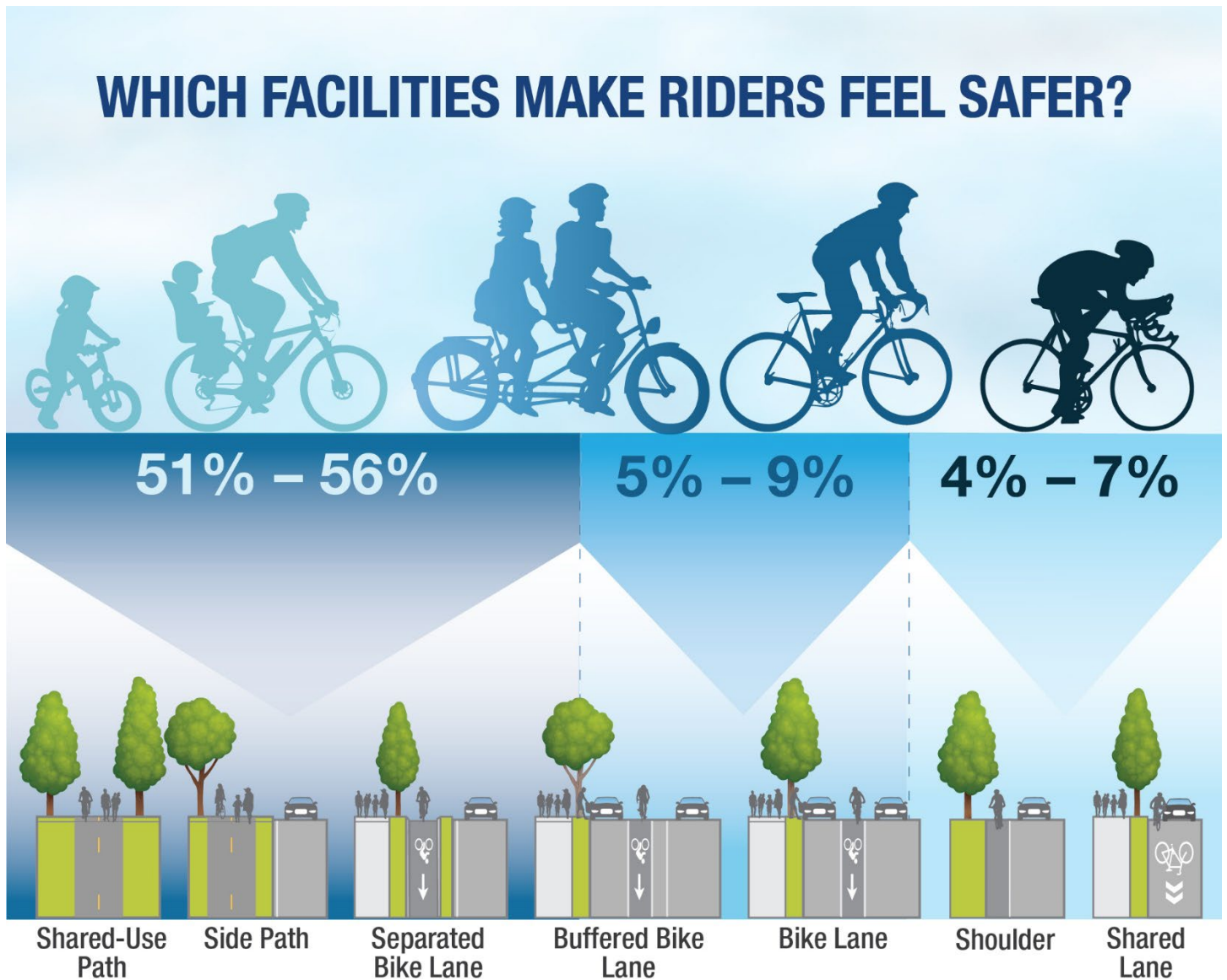


Figure 39: Martin County Non-Motorized Network

The implementation of the SUN Trail segment in east central Martin County is planned to connect from the SR-5/CR-708 intersection to the north terminus of SE Gomez Avenue. There are three potential south/north corridors including SR-5/Federal Highway, CR-A1A/Dixie Highway, and SE Gomez Avenue that are candidates to complete the segment. Additionally, CR-708/Bridge Road, SE Crossrip Street and SE Osprey Street are potential east/west

connector segments. Implementation of this segment of the SUN Trail will enhance connectivity and walkability in the area, while also providing additional mobility options for those interested in walking and biking for health, personal or economic reasons.



Note: Percentages represent the level of comfort that people feel bicycling, according to peer-reviewed surveys as recently as 2016.

Source: FHWA Bikeway Selection Guide: https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/fhwasa18077.pdf

For more information, please visit FHWA's Bicycle and Pedestrian Program webpage: https://www.fhwa.dot.gov/environment/bicycle_pedestrian/



U.S. Department
of Transportation
**Federal Highway
Administration**

Figure 40: Bicycle User Profiles & Preferred Facilities

4.5. SAFETY REVIEW

The primary purpose of this crash analysis is to identify crash trends and identify non-motorized crashes and the severity of those crashes. This crash analysis will assist this feasibility study to identify the safest route within the study area to connect the SUN Trail segment in Hobe Sound, Florida.

Various crash data sources such as FDOT’s Crash Analysis Reporting (CAR) System, the State Safety Office GIS (SSOGIS), and the University of Florida’s Signal Four Analytics (S4A) were accessed to capture all the crashes within a 5-year period. Crash data was collected from Signal Four Analytics (S4A) and reviewed from 2016 to 2020.

4.5.1. CRASH ANALYSIS FOR ALL TYPES OF VEHICLES

Crash statistics and crash histograms (by time of day, month, crash type, and severity, lighting, and surface conditions) were created and presented in the below **Tables and Figures**.

Table 4: Crash Data

Sun Trail Feasibility Study		Number of Crashes					5 Year Total Crashes	Mean Crashes Per Year	%
		Year							
		2016	2017	2018	2019	2020			
CRASH TYPE	Rear End	69	48	60	67	53	297	59.40	27.2%
	Head On	6	3	1	3	2	15	3.00	1.4%
	Angle	19	26	20	17	22	104	20.80	9.5%
	Left Turn	23	29	23	23	28	126	25.20	11.5%
	Right Turn	3	3	3	5	3	17	3.40	1.6%
	Sideswipe	12	17	16	24	15	84	16.80	7.7%
	Coll. w/ Pedestrian	1	2	1	5	5	14	2.40	1.1%
	Coll. w/ Bicycle	6	4	2	2	2	16	2.00	0.9%
	Ran Off Road	7	8	21	34	35	105	21.00	9.6%
	Overtuned	2	0	2	1	1	6	1.20	0.5%
	Animal	1	0	3	0	0	4	0.80	0.4%
	Unknown	3	6	2	6	9	26	5.20	2.4%
	Other	52	46	54	65	60	277	57.00	26.1%
	Total Crashes	204	192	208	252	235	1091	218.20	100.0%
SEVERITY	PDO Crashes	156	144	170	189	183	842	168.40	77.2%
	Fatal Crashes	1	1	1	1	0	4	0.80	0.4%
	Injury Crashes	47	47	37	62	52	245	49.00	22.5%
LIGHTING CONDITIONS	Daylight	159	158	178	194	190	879	175.80	80.6%
	Dusk	9	2	4	8	6	29	5.80	2.7%
	Dawn	2	3	3	2	3	13	2.60	1.2%
	Dark	34	29	22	47	36	168	33.60	15.4%
	Unknown	0	0	1	1	0	2	0.40	0.2%
SURFACE CONDITIONS	Dry	174	176	191	215	206	962	192.40	88.2%
	Wet	29	15	17	36	28	125	25.00	11.5%
	Others	1	1	0	0	1	3	0.60	0.3%
MONTH OF YEAR	January	18	21	16	12	28	95	19.00	8.7%
	February	21	21	17	23	26	108	21.60	9.9%
	March	19	15	19	19	20	92	18.40	8.4%
	April	13	20	13	28	17	91	18.20	8.3%
	May	17	12	18	24	21	92	18.40	8.4%
	June	18	11	17	19	18	83	16.60	7.6%

Sun Trail Feasibility Study		Number of Crashes					5 Year Total Crashes	Mean Crashes Per Year	%
		Year							
		2016	2017	2018	2019	2020			
	July	13	10	16	14	23	76	15.20	7.0%
	August	16	14	12	20	14	76	15.20	7.0%
	September	14	7	18	18	12	69	13.80	6.3%
	October	17	17	23	33	23	113	22.60	10.4%
	November	22	20	19	19	17	97	19.40	8.9%
	December	16	24	20	23	16	99	19.80	9.1%
DAY OF WEEK	Sunday	21	33	14	18	19	105	21.00	9.6%
	Monday	21	28	25	42	42	158	31.60	14.5%
	Tuesday	33	28	30	33	37	161	32.20	14.8%
	Wednesday	36	25	40	43	33	177	35.40	16.2%
	Thursday	44	26	35	40	37	182	36.40	16.7%
	Friday	24	31	37	38	46	176	35.20	16.1%
	Saturday	25	21	27	38	21	132	26.40	12.1%
HOUR OF DAY	00:00-06:00	12	9	2	10	8	41	8.20	3.8%
	06:00-09:00	33	31	38	36	22	160	32.00	14.7%
	09:00-11:00	14	25	20	26	25	110	22.00	10.1%
	11:00-13:00	26	30	27	41	34	158	31.60	14.5%
	13:00-15:00	29	26	30	40	39	164	32.80	15.0%
	15:00-18:00	58	45	59	56	67	285	57.00	26.1%
	18:00-24:00	32	26	32	43	40	173	34.60	15.9%

Notes

- 1) Collision with Bicycle Crashes include Collision with Bicycle/Collision with Bicycle in Bike Lane (Codes 11 and 12).
- 2) Fixed Object Crashes include collisions with sign/sign post, utility/light pole, guardrail, fence, concrete barrier wall, bridge, pier, Fixed Object Crashes include collisions with sign/sign post, utility/light pole, guardrail, fence, concrete barrier wall, bridge, pier, abutment, rail, tree, shrubbery, construction barricade/sign, traffic gate, crash attenuators, other fixed objects (incl. above road).
- 3) Ran-off-Road Crashes include Ran in Ditch/Culvert and Ran off road into water (Codes 29 and 30).
- 4) Other crashes include crashes not categorized as the crash types shown in the table.
- 5) Dark Crashes include both scenarios - with and without street lighting.

A total of 1,091 crashes occurred within the Hobe Sound study area (North – SE Heritage Blvd; South - Jonathan Dickson State Park, West – 1 mile from SR-5/Federal Highway; and East – SE Ocean Road), from 2016 to 2020.

Rear-end (27.2%) crashes, followed by left-turn crashes (11.5%) and angled (9.5%) crashes were the top three crash types in the area. Four (4) fatal crashes occurred in 2016, 2017, 2018 and 2019. Most crashes (77.2%) were property damage only, and occurred during clear daylight conditions (80.6%). Despite adverse weather conditions in Florida, there were 28 or 11.5% of crashes that occurred on wet pavement conditions.

During the 5-year period, October (10.4%) was the month with the highest number of crashes. When compared to other days of the week Wednesday, Thursday, and Friday had the highest percentage of average crashes (16%) documented per year. Lastly, more crashes were recorded during the evening-time, particularly between 3 PM to 12 AM (42%).

Figure 41 illustrates a heat map of all crashes within the study area, as indicated by the heat map, the majority of crashes are concentrated along SR-5/Federal Highway, particularly at the intersection of SR-5/Federal Highway and CR-708/Bridge Road. CR-A1A/Dixie Highway has several ‘hot spot’ locations for crashes, particularly at the intersections of SE Osprey Street, SE Crossrip Street, SE Pettway Street, SE Lares Avenue, CR-708/Bridge Road,

and SE Saturn Avenue. The heat map also indicates, SE Gomez Avenue had the least number of crashes in comparison to SR-5/Federal Highway and CR-A1A/Dixie Highway. Hotspots for crashes along Gomez Avenue include the intersections at SE Crossrip, SE Pettway and CR-708/Bridge Road.

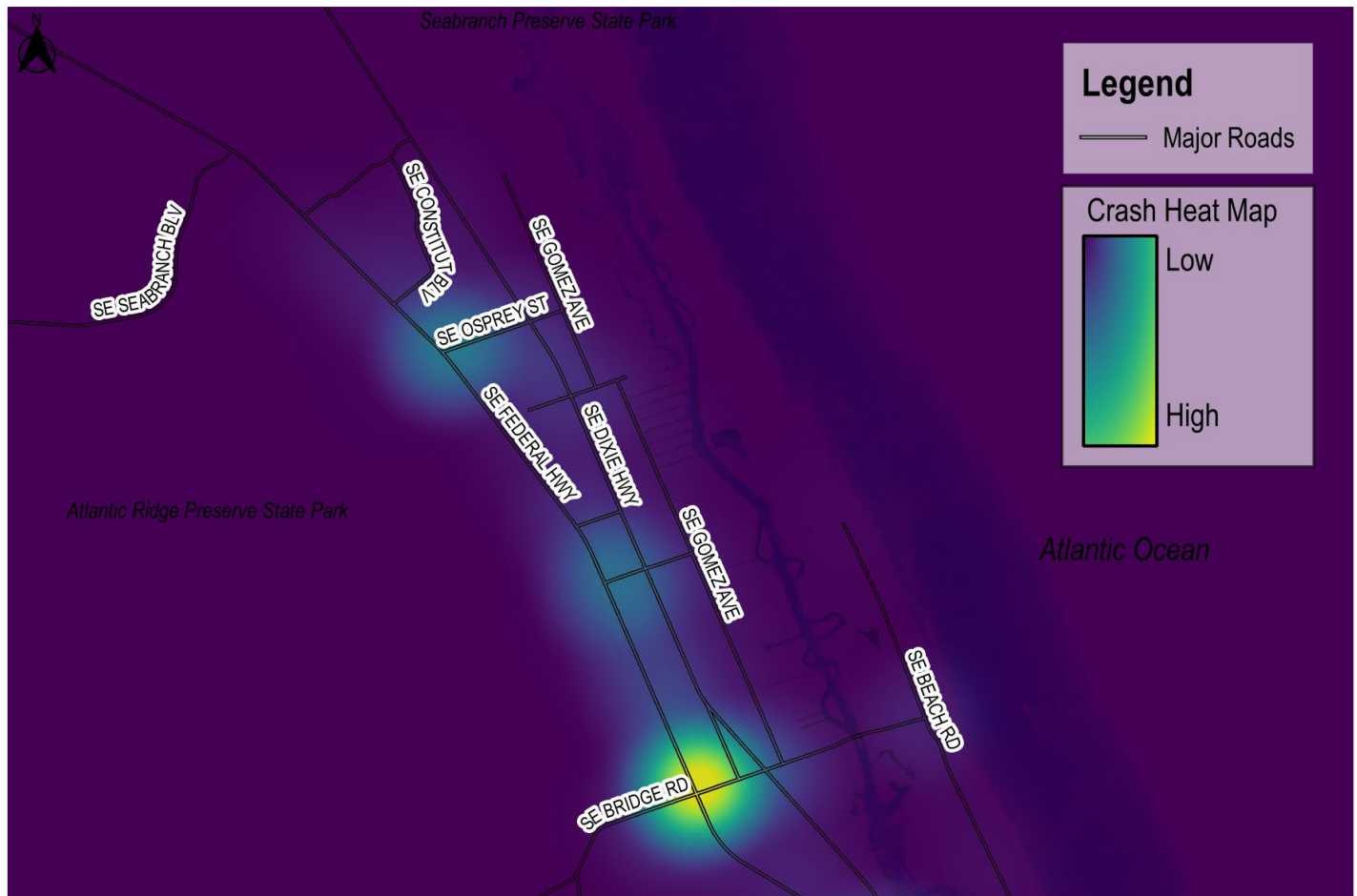


Figure 41: Heat Map of All Crashes (2016-2020)

The data reviewed indicates the majority of crashes are property damage only. While there are crashes that resulted in injuries along CR-A1A/Dixie Highway and SE Gomez Avenue, the majority of these types of crashes occurred along SR-5/Federal Highway, particularly at the intersection of SR-5/Federal Highway and CR-708/Bridge Road. For the purpose of this study, it is important to note that SE Osprey Street, SE Lares Avenue and CR-708/Bridge Road also had a significant concentration of injury related crashes. SE Gomez Avenue had the least number of injury related crashes in the study area.

Of the four (4) crashes that resulted in a fatality, two (2) occurred along SR-5/Federal Highway, one (1) occurred on CR-A1A/Dixie Highway at SE Osprey Street and one (1) other occurred on SE Gomez Avenue near SE Jupiter Narrows Place.

4.5.2. PEDESTRIAN AND BICYCLE CRASH ANALYSIS

There were 14 pedestrian crashes within the area from 2016 to 2020, see **Figure 42**. Five (5) pedestrian crashes occurred in 2019, and 2020, two (2) occurred in 2017, and one (1) occurred in 2016 and 2018. All 14 of the pedestrian crashes occurred during clear weather conditions, nine (9) of the 14 crashes occurred during daylight

conditions. Ten (10) crashes resulted in injuries and four (4) crashes were property damage only. Five (5) of the pedestrian crashes occurred on Monday, three (3) occurred on Wednesday, the remaining six (6) pedestrian crashes occurred on a Friday (2), Saturday (2) and Sunday (2). Five (5) pedestrian crashes occurred along or near CR-A1A/Dixie Highway at SE Osprey Street, SE Lars Avenue and CR-708/Bridge Road, four (4) of the five (5) crashes resulted in injury.

There were 16 bicycle crashes within the area. Six (6) bicycle crashes occurred in 2016, Four (4) bicycle crashes occurred in 2017, two (2) occurred in 2018, 2019 and 2020. Fourteen (14) bicycle crashes occurred in clear weather conditions, one occurred in cloudy weather conditions, and the other occurred in rainy weather conditions. Twelve (12) crashes occurred during daylight and four (4) occurred during dark light conditions. Fourteen (14) of the bicycle crashes were injury related crashes and two (2) included property damage only. Three (3) of the bicycle crashes occurred along SE Gomez Avenue near SE Pettway Street, SE Alabama Place and SE Colony Street, all three (3) of those crashes resulted in injuries. Two (2) of the bicycle crashes occurred along CR-A1A/Dixie Highway near CR-708/Bridge Road and SE Pettway Street both crashes resulted in injuries

It is important to note that during the analysis of this data, there was one pedestrian crash which was incorrectly categorized as a bicycle crash, the correction was reflected in the above analysis.



Figure 42: Bicycle & Pedestrian Crashes (2016-2020)

5. FEASIBILITY ANALYSIS

A feasibility analysis was conducted to identify several route alignments connecting the existing SUP to CR-708/Bridge Road. The analysis reviewed several factors to identify the pros and cons of each potential alignment option, which can be used to inform any subsequent design concepts. Per the AASHTO guide for the development of bicycle facilities, the factors to consider when deciding where bicycle improvements are needed to develop a connected bicycle transportation network include:

- User needs
- Traffic volume, vehicle mix, and speeds
- Identifying major barriers
- Connection to land uses
- Logical route
- Intersections
- Aesthetics
- Spacing and density of bikeways
- Safety and security
- Overall feasibility

The above information was compiled and input into an evaluation criterion, data collected, and analysis of each alignment alternative, discussed further in this section.

5.1. DATA

Data was gathered at the beginning of the study through a public records request for plans, reports, easements, right-of-way, utilities, infrastructure, and as-built plans through Martin County. Additional data was downloaded from the FDOT, FDEP, and Martin County.

Demographic data utilized was from the 2017-2021 ACS 5-Year Estimates. Environmental data included sources from Martin County, State Historic Preservation Officers (SHPO) database, and FDEP. Roadway data sources were obtained from FDOT and Martin County. Once data was collected, a desktop review of the information was conducted utilizing GIS and aerial imagery. Field visits were also conducted at the beginning of this project to note the existing conditions of the study corridors and to confirm the desktop review. A photo summary of existing conditions can be found in **Appendix D**.

5.2. EVALUATION CRITERIA

We began this study with three (3) alignment alternatives guided by the need to complete a separated facility which implements a portion of the Florida SUN Trail in Martin County, connecting Jonathan Dickinson State Park to Seabranh Preserve State Park. The purpose of this study focused on providing safe, comfortable and equitable access for bicycle, pedestrian and personal conveyance devices. Three primary categories of criteria were developed for feasibility analysis of the alignments, the categories include safety, infrastructure, and connectivity. **Table 5** includes the information and data that was collected, reviewed and analyzed for the criteria.

Table 5: Data Review for Evaluation Criteria

SAFETY	INFRASTRUCTURE	CONNECTIVITY
Pedestrian Crash Severity	No. of Driveways	No. of Schools
Bicycle Crash Severity	Existing Pedestrian Facilities	No. of Transit Routes & Bus Stops
Posted Speed Limit	Existing Bicycle Facilities	No. of Key Destinations
AADT	Existing Shared Use Pathway	No. of Parks
	Existing Shade	
	Right-of-Way	

Once this data was gathered, a score was assigned to each criterion. The scores ranged from 0 to 20, with a higher score having a drawback. The alignments with higher scores are considered to be less feasible than alignments with a lower score. A breakdown of scoring definitions, data sources, and points is provided in **Appendix E**.

5.3. POTENTIAL ALIGNMENTS

Three potential south/north alignments have been identified for a SUP within the study area boundaries connecting to SR-5/Federal Highway at CR-708/Bridge Road to the existing SUP south on SE Gomez Avenue and connects through Seabranche Preserve State Park. The alignments were selected based on review of corridor data, planning documents, available right-of-way and connections to the identified logical termini, see **Figure 43**.



Figure 43: Potential Route Alignments

The alignments include SR-5/Federal Highway, CR-A1A/Dixie Highway, and SE Gomez Avenue. There are also three potential east/west cross street connections for the pathway, these cross streets have been identified as CR-708/Bridge Road, SE Crossrip Steet, and SE Osprey Street. It is important to note that the cross streets selected are based on intersections that have sidewalks and pedestrian crossing gates over and along the FEC railroad tracks. The three potential alignments identified and include:

1. Gomez Avenue to Osprey Street to SR-5/Federal Hwy to CR-708/Bridge Rd (Yellow)

2. Gomez Avenue to Osprey Street or Crossrip Street to CR-A1A/Dixie Hwy to CR-708/Bridge Rd (Purple)
3. Gomez Avenue to CR-708/Bridge Rd (Orange)

A preferred route was selected through a comparative matrix, agency coordination, and public input. The comparative matrix utilizes crash data, pedestrian and bicycle infrastructure, traffic volumes, ROW information, connectivity and the number of driveways to identify the best possible route alignment for this study, see **Appendix E** for a detailed evaluation criterion - it is important to note that some factors were applied to the west, east, south, north portions of the corridor, while other factors accounted for the roadway as a whole. **Table 6** includes a summary of the comparative matrix, the lower the total score, the more feasible it is to implement.

Table 6: Summary Comparative Matrix

FACTOR	GOMEZ AVE ROUTE	CR-A1A/DIXIE HWY ROUTE	SR-5/FEDERAL HWY ROUTE
Safety	9	12	21
Infrastructure	14 (E) / 15 (W)	36 (E) / 41 (W)	15 (E) / 20 (W)
Connectivity	5	8	7
TOTAL SCORE	28 (E) / 29 (W)	56 (E) / 61 (W)	43 (E) / 48 (W)

The above referenced table is a summary of the final scores for each of the proposed alignments. Per the evaluation criteria, SE Gomez Avenue scored the lowest (most feasible) due the posted speed limit, AADT, bicycle/pedestrian crashes, shade, schools, and parks. CR-A1A/Dixie Highway scored the highest due to the many ROW restrictions.

Furthermore, at the March 9, 2022 second public meeting, the majority of attendees selected Gomez Avenue as the preferred route alignment, where attendees were provided with colored dots and given instructions to select their preferred alignment. The results include eight (8) who selected Gomez Avenue, four (4) selected CR-A1A, and four (4) selected SR-5/Federal Highway. The individuals who expressed opposition to Gomez Avenue cited issues with the existing cyclists utilizing Gomez Avenue, students' safety concerns, flooding caused by additional pavement, fear of strangers, and increased crime. The majority of attendees were in favor the Gomez Avenue route alignment. Individuals who preferred the Gomez Avenue alignment expressed their support due to potential conflicts, traffic volumes and speeds on SR-5/Federal Highway and CR-A1A/Dixie Highway.

5.4. ALTERNATIVES

In addition to the route alignment options, a total of two alternatives were presented, reviewed and analyzed for each of the three proposed alignments. The alternatives were selected by the agency stakeholders to present to the public for additional input and feedback at the March 9, 2022 public meeting, where Gomez Avenue Alternative 2 was the selected preferred route alignment and typical section alternative.

The Consultant Team presented these findings, data and analysis at the April 18, 2022 MPO Policy Board meeting where the recommendation for Alternative 2 for the Gomez Avenue corridor was denied. The Board approved a motion for the project team to revisit and get additional local input on the remaining alternatives assessed and return to the Board with it recommended alternative. See **Appendix B** for the April 18, 2022 meeting minutes.

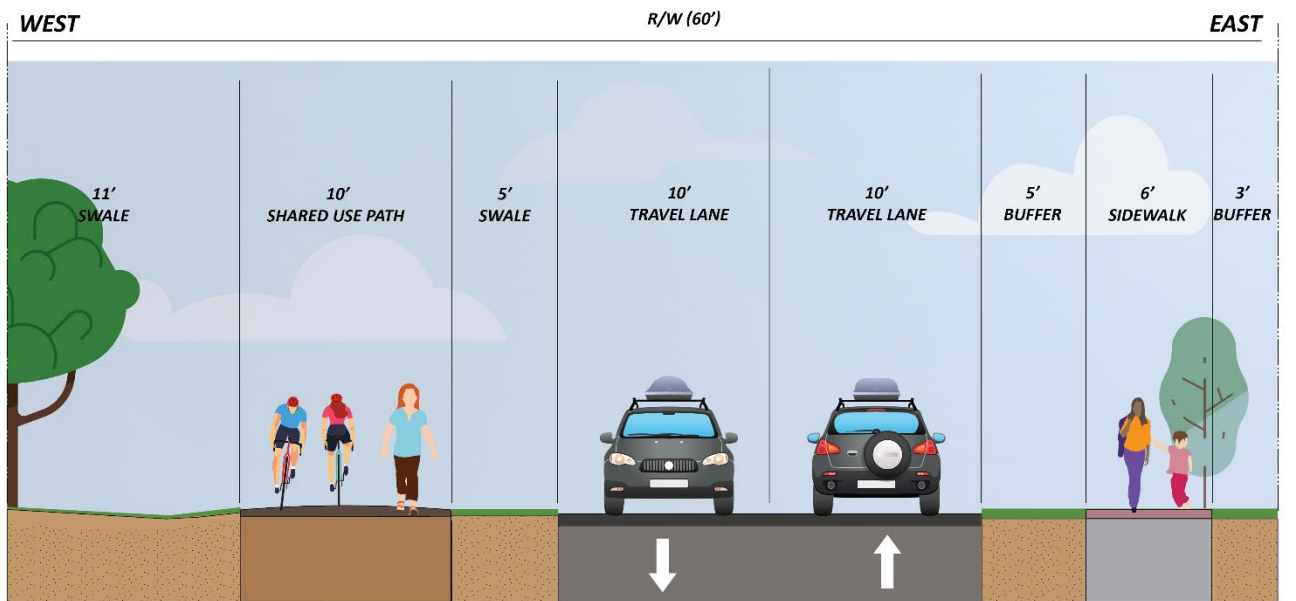
This resulted in the Consultant Team analyzing the other two corridors for the route alignment, the consultant team in coordination with MPO staff, selected SR-5/Federal Highway as the preferred route alignment due to various issues and challenges identified along CR-A1A/Dixie Highway. At a third public workshop, on January 11,

2023, two alternatives were presented to the public for selection of a preferred typical section alternative. Alternative 1 was the selected typical section alternative by a majority of the attendees (14 to 5). Alternative 1 was then presented to the MPO Policy Board at their February 27, 2023 meeting, as the selected preferred alternative to move forward to conceptual design. The alternative SUP roadways and typical sections assessed are presented in the next sections.

5.4.1. SE GOMEZ AVENUE

Gomez Avenue was identified as a likely and feasible alternative early in the process through data analysis, stakeholders, and community members. Gomez Avenue today is popular among local residents and regional cyclists due to its character and low speed limit. However, public objection at the April 18, 2022 MPO Policy Board meeting resulted in this route alignment being rejected by the Board.

Alternative 1 for Gomez Avenue includes a 10-foot SUP on the west side, initial analysis indicates the available right-of-way could fit a 10-foot pathway separated from traffic, but would explore a larger pathway, if feasible. **Figure 44** includes the proposed typical section for Alternative 1 on Gomez Avenue.



(ROW VARIES BETWEEN +/- 60 AND 90 FEET)



Figure 44: Alternative 1 SE Gomez Ave

Alternative 2 for Gomez Avenue includes a 10-foot two way separated bicycle lane with a two-foot physical barrier, separating the facility from vehicular traffic, see **Figure 45**. This was the preferred alternative selected by agency stakeholders and community members who attended the March 9, 2022 public meeting.

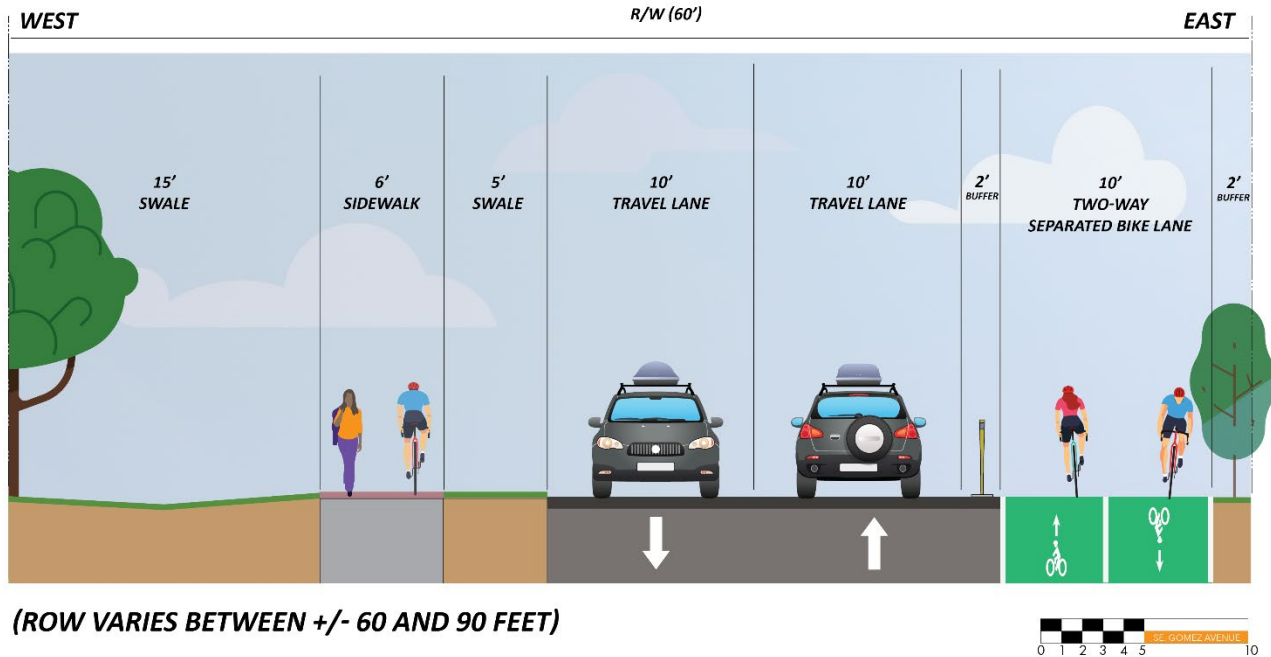


Figure 45: Alternative 2 SE Gomez Ave

5.4.2. CR-A1A / SE DIXIE HIGHWAY

CR-A1A /Dixie Highway was identified as the least feasible alignment option due to the many ROW constraints identified during the analysis of existing conditions. While CR-A1A/Dixie Highway has been voiced as one of the preferred route alignments by residents, stakeholders, and MPO board members, especially since the existing SUN Trail north of the study area is along CR-A1A/Dixie Highway. The typical right-of-way along CR-A1A/Dixie Highway is 30 to 85-feet, with severe constraints between CR-708/Bridge Road and SE Dharlys Street, as discussed in Section 5.4.6.2.

Alternatives for CR-A1A/Dixie Highway were presented with the understanding that the county would be required to acquire the missing 10-foot sidewalk easement and/or enter into a contracted agreement with the FEC Railway Corporation to allow for a SUP within their property. During stakeholder meetings, the various County representatives made clear that the County was attempting to minimize the number of contracts and agreements it had with the FEC due to costs associated with these lease agreements.

Alternative 1 included a 10-foot SUP within the existing 10-foot sidewalk easement, with the understanding that additional easements would need to be acquired to ensure a continuous pathway, see Figure 46.

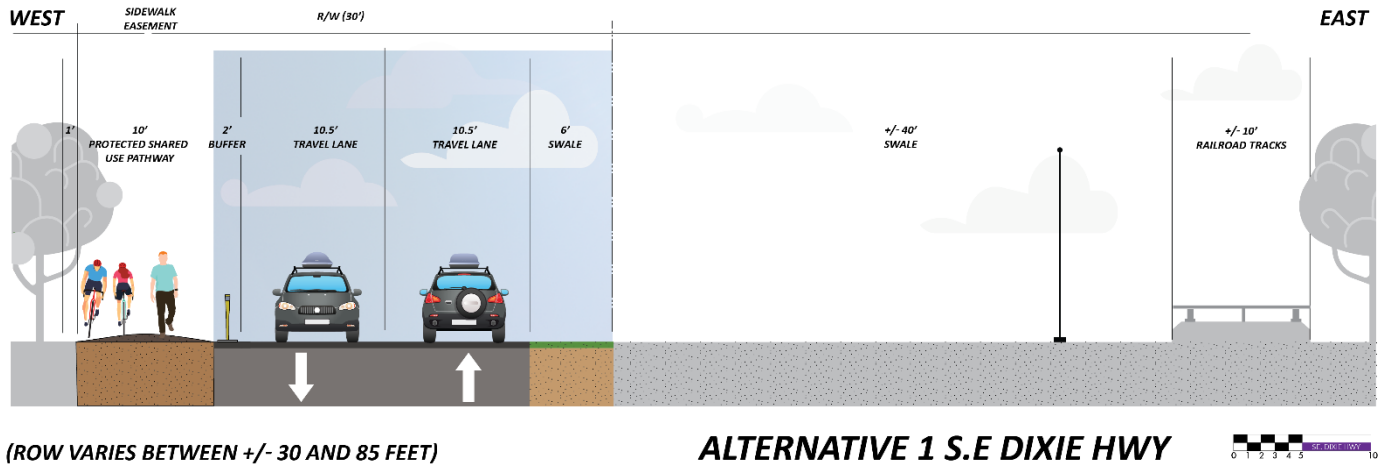


Figure 46: Alternative 1 CR-A1A/Dixie Highway

Alternative 2 includes a 10-foot pathway with two-foot physical barrier to separate the facility from vehicular traffic along the east side of CR-A1A/Dixie Highway, see **Figure 47**. This alignment would require the county to enter into negotiations and a lease agreement with the FEC Railroad Corporation. It is important to note through agency stakeholder engagement, Martin County is in the process of reducing their lease agreements with the FEC.

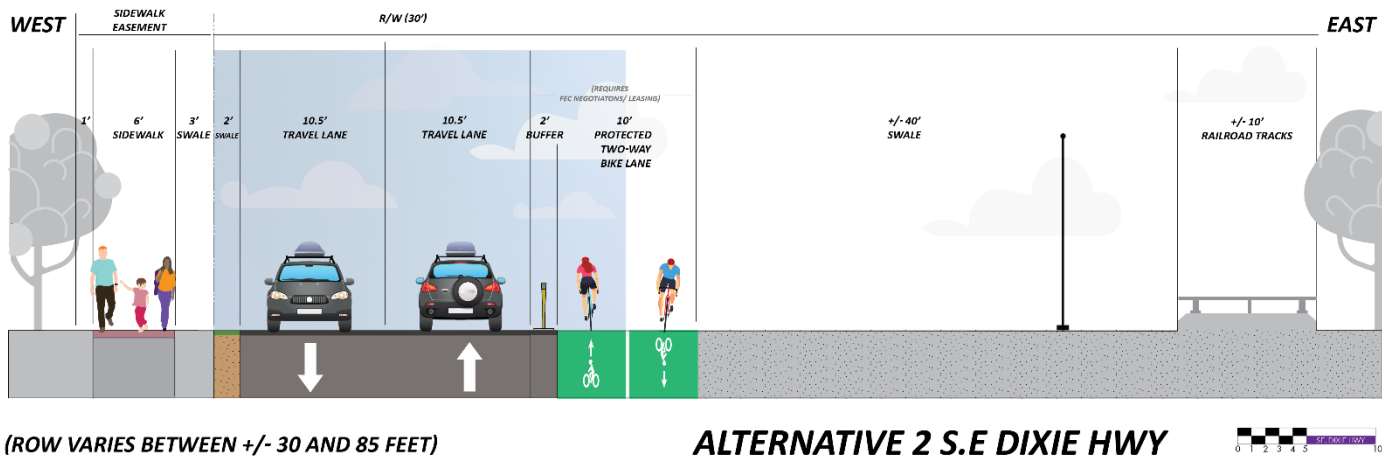


Figure 47: Alternative 2 CR-A1A/Dixie Highway

5.4.3. SR-5 / FEDERAL HIGHWAY / US-1

SR-5/Federal Highway scored in between Gomez Avenue and CR-A1A/Dixie Highway primarily due to traffic volumes, speeds, and crashes. The existing right-of-way indicates a SUP separated from traffic is feasible. This alignment also ranked the same number of votes as CR-A1A/Dixie Highway at the March 9, 2022 public meeting. The SR-5/Federal Highway route alignment was again presented to the community at a third and final public meeting on January 11, 2023, where the attendees were again encouraged to select their preferred typical section alternative.

Alternative 1 was the selected preferred alternative to move forward to conceptual design, see **Figure 48**. This typical section alternative includes a 14-foot SUP along the west side of SR-5/Federal Highway, most of which would be comfortably setback 20 or more feet from vehicular traffic.

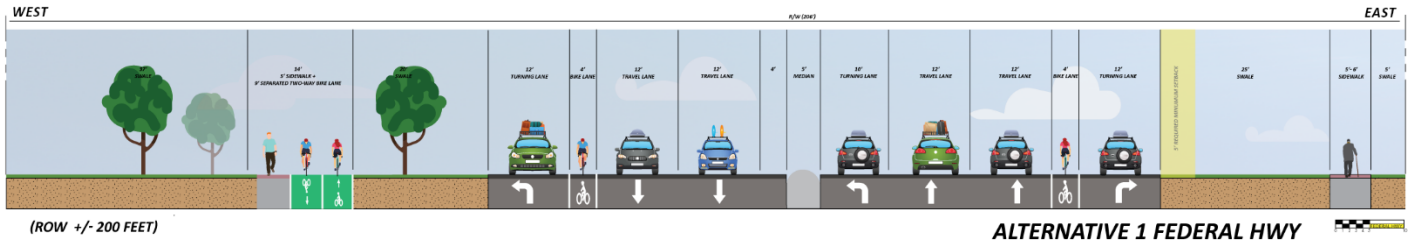


Figure 48: Alternative 1 SR-5/Federal Highway

Alternative 2 included two SUPs: a 12-foot SUP on the westside and an 8-foot SUP on the eastside, see **Figure 49**. It is important to note the Florida SUN Trail program funds one facility, the other facility would require funding from elsewhere. While residents expressed their interest in Alternative 2, Alternative 1 was ultimately selected due to cost.

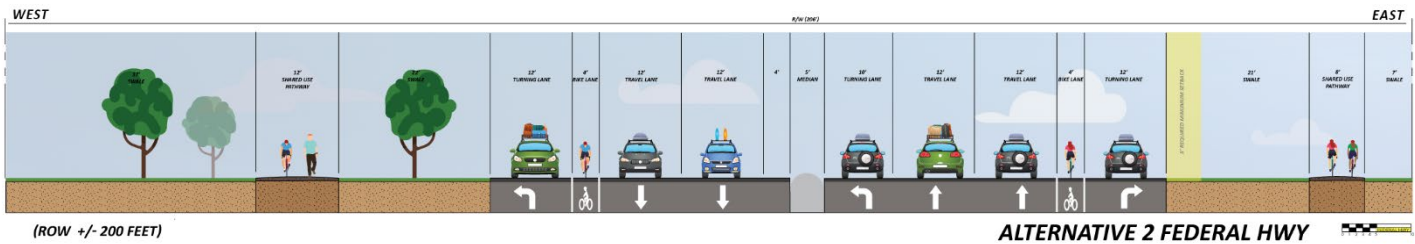


Figure 49: Alternative 2 SR-5/Federal Highway

6. RECOMMENDED ALTERNATIVE

As discussed, the recommended alternative was selected through public participation, stakeholder involvement, and meetings with the MPO Policy Board who approved the recommended alternative at the February 27, 2023 MPO Policy Board meeting. Several concerns were discussed by the board prior to approval, these concerns include safety, use, and comfort. Safety concerns included the number of conflict points (due to the number of driveways and intersections), the posted speed limits, and traffic volumes along SR-5/Federal Highway.

For the purpose of this study, the SR-5/Federal Highway alignment was divided into five (5) segments for planning and analysis purposes, these segments include:

1. SE Gomez Avenue from SUP to SE Osprey Street.
2. SE Osprey Street from SE Gomez Avenue to CR-A1A/Dixie Highway
3. SE Osprey Street from CR-A1A/Dixie Highway to SR-5/Federal Highway
4. SR-5/Federal Highway from SE Osprey Street to SE Pettway Street
5. SR-5/Federal Highway from SE Pettway Street to CR-708/Bridge Road

Figure 50 includes a map of the preferred route alignment by segment.



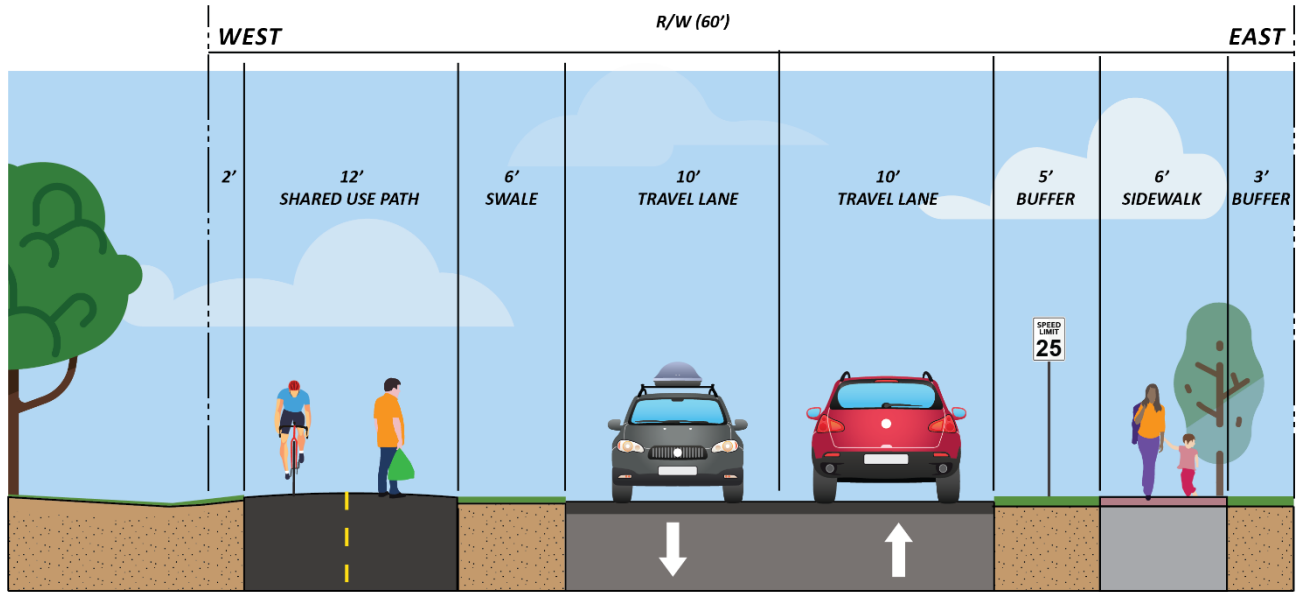
Figure 50: Preferred Route Alignment Map for SR-5/Federal Highway

6.1.SEGMENT 1: SE GOMEZ AVENUE

From the North Terminus to SE Osprey Street

The first identified segment of the alignment begins south of Seabranh Preserve State Park, midway to SE Osprey Street along Gomez Avenue. The existing 8-foot SUP is part of the ECG and Florida SUN Trail network, traversing between the Loblolly Golf Course and Gomez Preserve. The pathway connects into an existing 6-foot concrete sidewalk on the west side with a 10-foot swale. The ROW is approximately 60-feet in this segment, vehicular traffic is low, while pedestrian and bicycle traffic can be seen at all times of the day. There is one driveway, one community entrance, and one intersection in this segment. The design proposal for this segment removes the existing concrete sidewalk on the west to construct a 12-foot SUP, signage and enhanced crosswalks at the community entrance, and enhanced crosswalks and signage at the Gomez Avenue/Osprey Street intersection. The typical section is illustrated in **Figure 51** and concept design for this area includes:

- Remove existing 6-foot concrete sidewalk
- Construct 12-foot shared use asphalt pathway on west side
- Provide signage and high emphasis crosswalks at Hill Terrace and SE Osprey Street



(ROW VARIES BETWEEN +/- 60 AND 90 FEET)



Figure 51: Proposed Typical Section - Gomez Avenue

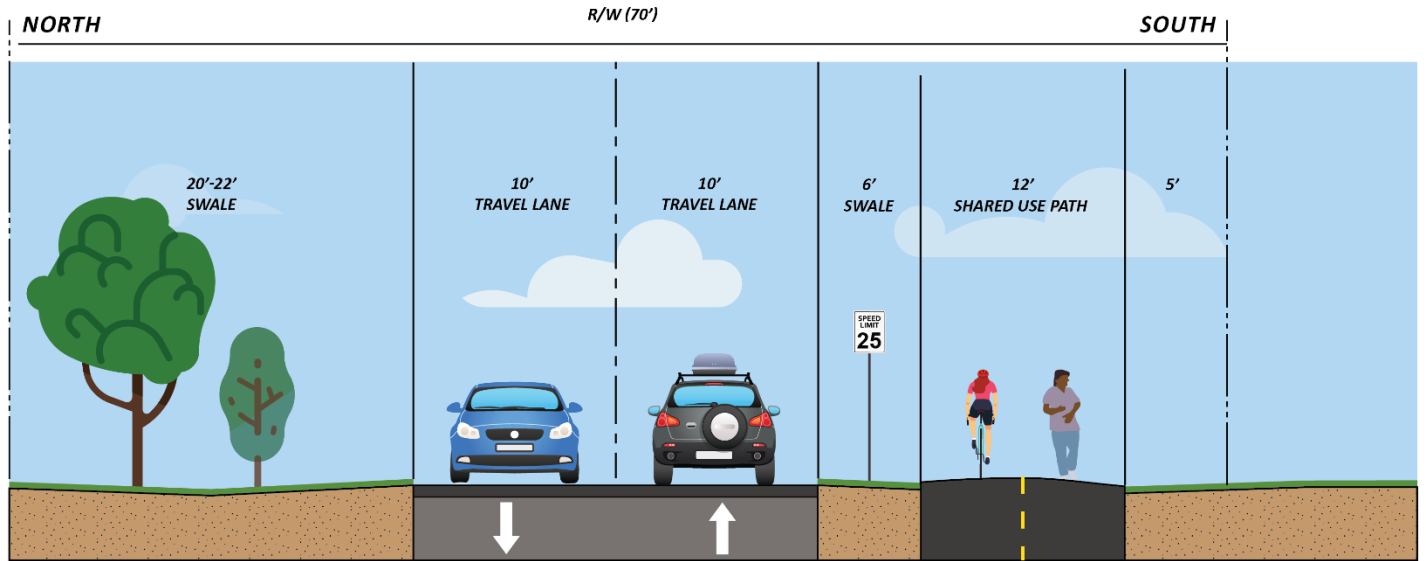
6.2.SEGMENT 2: SE OSPREY STREET

From SE Gomez Avenue to CR-A1A/SE Dixie Highway

The next segment, **Figure 52**, connects users traveling from SE Gomez Avenue to CR-A1A/Dixie Highway via SE Osprey Street, crossing the railroad tracks. The ROW is approximately 70 feet wide and it presents an approximate 22-foot swale, vehicular traffic is higher than Gomez Avenue, but remains low. The design proposed for this segment removes the existing 5.5-foot sidewalk on the southside to construct a 12-foot SUP. There are no driveways or community entrances in this segment, but this segment does include a railroad crossing owned and operated by the FEC Railroad Corporation which has an agreement with the county for crossing the railroad tracks.

This segment also includes a signalized intersection at CR-A1A/Dixie Highway. Recent improvements by the FEC include the addition of 5-foot sidewalks, safety gates, signage and pavement markings at the railroad crossing. It is recommended that the County work with the FEC to widen the pathway to accommodate users. Otherwise, the county will be required to request a variance from FDOT for the railroad crossing since the existing condition does not meet SUN Trail requirements. The typical section is illustrated in **Figure 52** and concept design for this area includes:

- Coordinate with FEC for improvements
- Removal of existing 5.5-foot concrete sidewalk
- Construct a 12-foot SUP on the south side
- Provide signage and high emphasis crosswalk at CR-A1A/Dixie Highway



(ROW VARIES BETWEEN +/- 60 AND 90 FEET)

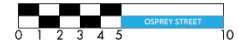


Figure 52: Proposed Typical Section, Osprey St

6.3. SEGMENT 3: OSPREY STREET

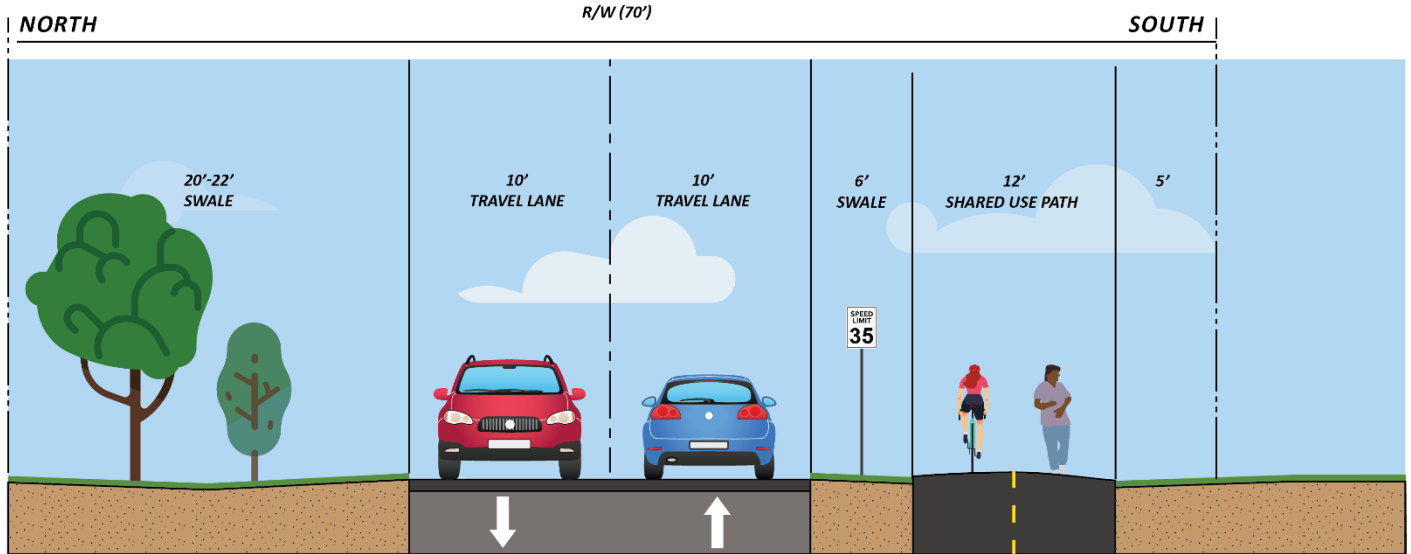
From CR-708/SE Dixie Highway to SR-5/SE Federal Highway

The third segment of the path is located along SE Osprey Street between CR-A1A/Dixie Highway and SR-5/Federal Highway. The ROW is approximately 70-feet wide and it presents an approximate 17-foot swale, vehicular traffic is higher than the first and second segments, but remains low. In order to connect the previously mentioned segments to SR-5/Federal Highway, the existing 5.5 concrete sidewalk on the south side will be removed and replaced with a 12-foot SUP.

This segment includes four driveways, one of which may be consolidated (at the Cumberland Farms Gas Station), two intersections at SE Eagle Avenue and SE Sandy Lane which would require signage, stop signs, and enhanced crosswalk markings; and one signalized intersection at SR-5/Federal Highway. Furthermore, there are also areas where utilities would need to be considered when designing this pathway as there are fire hydrants, sewer and drainage grates present in the swale in some areas of this segment. Power poles are also located on the southside. This segment also has some elevation differences as one approaches SR-5/Federal Highway, there is also a guardrail on the southeast corner of SE Osprey Street and SR-5/Federal Highway intersection which may need to be reconfigured. The typical section is illustrated in **Figure 53** and concept design for this area includes:

- Coordination with gas station on southeast corner of Osprey Street & SR-5/Federal Highway for driveway consolidation
- Coordination with FDOT on intersection improvements at Osprey Street & SR-5/Federal Highway:
 - Explore turn radii reduction
 - Lead pedestrian interval (LPI)
 - Crosswalk timing
 - High emphasis or patterned crosswalks
- Removal of existing 5.5-foot concrete sidewalk

- Construct 12-foot SUP on south side
- Install signage and high emphasis crosswalks at SE Sandy Lane, SE Eagle Ave, and SR-5/Federal Highway
- Utilities may need to be relocated
- Consider a midblock crossing to connect community on the north side



(ROW VARIES BETWEEN +/- 60 AND 90 FEET)

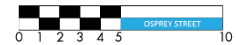


Figure 53: Proposed Typical Section, Osprey St

6.4. SEGMENT 4: SR-5/FEDERAL HIGHWAY

From SE Osprey Street to SE Pettway Street

The fourth segment of the path presents the highest posted speed limit of the alignment at 55 MPH with high traffic volumes. However, the street condition of Segment 4 has swales that vary on average between 20-35 or more feet. The ROW is over 200-feet in width, with the west side of the roadway having more available ROW than the east side. The swale’s width allows for a clear distinction from vehicular travel lanes, allowing users to be and feel protected. Furthermore, the swale area presents the opportunity for planting native shade trees in the future, thus enhancing the experience for users along the path.

This segment includes four driveways, one signalized intersection at SE Pettway Street, four intersections at SE Fairchild Way, SE Arrance Street, SE Wagon Trail, and SE Medalist Place. There is also a +/-287-foot frontage road between SE Medalist Place and SE Wagon Trail with one-way traffic, an auto repair shop, and diagonal parking. Most of this segment borders the Medalist Golf Club. Crossings would need to be enhanced to minimize conflicts, include stop signs for the SUP, signage to inform motorists, and enhanced or raised crosswalks. The design could widen the existing concrete sidewalk or replace it with a 14-foot asphalt pathway. The proposal also would require reducing the travel lane along the one-way frontage road and modifying existing parking to fit the 14-foot pathway. Bicycle, pedestrian and ADA improvements would also be required for the SE Pettway Street signalized intersection. This segment also includes elevation changes that would need to be taken into account for sloping and ADA purposes. The typical section is illustrated in **Figure 54** and concept design for this area includes:

- Coordination with property owners located on the northwest corner of SR-5/Federal Highway and SE Wagon Trail for reconfigured angled parking due to pathway
- Coordination with FDOT on safety study to lower design speed, consider reducing speed limit to 30-35 MPH
- Coordination with FDOT on intersection improvements at Pettway Street & SR-5/Federal Highway:
 - Explore turn radii reduction
 - Lead pedestrian interval (LPI)
 - Crosswalk timing
 - High emphasis or patterned crosswalks
 - Raised crosswalk across SE Croft Cir
- Removal of existing 5-foot concrete sidewalk
- Construct 14-foot SUP on west side
- Install signage and high emphasis/raised crosswalks at Medalist Golf Course maintenance driveway, SE Medalist Place, SE Wagon Trail, SE Arrance Street, SE Fairchild Way
- Consider a signalized midblock crosswalk to connect pathway to or near Doc Myers Park and residential community on east side

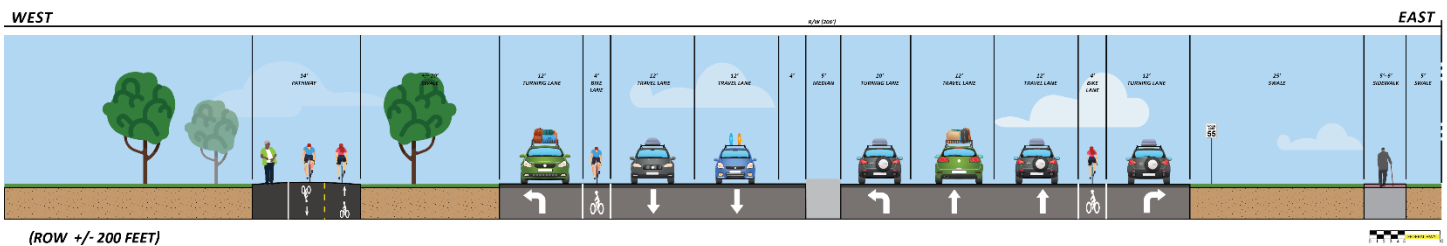


Figure 54: Proposed Typical Section, SR-5/Federal Hwy

6.5. SEGMENT 5: SR-5/FEDERAL HIGHWAY

From SE Pettway Street to CR-708/Bridge Road

The fifth and final segment of the project continues along SR-5/Federal Highway between SE Pettway Street and CR-708/Bridge Road, which also has a swale varying between 20-35 feet on average. The ROW is similar to Segment 4 with over 200 feet available, again, the west side of the roadway has more available ROW than the east. This segment includes a number of shade trees along the swale. The posted speed limit in this segment is 45 MPH with high traffic volumes. This segment includes various driveways and intersections. There are also multiple areas where there is a frontage road, which at times is one-way, but the largest section is two-way. This segment also includes the CR-708/Bridge Road signalized intersection. This area includes three typical sections due to the frontage road and is illustrated in **Figures 55 through 57**, general concept design for this area includes:

- Coordination with property owners located on the northwest corner of SR-5/Federal Highway and SE Mansion Lane for reconfigured angled parking due to pathway
- Coordination with FDOT on safety studies to lower design speed, consider reducing speed limit to 30-35 MPH
- Coordination with FDOT on intersection improvements at CR-708/Bridge Road & SR-5/Federal Highway:
 - Explore turn radii reduction

- Lead pedestrian interval (LPI)
- Crosswalk timing
- High emphasis or patterned crosswalks
- Removal of existing 5-to-9-foot concrete sidewalk
- Construct 14-foot SUP on west side
- Install signage and high emphasis/raised crosswalks at SE Mansion Lane, SE Sugar Pines Way, SE Evergreen Street, SE Woodland Road, SE Lake Drive, SE Sunset Street, SE Pine Circle, and Island Crossings Shopping Center driveways
- Consider a signalized midblock crosswalk to connect the pathway between CR-708/Bridge Road and SE Pettway to the residential community on the east side

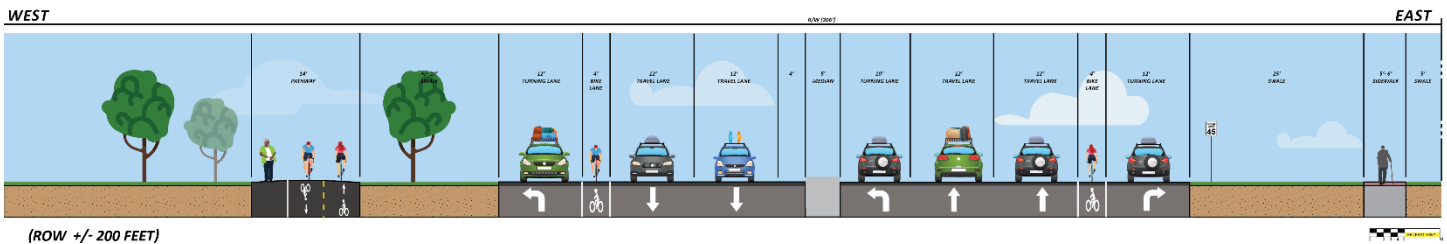


Figure 55: Proposed Typical Section, SR-5/Federal Hwy

Driveway and intersection crossings would need to include enhanced crosswalks, stop signs on the SUP, and signage for motorists. Another tactic can include raised crosswalks which would act as traffic calming across driveways and/or local streets, while elevating the non-motorized user to the view of motorists. Segment 5 includes various areas where this is a frontage road, these areas include:

- SE Fairchild to SE Mansion Lane (One-way)
- SE Sand/Surf Street (Two-way)
- SE Lake Drive to SE Pine Circle (Two-way)
- Catfish House Restaurant Circulation & Parking (One-way)

SE Fairchild to SE Mansion Lane is a frontage road for several marine related businesses, this area is a one-way road with diagonal parking. The roadway can be reconfigured to narrow the travel lane and place the pathway in front of the businesses, see **Figure 56**. The proposed typical section includes a 14-foot SUP, reconfigured angled parking, and narrows the travel lane to 11-feet with no impacts to the existing swale.

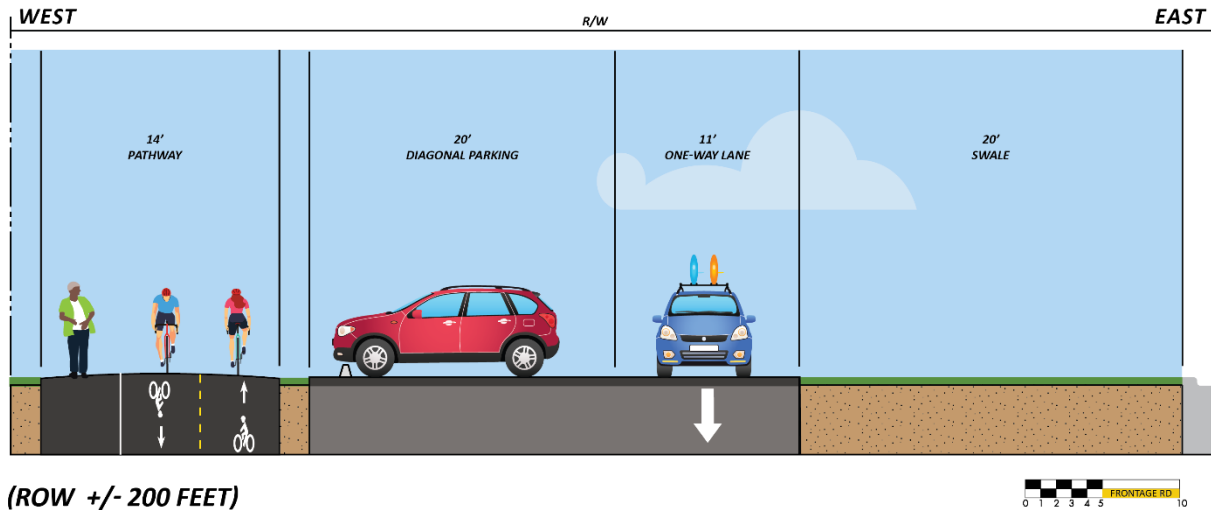


Figure 56: Frontage Road Proposed Typical Section

SE Sand/Surf Street can be avoided by designing the pathway within the swale, instead of where the existing sidewalk is today. The proposed pathway alignment for the SUP is within the existing swale to reduce conflicts.

SE Lake Drive to SE Pine Circle is the longest stretch of the frontage road and there are several businesses along this roadway with parking in the ROW. The County may want to work with the businesses to consolidate parking on site, rather within the public ROW. For the proposed alignment, the pathway would be placed within the swale between the Frontage Road and SR-5/Federal Highway to minimize conflicts with vehicles, parking, and businesses. This is also true for the Catfish House Restaurant area where the majority of the restaurants parking is in the public ROW. The parking area would need to be reconfigured near SE Sunset Street to allow for the SUP, this area is proposed to be parallel parking instead of 90° parking, therefore a total of 8 parking spaces would be lost. The proposed typical section keeps the existing 5-6-foot sidewalk intact, two 12-foot travel lanes with 90° and parallel parking, and a 14-foot SUP within the swale.

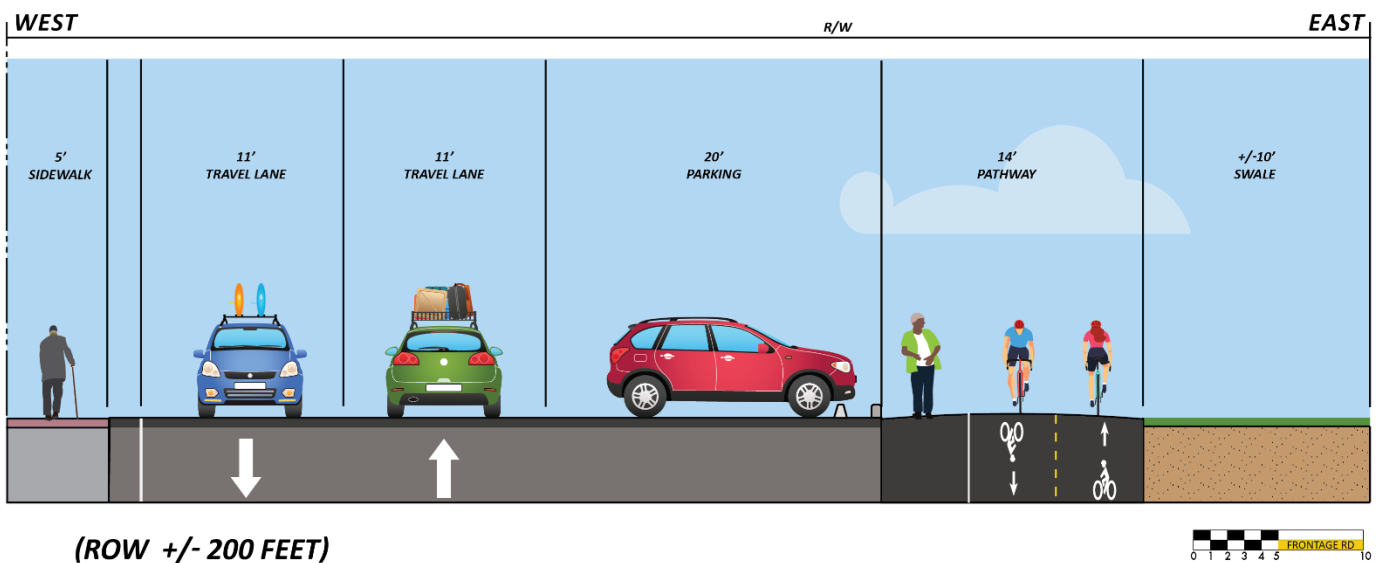


Figure 57: Frontage Road Proposed Typical Section

6.6. PROPOSED CONCEPTUAL PLAN

The proposed conceptual plan for SE Federal Highway for this segment of the Florida SUN Trail and ECG is illustrated in Figures 58 through 63, a full-page view of the proposed trail is available in Appendix F.

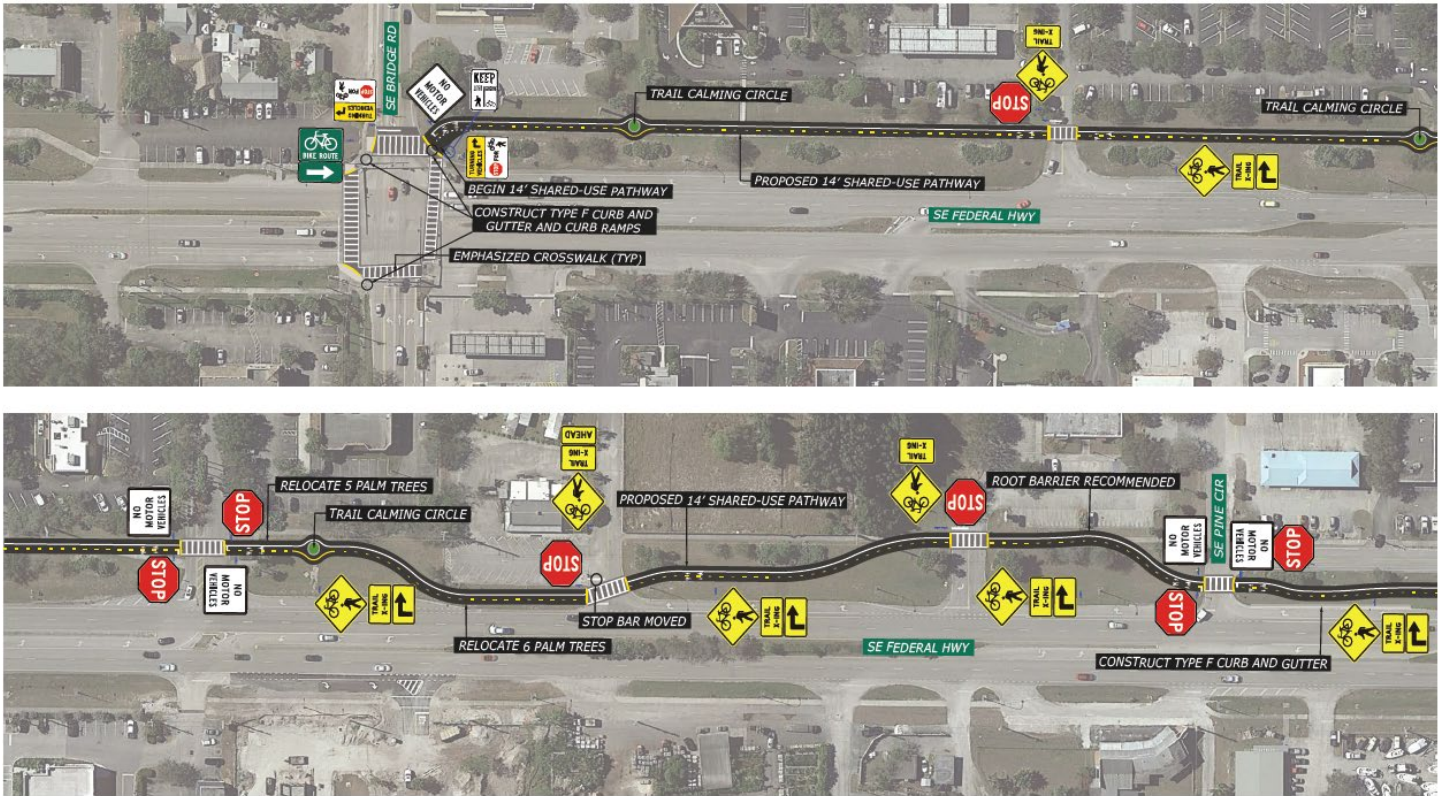


Figure 58: Conceptual Plan View (CR-708/Bridge Road to SE Pine Cir)

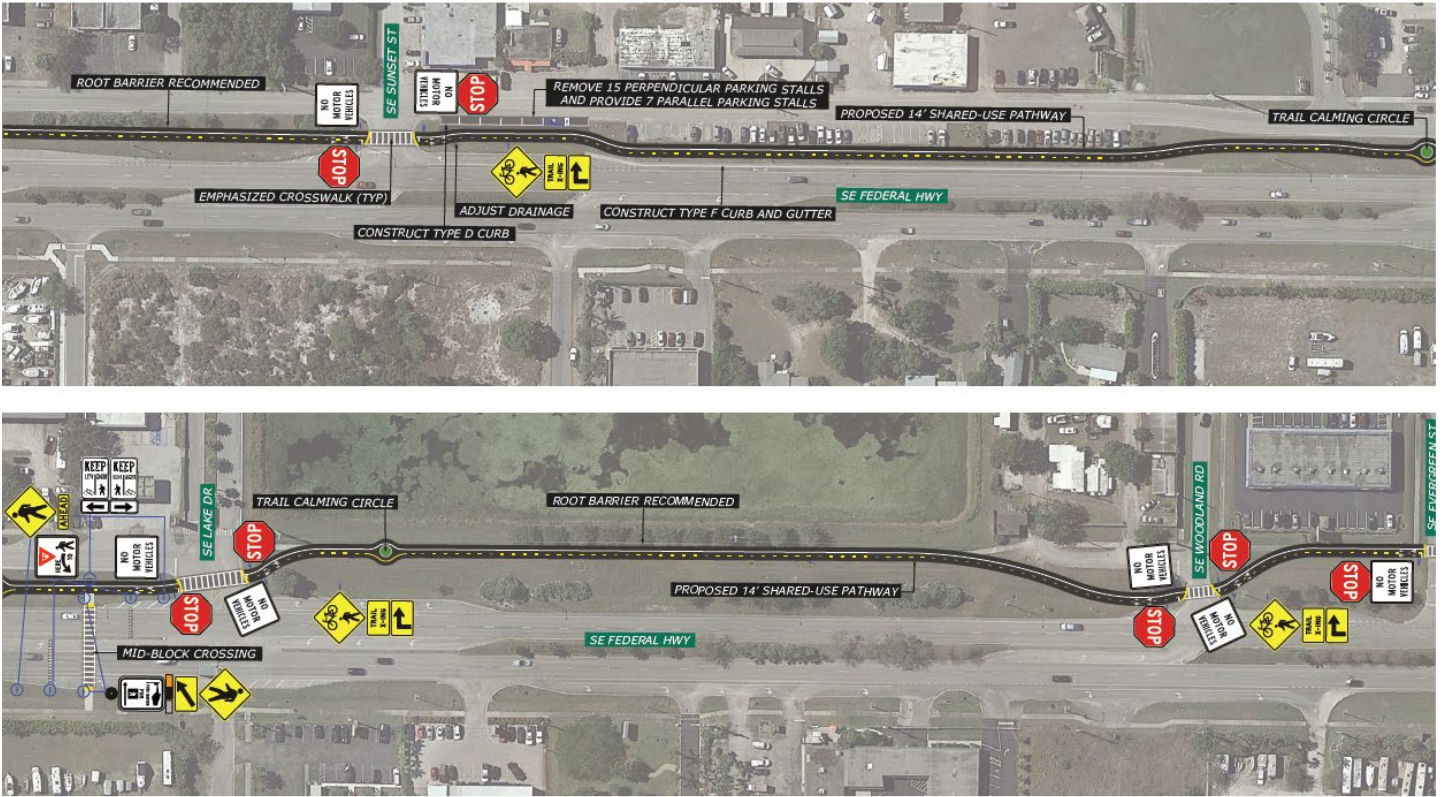


Figure 59: Conceptual Plan View (SE Pine Cir to SE Evergreen St)

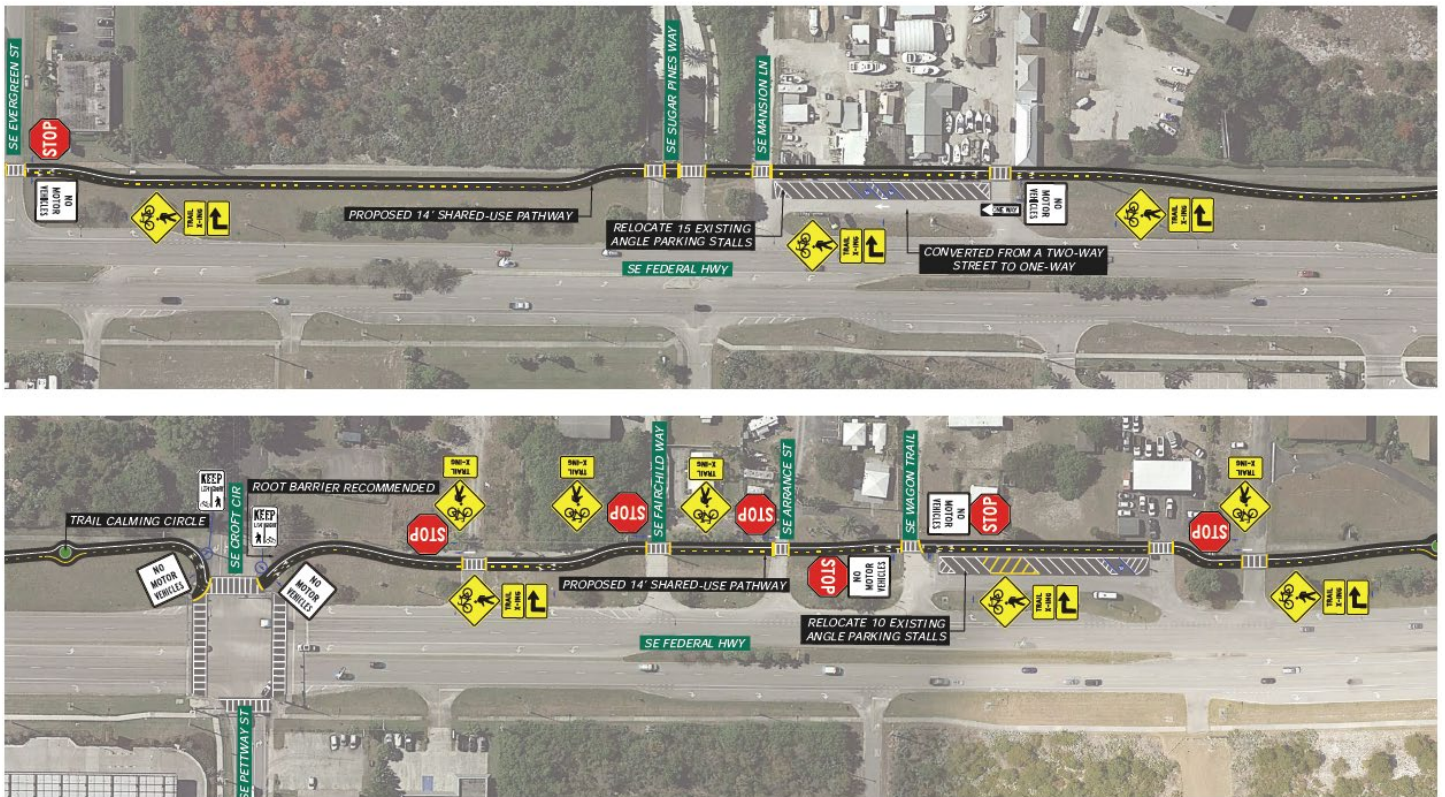


Figure 60: Conceptual Plan View (SE Evergreen St to south of SE Medalist Pl)



Figure 61: Conceptual Plan View (SE Medalist Pl to Medalist Golf Course Maintenance Facility)



Figure 62: Conceptual Plan View (east border of Medalist Golf Course)



Figure 63: Conceptual Plan View (east border of Medalist Golf Course)

The next segment of the proposed conceptual plan is for SE Osprey Street for this segment of the Florida SUN Trail and ECG, and is illustrated in Figures 64 through 66, a full-page view of the proposed trail is available in Appendix F.



Figure 64: Conceptual Plan View (SE Federal Hwy to SE Osprey St)



Figure 65: Conceptual Plan View (SE Osprey St to SE Dixie Hwy)



Figure 66: Conceptual Plan View (SE Osprey Street to SE Gomez Ave)

The next segment of the proposed conceptual plan is for SE Gomez Avenue for this segment of the Florida SUN Trail and ECG, and is illustrated in Figures 67 and 68, a full-page view of the proposed trail is available in Appendix F.



Figure 67: Conceptual Plan View (east border of Loblolly Golf Course)



Figure 68: Conceptual Plan View (east border of Loblolly Golf Course connecting to existing SUN Trail)

7. FUTURE CONSIDERATIONS

Future considerations are for the next phase of this process and consider long-term use and sustainability of the proposed facility. This section includes information and recommendations on drainage, utilities, access management and driveways, intersections, traffic calming, environmental, amenities, maintenance and permits. It is important to note that the Martin MPO and County should coordinate with FDOT to conduct safety analysis to further understand the speed at which vehicles are traveling along SR-5/Federal Highway and conduct an in-depth analysis to understand the bicycle and pedestrian crashes along this corridor. Further studies are needed to inform the design of the proposed SUN Trail pathway.

7.1. DRAINAGE

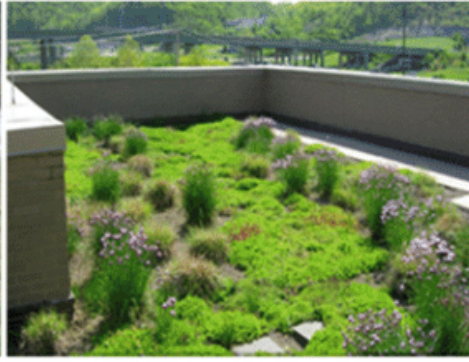
Added impervious area from the proposed facility will generate additional stormwater runoff within the corridor. To minimize the risk of flood encroachment into the travel lanes in areas where drainage may be blocked by a rise in elevation near the ROW, a few potential runoff storage sites may need to be taken into consideration. Future designers may also want to consider the use of Green Infrastructure² to mitigate the effects of stormwater runoff. This can include the use of pervious materials to offset additional surface area.

Green infrastructure is a sustainable way to manage stormwater and can include rain gardens, planter boxes, bioswales, permeable pavement, green parking, tree canopy and land conservation. Utilizing these techniques into the SUP is a sustainable cost-effective resilient solution to stormwater management, vegetation, trees, trails, parking and streetscape by providing numerous benefits to the community, **Figure 69** includes examples of green infrastructure techniques.

² Green infrastructure refers to planned, interconnected systems of green spaces, parks and natural elements that conserve natural ecosystem values and functions (Benedicts, M.A. and E.T. McMahon, 2002).



Rain garden



Green roof



Permeable pavement



Infiltration trench



Landscape water body



Grassed swale

Figure 69: Examples of Green Infrastructure

For future considerations, the County should explore the use of Green Infrastructure and work with FDOT to incorporate these elements along the SUP. It is important to note that SUN Trail funding will not cover landscaping, perhaps if these techniques were realized FDOT may take this approach into consideration rather than the use of traditional hardening techniques such as drainage systems and grates, which can be very expensive to install and maintain.

7.2. UTILITIES

Florida Power & Light has overhead power lines throughout the corridor. Power line locations are highlighted in the previous section describing the five segments. FDM Section 224.7 encourages a minimum of four feet of horizontal clearance from above grade obstacles to the edge of a multi-use trail. The location of the power poles and other utility structures will need to be further evaluated during future design phases to mitigate potential impacts. Other utilities include underground fiber optic, sewage and drainage, fire hydrants, utility boxes, and light poles.

7.3. ACCESS MANAGEMENT AND DRIVEWAYS

Access management is the coordinated planning, regulation, and design of access between roadways and land development (*FDOT Access Management Guidebook, 2019*). Thoughtful access management along a corridor can enhance safety for all modes, facilitate walking and biking, and reduce trip delay and congestion.

Access management can reduce injury and fatal crashes by as much as 31%.³ Every intersection, from a signalized intersection to an unpaved driveway, has the potential for conflicts between vehicles, pedestrians, and bicyclists. The number and types of conflict points where the travel paths of two user's intersection influence the safety performance of the intersection or driveway. Access management strategies include:

- Driveway closure, consolidation, or relocation
- Limited-movement designs for driveways (such as right-in/right-out only)
- Raised medians that preclude across-roadway movements
- Intersection designs such as roundabouts or those with reduced left-turn conflicts
- Turn lanes (i.e., left-only, right-only, or interior two-way left)
- Lower speed one-way or two-way off-arterial circulation roads

Successful corridor access management involves balancing overall safety and corridor mobility for all users along with the access needs of adjacent land uses. The construction of the proposed pathway will impact approximately 15 driveways and 16 side streets. It is anticipated that many of these paved connections will need to be rebuilt to ensure ADA compliance, some of these areas include landscaping. Avoidance of vegetation impacts should be considered, especially in areas with wider ROW. Future considerations should include raised crosswalks, additional signage for motorists, and stop signs along the pathway to inform users of potential conflicts. In addition to County collaboration with land owners and FDOT to consolidate driveways along SR-5/Federal Highway to reduce conflicts, improve operations, accessibility and safety.

7.4. INTERSECTIONS

The construction of the proposed pathway will impact four (4) signalized intersections. Many of these intersections do not meet ADA requirements and require safety improvements to ensure pedestrian and bicycle safety. As an example, the CR-708/Bridge Road and SR-5/Federal Highway intersection has a high concentration of motorized and non-motorized crashes, wide turn radius, lack of tactile pads, and vertical delineators separating the sidewalk from the roadway (which are often replaced as motorist continually run them over).

Future considerations include collaboration with FDOT to redesign signalized intersections along SR-5/Federal Highway to ensure safety and improve operations. Additional considerations include the use of bike boxes (**Figure 70**) or crosswalk markings for bicycles (**Figure 71**), as recommended per NACTO and is currently in the draft version of the MUTCD guidelines, which is currently pending approval.

³ Highway Safety Manual



Figure 70: Bike Box (Source: NACTO)

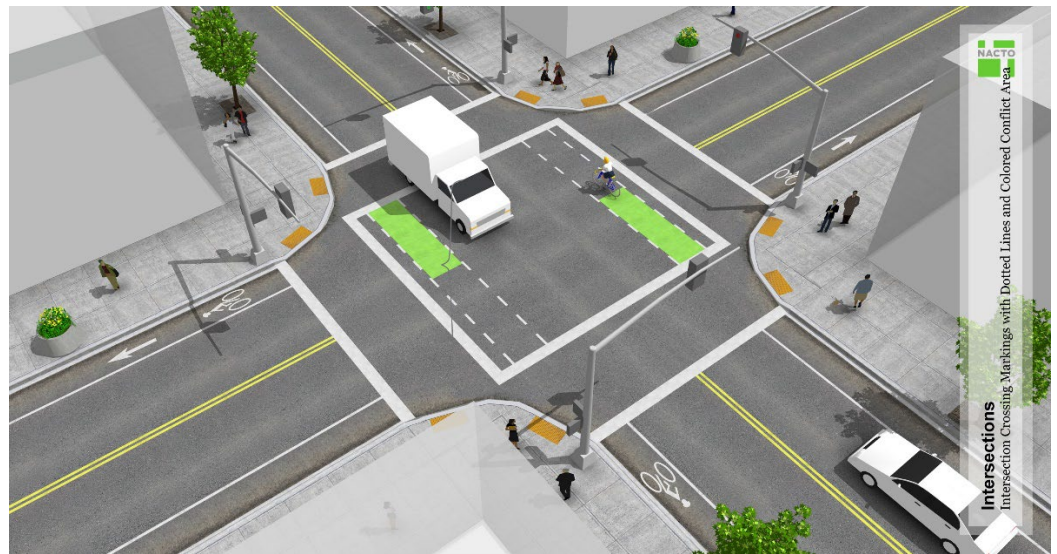


Figure 71: Bicycle Intersection Crossing Markings (Source NACTO)

Furthermore, the County and FDOT will need to review pedestrian signal timing at these intersections to ensure there is adequate time for crossing. Agencies should consider a LPI which has shown to reduce non-motorized crashes as much as 60%⁴. This would require adjustments to existing signal timing and should be taken into account at future design phases.

⁴ Van Houten R, Retting RA, Farmer C, Van Houten J. Field evaluation of a leading pedestrian interval signal phase at three urban intersections. *Transportation Res Rec.* 2000

Vehicle speed concepts can be classified into four types:



Design speed—the selected speed used to determine various geometric elements of the roadway.¹



Operating speed—the speed at which drivers are observed traveling during free flow conditions.²



Posted speed limit—established by methods described in the Speed Zoning for Highways, Roads, and Streets in Florida Manual. This manual is adopted by Rule 14-15.012, F.A.C.



Target speed—the highest speed at which vehicles should operate in a specific context, consistent with the level of multimodal activity generated by adjacent land uses, to provide both mobility for motor vehicles and a supportive environment for pedestrians, bicyclists, and public transit users.³

¹ American Association of State Highway and Transportation Officials, A Policy on Geometric Design of Highways and Streets, 6th Edition, 2011
² American Association of State Highway and Transportation Officials, A Policy on Geometric Design of Highways and Streets, 6th Edition, 2011
³ FDOT Design Manual, 2021.

7.5. TRAFFIC CALMING

Vehicle speed concepts can be classified into four types: Design Speed, Posted Speed Limit, Operating Speed, and Target Speed. The *FDOT Context Classification Guide* provides guidance to agencies and professionals to manage speeds along roadways within their communities. **Table 7** includes the design speeds for arterials and collectors based on context classification, this guidance should be considered to lower speed limits along SR-5/Federal Highway to ensure the safety, comfort, and convenience of residents and users of the proposed SUN Trail alignment. Please note, SR-5/Federal Highway is classified as a C3R and C4 context and the lower allowable design speeds should be considered when programming for this project. It is important that the MPO and County Commission work closely with FDOT to redesign SR-5/Federal Highway for future projects and projected growth to ensure all users can be accommodated.

Table 7: FDOT Context-Based Design Speeds for Arterials and Collectors

CONTEXT CLASSIFICATION	ALLOWABLE DESIGN SPEED RANGE (MPH)	SIS MINIMUM (MPH)
C1 Natural	55-70	65
C2 Rural	55-70	65
C2T Rural Town	25-45	40
C3 Suburban	35-55	50
C4 Urban General	25-45	45
C5 Urban Center	25-35	35
C6 Urban Core	25-30	30

Road design can influence both driver and pedestrian behavior and there are a number of countermeasures that can be adopted to ensure the safety of all users. Curb extensions, median islands, chicanes, roundabouts, textured crossings, and speed humps are all countermeasures which can be utilized to reduce traffic speeds, improve safety, and improve driver awareness of the presence of non-motorized users, see **Figure 72** for examples.



Intersection Curb Extensions



Center Median Island / Chicane



Chicane



Roundabout w/ Public Art



Enhanced Crosswalk w/ Textured Pavement & Street Furniture



Raised Pedestrian Crossing

Figure 72: Examples of Traffic Calming

During discussions with residents and stakeholders, concern for speeding was a topic which came up numerous times. Traffic was also a reason highlighted in the *Bicycle, Pedestrian & Trails Master Plan (2017)* for reasons why residents do not walk or bike today. Vehicle speed is an important component of pedestrian safety, because as speed increases, the likelihood of a fatality or serious injury also increases, for both motorized and non-motorized users, see **Figure 73**.

Future design considerations should include a review of the design speed of SR-5/Federal Highway and consider reducing the existing 55 and 45 MPH posted speed limits between CR-708/Bridge Road and SE Osprey Street to enhance safety and minimize risks. It is recommended that operating speed data be collected on SR-5/Federal Highway and a thorough review of crash data along this segment be review to inform the future design of the SUP.

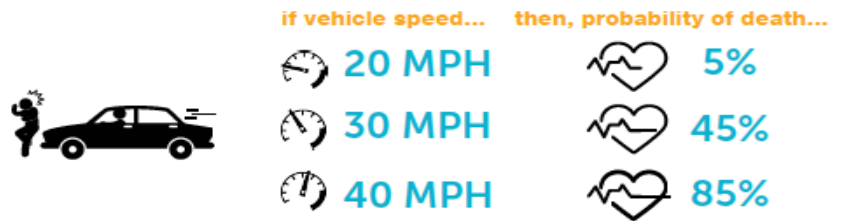


Figure 73: Port St. Lucie Multimodal Plan

7.6. ENVIRONMENTAL

Potential impacts which need to be further evaluated include wetlands, Florida Bonnet Bats and Gopher Tortoise sites. The county data indicates potential wetlands along Gomez Avenue, the location of wetlands, Bonnet Bats and Gopher Tortoise sites will need to be further evaluated during the future design phase to reduce or mitigate impacts. For locations where Gopher Tortoises are discovered, the County will need to apply for a relocation permit through FDEP.

Additional future considerations to include is landscaping which can not only provide shade, but several ecosystem services⁵. Trees can also assist in removing harmful pollutants like carbon dioxide (CO²) from the atmosphere, they also lower temperatures and assist with the reduction of the heat island effect, a condition of excessive accumulation of heat associated with impervious surface areas.

Landscaping has been found to provide benefits in human welfare and well-being, cognitive health, community development, and driver comfort⁶. Shade or canopy trees have numerous benefits including reducing peak temperatures and air pollution, enhancing property values, providing wildlife habitat, aesthetics improvements, and can attract businesses and people. Future considerations should include shade trees on both sides of the pathway, when feasible, to ensure coverage from the sun and elements. It is important to note that the Florida SUN Trail program does not pay for these features, therefore the County would be required to fund these amenities or apply for different grant program.

7.7. AMENITIES

Amenities are an important part of the walking and biking experience and can include signage, bathrooms, a water fountain, parking, street furniture, lighting, repair stations, shade, public art and/or pocket parks. The State of Washington conducted a study to review the economic, environmental, social and health benefits of trails in 2019, the report included several recommendations, including a policy recommendation for the addition of new and improved amenities since it was found that amenities increase visitation.⁷ **Figure 74** includes various types of street furniture which can be considered when designing for the facility.

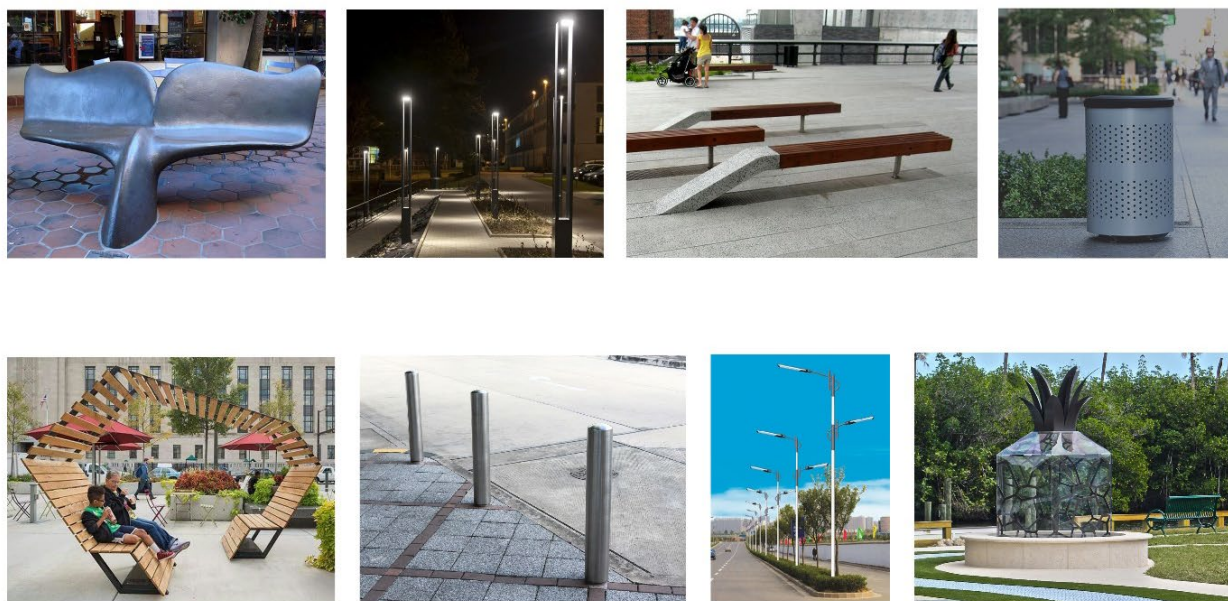


Figure 74: Examples of Street Furniture

⁵ Any positive benefit that wildlife ecosystems provide (National Wildlife Fund)

⁶ Dixon, K.K., and K.L. Wolf. 2007. Benefits and Risks of Urban Roadside Landscape: Finding a Livable, Balanced Response. Proceedings of the 3rd Urban Street Symposium (June 24-27, 2007; Seattle, WA). Washington D.C.: Transportation Research Board of the National Academics of Science

⁷ Washington State Recreation and Conservation Office. Economic and Health Benefits of Walking, Hiking and Bicycling on recreational Trails in Washington. 2019.

Future considerations should include the identification of locations for pocket parks or areas of respite which should include seating, lighting, an emergency callbox, bicycle repair station, shade water, and a waste/recycling receptacle. These areas should serve as areas to rest and enjoy the surrounding area. In important ecological areas, education signage can be placed to inform the user of important foliage, fauna, wildlife or ecosystems to better educate about the natural area.

Signage is an important amenity which can direct vehicles and non-motorized users to the location of destinations, improve navigation and accessibility to the area. Future considerations should include signage for motorist informing them of the facility at important sections and crossroads, but should also include wayfinding signage for the user to ensure the direction of the pathway and locations of key points of interest. It is important to note that the Florida SUN Trail program does not pay for these features, therefore the County would be required to fund these amenities or apply for other grant programs. The county should consider policy adoption of updates as it relates to amenities along trails and walking or biking routes.

7.8. MAINTENANCE

Maintenance is a necessary component of non-motorized facilities and includes day-to-day upkeep, removal of trash and debris, soil and weed control, maintenance of drainage, graffiti removal, mowing, sweeping, sign replacement, shrub trimming, and maintaining amenities to ensure lights, benches, trash cans, etc. are in good working condition. Future considerations need to include identification of who will be responsible for the operation and maintenance of this facility. Coordination and collaboration between the County, FDOT and any other responsible parties or affected agencies to ensure cooperation. Additionally, FDOT will require a Maintenance Memorandum of Agreement (MMOA) with Martin County to ensure commitment to long-term trail maintenance prior to funding.

An additional future consideration includes funding for maintenance and improvements. **Appendix H** includes funding programs for trails and non-motorized facilities the county can explore, but the county should consider amending the Comprehensive Plan as it relates to development fees and/or property taxes to include funding for new and existing multimodal facilities. This ensures a guaranteed revenue stream for the maintenance and construction of multimodal facilities, including trails, sidewalks, SUPs, and bicycle facilities.

7.9. PERMITS

All development requires permits, future permit considerations include coordination and permit collaboration with FDEP, FDOT, FWC, SFWMD, and Martin County. This includes drainage, environmental, National Pollutant Discharge Elimination System (NPDES), and the County Building Department. Additional considerations should include the identification of utility structures which may be impacted and coordination with agencies involved. This may include FPL, Martin County Utilities - including South Martin Regional Utility, AT&T, Elite Gas Contractors, and Paulie Propane-Natural Gas, Inc. Coordination with the FEC will also be required for the railroad crossing along SE Osprey Street.

8. COST ESTIMATES

Preliminary planning estimates were developed to provide a rough estimate of the proposed pathway alignments for the second and third public meeting using the FDOT Cost Per Mile Model Reports. These estimates were included in public meetings with a note that they were estimates and included only the pathway and not the earthwork, cost of removing existing sidewalk, relocation of utilities (if any), etc. Once the trail alignment and

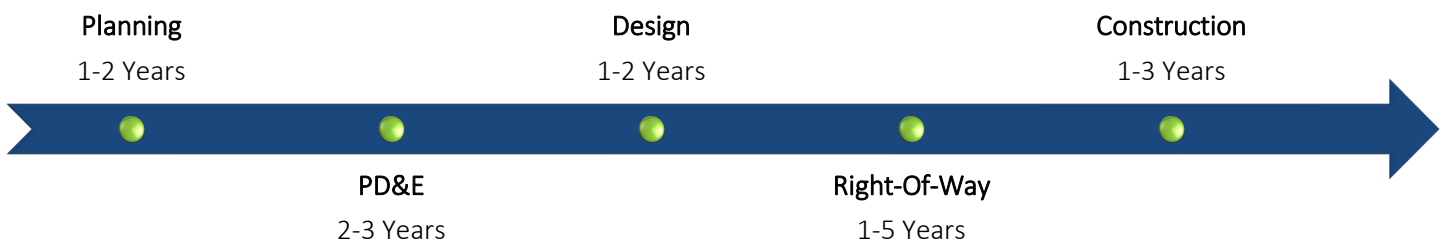
preferred typical section alternative was chosen, the Consultant Team developed an FDOT Long Range Estimate (LRE) for this project. **Table 8** includes a cost estimate summary of the pathway from CR-708/Bridge Road to Gomez Avenue. A more detailed cost estimate can be found in **Appendix G**.

Table 8: Cost Estimate

TYPE	COST ESTIMATE
Earthwork	\$807,252.41
Roadway	\$3,769,493.90
Shoulder	\$285,696.88
Drainage	\$925,390.84
Signing	\$74,442.84
Signalization	\$212,092.19
Maintenance of Traffic	\$485,949.52
Mobilization	\$656,031.86
Contingency	\$70,683.27
PROJECT TOTAL	\$7,287,033.71

9. NEXT STEPS

With the completion of this study the Hobe Sound North Corridor is ready to move into the next phase of the process, this phase is anticipated to take approximately two (2) years. As there is no ROW anticipated in need for acquisition, once the design plans are completed, the project will be ready for construction. On April 11, 2023 the Florida Governor approved Senate Bill 106 increasing the amount FDOT is required to allocate for purposes of funding and maintaining projects within the Florida SUN Trail Network, this additional appropriation included an additional \$200,000,000 in funding for the program, which may expediate the design and construction of this segment of the Florida SUN Trail Network and ECG. A list of funding programs is provided in **Appendix H**. The County may want to explore the funding programs to install amenities, landscaping, and additional wayfinding features to the proposed SUP alignment.



Appendix A

Stakeholder & Agency
Presentations and
Meeting Notes

Hobe Sound North Corridor SUN Trail Study

Agency Stakeholder Meeting #1 Notes

November 5, 2021

Attendance:

Christina Fermin, Marlin Engineering; Jeff Weidner, Marlin Engineering; Kathryn Marinace, Marling Engineering; Joy Puerta, Martin MPO; Beth Beltran, Marin MPO; James Clasby, CRA Project Manager; Mike Yustin, Project Manager for Restoration Management; Jim Lopilato, Parks and Recreation; Lisa Wischer, County Engineer

Comments:

Lisa – Posted speed was recently changed to 25 MPH on SE Bridge Rd; in the process of changing Speed Limit signs. Dixie Hwy at Lares Ave speed limit is 40 mph.

Mike – Have you thought about Osprey Street to Federal Highway? There is an existing wide pathway setback +/-20 feet from the road on the west side of Federal.

- We may consider this as an alternate route to due to existing facility and neighborhoods.

Mike – Are you looking at alternate areas to Bridge Rd/Federal Hwy?

- Scope is for Bridge Rd and Federal Hwy where the south corridor study will pick up and tie into the Hobe Sound Wildlife Preserve and Jonathan Dickinson State Park
- Need to check FEC agreements for Saturn Ave/Gleason St crossing
- Crossing at railroad on Gleason St had some challenges
- Opportunity to connect to Ham property trail
- Bridge Rd planned improvements for non-motorized users at the intersection
- Grading an issue at Saturn Ave near Federal Hwy and crossing over

FDOT conducting feasibility study for south corridor trail from Bridge Rd to Wildlife Center, this project is set.

MPO has discussed connectivity to Ham Property by using signage alerting users that there is a pathway/trail at the preserve.

Discussion on purpose and need statement for the project:

- Purpose to construct a segment of the ECG/SUN Trail in Martin County for non-motorized users
- Need is to provide safe and comfortable facility separated from traffic for peds/bikes
- Purpose and need statement needed for federal funding

Is there room for a shared use pathway - 10 feet wide or smaller sections in certain areas in the study area?

- Gomez Ave has ROW for most sections for at least a 10 foot pathway, less driveways, less traffic, slower speeds
- Dixie Hwy has more challenges, ROW is limited some areas missing easements, cannot build sidewalk on the east side
- Northwest corner of Bridge Rd property owner will not give easement or ROW for sidewalk or signage, had issues when doing the Bridge Rd improvements
- Lares Ave has no ROW available for facilities
- Saturn Ave has a steep hill/drop off and would be challenging for ADA

Capital project underway for drainage along Gomez Ave, our study will try and minimize impacts to this project.

South corridor study timing and construction, will they be constructed at the same time?

- FDOT conducting the south corridor study concurrently
- FDOT is supposed to include MPO staff on updates and meetings, MPO to reach out on an update
- Construction may move concurrently, depending on the funding and whether there is a need for property acquisition

Is there are recommendation for either corridor?

- Lisa: Prefers a multi modal path on one side and sidewalk on the other
- Gomez Ave has opportunities along the corridor the trail
 - ROW available
 - Less driveways
 - Less traffic
 - Low speed limit
 - Existing mid-block crossings with signage
 - Sidewalks available on one or both sides
 - Tree canopy throughout
 - Some challenges may include vehicle stacking at the schools for pickup/dropoff
 - Spoke with some residents and crossing guards at Gomez who are supportive of a shared use path
- Dixie Hwy has challenges throughout many portions of the corridor
 - ROW unavailable or missing
 - Existing sidewalks have an easement, some properties do not have an easement agreement in place
 - Some areas along Dixie Hwy missing sidewalks, such as north of Osprey Street and the properties who do not have an easement agreement in place

- Many intersections do not have crosswalks, pedestrian signals, signage or push buttons
- Many of the existing sidewalks are not ADA compliant
- There is potential for an alternate route along Shell Ave
 - More analysis needed
 - County may realign Shell Ave
 - Gleason St may have restrictions at the crossing

Community Stakeholder Meeting #1

Monday, November 8, 2021, 11am – 12pm

Attendance:

Jeff Weidner, MARLIN Engineering; Kathryn Marinace, MARLIN Engineering; Christina Fermin, MARLIN Engineering; Joy Puerta, Martin MPO; Beth Beltran, Martin MPO; Michael Macleod, BPAC & Cycle Association; Lainey Muenich, Chamber of Commerce; Allyson Von Holten, Hobe Sound Neighborhood Association Committee

Comments:

Recommendations for pathway:

- Alyson: Avid walker, separated trail for ped and bike is important
- Michael: Quality of the shared use pathway
 - Pathway along Green River Drive
 - No shoulder/bike lane
 - Cyclists use this shared use pathway
 - Maintenance once you leave Martin County is poor
 - Cyclists like bike lanes
 - Winter Garden pathway has a great shared use pathway
 - Gets busy
 - Cyclists will switch over to the roadway if facility gets crowded
 - Crowded or congestion is unsafe with a shared path
 - Cyclists are riding their bikes at 20 mph

Dixie Hwy and Federal Hwy, near Jonathan Dickinson Park, would be a better area to crossover than Federal Hwy & Bridge Rd intersection

- Why cross at Bridge Rd and Federal Hwy?
 - FDOT working on south corridor feasibility study now
 - South corridor feasibility study begins at Bridge Rd and Federal Hwy to the Hobe Sound Wildlife Refuge/Jonathan Dickinson State Park
 - SUN Trail funding the study is using federal, therefore money must be used for federal lands
 - Pathway coming from the south connecting through Jonathan Dickinson Park has been completed for design and will be moving to construction

- Project has been discussed for +/-10 years
- Pathway will be constructed on the east side of Federal Hwy connecting to the refuge
- Intersection has accessibility issues that need to be considered for both studies
- Is there an option to go under the bridge near Jonathan Dickinson State Park?
 - County/State does not have any rights to the area
 - Railroad is privately owned and can be difficult to get agreements to utilize their ROW
- Discussion on Federal Hwy/Bridge Rd intersection
 - Need to assume users will come from all directions to utilize pathway/trail
 - Bridge Rd is being considered an attraction as a gathering place for residents and trail users
 - Need to coordinate with FDOT on intersection improvements
 - There is an existing 9 foot pathway on the west side of Federal Hwy north of Bridge Rd
 - Due to ROW constraints, Dixie Hwy is not an option south of Bridge Rd

Will there be any additional construction along Bridge Rd as a result of this?

- It is our understanding that the streetscape improvements are complete
- There may be a sidewalk constructed (if ROW is available) on the north side of Bridge Rd between Hercules and Federal Hwy
- Missing sidewalk segment near the Dixie Hwy/Bridge Rd intersection on the north side, existing property owner did not want to provide ROW or easement for a sidewalk
- There are planned improvements for bikes/peds at the Bridge Rd/Dixie Hwy intersection

Study is primarily looking at completing the East Coast Greenway / SUN Trail segment in Martin County, we will also provide connectivity to areas trails/pathways

Study has challenges with connectivity on both ends (near the Seabranh Preserve and Federal Hwy/Bridge Rd intersection)

Need to be mindful of having enough room for bicycles and pedestrians

- May have sidewalk on one side and a shared use pathway on the other
- Typical sections will show different possibilities for the facilities

Will the trail extend east all the way to the Beach/AIA?

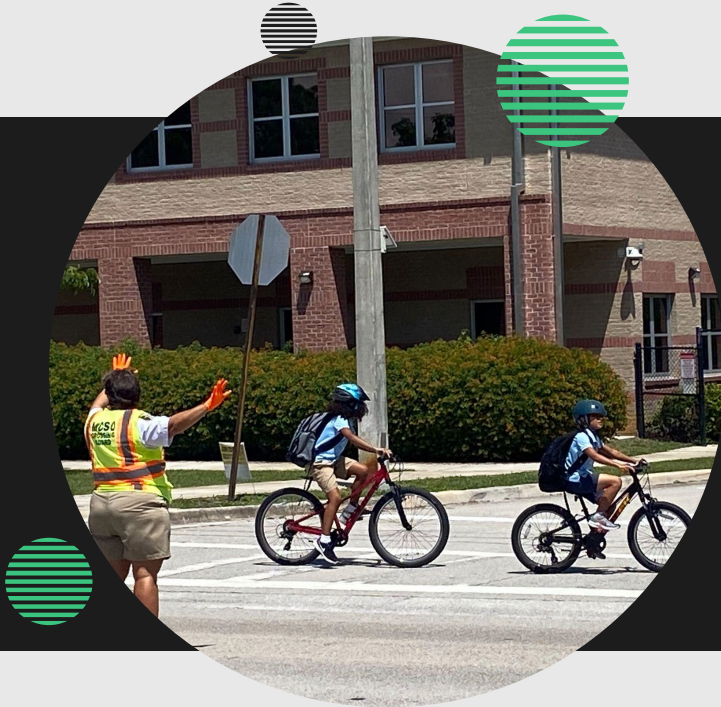
- Bridge Rd sidewalk has challenges to widen the existing pathway due to wetlands and existing canopy
- This study is focused on the study area

Discussion on site visit and talking with the crossing guards

- Crossing guards are supportive
- Concern brought up is golf carts using the existing sidewalks and whether they are allowed to use a shared use path
 - Motorized vehicles are not allowed on shared use pathways or the sidewalk
 - This is an issue in many communities when considering a shared use path as golf carts at times use them
 - Education and enforcement are primary strategies to ensure golf carts are not using the pathway
 - Signage is one strategy we can use
 - Educating golf cart users that they cannot use the pathway
 - Golf carts are considering low speed vehicles can use roadways 25 mph, but are not allowed on roadways above 25 mph

Hobe Sound North Corridor SUN Trail Study

Stakeholder Meeting #1
November 5, 2021



PREPARED BY

MARLIN

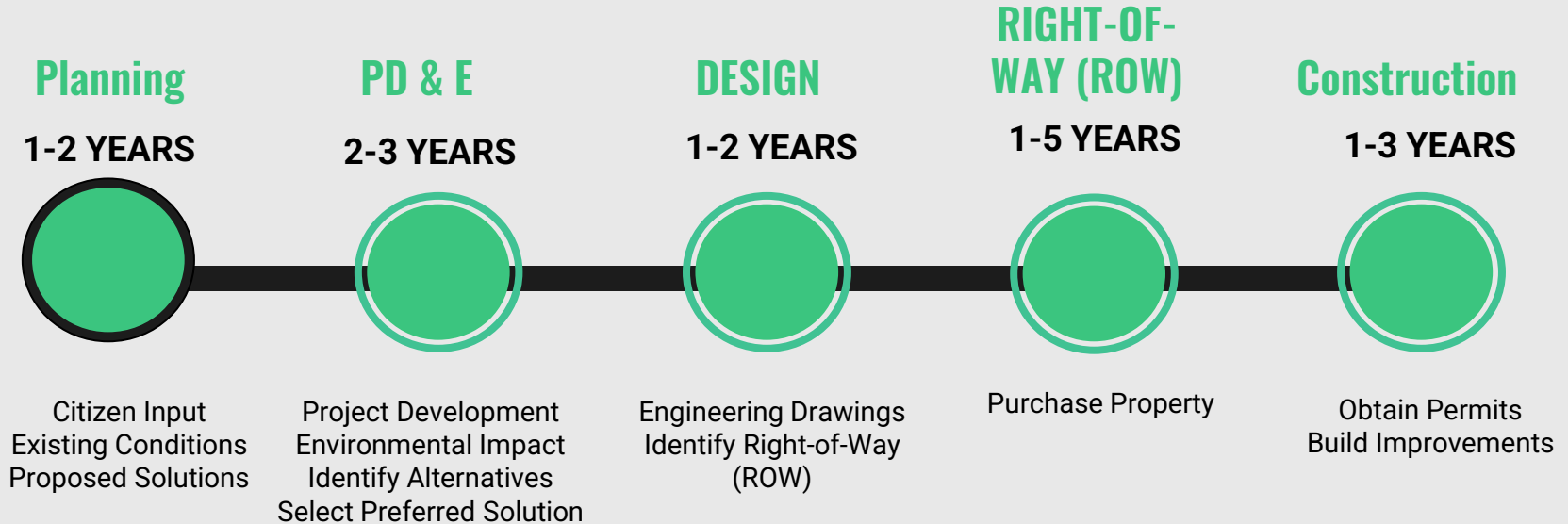


Welcome & Team Introductions

MARLIN

LIFE OF A PROJECT

TOTAL 6-14 YEARS FROM PLANNING TO CONSTRUCTION



 In progress

 Future



» **01**
SCOPE

Feasibility study for a +/- 5-mile segment of the East Coast Greenway / Florida SUN Trail

» **03**
ANALYSIS TO DATE


Data analyzed and reviewed to-date

» **02**
DATA COLLECTION

Maps, Site Visits, Existing Data, ROW, Aerial Imagery

» **04**
NEXT STEPS?

Stakeholder meetings, typical sections and selection of pathway







East Coast Greenway

**3,000 miles
of trails**

578 miles in Florida
262 miles off-road





Florida Shared Use Non Motorized (SUN) Trail

The SUN Trail network is the statewide system of high priority (strategic) paved trail corridors for bicyclists and pedestrians.





\$145 Billion

Total Economic Output
Produced by Outdoor Recreation
in Florida

Source: Statewide Comprehensive Outdoor Recreation Plan (SCORP)



01

SCOPE





Project Scope

Task 1: *Project Management* - Meetings, and coordination

Task 2: *Outreach and Meetings* - MPO Advisory Committee Meetings, Stakeholder Meetings, Public Outreach, Presentations, Brochure and Communication


Task 3: *Data Collection* - Review of Existing Plans and Documents, Data Collection, and Field Inventory

Task 4: *Data Analysis* - Development of Purpose and Need Statement, Review and Analysis of Collected Data, Mapping, Desktop Review and Comparative Matrix

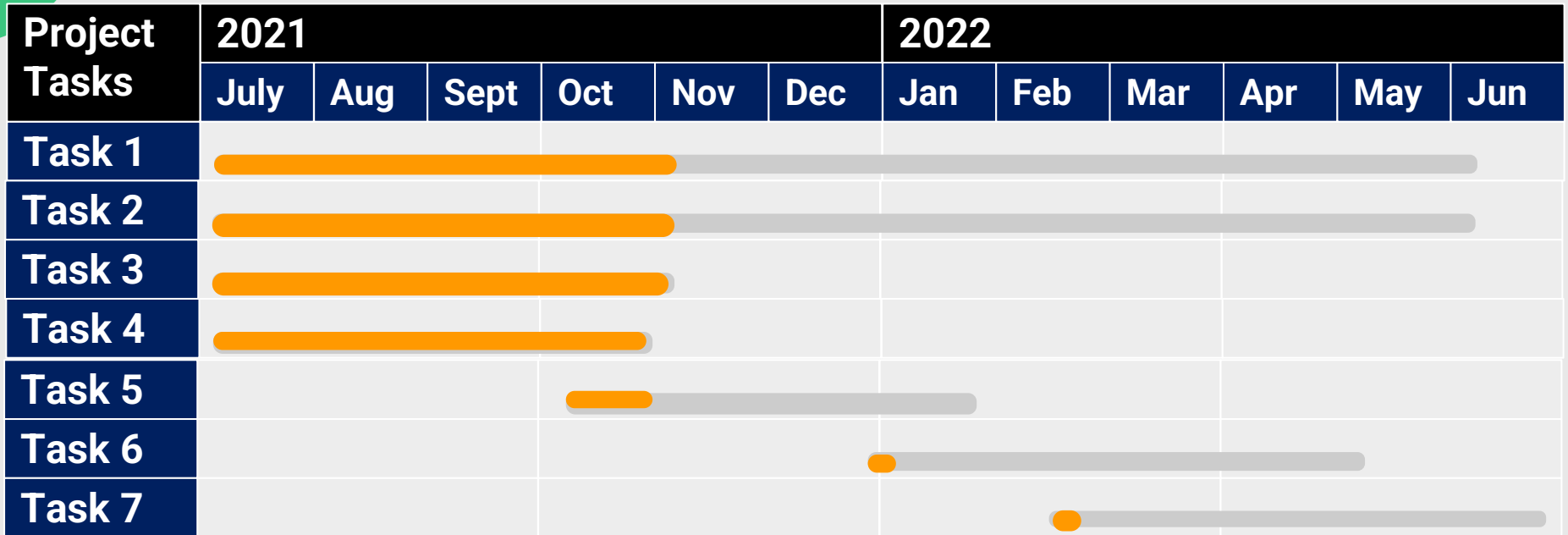
Task 5: *Preliminary Planning Analysis of Alignment Alternatives* - Develop Evaluation Criteria, Identification of Alternatives, Identification of three Best Alignments, Typical Cross Section Development, and Renderings

Task 6: *Documentation of Preferred Trail Concept* - Study Documentation, Recommendations, Evaluation of Alternatives, Finalize Typical Cross Sections, Permit Requirements, Cost Estimates and Conceptual Design

Task 7: *Feasibility Study* - Evaluate Comments, Feedback and Recommendations, Preparation of Final Document

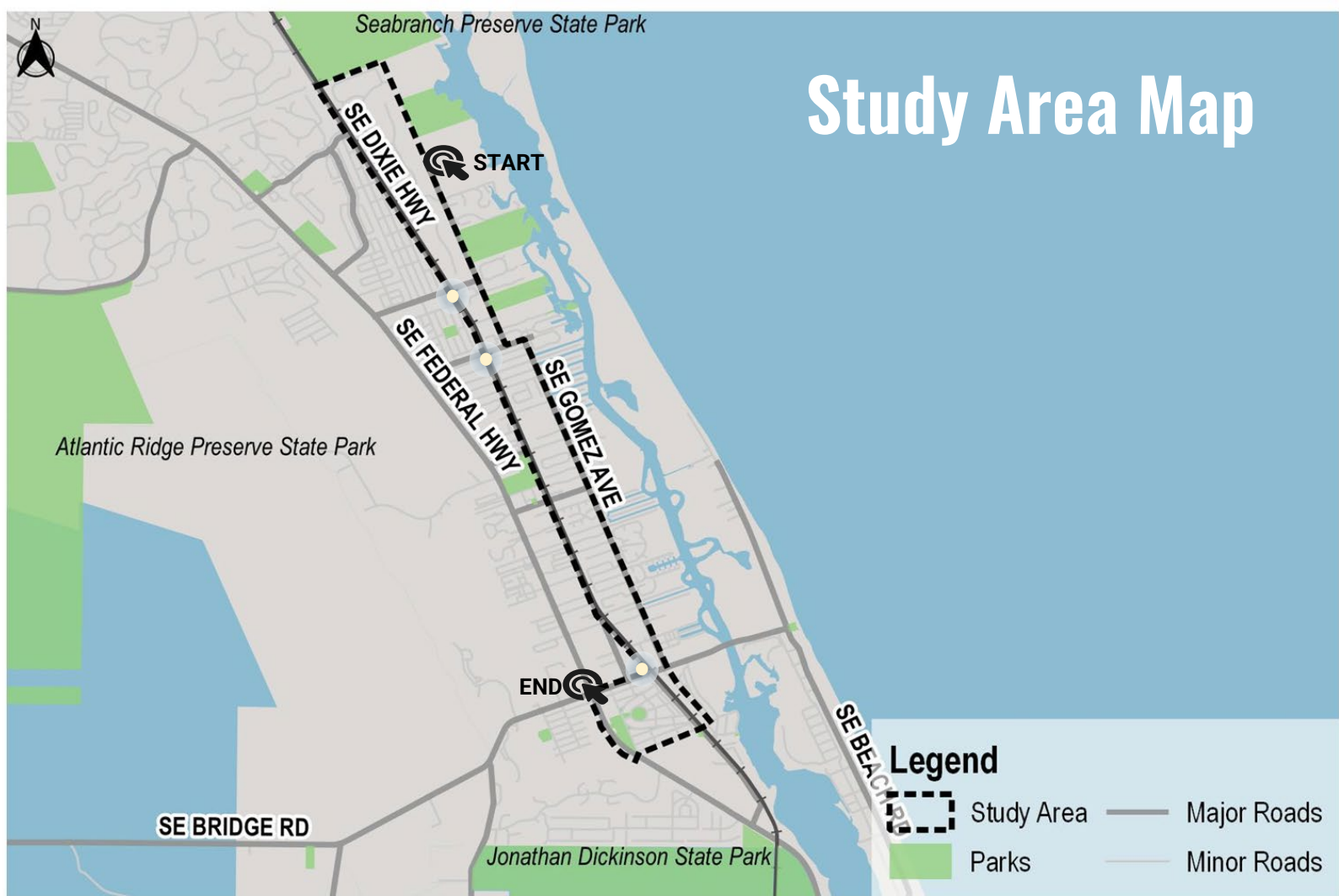


Schedule



TODAY ▲

Study Area Map



Route Option 1: Gomez Ave

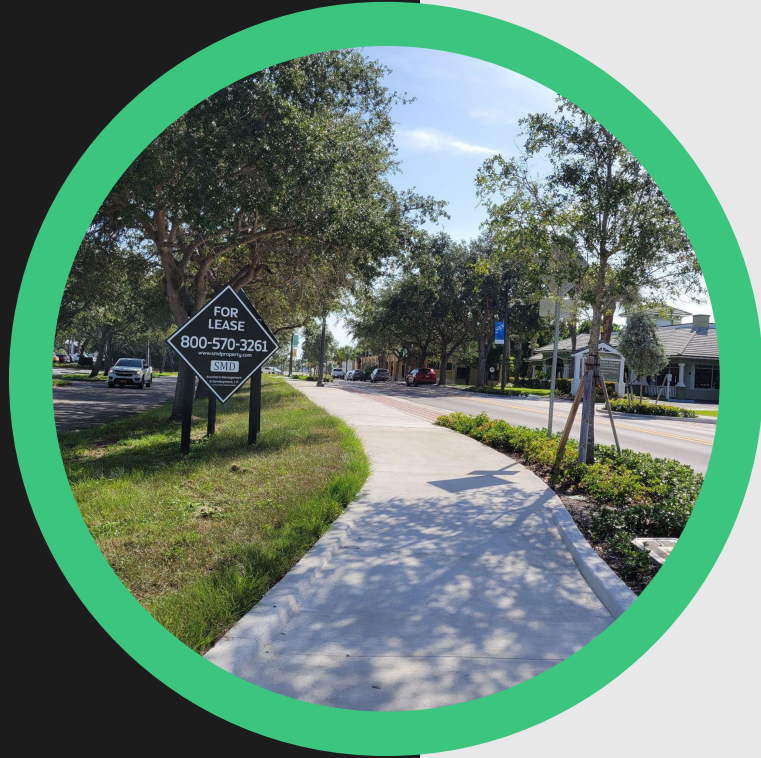


Route Option 2: Dixie Highway



End Point:
Federal Hwy &
Bridge Rd





02

DATA COLLECTION



Reviewed Plans & Documents



2045 LRTP

MPO Long Range
Transportation Plan - Current
& Future Traffic Conditions



Florida Greenways & Trails Plan

Vision for Florida's
Greenways & Trails



Bicycle, Pedestrian & Trails Master Plan

Vision of becoming a more
bicycle and pedestrian,
walkable livable community.



Bicycle & Pedestrian Safety Action Plan

Identify strategies to improve
safety for bicycles and
pedestrians.



Southeast Florida Greenways and Trails Plan

Vision of greenways and
trails in Southeast Florida



Other

5 Year Crash Data, Traffic
Volumes, LOS, As-Built Plans,
ROW, Trail Design Standards
& Strava Data

Field Visit



Sep 8, 2021 11:55:59 AM
27.11183N 80.15267W
281° W
7407 Southeast Gomez Avenue
Hobe Sound
Martin County
Florida



Pros

Cons

Desktop Review

GIS

Aerial Review Using County,
State and Local Data

Traffic

Annual Average Daily
Traffic (AADT), Level of
Service (LOS) & Crash Data

County Records

Surveys, Utilities,
Easements, FEC
Agreements, As-Built Plans

Wetlands

Located near the Indian
River and Bridge Road

Historic Sites

Identified near Pettway St,
Gomez Ave & Bridge Rd,
Built 1925 - 1945

ROW

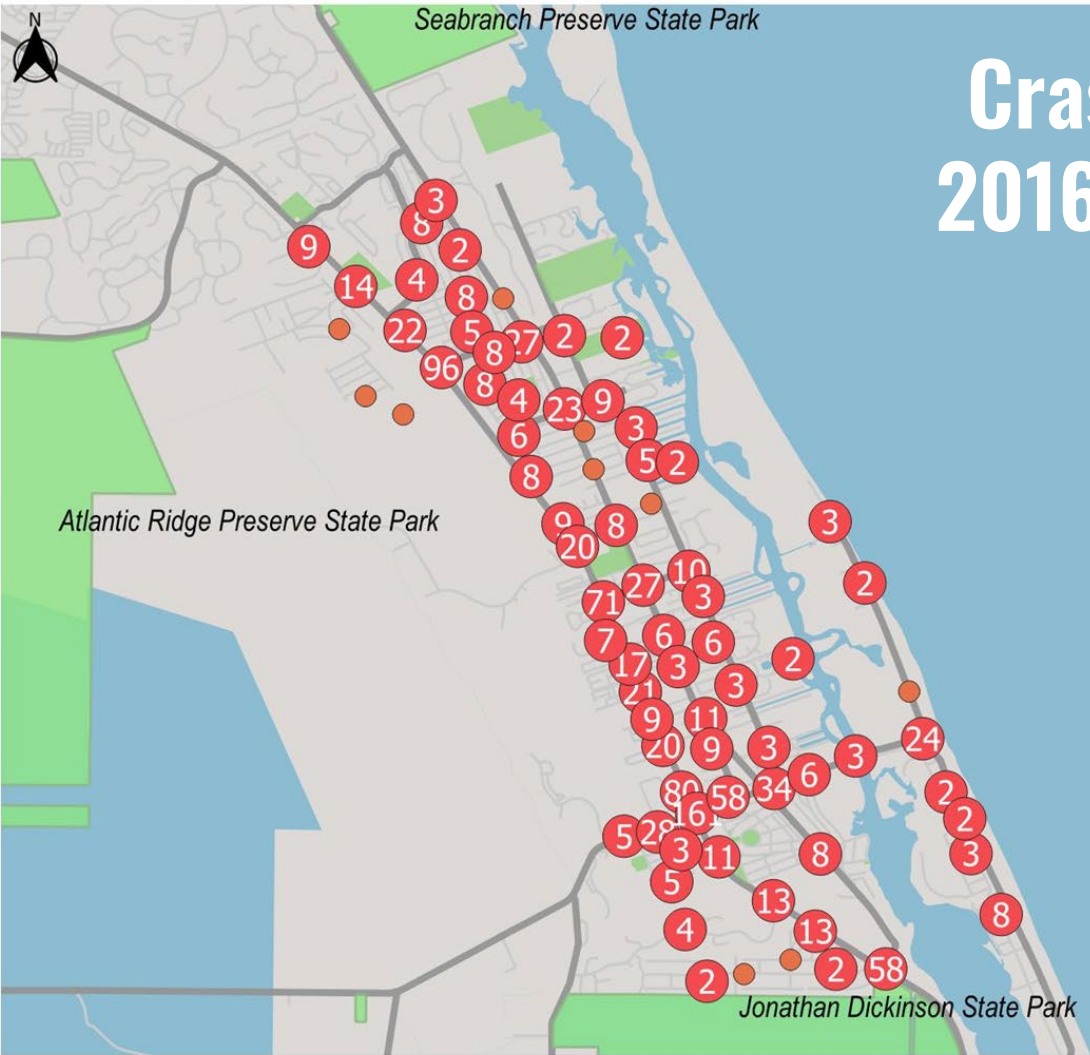
Dixie Hwy - Little to No
ROW, Missing Sidewalk
Easements in Various Areas

Traffic Data





ROADWAY	AADT* (2019)	SPEED LIMIT (MPH)
DIXIE HWY	6,595	<ul style="list-style-type: none">• 45 (N. OF CROSSRIP ST)• 30 (S. OF 1ST ST)
GOMEZ AVE	3,732	<ul style="list-style-type: none">• 35
BRIDGE RD	9,373	<ul style="list-style-type: none">• 30
CROSS RIP ST	N/A	<ul style="list-style-type: none">• 25
OSPREY ST	1,926	<ul style="list-style-type: none">• 25

*AADT = ANNUAL AVERAGE DAILY TRAFFIC


Crash Map 2016 - 2020



Legend

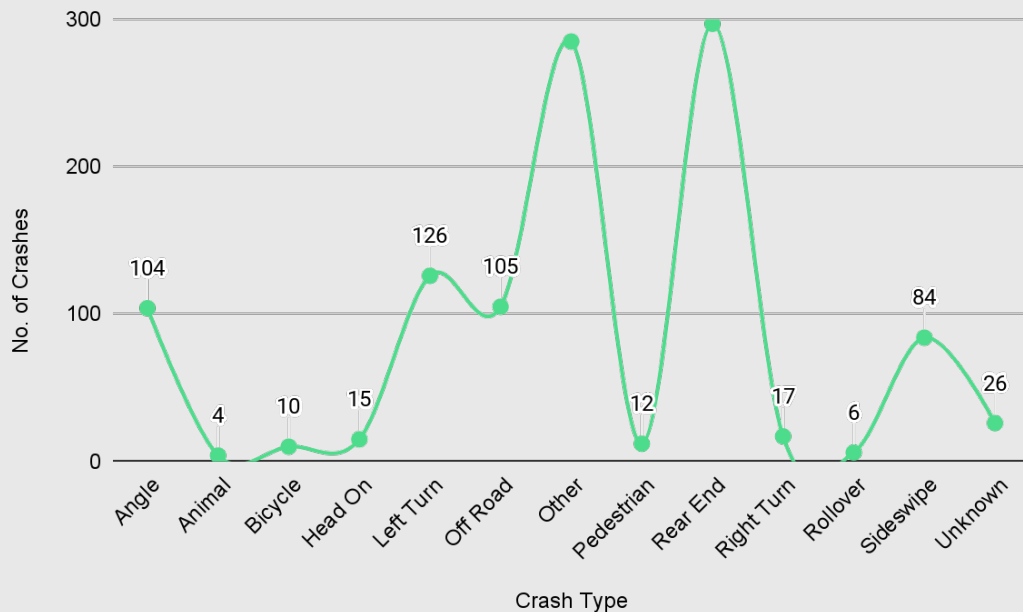
-  Parks
-  Major Roads
-  Minor Roads
-  Crashes (1091 Total)

Crash by Type

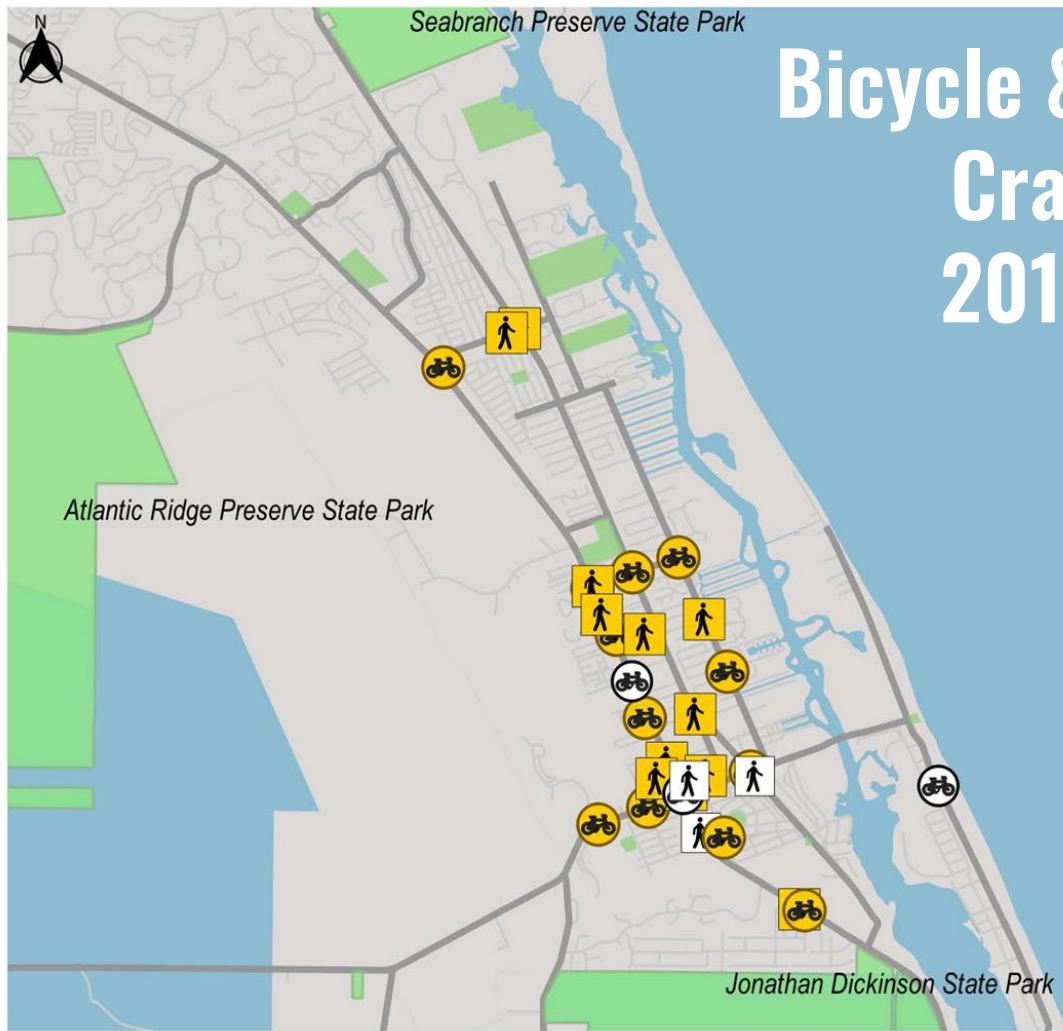
 Total Number of Crashes by Type

There are 10 Bicycle Crashes & 12 Pedestrian Crashes

Rear End crashes account for 27.2% of all crashes followed by Left Turn crashes at 11.6%



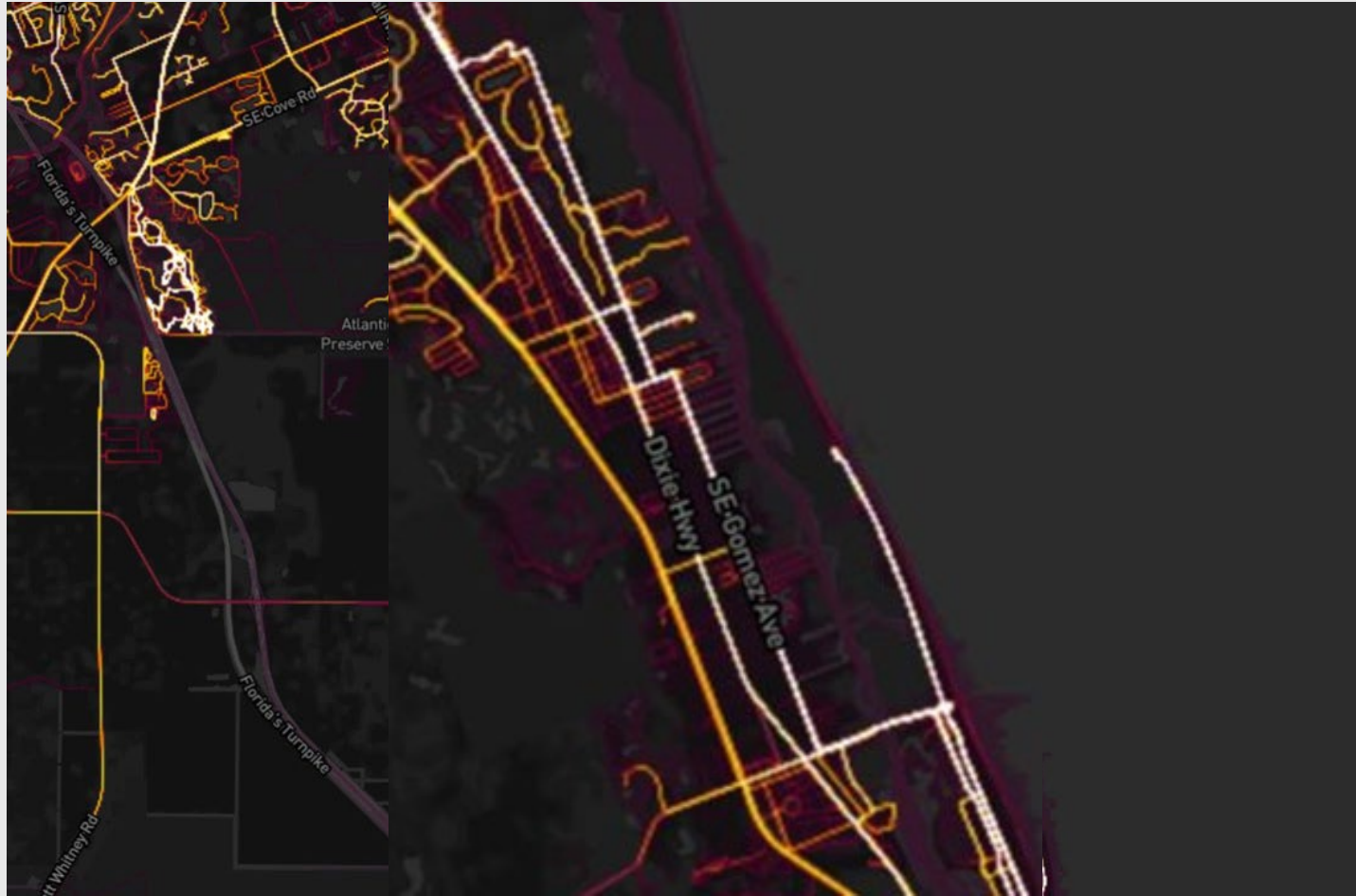
Bicycle & Pedestrian Crash Map 2016-2020



Legend

-  Parks
-  Major Roads
-  Minor Roads
-  Bicycle Injury
-  Property Damage Only
-  Pedestrian Injury
-  Property Damage Only

Bike & Ped Heat Map (Strava)



Trail Design Standards

1

Traffic Separated

2

Firm Surface

3

Publicly Accessible

Avoids Steep Grades & Steps

6

Integrated Rec & Transportation
Infrastructure

5

Wide Enough for Shared Use

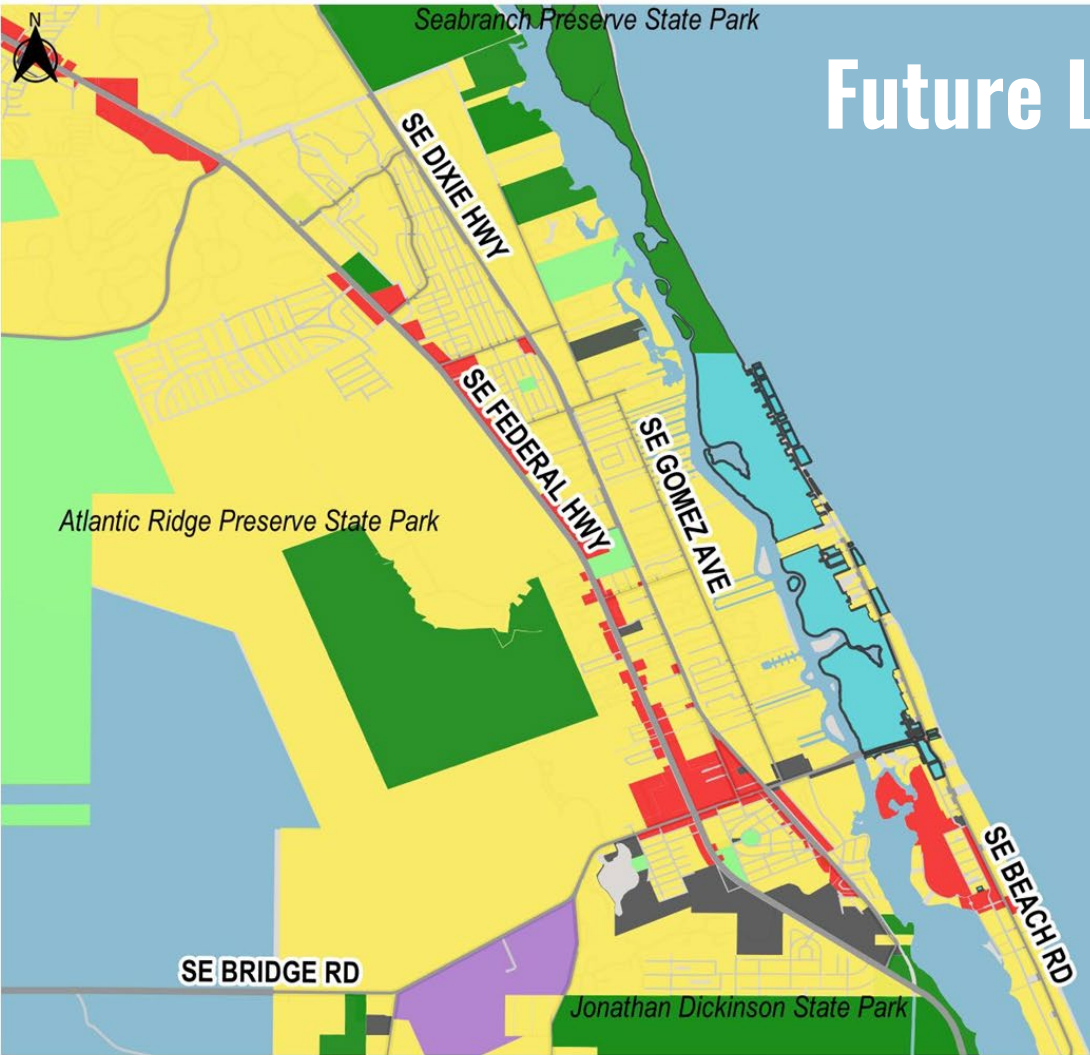
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03

**ANALYSIS
TO DATE**

Future Land Use Map



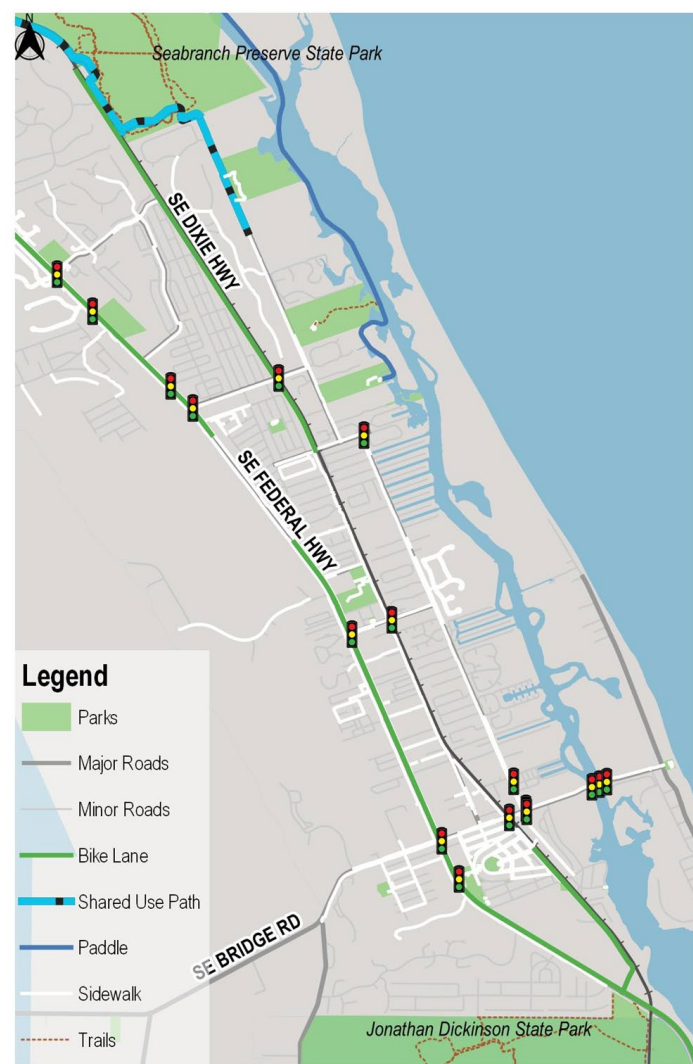
Legend

- Commercial
- Industrial
- Institution
- Nature
- Public
- Recreational
- Residential

Pedestrian Conditions

FINDINGS:

- Sidewalks
- Crosswalks
- Comfort
- ADA Accessibility



Bicycle Conditions

FINDINGS:

- Bike Lanes
- Shared Use Pathway (aka Multi-Use Trail)
- Bike Paths @ State Parks
- Cyclists Using Sidewalks
- Bicycle Crosswalks
- Bicycle Signage



Community Recreational Assets



Atlantic Ridge Preserve State Park

SSG JUSTIN JOHNSON MEMORIAL PARK AT BANNER LAKE

SE BRIDGE RD

Seabrook Preserve State Park

EASTRIDGE PARK

EAGLEWOOD COUNTRY CLUB

PETTWAY PARK

Jonathan Dickinson State Park

HOBE SOUND GOLF CLUB

ST. CHRISTOPHER'S

JOSEPH REED PARK

GOMEZ PRESERVE

LOBLOLLY PINES GOLF CLUB

LOBLOLLY BAY MARINA

PECK LAKE PARK

SOUTH COUNTY BOAT RAMP PARK

JIMMY GRAHAM PARK & BOAT RAMP

SE GOMEZ AVE

HOBE SOUND PUBLIC BEACH PARK

HOBE SOUND ELEMENTARY SCHOOL PLAYGROUND

ZEUS PARK

GREENFIELD PARK

JUPITER ISLAND CLUB

Potential Routes

1. SE Gomez Avenue

- 35 MPH
- ROW Available
- 2 Bicycle Crashes
- 1 Pedestrian Crash
- Existing Shared Use Path
North of Osprey Street

2. SE Dixie Highway

- 30 - 45 MPH
- Missing ROW/Easements
- 5 Pedestrian Crashes
- 2 Bicycle Crashes



POTENTIAL CROSS POINTS



Osprey Street

1 Pedestrian Crash
13 Vehicle Crashes
1,926 AADT



Cross Rip Street

18 Vehicle Crashes



CROSS POINTS



Bridge Road

2 Pedestrian Crashes
14 Vehicle Crashes
8,053 AADT



Federal Hwy

1 Bicycle Crash
103 Vehicle Crashes
24,807 AADT





Summary Points

Dixie Highway

Gomez Avenue

Bridge Road

Osprey Street

Cross Rip Street

Federal Hwy







04 NEXT STEPS



What's Next?

- Maps
 - Comparative Matrix
 - North/South Routes
 - East/West Connectors
 - Evaluation Criteria
 - Identify Alternatives
 - Three Best Alignments
 - Typical Cross Section Development
 - Permit Review
 - Cost Estimates
 - Renderings
 - Selection of Preferred Alternative
 - Finalize Typical Sections, Cost Estimates, Permit Requirements & Graphics
 - Final Report
- 
- 

Meetings

General & Stakeholders

	Stakeholder	Public
Government Stakeholders - November 4	▶	
Community Stakeholders - November 8	▶	
General Meeting - November 10		▶
Stakeholder Meetings January/March TBD	▶	
General Meeting - May TBD		▶

MPO Policy Boards

	Meeting Dates	
Citizens Advisory Committee (CAC)	2/2/22	6/1/2022
Technical Advisory Committee (TAC)	2/7/22	6/6/22
Bicycle & Pedestrian Advisory Committee (BPAC)	2/14/22	6/13/22
MPO Policy Board	2/28/22	6/20/22

STAKEHOLDER TO-DO



Purpose & Need
Statement

Comparative Matrix



Evaluation Criteria

Review Alternatives



Thank You

CONTACT INFORMATION:

Christina Fermin
Marlin Engineering, Inc.
CFermin@marlinengineering.com
954-870-5064

Joy Puerta
Martin MPO
JPuerta@martin.fl.us
772-320-3015



Hobe Sound North Corridor Study - Agency Stakeholder Meeting #2

Wednesday, March 2·11:00am – 12:30pm

Attendees:

1. Jim Gorton, Martin County Public Works Director
2. Lisa Wischer, Martin County Public Works Engineer
3. Christopher Goetzfried, Martin County Public Works Capital Projects Administrator
4. Irene Szedlmayer, Martin County Growth Management Principal Planner
5. Michael Yustin, Martin County Public Works Project Manager – Ecosystem
6. Jana Cox, Martin County Administration Community Development Program Manager
7. m Manager
8. Joy Puerta, Martin MPO
9. Beth Beltran, Martin MPO
10. Ricardo Vazquez, Martin MPO
11. Lucine Martens, Martin MPO
12. Christina Fermin, MARLIN
13. Jeff Weidner, MARLIN
14. Moshir Rahman, MARIN
15. Suom Francis, MARLIN
16. Kathryn Marinace, MARLIN

Recommendations and Notes:

- **Amended Purpose and Need:** Instead of using the word “recreational” in the purpose statement perhaps the word “Multipurpose” would be better.
 - To provide for a safe, comfortable, equitable and accessible multipurpose pathway for non-motorized use.
 - *In response to irene szedlmayer comment: Increasingly shopping and education and work trips should be planned for*
- **Preferred route alignment by stakeholders today?** Gomez

Gomez Alignment Preference alternatives:

- Move forward with alternatives 1 & 2.
- Alternative 2 is the preferred.
- Concerned with driveways and resident pushback
- Hundreds of cyclists use Gomez Ave every weekend
- In the future a second connection may be looked into like Shell Ave?

- Discussion on Shell Ave and utilizing Dixie Hwy south of Gleason Ave.
- Shared used path on Gomez is recommend instead of two-way bike facility.
- Regarding the alternatives for the Gomez alignment, need to show/ explain the Gomez alignment is necessary.
- Jim and Lisa would ride on Gomez Alt. 2 (*they seem to fit the interested but concerned criteria*)
- Does the plan include connections to the west to the library, county parks, shopping, bus routes?
 - A: It's not part of the scope of this study.
- Martin County requires 6-ft sidewalks in almost every instance.

Jim Gorton Comments:

- The project may have some challenges due to the number of residential driveways to be modified in order to implement.
- Dixie may have less driveways.
- Christina noted that Dixie and Gomez have a similar number of driveways.
- *"Users are already on Gomez but I think there will be some pushback"*-Jim
 - Suom suggests championing the property value argument in order to get buy-in and minimize pushback.

Lisa Wischer Comments:

- Preferred alternative is #2 for Gomez Alignment.
- Are the alternatives purposing to have a curb?
- A bike path instead of a share use path may be better.

Irene Szedlmayer comments:

- Buffering is preferred between motorized traffic and bikes and pedestrians is preferred.
- To Everyone at 11:29 AM *"I prefer alternative 2 over alternative 1 as well. I agree with Lisa and Jim"*.

Micheal Yustin comments:

- A concern regarding the alternative on Gomez alignment is if the footprint expands there may be pushback from residence.
- Be prepared for comments and feedback from the residence on Gomez.

Joy comments:

- there are already many cyclists there, especially on the weekends so it should be highlighted that a bike facility will benefit both kinds of users. Cyclists are safer and

contained on facility easing drivers potentially reducing collisions, and improving traffic flow.

Dixie Highway Alignment Preference alternatives:

- 1st Alternative and 4th Alternative
- Convey that the 4th alternative is not feasible.
- Alternative 1 is the least complex. Show both Alternative 1 and 4 by marking the possible complexity in Alternative 4 with FEC and easement.
- According to Lisa the easements allow for a construction for public Sidewalk.
- Constraints regarding Dixie were provided to the group such as time and FEC agreements.
- FEC annual lease payment every year gets very expensive. The compounding interest makes it infeasible
- County is trying to reduce the number of agreements they have with FEC.
- Check if current county easement can be used for new kinds of facilities
- Bring in magnitude of cost for reconstruction of road for options in order to communicate feasibility to the public.
- Alternative 2 & 4 seem similar, with alternative. 4 having more challenges.
- FDOT has started feasibility study which includes US-1 to Bridge Rd on the east side. For now, a shared use path will be looked at. There is a meeting at the end of March. FDOT is proposing a pathway on the east side.
- Can a buffer/ separator be less than 2'? (18 inches?)
- How to cross from Dixie to Bridge?? Property on the NWC of Dixie Hwy and Bridge Rd will not give an easement or ROW for sidewalks/pathway

Lisa Recommendation/ Comments:

- The minimum width for a sidewalk is 6 ft.
- Reduce lanes to 10.75' or 10.5'. Eleven (11') foot wide travel lanes are only required where there are transit facilities. May want to show for 2nd alternative for Dixie.

Christopher Goetzfried comment:

- *"If there is no dedicated bike lane on Dixie, people will still use Gomez Ave", everyone agreed on that.*

US-1 Alignment Preference alternatives:

- 1st and 3rd alternatives are preferred by stakeholder.
- Lisa and Jim comment: The users are using Gomez, but there may be push back.
- Constraint with US-1 is some residents may not be will to give up Right of way.
- SuOm to make: US1 Alternative 1: 15' path on West 6' sidewalk on East. Alternative 2: 10' Shared use path on both sides.

Jeff's comments:

- Isn't there back angled parking on Dixie? Not parallel? (In relation to the slide "cross streets")
- The Landscape rendering on Gomez Shows Black asphalt, change color.

Lisa's Comments:

- Alternative 3 is preferred.

Chat Questions:

11:03:09 From irene szedlmayer to Everyone:

Good morning presenters. Audio is not great. I encourage you to speak into your microphones and make an effort to speak precisely.

11:06:56 From irene szedlmayer to Everyone:

I am not on verbally!

11:07:08 From jcox to Everyone:

I am not on audio either

11:08:20 From suOm to Everyone:

I will capture all written comments. Please utilize the chat if you are not on verbally.
Thank you

11:11:16 From irene szedlmayer to Everyone:

Must it be limited to recreational travel? Increasingly shopping and education and work trips should eb planned for

11:24:35 From irene szedlmayer to Everyone:

Can we see options 1 and 2 again, please?

11:26:16 From irene szedlmayer to Everyone:

Buffering between the motorized traffic and bikes and peds is preferred.

11:29:51 From irene szedlmayer to Everyone:

I prefer alternative 2 over alternative 1 as well. I agree with Lisa and Jim.

11:32:28 From irene szedlmayer to Everyone:

Does the plan include connections to the west to the library, county parks, shopping, bus routes?

11:44:02 From cgoetzfried to Everyone:

Alt 2 and 4 seem similar with Alt 4 having more challenges?

11:46:26 From irene szedlmayer to Everyone:

Martin County requires 6-ft sidewalks in almost every instance.

11:53:12 From cgoetzfried to Everyone:

What's the effect on safety when the adjacent bike lane travel direction is against the vehicle traffic direction?

12:02:44 From cgoetzfried to Everyone:

Without dedicated bike lanes on Dixie, bicyclists will still use Gomez.

12:15:26 From cgoetzfried to Everyone:

The third is preferable to 2.

12:19:35 From irene szedlmayer to Everyone:

I think the professionals should choose. They best understand the constraints.

Hobe Sound North Corridor SUN Trail Study

Stakeholder Meeting #2
March 2, 2022

PREPARED BY

MARLIN





Welcome & Team Introductions

MARLIN



01

SCOPE & RECAP 1ST MEETING

Feasibility study for a +/- 5-mile segment of the East Coast Greenway / Florida SUN Trail



02

DATA COLLECTION & ANALYSIS

Three (3) potential alignments



03

PROPOSED ALIGNMENTS & TYPICALS

US-1, Dixie Highway & Gomez Avenue



04

NEXT STEPS?

Public Meeting & Preferred Alternative



01

SCOPE





Project Scope

Task 1: *Project Management* - Meetings, and coordination

Task 2: *Outreach and Meetings* - MPO Advisory Committee Meetings, Stakeholder Meetings, Public Outreach, Presentations, Brochure and Communication


Task 3: *Data Collection* - Review of Existing Plans and Documents, Data Collection, and Field Inventory

Task 4: *Data Analysis* - Development of Purpose and Need Statement, Review and Analysis of Collected Data, Mapping, Desktop Review and Comparative Matrix

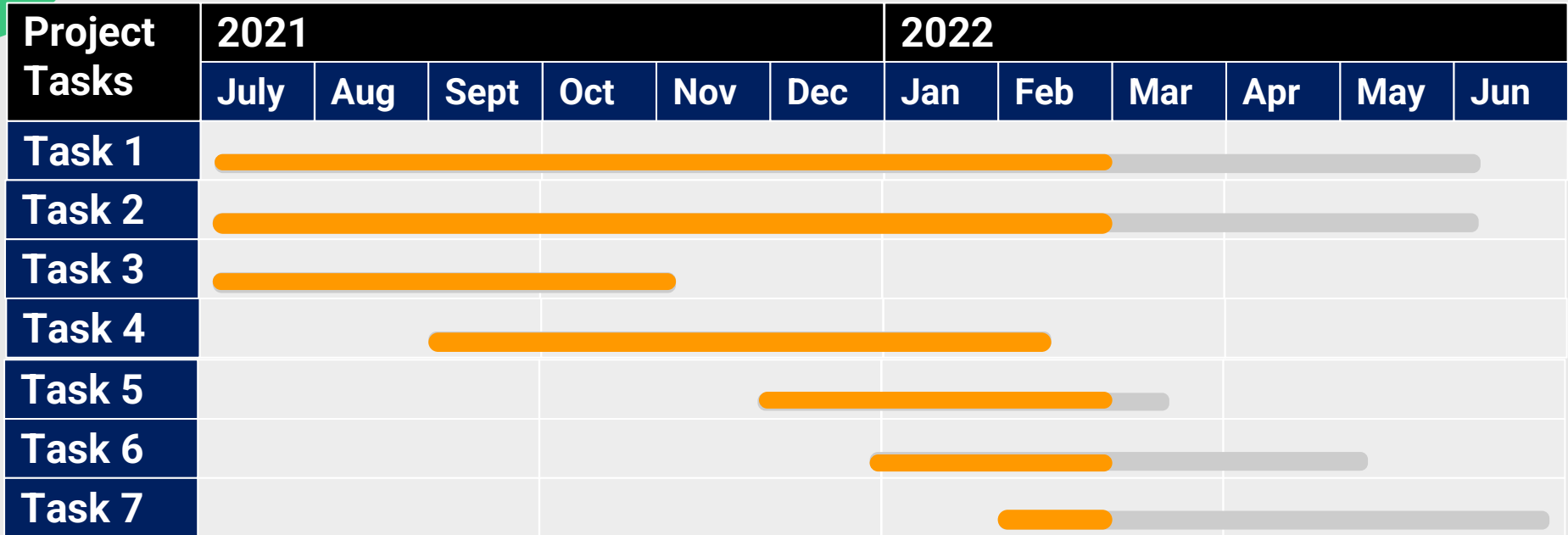
Task 5: *Preliminary Planning Analysis of Alignment Alternatives* - Develop Evaluation Criteria, Identification of Alternatives, Identification of three Best Alignments, Typical Cross Section Development, and Renderings

Task 6: *Documentation of Preferred Trail Concept* - Study Documentation, Recommendations, Evaluation of Alternatives, Finalize Typical Cross Sections, Permit Requirements, Cost Estimates and Conceptual Design

Task 7: *Feasibility Study* - Evaluate Comments, Feedback and Recommendations, Preparation of Final Document

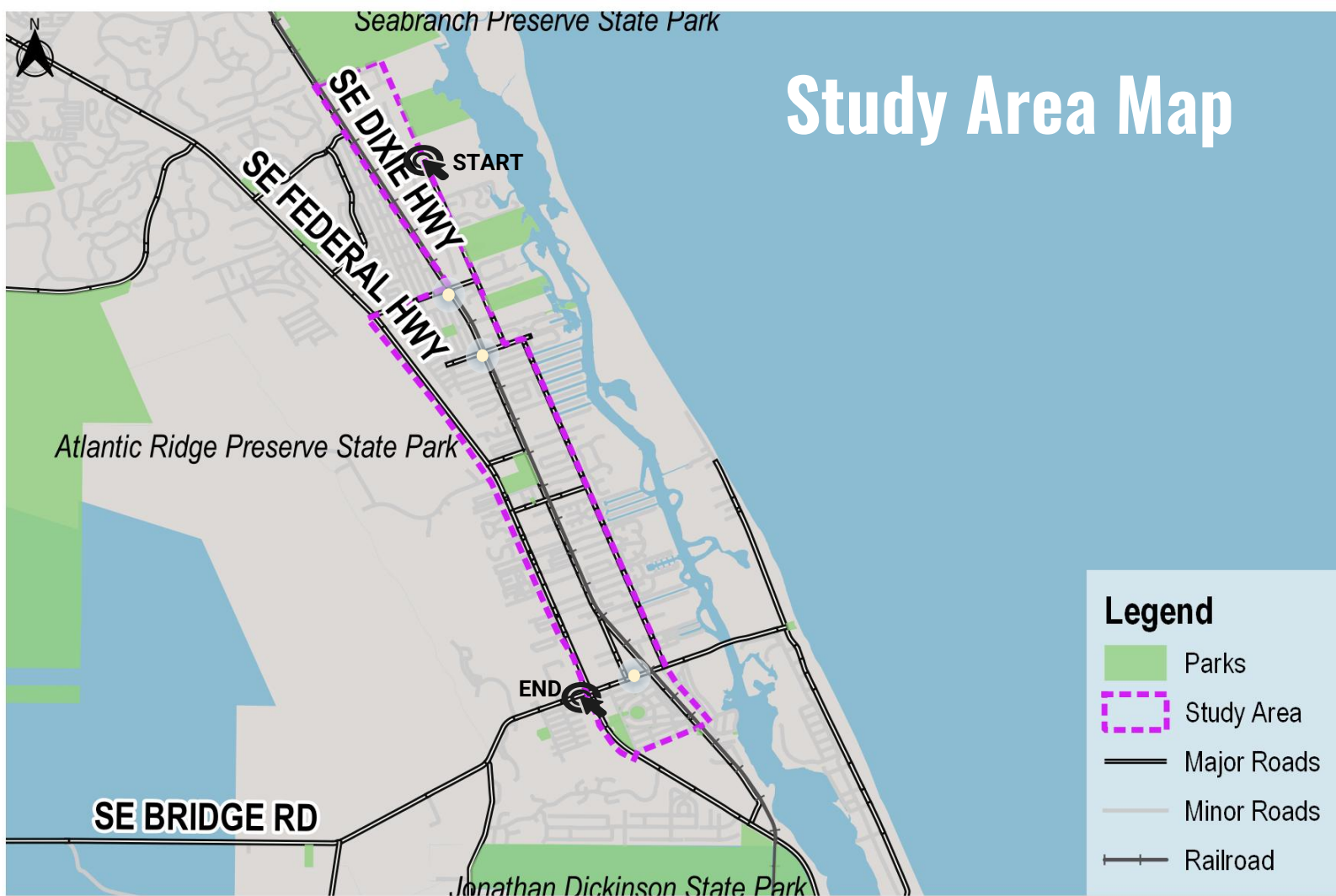


Schedule



TODAY ▲

Study Area Map



Purpose & Need

Purpose

To provide for a safe, comfortable, equitable and accessible recreational pathway for non-motorized use.

Need

To Complete a separated facility which implements a portion of the East Coast Greenway and Florida SUN Trail in Martin County.





02

DATA COLLECTION & ANALYSIS

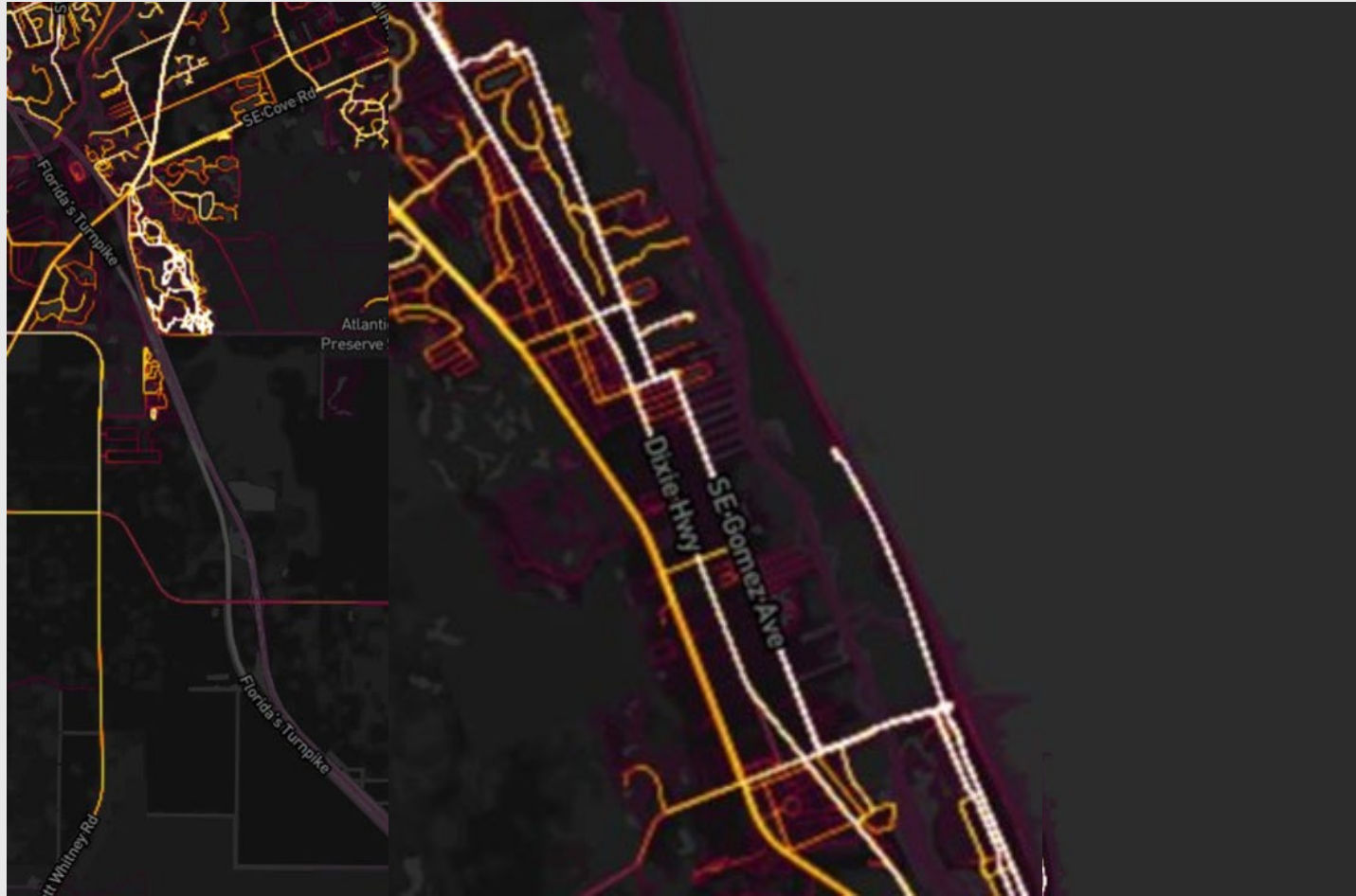


Traffic Data

ROADWAY	AADT* (2019)	SPEED LIMIT (MPH)
US-1	25,500	<ul style="list-style-type: none">• 55 (N. OF PETTWAY ST)• 45 (S. OF PETTWAY ST)
DIXIE HWY	6,595	<ul style="list-style-type: none">• 45 (N. OF CROSSRIP ST)• 30 (S. OF 1ST ST)
GOMEZ AVE	3,732	<ul style="list-style-type: none">• 35
BRIDGE RD	9,373	<ul style="list-style-type: none">• 30
CROSS RIP ST	N/A	<ul style="list-style-type: none">• 25
OSPREY ST	1,926	<ul style="list-style-type: none">• 25

*AADT = ANNUAL AVERAGE DAILY TRAFFIC

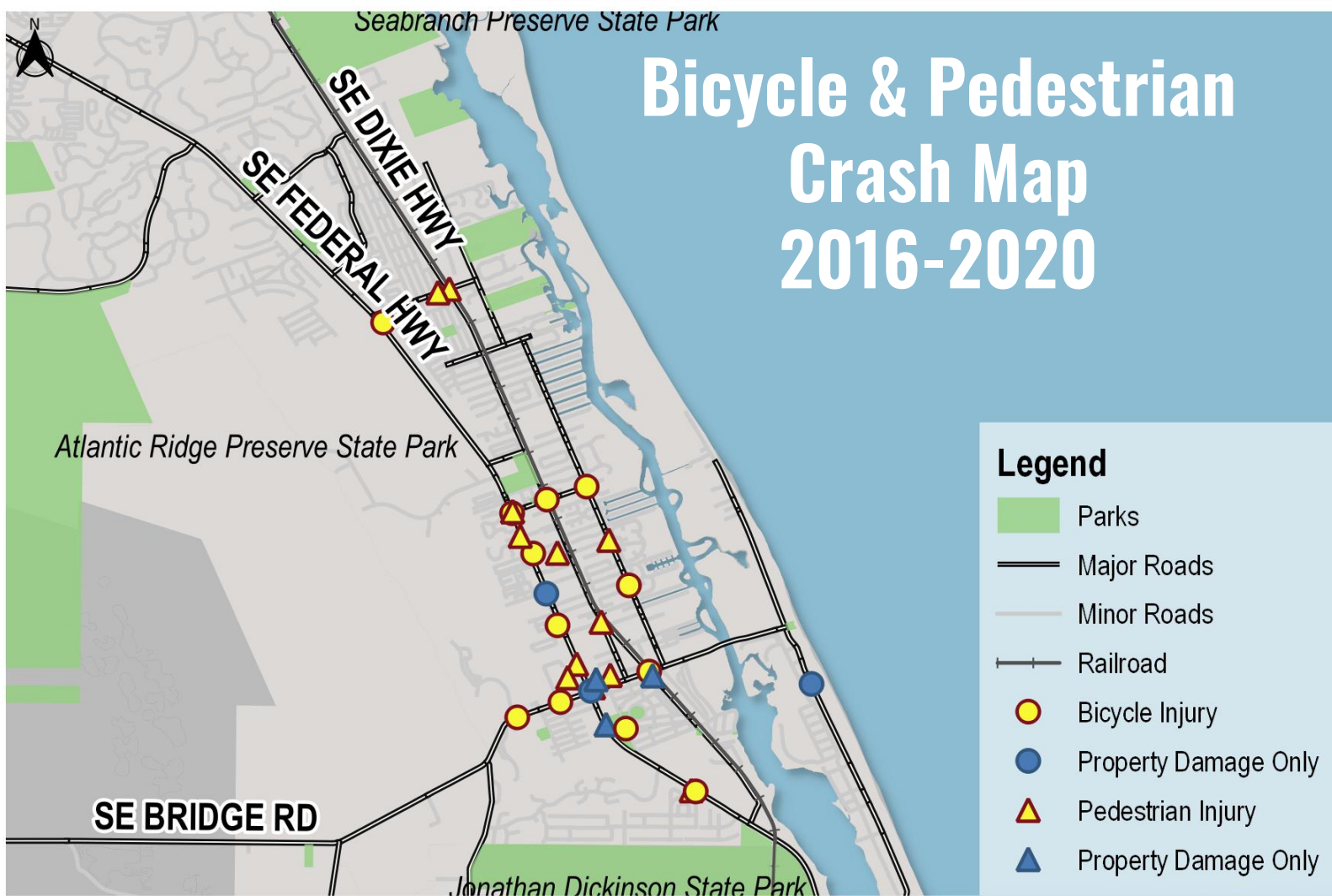
Bike & Ped Heat Map (Strava)





MAPS

Bicycle & Pedestrian Crash Map 2016-2020



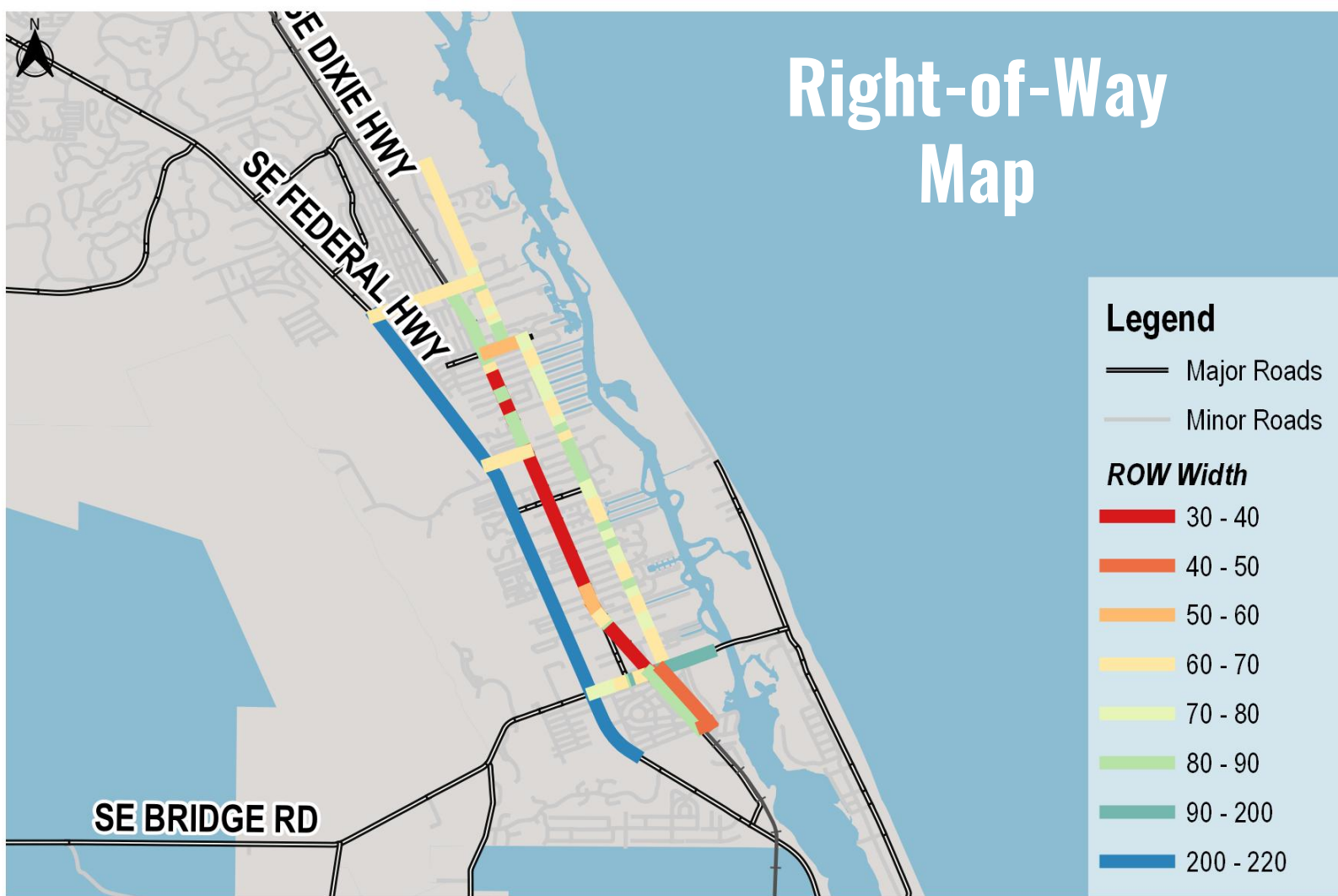
Non-Motorized Facilities Map



Legend

-  Parks
-  Major Roads
-  Minor Roads
-  Shared Use Path
-  Paddle
-  Sidewalk
-  Trails

Right-of-Way Map





PROPOSED ALIGNMENTS & TYPICAL SECTIONS

GOMEZ AVE DIXIE HWY, US-1



PROPOSED ALIGNMENTS



Legend

- Major Roads
- Minor Roads
- Potential Alignments**
- SE Dixie Hwy
- SE Federal Hwy
- SE Gomez Ave

Alignments Continued



US-1

No ROW Restrictions
Frontage Road (West Side)
Higher Speed Limits & Traffic
Volumes



Dixie Hwy

ROW Restricted (More than
50% of Roadway)
10' Sidewalk Easement
FEC Railroad/ROW Challenges



Gomez Ave

Lower Speed Limit & Traffic
Little to No ROW Restrictions
Residential Communities

Cross Streets



Osprey St

No ROW Restrictions
Low Speed Limits



Crossrip St

No ROW Restrictions
Dixie Hwy & Crossrip St
Intersection Unsignalized
Low Speed Limits



Bridge Rd

Partial Existing Pathway
Few ROW Restrictions
Low Speed Limits

Evaluation Criteria/Matrix

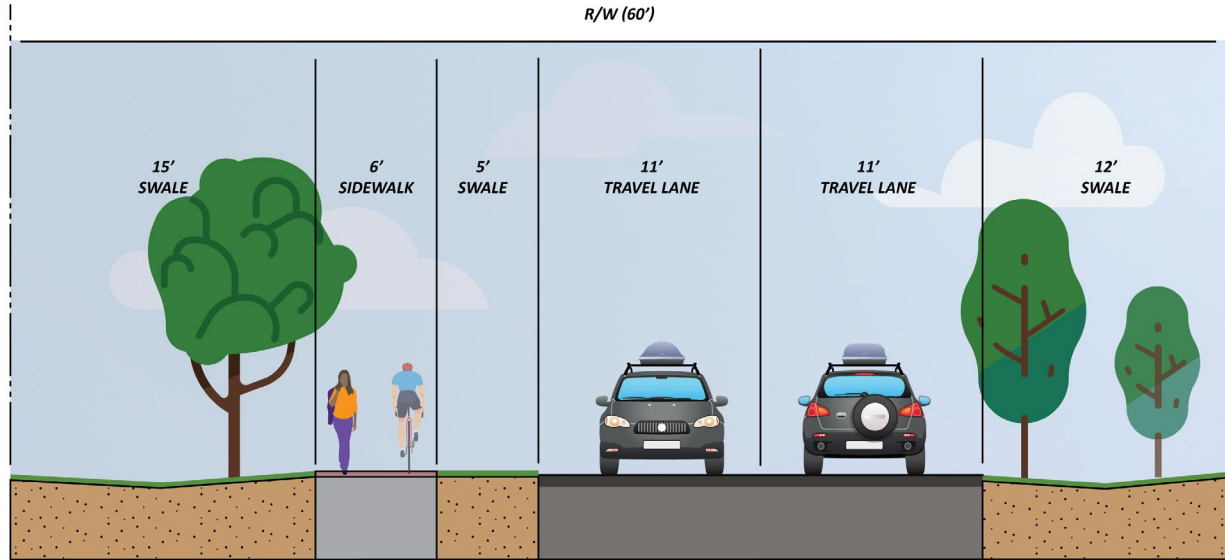
Factor	Description	Total Points	Route 1 US-1		Route 2 Dixie Hwy		Route 3 Gomez Ave	
			East	West	East	West	East	West
Safety	No. of Crashes & Severity, Speed Limit, AADT	45		21		12		9
Infrastructure	Driveways, Ped/Bike Facilities, Crossings, ROW	44	15	20	36	41	14	15
Lack of Connectivity	Schools, Transit, Places, Parks	11		7		8		5
TOTAL SCORE		100	43	48	56	61	28	29



TYPICAL SECTIONS

PROPOSED

GOMEZ AVE (EXISTING)



(ROW VARIES BETWEEN +/- 60 AND 90 FEET)

SE GOMEZ AV.



- ROW Varies
- Speed Limit is 35 MPH
- No. of Lanes 2
- Residential Uses and Schools

GOMEZ AVE ALTERNATIVES

Alternative 1

Gomez Ave



Alternative 1

- 10' Shared Use Pathway (West Side)
- 6' Sidewalk (East Side)
- Reduces Lane Width to 10'

Alternative 2

- 10' Two-Way Protected Bikeway (East Side) w/ 2-3' Buffer
- 6' Sidewalk (West Side)
- Reduces Lane Width to 10'

Alternative 2

Gomez Ave



GOMEZ AVE ALTERNATIVES

Alternative 3

Gomez Ave

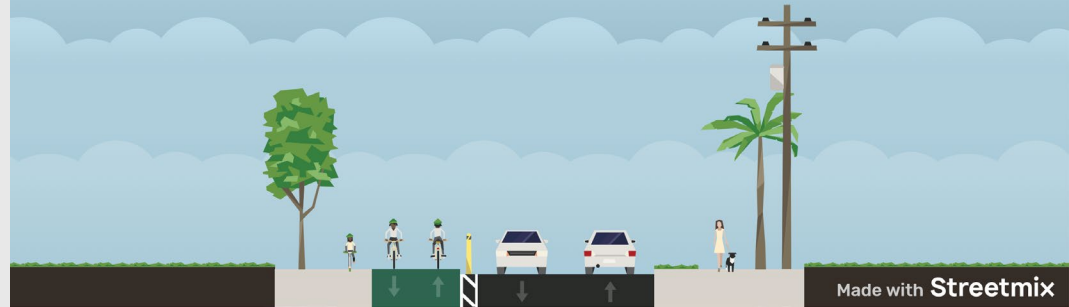


Alternative 3

- 10' Protected Shared Use Pathway (West Side)
- 2-3' Physical Barrier
- 6' Sidewalk (East Side)
- Reduces Lane Width to 10'

Alternative 4

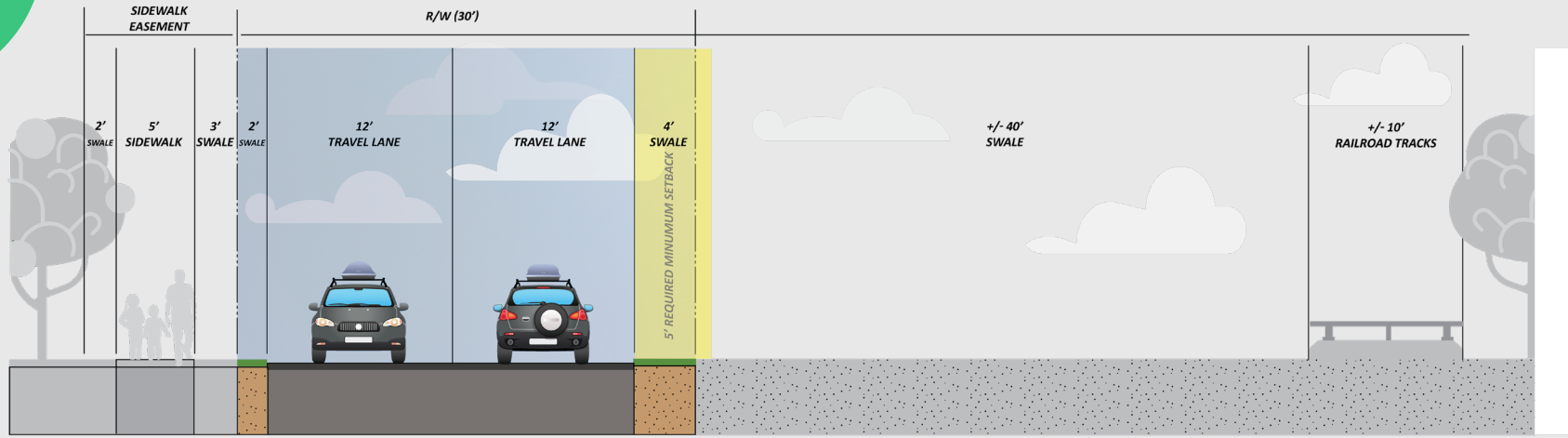
Gomez Ave



Alternative 4

- 10' Protected Two-Way Bikeway with 5' Sidewalk (West Side)
- 2-3' Physical Barrier
- 6' Sidewalk (East Side)
- Reduces Lane Width to 10'

DIXIE HWY (Existing)



(ROW VARIES BETWEEN +/- 30 AND 85 FEET)

EXISTING TYPICAL SECTION SE DIXIE HWY



- Between Dharyls Street & Bridge Road ROW is mostly 30 Feet
- 10 Foot Sidewalk Easement – Some Parcels Missing
- FEC on East Side

- Speed Limit is 30 – 45 MPH
- No. of Lanes is 2
- Residential and Some Commercial Uses

DIXIE HWY ALTERNATIVES

Alternative 1

Dixie Hwy



Alternative 1

- 10' Protected Shared Use Pathway (West Side)
- 2' Physical Barrier
- Reduces Lane Width to 11'

Alternative 2

- 10' Two-Way Protected Bikeway (West Side)
- 2' Physical Barrier
- 5' Urban Sidewalk w/ Curb & Gutter (East Side)
- Reduces Lane Width to 11'

Alternative 2

Dixie Hwy



DIXIE HWY ALTERNATIVES

Alternative 3

Dixie Hwy



Alternative 3

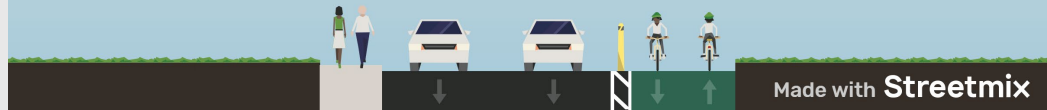
- 6' Sidewalk (West Side)
- 8' Shared Use Pathway with Curb & Gutter (East Side)
- Reduces Lane Width of 11'
- Requires Roadway Realignment and/or FEC Easement and Negotiations

Alternative 4

- 6' Sidewalk (West Side)
- 10' Two-Way Protected Bikeway (East Side)
- 2' Physical Barrier
- Reduces Lane Width of 11'
- Requires Roadway Realignment and/or FEC Easement and Negotiations

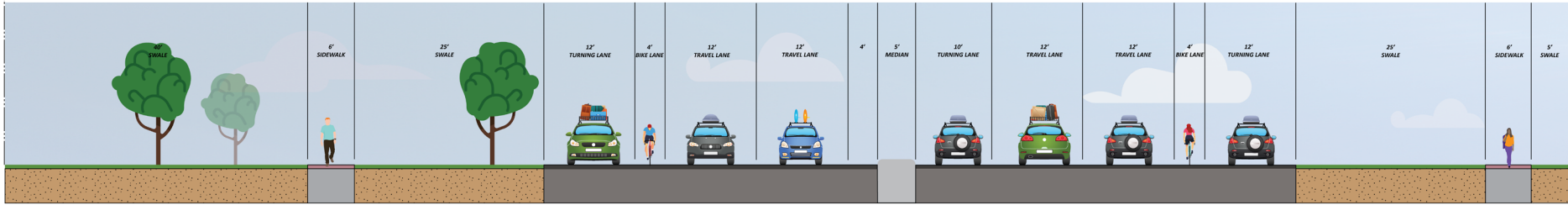
Alternative 4

Dixie Hwy



US – 1 (Existing)

R/W (206')



(ROW +/- 225 CONSISTENT)

FEDERAL HWY 0 10 20 30 40 50 60 70 80 90 100

- ROW Consistently +/-215 Feet
- Speed Limit is 45 – 55 MPH
- No. of Lanes is 4 to 8 Divided by a Median Island
- Commercial Uses

US-1 ALTERNATIVES

Alternative 1

US-1/Federal Hwy



15' Pathway for Bicycles & Pedestrians (5' Sidewalk with 10' Two-Way Bikeway – West Side), 6' Sidewalk (East)

Alternative 2

US-1/Federal Hwy



12' Shared Use Pathway (West Side), 6' Sidewalk (East Side)

US-1 ALTERNATIVES

Alternative 3

US-1/Federal Hwy



10' Shared Use Pathway (Both Sides)

Alternative 4

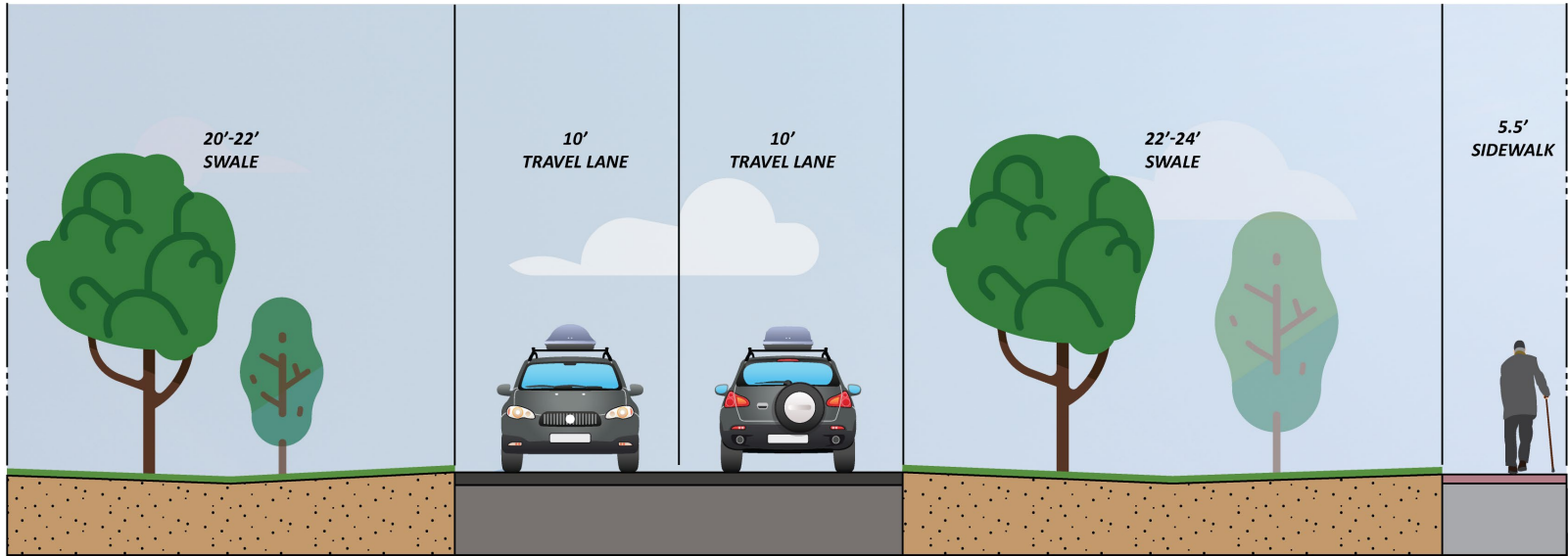
US-1/Federal Hwy



15' Pathway for Bicycles & Pedestrians (West Side) and 10' Shared Use Pathway (East Side)

Existing Typical for the Cross Streets

R/W (70')



(ROW CONSISTENT +/- 70 FEET)

SE. OSPREY STREET









04 NEXT STEPS



What's Next?

- ✓ Maps
 - ✓ Comparative Matrix
 - ✓ North/South Routes
 - ✓ East/West Connectors
 - ✓ Evaluation Criteria
 - ✓ Identify Alternatives
 - ✓ Three Best Alignments
 - ✓ Typical Cross Section Development
 - Permit Review
 - Cost Estimates
 - Renderings
 - Selection of Preferred Alternative
 - Finalize Typical Sections, Cost Estimates, Permit Requirements & Graphics
 - Final Report
- 
- 

Meetings

General & Stakeholders

	Stakeholder	Public
Government Stakeholders - November 4	▶	
Community Stakeholders - November 8	▶	
General Meeting - November 10		▶
Government Stakeholder – March 2	▶	
General Open House Meeting – March 9		▶

MPO Policy Boards

	Meeting Dates	
Citizens Advisory Committee (CAC)	4/4/22	6/1/2022
Technical Advisory Committee (TAC)	4/4/22	6/6/22
Bicycle & Pedestrian Advisory Committee (BPAC)	4/4/22	6/13/22
MPO Policy Board	4/18/22	6/20/22

Stakeholder To-Do

- ✓ Purpose & Need Statement
- ✓ Route Alignment Preference
- ✓ Select Two Alternatives for each Route
- ✓ Public Open House Next Wednesday, March 9, 2022 @ 5 PM
- ✓ Potential 3rd Stakeholder Meeting in May for Review of Plan Sheet

Thank You

CONTACT INFORMATION:

Christina Fermin
Marlin Engineering, Inc.
CFermin@marlinengineering.com
954-870-5064

Joy Puerta
Martin MPO
JPuerta@martin.fl.us
772-320-3015



Appendix B

Martin MPO Meeting
Minutes

**MARTIN METROPOLITAN PLANNING ORGANIZATION
JOINT CITIZEN'S/TECHNICAL/BICYCLE AND PEDESTRIAN ADVISORY
COMMITTEE (CAC/TAC/BPAC) MEETING**

Martin County Administrative Building Commission Chambers
2401 SE Monterey Road
Stuart, FL 34996
www.martinmpo.com
(772) 221-1498

Monday, April 4, 2022 @ 1:30 pm

MEETING MINUTES

1. CALL TO ORDER

The meeting was called to order at 1:36 PM by Lisa Wichser, TAC Chair.

2. ROLL CALL

TAC Members in Attendance:

Lisa Wichser, Chair
Kim DeLaney, Vice Chair
Joe Capra for Dan Hudson
Michael Wood for Stuart Trent
Althea Jefferson
Samantha Lovelady
Mark Cocco
Tim Voelker
Milton Leggett
Mary Ann Yaw Sosa for William Powell

TAC Members Excused:

TAC Members Not in Attendance:

Sam Carver
Ken DeAngeles

BPAC Members in Attendance:

Joan Moore, Chair
Pinal Gandhi-Savdas, Vice Chair
Julie Preast
Jackie Vitale
Kerrie Tyndall
Don Fabricy
Jody Garrett
Mike Bocchino
Michael MacLeod

BPAC Excused Members:

BPAC Members Not in Attendance:

Dawn Arvin
Timothy Rossknecht
Hal Forsland
Arlette Cataldo

CAC Members in Attendance:

Amy Eason
John Patteson
Cindy Greenspan
Ann Kagdis
Blake Capps
Saadia Tsafarides
Helen McBride
Trent Steele
Howard Lyndon Brown

CAC Members Excused:

CAC Members Absent:

Hilary Young

Staff in Attendance:

Beth Beltran, MPO Administrator
Lucine Martens, Planner
Ricardo Vazquez, Senior Planner
Joy Puerta, Planner
Cherie White, Administrative Assistant

Others in Attendance:

Christine Fasiska, FDOT
Jeff Weidner, Marlin Engineering
Larry Wallace, FDOT
Christina Fermin, Marlin Engineering
Daphne Schaub, Senior Planner, Martin County
Christopher Goetzfried, Capital Projects Administrator, Martin County

A quorum was present.

3. APPROVE AGENDA

A motion to approve the agenda was made by Joan Moore and seconded by Pinal Gandhi-Savdas, the motion passed unanimously.

4. APPROVE MINUTES

A motion to approve the Joint CAC/TAC/BPAC Meeting Minutes of November 29, 2021, was made by Joan Moore and seconded by Amy Eason, the motion passed unanimously.

5. COMMENTS FROM THE PUBLIC.

Julie Preast discussed the development order for Harborage and other developments that are under review along Baker Road, Dixie Highway, and the Green River Parkway. Funds were collected from the Developer of Harborage to possibly put a signal light when it was needed, at the corner of Alice Street. She explained with the hundreds of units, homes, condos, and apartments that are already approved, or will be approved soon, the situation that was anticipated is only going to get worse and a signal light is needed. She has been in communication with the City of Stuart for years, and knows they have been collecting some funds; however, there is a lack of funds for this signal light. Ms. Preast requested guidance from the Committee as to what direction to go in, and who to speak with to try and get these funds for a signal light at Dixie Highway and Alice Street.

Lisa Wichser, TAC Chair, postponed public comments for Item 6A. until after the presentation.

6. AGENDA ITEMS

A. HOBE SOUND NORTH CORRIDOR SUN TRAIL FEASIBILITY STUDY UPDATE.

Christina Fermin, Marlin Engineering Project Manager. presented the Hobe Sound North Corridor SUN Trail Feasibility Study. She provided an update on the project including the Stakeholder comments from March 2, 2022, and the Open House comments and results from March 9, 2022, where the Gomez Avenue corridor was the preferred route selected with the Gomez Avenue Alternative 2 typical section selected (10' two-way protected bikeway on the east side). Ms. Fermin requested direction from the Committee to move forward with developing a final conceptual plan view and typical sections for the SUN Trail Network along the Gomez Avenue corridor.

The following members of the public came forward and offered public comment:

Scott Faye, a resident of Hobe Sound since 1983, and a property owner along US-1 and along the Gomez Corridor, expressed oppositive for the project. After he researched the SUN Trail on the FDOT website, he noticed the SUN Trail is a statewide system and not a community or county initiative and stated running such a project right through a neighborhood seems completely out of design intent. Hoping his comments

were not too late, and the lack of participation from the residents attending the Open House, he expressed the US-1 corridor was far better for everyone in the community.

Beverly Halstead, a resident of Hobe Sound along the Gomez Corridor, read a statement of concerns for the project from the President of Hobe Sound Bible College, Dr. Daniel Stetler. The statement provided a lengthy discussion on the history of Hobe Sound Bible College and Christian Academy located on both sides of Gomez with approximately 500 students, staff, and faculty in the operation of the schools. She continued by noting the large amount of sidewalk usage by K through 12th grade and college students resulting in nearly hundreds of street crossings per day, 5-days per week in both the morning and afternoon. This has resulted with the need to hire additional crossing guards to assist students crossing in the middle of campus for the lunch hours. In addition, their neighbor on the east side of Gomez is Hobe Sound Elementary School and on the west side is a day care center with similar situations with parents dropping off their children for the day. One significant difference between Hobe Sound Bible College and Hobe Sound Elementary, and the day care is due to the College residing on both sides of the road with the academy classrooms, library, high school recreational facilities on one side of the road and the cafeteria, chapel, elementary playground, music facility on the other side of the road. She concluded that placing a trail within this area with 41 roads adjoining Gomez Avenue, would invite additional traffic with the many walkers, joggers, cyclists that already use the corridor.

Bruce Montefusco, a resident of Hobe Sound residing off of Gomez for 45 years, expressed opposition for the project. He discussed the increased traffic as buildings increase, the many pedestrians that use the sidewalks on both sides of Gomez, and the cyclists that ride in packs along Gomez that refuse to give way to not only pedestrians but also cars. He expressed frustration over the project's direction with the Gomez Avenue corridor as the preferred route and mentioned even if you widen the sidewalk, this will continue to be a big issue since cyclists will tell you to move over, whether you're on a sidewalk or not. He continued by explaining the road is heavily traveled during and out of season during rush hour near the school area and commented on Ms. Halstead discussion with the 41 roads accessing Gomez. He concluded with mentioning the death of a child years ago, the lack of right-of-way for the project, traffic concerns, the bad decision to use Gomez Avenue as the route and recommended US-1 as a better choice.

The following members of the Joint CAC/TAC/BPAC made the following comments:

Blake Capps, CAC member and Hobe Sound resident for 45 years, discussed the following: Attending the recent public meeting on this subject, the lack of many residents of Gomez Avenue who were there, and the lack of a representative of the people that attended who were going to be directly affected by the decision. He explained a number of concerns about the project; including, interfering with new drainage pipes that we just installed, the giant beautiful pine trees that would have to be cut down, the telephone poles, fire hydrants, and large FPL electrical boxes that

would have to be moved, as well as residents along Gomez Avenue losing a sizeable strip of their yards. He discussed his main concern that he didn't think his neighbors on Gomez Avenue knew about the project and the leaders of the four schools at the south end of Gomez Avenue need to be fully informed about the impact of the trail and their operations. He concluded by stating the decision to move forward to develop a final conceptual plan view, was premature and requested that the project be delayed until we have more public input.

Pinal Gandhi-Savdas, BPAC Vice Chair, inquired into how many people do they anticipate using the trail. Jeff Weidner of Marlin Engineering explained there were no counts as part of the scope of work performed but the observations and Strava data, (a tool pedestrians and cyclists can use their phone to track their activities) showed there was significant bicycle traffic along the Gomez corridor most likely coming from Seabranh Blvd. to Jonathan Dickinson. However, his observation was pedestrians local, and bicyclists mixed local and county.

Joan Moore, BPAC Chair, stated that she rides that route along Gomez every Saturday and Sunday, not in a pack but by herself, and she loves it. She stated that if the trail moves to US-1 she will continue to use Gomez. Lisa Wichser TAC Chair inquired as to how many post cards were mailed to the property owners regarding the public open house. Jeff Weidner stated 1,868 were mailed to properties within 300 feet of the study area, two or three weeks prior to the meeting. A brief discussion ensued regarding the number of people who attended versus the number of property owners who were notified. Joy Puerta MPO Planner explained that there were also yard signs placed in the right-of-way advertising the public open house. A comment was made the signs were difficult to read. Ms. Moore, stated she also rides in Winter Park which has a multi-use trail like the one proposed along Gomez, and their property values have increased, she also stated she has been riding Gomez for the past 35 years.

Jackie Vitale, BPAC member, asked if a decision were to be postponed would it jeopardize the project since hearing from the residents today it appears additional public outreach is needed. Joy Puerta stated that if not approved, another public outreach meeting is not in the scope but there is one more stakeholder meeting scheduled. She explained that staff did everything they could to reach out to the residents in the area and further explained that typically what happens if people are not concerned about the project, they are the ones that do not show up at the meetings.

A motion to approve the was made by Pinal Gandhi-Savdas and seconded by Joan Moore, the motion passed. the motion passed with 22 ayes and 6 nays.

ayes

Lisa Wichser
Michael Wood for Stuart Trent
Althea Jefferson
Samantha Lovelady
Mark Cocco

Samantha Lovelady
Tim Voelker
Milton Leggett
Mary Ann Yaw Sosa for William Powell
Joan Moore
Pinal Gandhi-Savdas
Julie Preast
Don Fabric
Jody Garrett
Mike Bocchino
Michael MacLeod
Amy Eason
John Patteson
Cindy Greenspan
Ann Kagdis
Saadia Tsaftarides
Helen McBride
Howard Lyndon Brown

nays

Joe Capra for Dan Hudson
Kim DeLaney
Jackie Vitale
Kerrie Tyndall
Blake Capps
Trent Steele

B. TITLE VI PLAN UPDATE

Ricardo Vazquez, MPO Senior Planner, gave a brief overview on the agenda item. He noted the following minor changes to the annual Title VI Plan:

- Coordinator for the County.
- Limited English Proficiency (LEP).
- County population data.
- Title VI Plan Community Training update.

A motion to approve the Title VI Plan Update was made by Julie Preast and seconded by Samantha Lovelady, the motion passed unanimously.

C. DRAFT FY23-FY24 UNIFIED PLANNING WORK PROGRAM (UPWP)

Ricardo Vazquez, MPO Senior Planner, gave a brief overview on the agenda item. He explained that the UPWP is a 2-year document that identifies the MPO's budgeted planning activities that will be performed by the MPO during that time. He presented details of each Task 1 through 8 of the UPWP.

A motion to approve the Draft FY23-FY24 Unified Planning Work Program (UPWP) was made by Amy Eason and seconded by Joan Moore, the motion passed unanimously.

D. FY21-FY22 UPWP DE-OBLIGATION OF PL FUNDS AND UPWP REVISION 7-AMENDMENT 2.

Joy Puerta, MPO Planner, introduced the item and explained that the PL funds in the FY21-FY22 UPWP would need to be de-obligated by May 1st in order for those funds to be available in FY23, and as part of this item staff also requests approval of the UPWP revision 7-Amendment 2.

A motion to approve the FY21-FY22 UPWP De-Obligation of PL funds and UPWP Revision 7-Amendment 2 was made by Julie Preast and seconded by Saadia Tsafarides, the motion passed unanimously.

E. FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) MPO SCHEDULING REPORT.

Larry Wallace, FDOT District 4 Bicycle Pedestrian and Complete Streets Coordinator, outlined the MPO Scheduling Report and specific scope elements. The report contains all of FDOT District 4 projects that are currently in the FDOT District 4's Adopted Work Program.

Julie Preast stated she was a proponent of the Marty Bus and suggested creating more awareness and safety for our bus riders; therefore, increasing the ridership. She stated there needs to be more bus stop enclosures and more right-of-way to put them on. Larry Wallace stated that bus shelters are maintained by the County and/or City, and those requests would be made by the transit department to FDOT during the design phase. He mentioned that any right of way acquisition goes through a different design phase and any major scope changes recommended by the committee should be sent to the MPO staff, and that he would be providing a monthly report to the MPO staff.

7. COMMENTS FROM COMMITTEE MEMBERS

Joan Moore, BPAC Chair, thanked FDOT and the MPO for clearing the overgrowth on the bike lane on Hutchinson Island.

Blake Capps inquired as to whether the decision on the SUN Trail would go before the Martin County Commission. Ricardo Vazquez, MPO Senior Planner, stated there are four Martin County Commissioners on the MPO Board, and the decision would be made through the MPO Board.

8. COMMENTS FROM THE PUBLIC

NOTES - None


9. NEXT MEETING

CAC – April 27, 2022
TAC – April 27, 2022
BPAC – May 2, 2022

10. ADJOURN

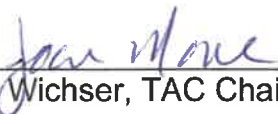
Seeing no other business items remaining on the Agenda and no additional comments, the Chair adjourned the meeting at 2:58 PM.

Prepared by:

For: 
Cherie White, Administrative Assistant

Date 11/28/22

Approved by:

For: 
Lisa Wichser, TAC Chair

Date 11/28/22

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**MARTIN METROPOLITAN PLANNING ORGANIZATION
POLICY BOARD MEETING**
Martin County Administrative Building Commission Chambers
2401 SE Monterey Road
Stuart, FL 34996
www.martinmpo.com
(772) 221-1498

Monday, April 18, 2022 @ 9:00 am

MINUTES

1. **CALL TO ORDER** – MPO Chair Troy McDonald called the meeting to order at 9:00 a.m.
2. **PLEDGE OF ALLEGIANCE** – MPO Chair Troy McDonald led the Pledge of Allegiance.
3. **PRAYER** - Reverend Jim Harp, Stuart Alliance Church led the Invocation.
4. **ROLL CALL**

PRESENT:

Troy McDonald, Chair
Doug Smith, Vice Chair
Commissioner Edward Ciampi
Commissioner Harold Jenkins
Commissioner Stacey Hetherington
Commissioner Merritt Matheson

REPRESENTING:

City of Stuart Commission
Martin County Board of County Commission
Martin County Board of County Commission
Martin County Board of County Commission
Martin County Board of County Commission
City of Stuart Commission

EXCUSED ABSENCE:

Council Member Guyton Stone
Commissioner James Campo

Village of Indiantown Council
Town of Sewall's Point Commission

Staff in Attendance:

Beth Beltran, MPO Administrator
Ricardo Vazquez, Senior Planner
Joy Puerta, Planner
Lucine Martens, Planner
Cherie White, Administrative Assistant

Others in Attendance:

Reverend Jim Harp, Stuart Alliance Church
Lisa Wichser, Martin County Engineer
Jeff Weidner, Marlin Engineering
Christina Fermin, Marlin Engineering
Mira Skoroden, FDOT

5. APPROVE AGENDA

A motion to approve the Agenda was made by Commissioner Stacey Hetherington and seconded by Commissioner Doug Smith. The motion passed unanimously.

6. APPROVE MINUTES

MPO Policy Board Meeting – February 21, 2022

A motion to approve the MPO Policy Board Minutes of February 21, 2022 was made by Commissioner Doug Smith and seconded by Commissioner Edward Ciampi. The motion passed unanimously.

7. PUBLIC COMMENTS - None

8. AGENDA ITEMS

A. HOBE SOUND NORTH CORRIDOR SUN TRAIL FEASIBILITY STUDY

Christina Fermin, Marlin Engineering, presented a visual Sun Trail Feasibility Study presentation to the Policy Board.

The following members of the public came forward and offered public comment:

Daniel Stetler came forward and expressed concern over the proposed trail along Gomez Avenue.

Michael Macleod came forward in support of the proposed Gomez Avenue trail. He explained it would be a safer corridor for the school children.

Beverly Halstead came forward and expressed concern over the proposed trail along Gomez.

Jeff Teach came forward and stated that traffic safety is very important. He stated he is an avid bicyclist and supports a separated bike path and supports the proposed trail on Gomez.

Bruce Montefusco came forward and expressed concern over the proposed trail on Gomez and stated Dixie Highway is a better alternative.

Blake Capps came forward and stated that there needs to be better outreach to the residents on Gomez. He expressed concern that the recent drainage work would be impacted if this trail is put in along Gomez.

Commissioner Harold Jenkins stated that bicyclists will continue to ride Gomez Avenue since it is a safe alternative over US 1, and there is no chance of getting the right of way from FEC along Dixie Highway.

Commissioner Doug Smith was not supportive of adding the trail to Gomez Avenue. He did say that there are some good trails that go through neighborhoods and once they're built, people like them. He suggested looking at the cost to acquire the right of way property along A1A behind Heritage Ridge on the East side. He added that there needs to be a bigger discussion about where these trails should be in the first place, where is the master plan and how does this fit into the big picture. He said that the County needs to decide where it should go and if we need to acquire right of way, they should look at that and not spend any more money on Gomez until we have fully explored for alternative routes.

Commissioner Stacey Hetherington agreed with Commissioner Smith to look at other options. She did suggest continuing additional outreach to the Gomez Avenue corridor property owners.

Commissioner Ciampi agreed that there needs to be a plan and asked what the project timeline was.

Beth Beltran explained that they're looking at construction 10-15 years out.

Commissioner Harold Jenkins suggested looking at an alternative path from US 1 around the Macarthur property, through the State Park and meander through that property down to Flora Road, out through Flora Road into Johnathon Dickinson Park to the proposed connection point. He supported pausing this project until we have input from the Gomez Community.

Commissioner Merritt Matheson agreed about the FEC right of way. He stated that we must look at crash data and compare the roadways and their speed limits. He asked about the impacts to vehicular traffic and vehicle traffic calming if a trail was added to a roadway and/or reducing the road width, what does the data show? He also asked to look at A1A without touching the easement but wanted to clarify that his priority is safety.

Jeff Weidner, Marlin Engineering came forward and explained that the data shows that when roadways are reduced, and paths or structures are added it creates a safer or traffic calming effect.

Commissioner Smith requested to see the right of way study of A1A and also the MPO trails plan to see where that stands and how this can link together, and asked if there is a way to shift over further to the West. He suggested stepping back and looking at the plan in a different setting from this.

Commissioner Troy McDonald agreed with Commissioner Smith and stated this is a destination route that should provide a safe environment but those cyclists who ride regularly will most likely continue to ride on the road. He was interested in the plan Commissioner Jenkins described and stated we should step back and look at alternatives.

A motion to approve that staff go back to the drawing board, do further outreach to the Gomez community to further engage, and to further look at some of the alternatives that have been presented, and to have the consultants prepare updated information and conduct one-on-one conversations with the Board members so that the Board can better understand the project, was made by Commissioner Doug Smith and seconded by Commissioner Harold Jenkins. The motion passed unanimously.

The Board took a closed captioning break at this time.

B. TITLE VI PLAN UPDATE

Ricardo Vazquez, Senior Planner, introduced the agenda item outlining Title VI Plan updates.

A motion to approve the Title VI Plan Updates was made by Commissioner Doug Smith and seconded by Commissioner Harold Jenkins. The motion passed unanimously.

C. DRAFT FY23-FY24 UNIFIED PLANNING WORK PROGRAM (UPWP)

Beth Beltran, MPO Administrator introduced the agenda item outlining the Draft FY23-FY24 UPWP, which is a federally required document and updated every two years. The UPWP is necessary for Martin County to be able to receive Federal and State transportation funds. The Martin MPO begins its fiscal year in July and ends June 30th. She explained that they have not received any comments from FDOT to date but hope to have them by the next Board meeting.

A motion to approve the Draft FY23-FY24 Unified Planning Work Program (UPWP) was made by Commissioner Stacey Hetherington and seconded by Commissioner Edward Ciampi. The motion passed unanimously.

D. FY20/21-FY21/22 UPWP DE-OBLIGATION OF PL FUNDS AND UPWP REVISION 7/AMENDMENT.

Joy Puerta, Planner, introduced the agenda item outlining the de-obligation of UPWP funds that are not going to be spent in the current Fiscal Year (FY). The de-obligation process is necessary in order to make the funds, \$78,000, available in the first year of the FY 22/23 – FY 23/24 UPWP that starts on July 1, 2022. As part of the de-obligation process an amendment is required. Staff is requesting the Board approve two items, the UPWP revision to de-obligate the funds, and to authorize the chair to execute the amendment and Resolution 22-03.

A motion to approve the UPWP revision to de-obligate the funds, and to authorize the chair to execute the amendment and Resolution 22-03 was made by Commissioner

Doug Smith and seconded by Commissioner Stacey Hetherington. The motion passed unanimously.

9. COMMENTS FROM ADVISORY COMMITTEE MEMBERS - NONE

10. COMMENTS FROM BOARD MEMBERS

Commissioner Hetherington stated that she would like to put comments on the record for Vision Zero from this Board, that in addition to the analysis of regular traditional data, we should be taking local input into consideration if we are going to achieve the Vision Zero Mission. Beth Beltran stated that at the May 9th Policy Board meeting the Vision Zero study will be presented and suggested that at the June meeting it would be a good time to let FDOT know that based on the study just completed the importance of local input and that it should be factored into decisions on how projects are funded.

Commissioner Smith thanked Commissioner Hetherington and stated he is a member of the Florida Long Range Transportation Plan Steering Committee and that issue has been raised many times. He suggested this Board address a letter to the Long Range Transportation Plan Steering Committee, and to the Regional Planning Councils around the State and agrees that there needs to be data to justify doing certain things, but when a local jurisdiction defines that there is a dangerous intersection or a dangerous situation that needs to be addressed that doesn't fit the standard of criteria, there needs to be a way, either the MPO or the County or City Commission, to step out of that traditional box and make a determination that something needs to be done, like a traffic light at South River.

He stated that there needs to be a change in the way the FDOT is thinking if Vision Zero is going to be achieved and there must be another way to get there, other than crash and speed statistics. He said the letter needs to be drafted now to the Long-Range Transportation Plan Steering Committee at FDOT and copy that letter to all the Regional Planning Councils. Beth Beltran stated she would like to see the letter accompany the adopted Vision Zero plan since it incorporates what is described as local input, for example, the interactive map that records near misses. Commissioner Smith said that by putting this in writing now and on the record that we have talked about this, they need to address these comments at the upcoming meeting.

A motion to draft a letter for signature by the MPO Chair to the Long-Range Transportation Plan Steering Committee and Regional Planning Councils regarding Vision Zero and local input for safety issues was made by Commissioner Stacey Hetherington and seconded by Commissioner Doug Smith. The motion passed unanimously.

Commissioner Merritt Matheson said he would like to see a buy-in from other MPOs. Chair Troy McDonald requested adding a copy of the letter to the Metropolitan Planning Organization Advisory Council (MPOAC).

11. COMMENTS FROM FDOT - NONE

12. NOTES

ADJOURNMENT: 11:00 AM

Approved by:



Troy McDonald, Chair

Prepared by:



Cherie White, Administrative Assistant

Minutes Approved on May 9, 2022

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**MARTIN METROPOLITAN PLANNING ORGANIZATION
POLICY BOARD MEETING**

Martin County Administrative Building Commission Chambers
2401 SE Monterey Road
Stuart, FL 34996
www.martinmpo.com
(772) 221-1498

Monday, February 27, 2023 @ 9:00 am

MINUTES

- 1. CALL TO ORDER** – MPO Chair Troy McDonald called the meeting to order at 9:01 a.m.
- 2. PRAYER** – Pastor Jim Harp, Stuart Alliance Church led the Invocation.
- 3. PLEDGE OF ALLEGIANCE** – MPO Chair Troy McDonald led the Pledge of Allegiance.
- 4. ROLL CALL**

PRESENT:

Troy McDonald, Chair
Doug Smith, Vice Chair
Commissioner Sarah Heard
Commissioner Stacey Hetherington
Commissioner Christopher Collins
Commissioner James Campo
Council Member Susan Gibbs-Thomas

REPRESENTING:

City of Stuart Commission
Martin County Board of County Commission
Martin County Board of County Commission
Martin County Board of County Commission
City of Stuart Commission
Town of Sewall's Point Commission
Village of Indiantown Council

EXCUSED:

Commissioner Harold Jenkins Martin County Board of County Commission

Staff in Attendance:

Beth Beltran, MPO Administrator
Ricardo Vazquez, Senior Planner
Joy Puerta, Planner
Lucine Martens, Planner
Alor Cadorna, Administrative Assistant

Others in Attendance:

Christine Fasiska, FDOT
Ronald Kareiva, FDOT
Jeff Robbert, FDOT

James Brown, FDOT-FTE
Pastor Jim Harp, Stuart Alliance Church
Lisa Wichser, Martin County Engineer
Christina Fermin, Marlin Engineering
Jeff Weidner, Marlin Engineering
Donna Carman, Indiantown Chamber of Commerce
Taryn Kryzda, Village of Indiantown
Barbara Clowdus, McCurrents
Frank Veldhuis, NorthStar Geomatics
Pinal Gandhi-Savdas, City of Stuart
Joe Capra, Captec
Yvonne Wilkes, Indiantown
Sandra Anderson, Indiantown
Julie Harper, Indiantown
Laura Culpepper, Culpepper Electric
Bert Lieftink, Indiantown
Lisa Ferrier, Indiantown
Shanna Reynolds, Indiantown
David Reynolds, Indiantown
Billy Parker, Indiantown
Wendy Parker, Indiantown
Cheryl Swink
Laverne Williams

A quorum was present.

5. APPROVE AGENDA

A motion to approve the agenda was made by Commissioner Stacey Hetherington and seconded by Commissioner Doug Smith, the motion passed unanimously.

6. APPROVE MINUTES

MPO Policy Board Meeting – December 12, 2022

A motion to approve the MPO Policy Board Minutes of December 12, 2022 was made by Commissioner Stacey Hetherington and seconded by Commissioner Doug Smith, the motion passed unanimously.

7. PUBLIC COMMENTS - None

8. AGENDA ITEMS

A. ELECTION OF OFFICERS

Beth Beltran, MPO Administrator, introduced the agenda item and stated that the Chair and Vice Chair are the two members of the regional Treasure Coast Transportation Council (TCTC). The MPO needs two alternates to the TCTC and a Chair of the Local

Coordinating Board for the Transportation Disadvantaged (LCB-TD). The MPO Chair is the member of the Governing Board for the statewide MPO called the MPOAC, and the Vice Chair is the alternate. She announced that the upcoming year is very important for attendance to the MPOAC Governing Board meetings because they are going to discuss the breakdown of the MPOAC funding throughout the state. FDOT will be looking at the allocations for the MPO's and the bigger MPO's in the state want the allocation based on population and that would certainly hurt the smaller MPO's like Martin MPO and Indian River MPO. The MPOAC meetings are held once a quarter. Ms. Beltran stated that she wanted to update the Board on the responsibility and expectation of the Chair and Vice Chair this year.

A motion to nominate Commissioner Troy McDonald as Chair by Commissioner Doug Smith and seconded by Commissioner Sarah Heard, motion passed unanimously.

A motion to nominate Commissioner Doug Smith as Vice Chair by Commissioner Sarah Heard and seconded by Commissioner Stacey Hetherington, motion passed unanimously.

A motion to nominate Commissioner Harold Jenkins and Commissioner Stacey Hetherington as the alternates for the Treasure Coast Transportation Council (TCTC) by Commissioner Sarah Heard and seconded by Commissioner Doug Smith, motion passed unanimously.

A motion to nominate Commissioner Christopher Collins as Chair to the Local Coordinating Board for the Transportation Disadvantaged (LCB-TD) by Commissioner Sarah Heard. Commissioner Christopher Collins declined and nominated Commissioner James Campo. It was seconded by Commissioner Sarah Heard and the motion passed unanimously.

B. FY23 – FY27 TRANSPORTATION IMPROVEMENT PROGRAM (TIP) – AMENDMENT #2

Beth Beltran gave a brief overview on the FY23-FY27 Transportation Improvement Program (TIP) Amendment #2. She stated that FDOT requests an amendment because a new project has been added to the Work Program (FM#452227-1). This project is part of a Statewide Initiative to install rumble strips on the shoulders of high-speed state roadways (50 mph and above). She requested approval and was available to answer questions.

A motion to approve the FY23 – FY27 Transportation Improvement Program (TIP) – Amendment #2 was made by Commissioner Sarah Heard and seconded by Commissioner Stacey Hetherington, the motion passed unanimously.

C. FY23 TRANSPORTATION ALTERNATIVE PROGRAM (TAP) APPLICATION

Beth Beltran introduced the item and she explained that the MPO received one application from the City of Stuart. She introduced Pinal Gandhi-Savdas, CRA Director of the City of Stuart, and Joe Capra, Project Engineer. They presented the South Dixie Highway Improvements for the 2023 TAP application cycle. The federal funds being requested are \$481,673.38 with local fund contributions of \$508,714.66.

Commissioner James Campo asked how many streetlights are being installed. Joe Capra stated that there are total of seven streetlights they are proposing, and they try to add streetlights at each intersection. Commissioner Doug Smith asked if the City of Stuart has the policy of right of way for extractions that is needed for sidewalks and parking. Pinal Gandhi-Savdas stated that they will work with the developer to make sure that it complies with the design that they have in mind.

Commissioner Sarah Heard inquired what is the existing lane width on SE Flagler Avenue. Joe Capra stated that the width of the lane is at least 11 feet. Commissioner Sarah Heard added that there are a lot of big pick-up trucks and SUV's and reducing the lane to 10 feet is going to be difficult. Joe Capra stated that they are trying to accomplish walkability and safety. Also, they are trying to slow down traffic by reducing the lane to ten feet width and adding landscaping. They are trying to work with the right of way that they have, and the grant requires the applicant to have right of way.

Commissioner Stacey Hetherington inquired if the grant requires five-foot or six-foot sidewalk. Pinal Gandhi-Savdas stated that they are proposing a six-foot sidewalk. Commissioner Hetherington expressed her concerns about sacrificing traffic flow to squeeze in a sidewalk where it doesn't necessarily fit. She also mentioned that no one stops at the pedestrian crosswalks, and she asked if there were any kind of indicators or flashers for enforcing those pedestrian crosswalks. Joe Capra stated that they can put flashers at the crosswalks. Pinal Gandhi-Savdas added that they will take the MPO Board's comments and take that into consideration. Also, this is not the final plan, and they will look at other options and talk to FEC to see if they can move the sidewalk on their property to give us more right of way to keep the two travel lanes.

A motion to approve the FY23 Transportation Alternative Program (TAP) application with comments that the local agency will come back to the MPO Board once all the comments have been incorporated into the project was made by Commissioner Sarah Heard and seconded by Commissioner Christopher Collins, the motion passed unanimously.

D. DEVELOPMENT REVIEW INTERACTIVE MAP

Beth Beltran informed the Board that this is an information item and introduced Frank Veldhuis from NorthStar Geomatics who gave a visual presentation of the Development Review Interactive Map.

Commissioner Doug Smith mentioned that he attended the Treasure Coast Builders Association, and the Property Appraiser used the interactive map in her presentation, and everybody loved the map. Commissioner Campo requested that the map show information about the priority projects that have moved forward to construction.

Commissioner Troy McDonald inquired if there are analytics of how many people from the public that are going to the website. Frank Veldhuis stated that they have statistics as far as how many people have used it over different time ranges. Also, they will look at how many times the application has been loaded.

E. DRAFT FY25 – FY29 LIST OF PROJECT PRIORITIES (LOPP)

Beth Beltran introduced the item and gave the Board a status report on the Martin MPO DRAFT FY25-FY29 LOPP. She mentioned that FDOT requires that the MPO submit the Draft LOPP by March 1st of each year. LOPP Scoping Forms must be completed for all new projects and must also be submitted with the Draft LOPP by March 1st. The final LOPP will be presented at the June advisory committee meetings and MPO Board meeting before adoption. At the MPO Bicycle and Pedestrian Advisory Committee (BPAC) meeting, committee members recommended modifying project #9 “FEC RR Crossings at NW Alice Street” to include language regarding the realignment of Alice Street and Wright Boulevard. BPAC members also recommended modifying project #15 to include “Protected Bike Lanes” in the project description.

Commissioner Stacey Hetherington expressed how she would like to keep project #6 “SW South River Drive” on the LOPP until it is under construction. Beth Beltran stated that she will take out the strike line and put an asterisk on it to clarify that the new southbound right turn lane at South River Drive has been funded but not the traffic signal.

The following members of the public came forward and offered public comment:

Shannon Reynolds, resident of Indiantown, explained her story about losing her 19-year-old son in a traffic crash on SR-710. Also, on November 30, 2022, a day before her deceased son’s birthday, her younger son’s girlfriend was involved in a horrific car crash. According to Shannon, SR-710 is a two-lane road driven by people who are in a hurry, people who take risks passing in no passing zones and putting other people’s lives in danger. Seeing the skid marks on SR-710 at side streets and driveways remind her of how many people are not paying attention and how many close calls there have been. Shannon and the residents of Indiantown have repeatedly asked for help from government agencies to take action. They have been given ‘no passing zone’ signs with flashing lights and flags, but she said this is not enough. People don’t obey these signs and the trees and shrubs grow to block the signs. She mentioned that everyone wants to point fingers passing the responsibilities for the upkeep of the road onto others and the only thing that is going to work is widening the stretch of SR-710 from a dangerous two-lane road to a four-lane divided highway like the other side of Indiantown. She added that if she can do one positive helpful action in her life, it is to do something to stop another family from having to bury a loved one from something that could’ve been avoided. This will help ease the fears of drivers and families that wonder, “Will I make it home? Will my loved one make it to where they are going and come back?”.

Barbara Clowdus, resident of Indiantown, stated how dangerous SR-710 is and that there are too many close calls on that road. SR-710 is heavily traveled by tractor trailers

that are constantly speeding. She encouraged the MPO Board to make SR-710 a priority that needs to be widened from two-lanes to four-lanes.

Taryn Kryzda, Interim Village Manager of the Village of Indiantown, asked the MPO Board to reprioritize to make SR-710 project #1 on the LOPP. She mentioned to do the whole widening of SR-710 and not just a section of it. The issues are speeding, fatalities, and it's also an evacuation route. SR-710 is on the Strategic Intermodal System (SIS) which she thinks should be given more importance to reprioritize the project.

Bert and Lisa Lieftink, who own a property in Clementsville drove an hour and a half from Deerfield Beach, FL to give their input and let the MPO Board know that the issue on SR-710 is very important to them. They've seen people passing in the no passing zone all the time and they've asked the MPO Board to prioritize SR-710 to project #1 on the LOPP to widen from two-lanes to four-lanes.

Yvonne Wilkes, resident of Indiantown, shared her stories of how many accidents she's witnessed on the intersection of SR-710 and SW Tommy Clements Street. In addition, this intersection is the only access in and out of the Clementsville community. When a train is going by or stopped on the CSX Railroad tracks, traffic backs up in both directions along SR-710 creating an extremely dangerous situation when speeding motorists are oblivious to the stopped vehicles. She fears for her life, she fears for the lives of the residents living there, and the lives of the people that are leaving Indiantown.

Donna Carman, representing Indiantown Chamber of Commerce expressed the desire to make SR-710 priority #1 on the list of project priorities and widen the road from two lanes to four lanes.

Laura Culpepper, resident of Indiantown, agreed with everyone about SR-710 and how dangerous it is. She has a shop at the corner of SR-710 and CR-609/Allapattah Road and it's difficult to get across the street coming from CR-609 to cross over to her shop. She fears for her life and her children's lives everyday driving on SR-710. She has seen many accidents and asked the MPO Board to make SR-710 a priority #1 on the LOPP and asked for a light at CR-609 and SR-710.

The following members of the MPO Board made the following comments:

Commissioner Doug Smith thanked everyone from Indiantown who came to the MPO Board meeting. He stated that the message from the residents of Indiantown needs to go to Tallahassee where people can make decisions about the SR-710 issue. The MPO Board can make it a priority #1 on the list but that doesn't make it happen tomorrow because unfortunately that's not how it works. Commissioner Smith reminded FDOT during the Long Range Transportation Planning Committee for the state that zero fatalities are the number one priority in the State of Florida. If that is the case, then how do we have the condition that exists in Indiantown and these actions continue to happen? He committed to the residents of Indiantown that he will find his way to Tallahassee and meet with the State Secretary to find out what his position is on this matter. He also asked Shannon Reynold's family if they want to join him in Tallahassee to prioritize funding and get a sense of urgency.

Council Member Susan Gibbs-Thomas expressed her appreciation to the residents of Indiantown who showed up to the MPO Board meeting to voice and share their stories on what is happening in Indiantown. She also shared stories of the people that she knows who sold their homes because they felt every time they were leaving and coming home that they were taking their lives and their children's lives in their hands. They felt like their only alternative was to sell their home immediately. She stated that SR-710 should be priority #1 on the LOPP and that it needs to be widened from two-lanes to four-lanes. She also commended Commissioner Doug Smith for stepping up and offering for us to come along to Tallahassee and see what else they can do to get the whole project funded.

Commissioner Sarah Heard stated that the comments from the residents of Indiantown are heart wrenching and shared her deepest sympathy. She mentioned that she avoids traveling on SR-710 and uses every alternative that she can find because it is very dangerous. She acknowledged that the residents of Indiantown can't avoid SR-710 because it's their way home. She agreed with everyone to make SR-710 a top priority and to make sure that it gets done.

Commissioner Christopher Collins inquired what can the MPO do beyond reorganizing SR-710 to priority #1 on the LOPP. Beth Beltran stated that MPO staff can draft a letter to the State Secretary and point out that the primary issue along SR-710 is safety and to mention that Vision Zero is the top priority for the State and SR-710 is a State Road. Also, Beth mentioned that SR-710 is part of the Strategic Intermodal System (SIS) and that is a top priority for the state for freight movement.

Commissioner Stacey Hetherington agreed with Commissioner Doug Smith to go to Tallahassee and talk to FDOT leadership. Also, to send letters and prioritize SR-710 to #1 on the list of project priorities. She agreed that SR-710 is the most dangerous stretch of roadway and FDOT should be held accountable to their Vision Zero standards. Commissioner Hetherington asked if the traffic light on CR-609 and SR-710 has been discussed and warranted. Lisa Wichser, County Engineer, stated that project #13 CR-609/Allapattah Road is going to be a resurfacing project and it includes a traffic signal.

Commissioner Troy McDonald expressed his sympathy for the challenges the residents of Indiantown are facing and all the suffering they are going through. He mentioned that the MPO Board will do everything they can to make it right. He supports moving SR-710 from Martin/Okeechobee County Line to CR-609/SW Allapattah Road to priority #1. He stated that the MPO staff should draft a letter from the MPO Board to the Secretary of Florida Department of Transportation and copy Secretary O'Reilly as well as the legislative delegation to emphasize the importance of this. He stated none of these are quick fixes, but in the short term ask Martin County Sheriff to step-up enforcement to at least try to get some of the vehicles to slow down and stop passing in the no passing zones.

Council Member Susan Gibbs-Thomas inquired if traffic data could be included in the letter. Beth Beltran stated that data will be included in the letter, as well as a reminder of FDOT's Vision Zero targets. Commissioner Troy McDonald expressed his concern and

stated that the letter should include the backup of cars along SR-710 at SW Tommy Clements Street when a train is going by or stopped on the CSX Railroad tracks.

Commissioner James Campo agreed with all the comments from his fellow MPO members, and he thanked the residents of Indiantown for the courage that it took to speak though that pain at the MPO Board meeting. He also inquired the status of the PD&E study and if this study has been funded. He asked what has already been done and what is the timeframe for the next steps. Beth Beltran mentioned that there was a PD&E study done about 15-18 years ago on this section of SR-710. Also, FDOT did a study from SR-76 to the Okeechobee County line and more recently there is a feasibility study going on from the FPL Power Plant to the Okeechobee County line. Ms. Beltran introduced Ron Kareiva, Christine Fasiska, and Jeff Robert from FDOT to discuss the update of the project. Ron Kareiva, Project Manager for the ongoing feasibility study from FPL Power Plant to Martin/Okeechobee County line, explained that they are studying that entire corridor that was prioritized by the MPO Board for widening. They are looking to have recommendations both immediate and long-term recommendations. The consultant is far along with the study but do not have the recommendations yet. Christine Fasiska, FDOT-District Four Transportation and Planning Manager added that they looked at the traffic information from Okeechobee/Martin County line all the way to South of SR-76. The PD&E study that was done 15-18 years ago had a lot of DRI's that fell through and wanted to do another study to update for more current information. Jeff Robert, FDOT Project Manager for the left turn lane at SW Tommy Clements Street, stated that they will be in construction at the very end of the summer or beginning of fall and should be complete by next year.

Commissioner Doug Smith inquired about the status of the study on the segment South of the FPL Power Plant. Mr. Kareiva stated that 30% design was completed for the segment from the FPL Power Plant to CR-609/SW Allapattah Road.

A motion to move the widening from two lanes to four lanes of SR-710 from Martin/Okeechobee County Line to CR-609/SW Allapattah Road to Priority #1 on the List of Project Priorities; for FDOT staff to come back to update MPO Board on the status of the 30% design work that was done for the segment south of FPL Power Plant, and if it can be reopened or redone, was made by Commissioner Doug Smith and seconded by Council Member Susan Gibbs-Thomas, the motion passed unanimously.

A motion to request that MPO staff draft letters that include the content of this meetings conversation and background information of the crash criteria from five or ten years ago, as well as for the Village of Indiantown to draft the same letter to send to both Delegations, District Secretary, State Secretary and to the Governor's Office; for MPO staff to draft a letter to the Martin County Sherriff's Office asking to increase enforcement on SR-710 was made by Commissioner Doug Smith and seconded by Council Member Susan Gibbs-Thomas, the motion passed unanimously.

A motion to modify project #9 "FEC RR Crossings at NW Alice Street" to include language regarding the realignment of Alice Street and Wright Boulevard and to

leave it in position #9 on the LOPP was made by Commissioner Doug Smith and seconded by Council Member Susan Gibbs-Thomas, the motion passed unanimously.

F. HOBE SOUND NORTH CORRIDOR SUN TRAIL FEASIBILITY STUDY UPDATE

Beth Beltran introduced Jeff Weidner and Christina Fermin with Marlin Engineering who gave a presentation on the agenda item. The consultant looked at all three of the corridors, Gomez Avenue, Dixie Highway and US-1 and reviewed several factors related to safety infrastructure and connectivity. At the last open house, the residents selected the US-1 Alternative 1 corridor as the preferred route.

Commissioner Stacey Hetherington inquired if the Sun Trail initiative is a federal or state program. Christine Fermin stated that the Sun Trail network is a state program and its typically funded \$100 million a year. Commissioner Hetherington asked what section the county would have to fund if the MPO Board picked an alternative. Christine Fermin stated that was pertaining to the second alternative which showed a multi used pathway on the west side and on the east side a potential eight-foot sidewalk/shared used pathway. The Sun Trail only funds one side and if the public want a wide pathway on both sides Sun Trail would fund one side of it and the county fund the other side of it, or the FDOT would, since it's a FDOT roadway.

A motion to accept Alternative 1 with the understanding that Marlin Engineering will come back to present the conceptual design and proposed typical section, and if the MPO Board does not like the alternative, they can stop the project was made by Commissioner Doug Smith and seconded by Commissioner Christopher Collins, the motion passed. The motion passed with 4 yes and 1 no.

Yes

Commissioner Troy McDonald
Commissioner Christopher Collins
Commissioner Doug Smith
Council Member Susan Gibbs-Thomas

No

Commissioner Stacey Hetherington

G. COMMUNITY CHARACTERISTICS REPORT SCOPE OF SERVICES

Beth Beltran introduced Jill Quigley from Benesch who gave a brief overview of the item. The guidance from the United State Department of Transportation requires that MPOs collect and analyze socio-economic data to better incorporate the needs of diverse groups into the transportation decision-making process.

A motion to approve Community Characteristics Report Scope of Services was made by Commissioner Stacey Hetherington and seconded by Commissioner Christopher Collins, the motion passed unanimously.

H. Public Involvement Annual Report - 2022

This agenda item was moved to be presented at the April 17, 2023 Board meeting.

9. COMMENTS FROM ADVISORY COMMITTEE MEMBERS - None

10. COMMENTS FROM BOARD MEMBERS

Chair McDonald shared some information about seeking to have FDOT rehabilitate and/or replace the bridge on US-1 over Frazier Creek for safety perspective and to see if the MPO will put it as a future priority.

11. COMMENTS FROM FDOT – None

12. NOTES

- Public Workshop on March 8, 2023, for the Feasibility Study of US-1 at SW Palm City Road.

ADJOURNMENT: 12:14 PM

Approved by:



Troy McDonald, Chair

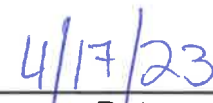


Date

Prepared by:



Alor Cadorna, Administrative Assistant



Date

Minutes Approved on April 17, 2023

The Martin MPO solicits public participation without regard to race, color, national origin, age, sex, religion, disability or family status. Persons who require special accommodations under the American with Disabilities Act or persons who require language translation services (free of charge) should contact Ricardo Vazquez, Senior Planner (Title VI/Non-discrimination Contact) at (772) 223-7983 or rvazquez@martin.fl.us in advance of the meeting. Hearing impaired individuals are requested to telephone the Florida Relay System at #711.

Appendix C

Public Involvement &
Outreach

578 SPINE ROUTE MILES

OFF-ROAD ON-ROAD
COMPLEMENTARY ROUTE



MARTIN MPO SHARED-USE NONMOTORIZED (SUN) TRAIL FEASIBILITY STUDY

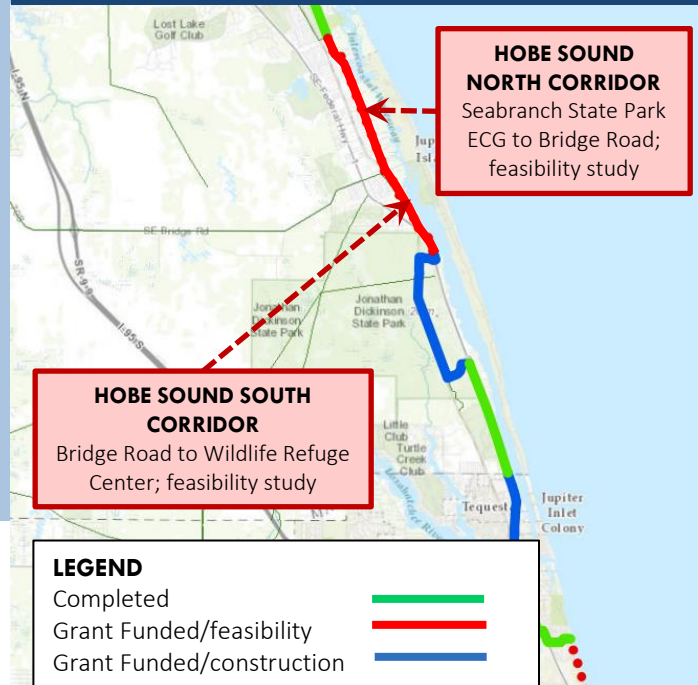
South of Seabranh Preserve State Park to Bridge Road

A Florida East Coast
Greenway (ECG) Segment

The Shared-Use Non-Motorized (SUN) Trail network is the statewide system of high-priority (strategic) paved trail corridors for bicyclists and pedestrians. The SUN Trail grant is administered by the Office of Greenways and Trails. The Martin MPO East Coast Greenway (ECG) is the only priority trail in Martin County eligible for SUN Trail funding.

The Martin MPO is performing a feasibility study to implement a shared-use, non-motorized path as a segment of the SUN Trail/East Coast Greenway South of Seabranh Preserve State Park to Bridge Road/US 1. The MPO submitted an application for funding for this feasibility study which was well received and awarded 100% State funding. The focus of the study is to coordinate with the community and to perform analyses to identify a concept that can move from the planning phase of project development towards design and ultimately, construction.

SE FLORIDA EAST COAST GREENWAY MARTIN COUNTY, FL HOBE SOUTH NORTH CORRIDOR



PURPOSE OF GRANT AWARD

A Feasibility Study, also referred to as a planning or corridor study, includes the development of a purpose and need; an evaluation of existing conditions in the study area; the development and evaluation of trail routes, also known as corridors or alternatives; identification of logical termini; an agreed-upon course of action; public involvement and agency coordination. Key considerations: prior projects, prior planning efforts; inclusion of a diverse group of stakeholders (i.e., trail users and non-trail users, neighboring property owners, business owners in the general vicinity, and public entities); the recognition of and buy-in for the maintenance agreement requirements by a government agency; potential for multiple jurisdictional involvement; ROW minimization, and avoidance; a focus on one preferred corridor or viable alternative to be carried into the Project Development and Environment (PDE) Study or Preliminary Engineering/Design (PE) phase; cost estimates; and clear and concise documentation.

CONTACT INFORMATION

Joy Puerta
772.320.3015
jpuerta@martin.fl.us

Jeffrey Weidner
954.870.5058
jweidner@marlinengineering.com



BACKGROUND

THE EAST COAST GREENWAY

The East Coast Greenway connects 15 states and 450 cities and towns for 3,000 miles from Maine to the Florida Keys. The Greenway is intended to foster a safe walking and biking route along the country's most populated corridor. Thirty-one miles of safe, traffic-free segments were added to the East Coast Greenway route in 2020, bringing the total length of protected pathways to more than 1,000 miles - 35 percent of the entire 3,000-mile route. In 2019, 23 segments in 13 states and Washington, D.C. were added to the Greenway including two new Florida segments – Neptune Beach and St. Augustine.

The Planned East Coast Greenway in Florida threads its way across nearly 600 miles. From Georgia, the Greenway enters the state at Fernandina Beach, then makes its way through 13 counties, including Martin County, before reaching Key West, the southernmost mainland point of the United States. The Greenway is mainly along the coast through seaside villages, America's earliest historical sites, vast nature preserves, and major cities that include Jacksonville and Miami.

Much of the Greenway through Florida is on a path that runs along Highway A1A. It concludes with the Florida Keys Overseas Heritage Trail, which hops from island to island for 106 miles (more than half of which is completed).

The Florida Greenways and Trails System Plan (FGTS) establishes the vision for implementing a connected statewide system of greenways and trails for recreation, conservation, alternative transportation, healthy lifestyles, a vibrant economy and a high quality of life. The original FGTS Plan was completed in 1998 and adopted by the Florida Legislature in 1999, laying the groundwork for many programs, projects and initiatives that exist today. The updated FGTS Plan and maps guide the implementation of the connected statewide trail system from 2019 through 2023.

The FDOT Office of Greenways and Trails (OGT) has also updated its statewide opportunity and priority trail maps. Many trails are eligible for certain types of funding if they are on one or both maps. As part of the update, OGT held 14 public workshops throughout the state to receive input from trail users, local planners and the public. OGT also received hundreds of emails, letters, and input from the Florida Greenways and Trails Council.



A New Vision for the Florida Greenways and Trails System (FGTS) ... 2019-2023 Plan and Maps

SCOPE TASKS

1

PROJECT MANAGEMENT

2

COMMUNITY OUTREACH

- Stakeholder Meetings
- Neighborhood Advisory Meeting
- Open Houses
- MPO Advisory Committee and Board Meetings

3

DATA COLLECTION

4

DATA ANALYSIS

5

PLANNING ALIGNMENT ALTERNATIVES

- Graphics
- Evaluation

6

PREFERRED TRAIL CONCEPT

- Recommended Typical Section
- Recommended Conceptual Plan View
- Cost Estimate

7

FEASIBILITY STUDY

- Final Report

Hobe Sound North Corridor SUN Trail Study

General Public Meeting #1
November 10, 2021

PREPARED BY

MARLIN



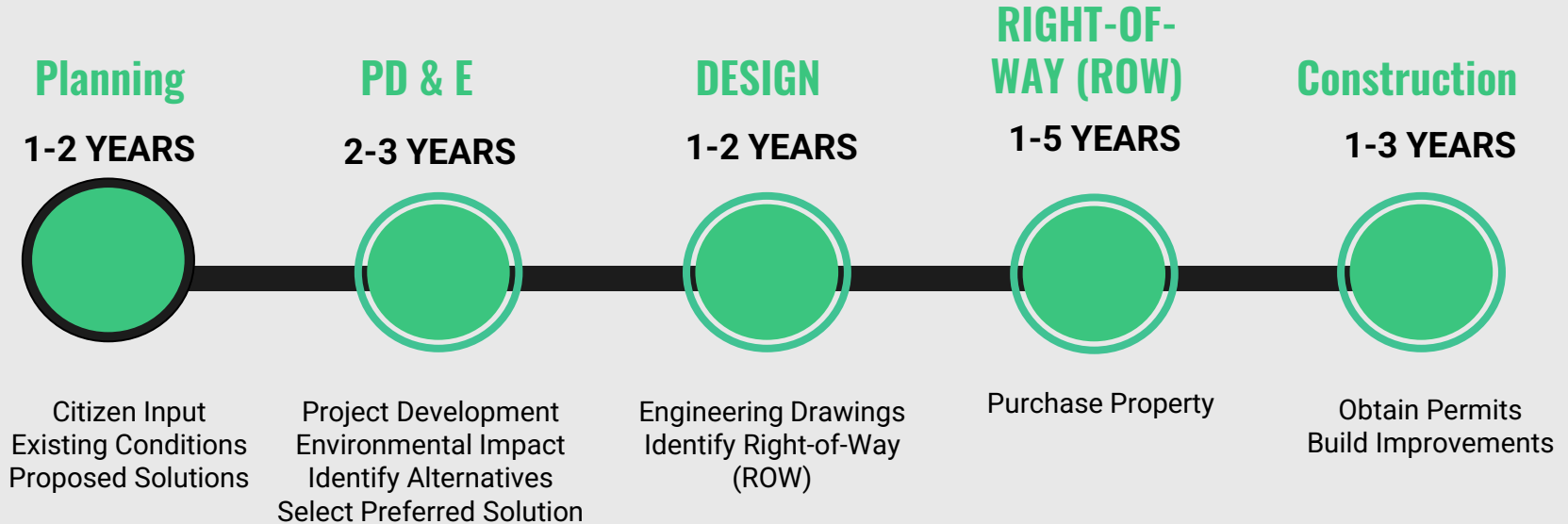


Welcome & Team Introductions

MARLIN

LIFE OF A PROJECT

TOTAL 6-14 YEARS FROM PLANNING TO CONSTRUCTION



 In progress

 Future



» **01**
SCOPE

Feasibility study for a +/- 4-mile segment of the East Coast Greenway / Florida SUN Trail

» **03**
ANALYSIS TO DATE


Data analyzed and reviewed to-date

» **02**
DATA COLLECTION

Maps, Site Visits, Existing Data, ROW, Aerial Imagery

» **04**
NEXT STEPS?

Stakeholder meetings, typical sections and selection of pathway







East Coast Greenway

**3,000 miles
of trails**

578 miles in Florida
262 miles off-road





Florida Shared Use Non Motorized (SUN) Trail

The SUN Trail network is the statewide system of high priority (strategic) paved trail corridors for bicyclists and pedestrians.





\$145 Billion

Total Economic Output
Produced by Outdoor Recreation
in Florida

Source: Statewide Comprehensive Outdoor Recreation Plan (SCORP)



01

SCOPE





Project Scope

Task 1: *Project Management* - Meetings, and coordination

Task 2: *Outreach and Meetings* - MPO Advisory Committee Meetings, Stakeholder Meetings, Public Outreach, Presentations, Brochure and Communication


Task 3: *Data Collection* - Review of Existing Plans and Documents, Data Collection, and Field Inventory

Task 4: *Data Analysis* - Development of Purpose and Need Statement, Review and Analysis of Collected Data, Mapping, Desktop Review and Comparative Matrix

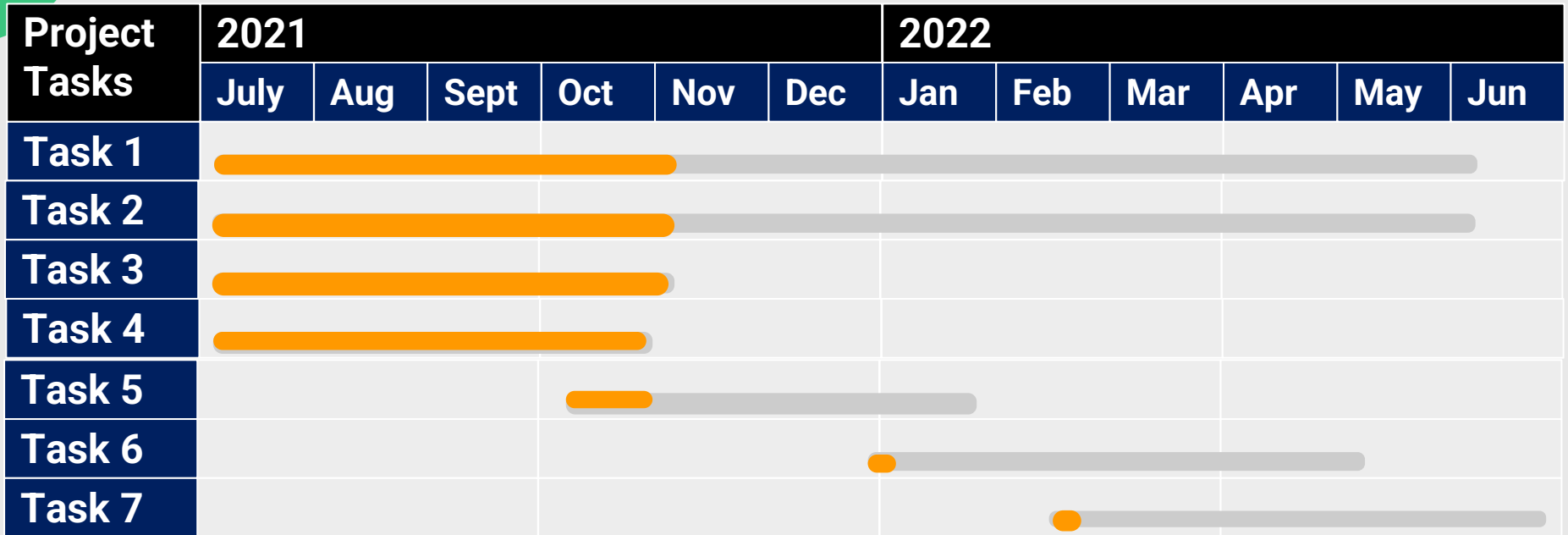
Task 5: *Preliminary Planning Analysis of Alignment Alternatives* - Develop Evaluation Criteria, Identification of Alternatives, Identification of three Best Alignments, Typical Cross Section Development, and Renderings

Task 6: *Documentation of Preferred Trail Concept* - Study Documentation, Recommendations, Evaluation of Alternatives, Finalize Typical Cross Sections, Permit Requirements, Cost Estimates and Conceptual Design

Task 7: *Feasibility Study* - Evaluate Comments, Feedback and Recommendations, Preparation of Final Document

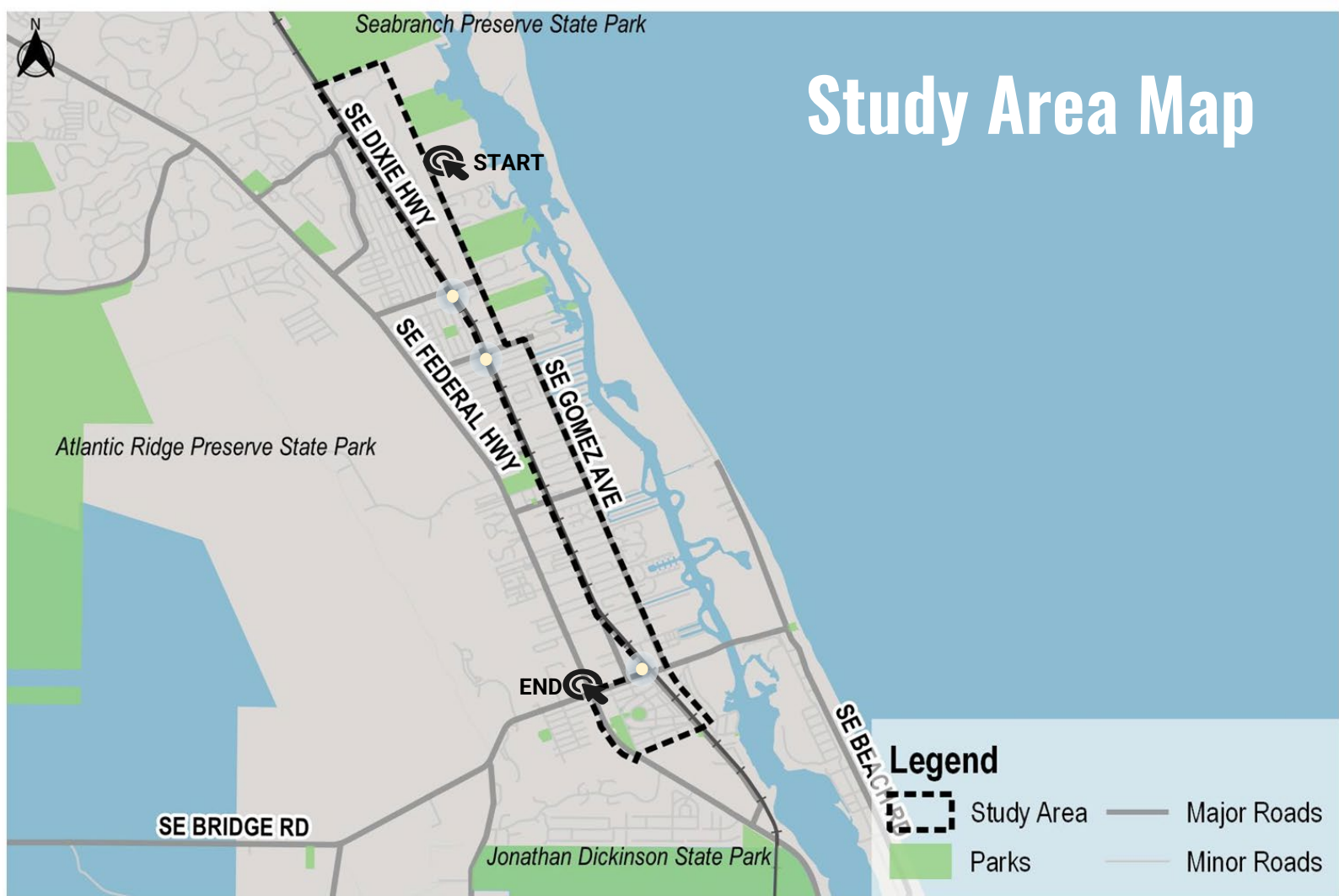


Schedule



TODAY ▲

Study Area Map



Seabranch Preserve State Park

Atlantic Ridge Preserve State Park

Jonathan Dickinson State Park

SE BRIDGE RD

SE DIXIE HWY

SE FEDERAL HWY

SE GOMEZ AVE

SE BEACH RD

START

END

Legend

Study Area

Parks

Major Roads

Minor Roads

Route Option 1: Gomez Ave

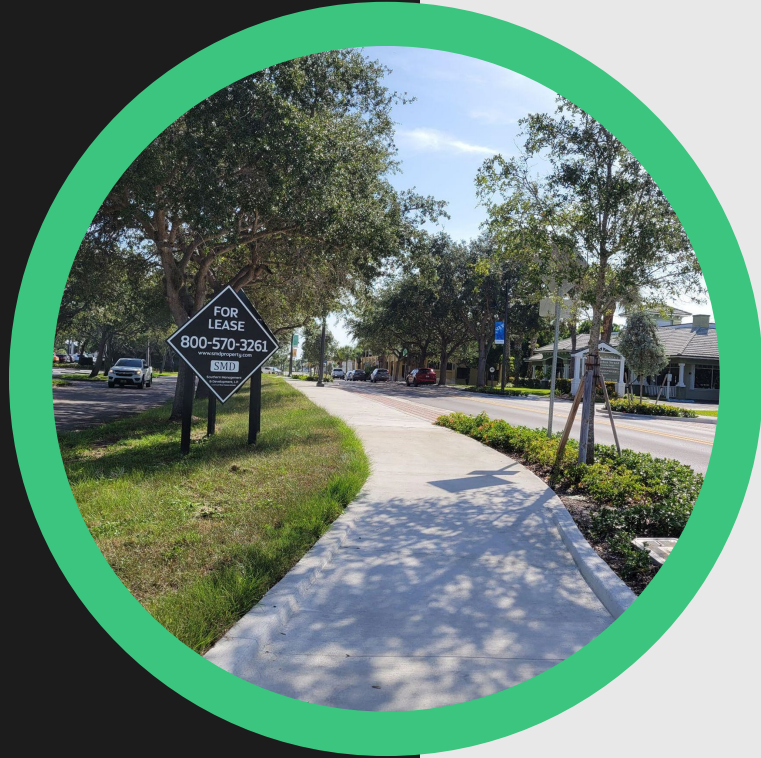


Route Option 2: Dixie Highway



**End Point:
Federal Hwy &
Bridge Rd**





02

DATA COLLECTION



Reviewed Plans & Documents



2045 LRTP

MPO Long Range
Transportation Plan - Current
& Future Traffic Conditions



Florida Greenways & Trails Plan

Vision for Florida's
Greenways & Trails



Bicycle, Pedestrian & Trails Master Plan

Vision of becoming a more
bicycle and pedestrian,
walkable livable community.



Bicycle & Pedestrian Safety Action Plan

Identify strategies to improve
safety for bicycles and
pedestrians.



Southeast Florida Greenways and Trails Plan

Vision of greenways and
trails in Southeast Florida



Other

5 Year Crash Data, Traffic
Volumes, LOS, As-Built Plans,
ROW, Trail Design Standards
& Strava Data

Field Visit



Sep 8, 2021 11:55:59 AM
27.11183N 80.15267W
281° W
7407 Southeast Gomez Avenue
Hobe Sound
Martin County
Florida



Pros

Cons

Desktop Review

GIS

Aerial Review Using County,
State and Local Data

Traffic

Annual Average Daily
Traffic (AADT), Level of
Service (LOS) & Crash Data

County Records

Surveys, Utilities,
Easements, FEC
Agreements, As-Built Plans

Wetlands

Located near the Indian
River and Bridge Road

Historic Sites

Identified near Pettway St,
Gomez Ave & Bridge Rd,
Built 1925 - 1945

ROW

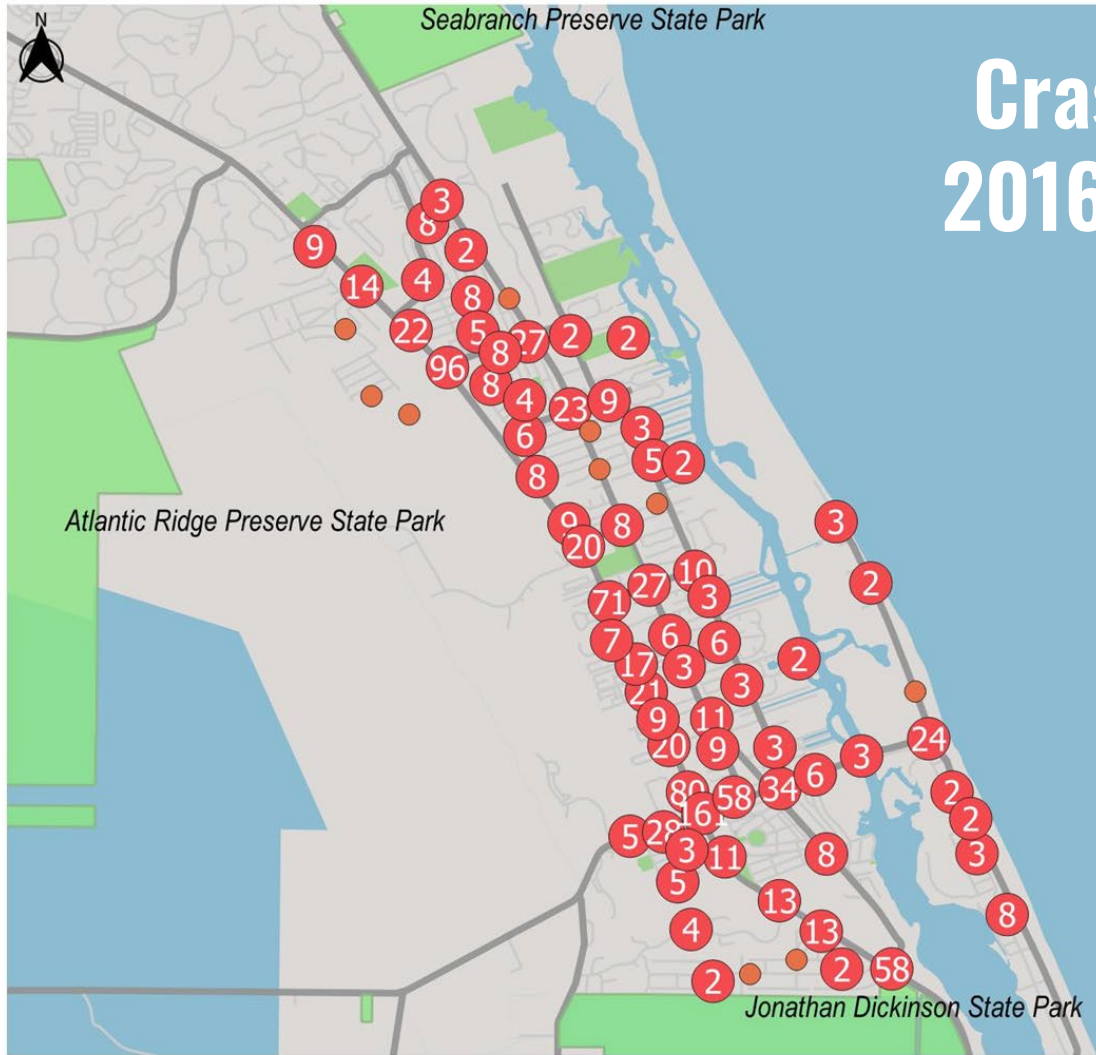
Dixie Hwy - Little to No
ROW, Missing Sidewalk
Easements in Various Areas

Traffic Data

ROADWAY	AADT* (2019)	SPEED LIMIT (MPH)
DIXIE HWY	6,595	<ul style="list-style-type: none">• 45 (N. OF CROSSRIP ST)• 30 (S. OF 1ST ST)
GOMEZ AVE	3,732	<ul style="list-style-type: none">• 35
BRIDGE RD	9,373	<ul style="list-style-type: none">• 30
CROSS RIP ST	N/A	<ul style="list-style-type: none">• 25
OSPREY ST	1,926	<ul style="list-style-type: none">• 25

*AADT = ANNUAL AVERAGE DAILY TRAFFIC


Crash Map 2016 - 2020



Legend

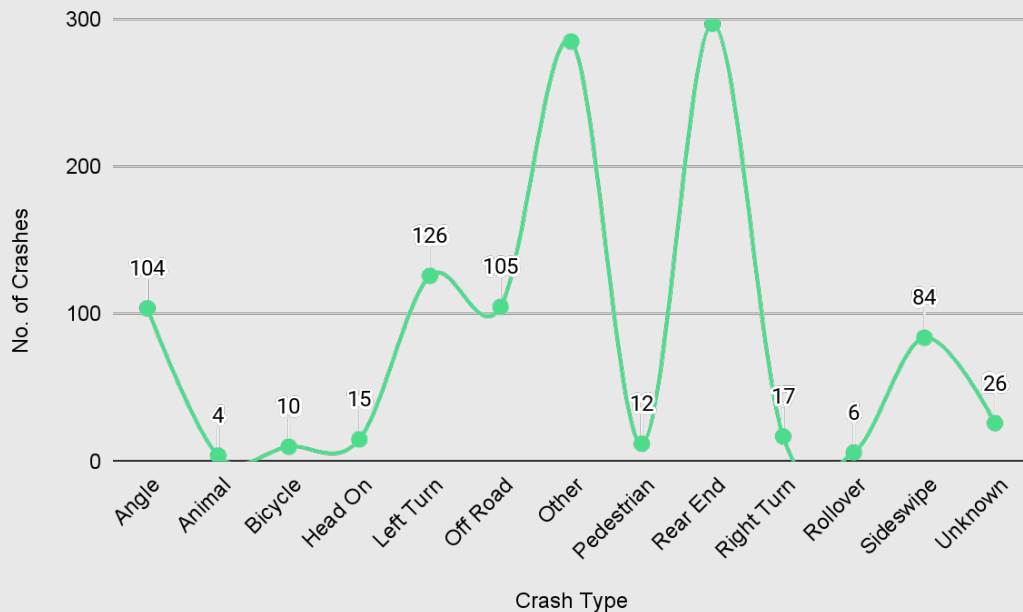
-  Parks
-  Major Roads
-  Minor Roads
-  Crashes (1091 Total)

Crash by Type

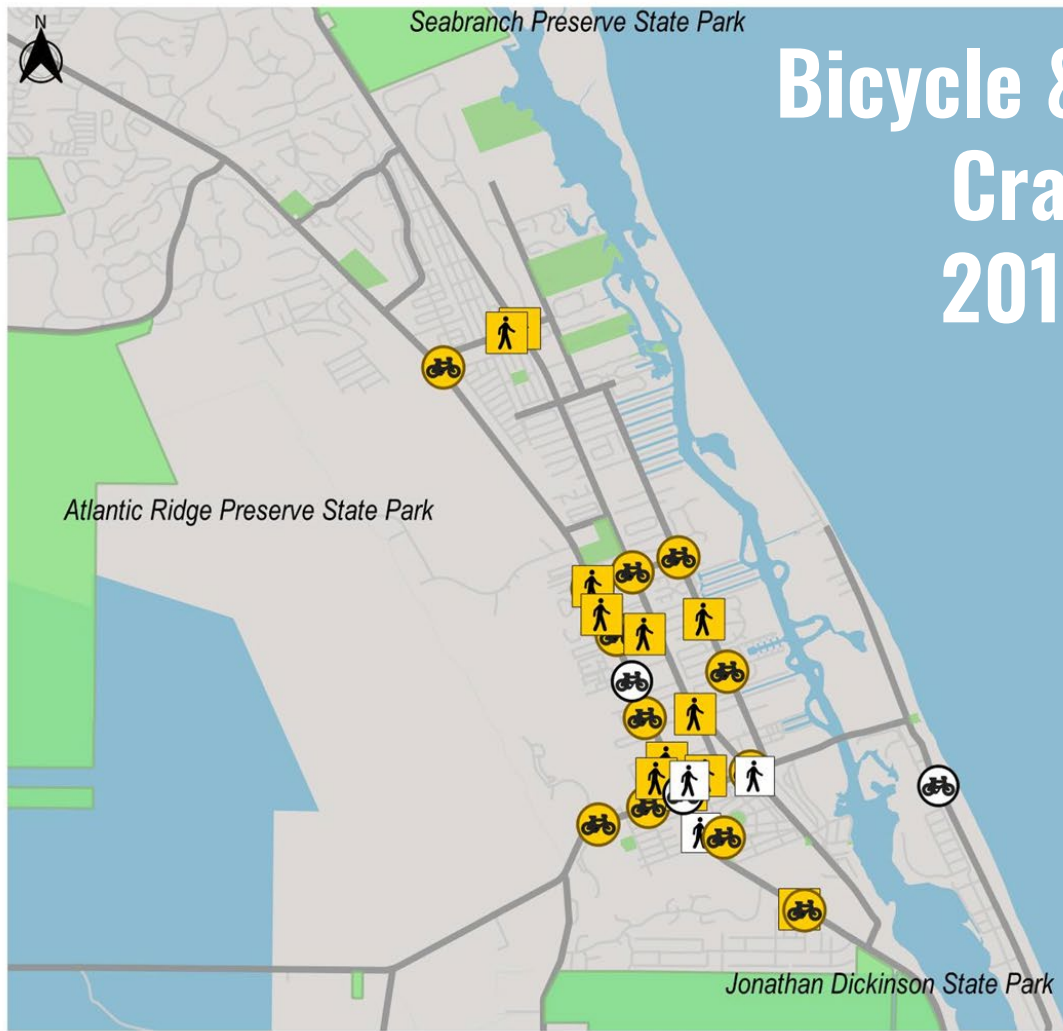
 Total Number of Crashes by Type

There are 10 Bicycle Crashes & 12 Pedestrian Crashes

Rear End crashes account for 27.2% of all crashes followed by Left Turn crashes at 11.6%



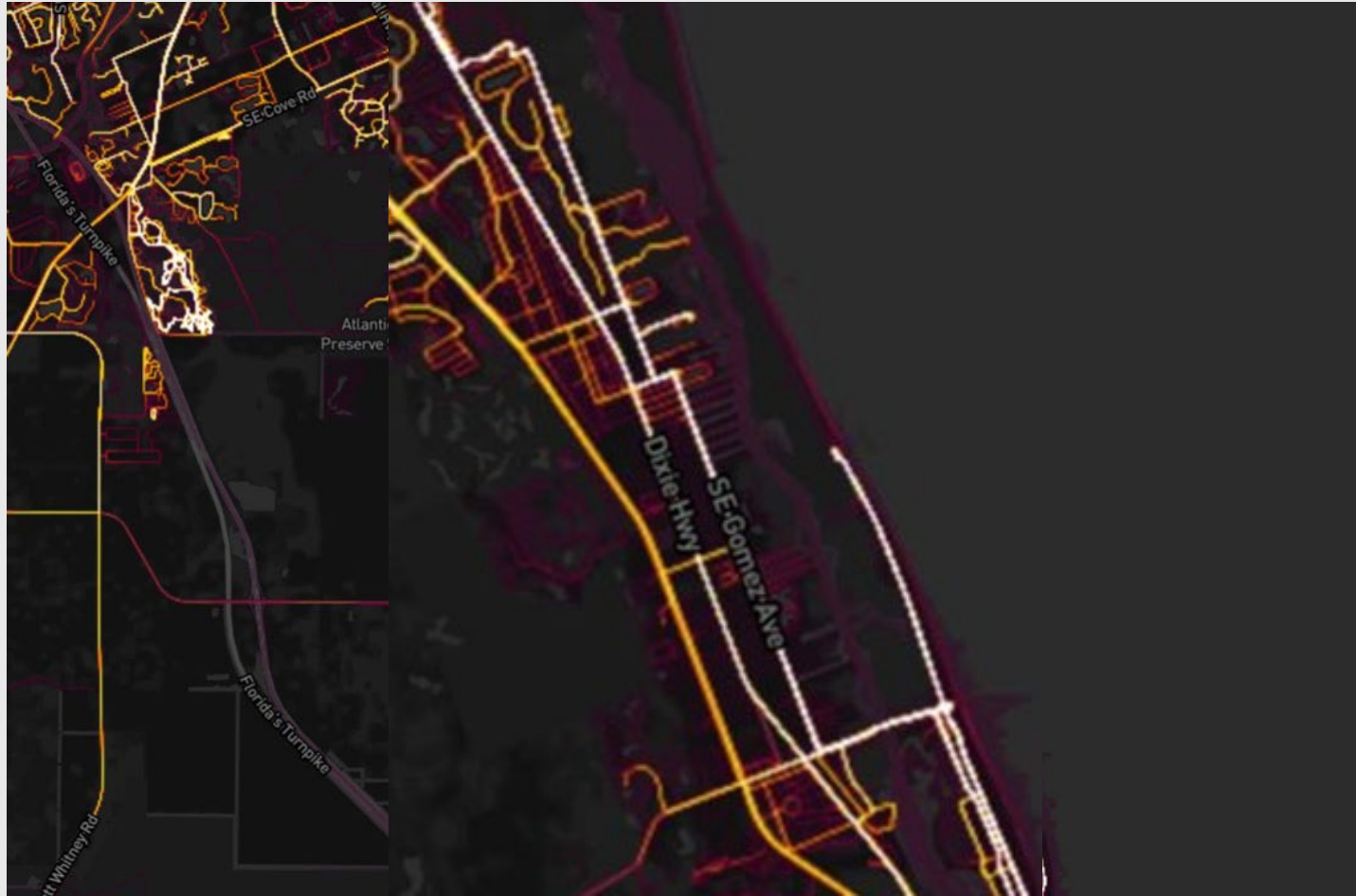
Bicycle & Pedestrian Crash Map 2016-2020



Legend

-  Parks
-  Major Roads
-  Minor Roads
-  Bicycle Injury
-  Property Damage Only
-  Pedestrian Injury
-  Property Damage Only

Bike & Ped Heat Map (Strava)



Trail Design Standards

1

Traffic Separated

2

Firm Surface

3

Publicly Accessible

Avoids Steep Grades & Steps

6

Integrated Rec & Transportation
Infrastructure

5

Wide Enough for Shared Use

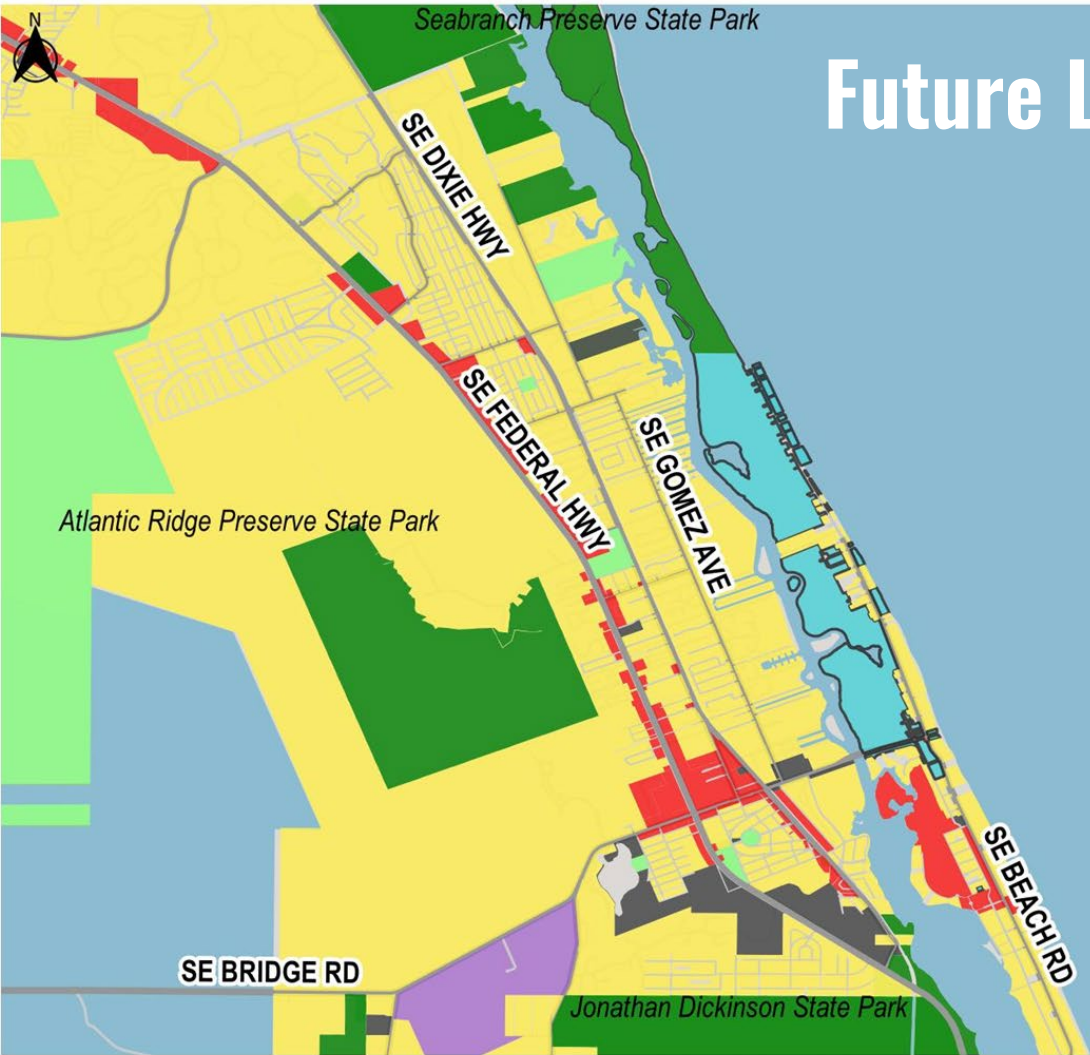
4



03

**ANALYSIS
TO DATE**

Future Land Use Map



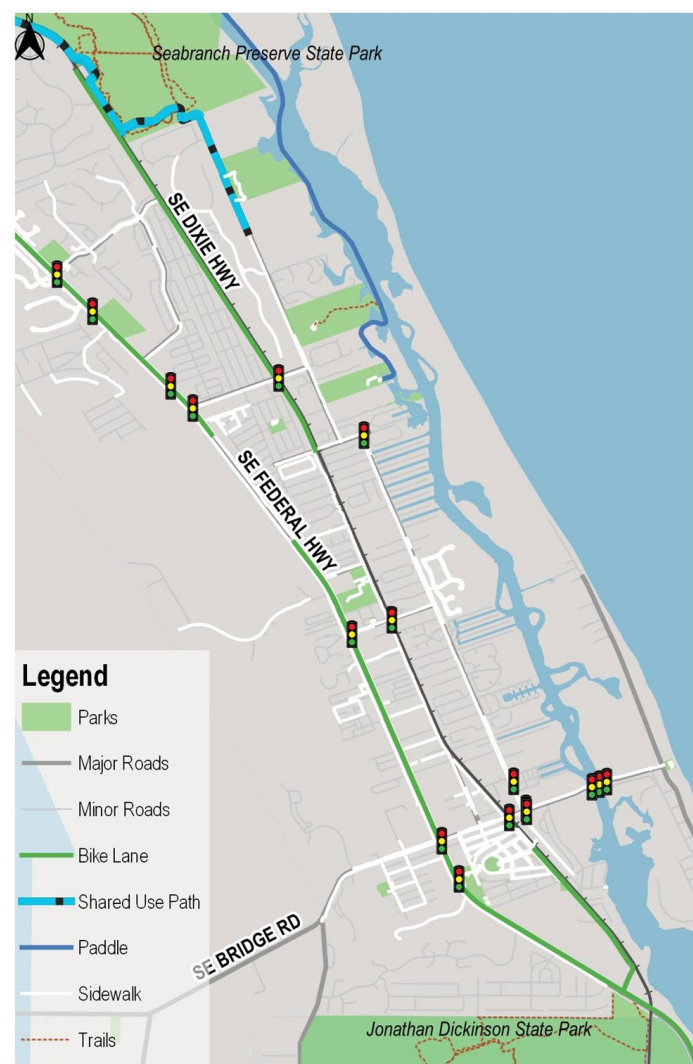
Legend

- Commercial
- Industrial
- Institution
- Nature
- Public
- Recreational
- Residential

Pedestrian Conditions

FINDINGS:

- Sidewalks
- Crosswalks
- Comfort
- ADA Accessibility



Bicycle Conditions

FINDINGS:

- Bike Lanes
- Shared Use Pathway (aka Multi-Use Trail)
- Bike Paths @ State Parks
- Cyclists Using Sidewalks
- Bicycle Crosswalks
- Bicycle Signage



Community Recreational Assets



Seabrook Preserve State Park

SE DIXIE HWY

GOMEZ PRESERVE

LOBLOLLY PINES GOLF CLUB

LOBLOLLY BAY MARINA

PECK LAKE PARK

SOUTH COUNTY BOAT RAMP PARK

JIMMY GRAHAM PARK & BOAT RAMP

EASTRIDGE PARK

SE GOMEZ AVE

Atlantic Ridge Preserve State Park

PETTWAY PARK

HOBE SOUND PUBLIC BEACH PARK

HOBE SOUND ELEMENTARY SCHOOL PLAYGROUND

HOBE SOUND GOLF CLUB

ST. CHRISTOPHER'S

ZEUS PARK

GREENFIELD PARK

SSG JUSTIN JOHNSON MEMORIAL PARK AT BANNER LAKE

JOSEPH REED PARK

JUPITER ISLAND CLUB

EAGLEWOOD COUNTRY CLUB

SE BRIDGE RD

Jonathan Dickinson State Park

Potential Routes

1. SE Gomez Avenue

- a. 35 MPH
- b. ROW Available
- c. 2 Bicycle Crashes
- d. 1 Pedestrian Crash
- e. Existing Shared Use Path
North of Osprey Street

2. SE Dixie Highway

- a. 30 - 45 MPH
- b. Missing ROW/Easements
- c. 5 Pedestrian Crashes
- d. 2 Bicycle Crashes



POTENTIAL CROSS POINTS



Osprey Street

1 Pedestrian Crash
13 Vehicle Crashes
1,926 AADT



Cross Rip Street

18 Vehicle Crashes



CROSS POINTS



Bridge Road

2 Pedestrian Crashes
14 Vehicle Crashes
8,053 AADT



Federal Hwy

1 Bicycle Crash
103 Vehicle Crashes
24,807 AADT





Summary Points

Dixie Highway

Gomez Avenue

Bridge Road

Osprey Street

Cross Rip Street

Federal Hwy







04 NEXT STEPS



What's Next?

- Maps
 - Comparative Matrix
 - North/South Routes
 - East/West Connectors
 - Evaluation Criteria
 - Identify Alternatives
 - Three Best Alignments
 - Typical Cross Section Development
 - Permit Review
 - Cost Estimates
 - Renderings
 - Selection of Preferred Alternative
 - Finalize Typical Sections, Cost Estimates, Permit Requirements & Graphics
 - Final Report
- 
- 

Meetings

General & Stakeholders

	Stakeholder	Public
Government Stakeholders - November 4	▶	
Community Stakeholders - November 8	▶	
General Meeting - November 10		▶
Stakeholder Meetings January/March TBD	▶	
General Meeting - May TBD		▶

MPO Policy Boards

	Meeting Dates	
Citizens Advisory Committee (CAC)	2/2/22	6/1/2022
Technical Advisory Committee (TAC)	2/7/22	6/6/22
Bicycle & Pedestrian Advisory Committee (BPAC)	2/14/22	6/13/22
MPO Policy Board	2/28/22	6/20/22

STAKEHOLDER FEEDBACK



{insert comments here}

{insert comments here}



{insert comments here}

{insert comments here}



Thank You

CONTACT INFORMATION:

Christina Fermin
Marlin Engineering, Inc.
CFermin@marlinengineering.com
954-870-5064

Joy Puerta
Martin MPO
JPuerta@martin.fl.us
772-320-3015



SUN Trail Feasibility Study

SIGN-IN SHEET



Name	Address	Phone	E-mail
Michael Doocy	8454 SE Lagoon Dr. HS.	772-546-7355	HSDOOCY@GMAIL.COM
Bruce Montefusco	8466 SE Baybeam Terr. HS	772-546-3676	BRUCEMONT@COMCAST.NET
James Clashy			JClashy@Martin.FL.US
Mark Virginia Ileschi	7901 SE Osprey Hole Sound FL	33455	
Michael P. Byrd	9776 SE CABOT ST. Hobc Sound FL	33455	
Jenna Cox			jcox@MartinFL.us
Patrick Jenkins	12260 SE Dixie Hwy HS.		HJenkins@Martin.FL.US
Darlene VanRiper			darlenevanriper@gmail.com
Roger Towner	7973 SE Carlton St	772-349-5972	
Barbara Clowdus	2452 SE Janet St	772-349-4462	barbarac@martincountycurrents.com
Karen Greene	8026 S.E. Crossrip St.		

SUN Trail Feasibility Study

SIGN-IN SHEET



Name	Address	Phone	E-mail
Karen Kendall	8921 SE Marina Bay Dr. HS, FL 33455	850-324-5950	mccokk@gmail.com
Jim Gorton	2401 SE Monterey Rd, Stuart FL 34996		jgorton@martin.fl.us
Joy Puente	3481 Willoughby Blvd		jpunte@martin.fl.us
Blake Capps	8686 SE Alabama Pl., HS, FL 33455		blake@cappsroofing.com
Beverly Habstad	9125 Morning St. HS FL 33455		lnnhals@tad.com
Janet + Richard Otter	8262 SE Cumberland Cir, HS		dancensoond1@outlook.com
Jane & Bert Krebs	8769 SE woodwind St HS FL		bkrebs@iw-hs.com
Colleen Pachowicz	2401 SE Monterey Rd		Comaide3@Martin.fl.us
IRV HETHERINGTON	8499 SE Sabal St HS 33455		
Deirdre A Kiley	6866 SE Amendment St HobeSound		dkiley5106@gmail.com
Doug Bernhard	8460 SE Sabal St - HobeSound		Tarson.Master@gmail.com

SUN Trail Feasibility Study

SIGN-IN SHEET



M5N.COM

Name

Address

Phone

E-mail

QTBARSI@~~MTA~~

BARBARA WHITE 7841 SE SUGAR SANDS CIR HS

SUN Trail Feasibility Study

Comment Card



Name Beverly Halstead Address 9135 Morris St Phone 773 545-3675 E-mail glzhalstead@aol.com
Hobe Sound, FL

Comments

at the end of Conroy close to Bridge Rd, there is Hobe Sound Christian Academy. There is a sidewalk for the school and beyond that is school yard. There is no room for a bike trail going right through a school yard.
Please call the Hobe Sound Christian Academy and talk to the principals.

Hobe Sound North Corridor SUN Trail Study

Public Meeting #1 Notes

November 10, 2021

1. Questions:

- a. Who is Marlin?
 - i. Marlin Engineering is the consultant team performing this feasibility study.
- b. Who came up with this idea? How Long has this project/ program been around?
 - i. The Martin County Metropolitan Planning Organization (MPO) is leading this effort.
 - ii. This has been an ongoing discussion for over 10 years.
- c. The plans include a combination of sidewalks, lighting, signs to make a “path”?
 - i. The plan is a feasibility study to construct a segment of the east coast greenway/SUN Trail network.
 - ii. Need to reinforce and address signs, lighting, and sidewalks.
- d. Will the funds pay for lighting? Who pays for the lighting?
 - i. Funding can come from the federal, state or county
 - ii. If it is included in the study, it will be eligible for grants and funding.
- e. If ROW is needed for acquisition, how long is this? What if it isn't given up?
 - i. This process typically takes 1 to 5 years
 - ii. ROW acquisition can take several years depending on who is involved
 - iii. If ROW isn't able to be acquired it can prevent the construction of a project
- f. Are you talking about other factors like lighting and safety?
 - i. These items are being taken into consideration
- g. Are you able to include the economic benefits of the proposed trail to the area?
 - i. This is not included in the scope
 - ii. We can reference the economic benefits
 - iii. MPO may look into conducting an economic impact study
- h. Will Traffic Calming be included in this study?
 - i. This study is not a Traffic Calming Plan
 - ii. General traffic calming recommendations may be included as it relates to the trail, i.e. improving the existing mid-block crossings such as patterned pavement or speed hump with crosswalk atop
- i. Is there any portion of this trail going to be elevated?
 - i. No

- j. Will this study look into connecting or extending to AIA via Bridge Rd
 - i. Bridge Rd has concerns with widening the existing sidewalks due to wetlands and the existing tree canopy
 - ii. Bridge Rd east of Gomez is not included in the study
 - iii. This study is reviewing the study area outlined in the map
 - 1. North: Gomez Ave Shared Use Path, south of Seabranh Preserve
 - 2. West: Dixie Hwy
 - 3. East: Gomez Ave
 - 4. South: Bridge Rd and US 1
- k. Can you share this presentation?
 - i. Yes, the presentation will be shared with anyone who included their email address on the sign-in sheet
 - ii. You can also contact me via email for the presentation: CFermin@marlinengineering.com

2. Comments:

- a. Excellent Project – we live in a climate where we can be outside
- b. Preferred Gomez - Nice to have sidewalks on both sides
- c. Enthusiastic about project, can you speed up?
- d. Gomez has no R.O.W.
- e. Various routes of travel
- f. Zero support from sheriff regarding golf carts on sidewalks
- g. Speeding on Gomez is out of Hand.
- h. Preferred Gomez because of sidewalks on both sides
- i. Thrilled this is going in
- j. Like many others how speed going to be regulated
- k. Resident lived in Oregon near a 100-mile trail
 - i. Trails police themselves
 - ii. Tremendous asset to community
 - iii. Excited about the project

3. Concerns:

- a. Gomez has several schools: Christian Academy, Hobe Sound College, Elementary School – many children walk/bike and concerned with potential impact to trail users and school children, no ROW in this area
 - i. Sidewalks in school yard.
 - ii. No room for trail.
 - iii. Heavily occupied by children.
 - iv. Strangers using the trail
 - v. Consider Dixie Hwy instead
- b. Christian school on Gomez Ave has a campus located on both sides of the road, there are school age children crossing Gomez Ave throughout the day in between classes
- c. Safety / Speeding

- d. Golf Carts & Non-motorized vehicles
- e. We live in paradise, concerned with how pedestrians will be impacted with shared use trail
 - i. Is there a purposed speed limit?
 - ii. Who will patrol the shared space?
 - iii. Will there be an Economical impact?




Mon 11/15/2021 4:14 PM

Jeffrey Weidner

RE: New Voicemail from HALSTEAD, GLENN 17725453673

To 'Joy Puerta'

Cc 'Beth Beltran'; Christina Fermin; Kathryn Marinace

 Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

I just spoke with Ms. Halstead. She was very nice, glad we called back to confirm and she is concerned about the Gomez Corridor.

She provided consistent information from her 11/12 voice mail and some additional comments. My notes:

The Bible College is on both sides of the street and students are crossing from classrooms to cafeteria, music class all day

Christian Academy and Hobe Sound Elementary have 500 students/small children who use the sidewalks

Dangerous to implement a Trail

Crossing guard is only there a few hours a day

It will bring strangers in to the area

Suggest that A1A be selected can crossover to Lares and go straight down to Bridge Road

Indicated that others on Gomez will contacting us

I told her that we are just beginning the study, have a lot of work to do and will be meeting again in May and would let her know.

Did you all hear anything from Commissioner Jenkins?

From: James Gorton <jgorton@martin.fl.us>
Sent: Friday, November 12, 2021 12:47 PM
To: Beth Beltran <bbeltran@martin.fl.us>
Cc: Lukas Lambert <llambert@martin.fl.us>; Lisa Wichser <lwichser@martin.fl.us>
Subject: sign in sheet

Beth-

Please share the sign in sheet from the SUN trail meeting Wednesday night so we have contact info for the gentleman who expressed concerns about speeding on Gomez between Bridge Road and Crossrip (His last name started with Van). I copied Luke on this email so he would be aware of a future RFS for traffic safety once we get this info.

His specific concerns included his observations of: Speeding, desire for raised mid-block crosswalks and traffic calming, increased awareness for midblock crosswalks, request for speed study, and request for increased enforcement. He also brought up a motorcycle fatality along the corridor that involved a group of motorcyclists who he claims were speeding.

I also wanted to reiterate what a great job your staff and consultant did. The meeting was well attended and the audience was treated to a lot of information about the program and the status of the project. Another example of the excellent work that our MPO produces.

Jim Gorton
Public Works Director
Martin County Board of County Commissioners
(772) 320-3155



Mon 11/29/2021 3:48 PM

Jeffrey Weidner

To Beth Beltran; Joy Puerta; Christina Fermin
Cc Kathryn Marinace

Beth/Joy/Christina – I just got off the phone with Suzanne Carr who lives along Gomez Avenue. Below are my notes.

I will be forwarding to her the flyer and the tentative schedule.

Suzanne Carr, Hobe Sound, 11/29/2021 561-339-5855

Hobe Sound is not the place to disrupt.

Lives off of Gomez and they already have a problem with bikers

She lives north of the Soundings

She doubts that anyone along the corridor is going to let use the right of way

They have had drainage problems for many years, they are fixing now and then we are going to rip it up all over again

Lived there for 26 years with all the bikers

Can't go north or south on Gomez without running into them

There are packs of bicycles on Dixie Highway also

On Dixie Highway there is a no passing zone and all the cars ignore it to go around the bicycle packs

We should find a way to use US 1, to go on Gomez is insanity

Pat Martin, the owner of the garage at NW corner of Dixie Highway and Bridge Road will not give any of the property for a trail

They will get petitions along Gomez

Does not believe this is right time to do this because of the pandemic

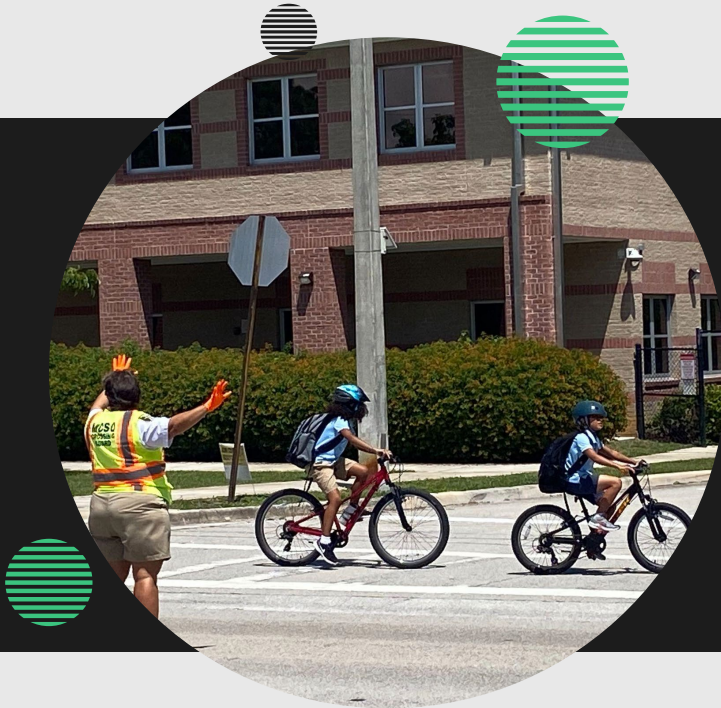
The Soundings just spent a fortune on landscaping There is also a location north of Osprey where a new house is being built and they won't let the trail go in front of them

Carnation Farms was proposed for cookie cutter house and they got 700 signatures to oppose, if we propose Gomez people will be upset

Marlin will follow up by sharing the Flyer and the current schedule for the MPO meetings and next public meeting.

Hobe Sound North Corridor SUN Trail Study

Public Meeting #2
March 9, 2022



PREPARED BY

MARLIN



Welcome & Team Introductions

MARLIN



01

SCOPE & RECAP 1ST MEETING

Feasibility Study for a +/- 5-Mile Segment of Trail



02

DATA COLLECTION & ANALYSIS

Three (3) Potential Alignments/Pathways



03

PROPOSED ALIGNMENTS & TYPICALS

US-1, Dixie Highway & Gomez Avenue



04

NEXT STEPS?

Selection of Preferred Alternative & Conceptual Design



01

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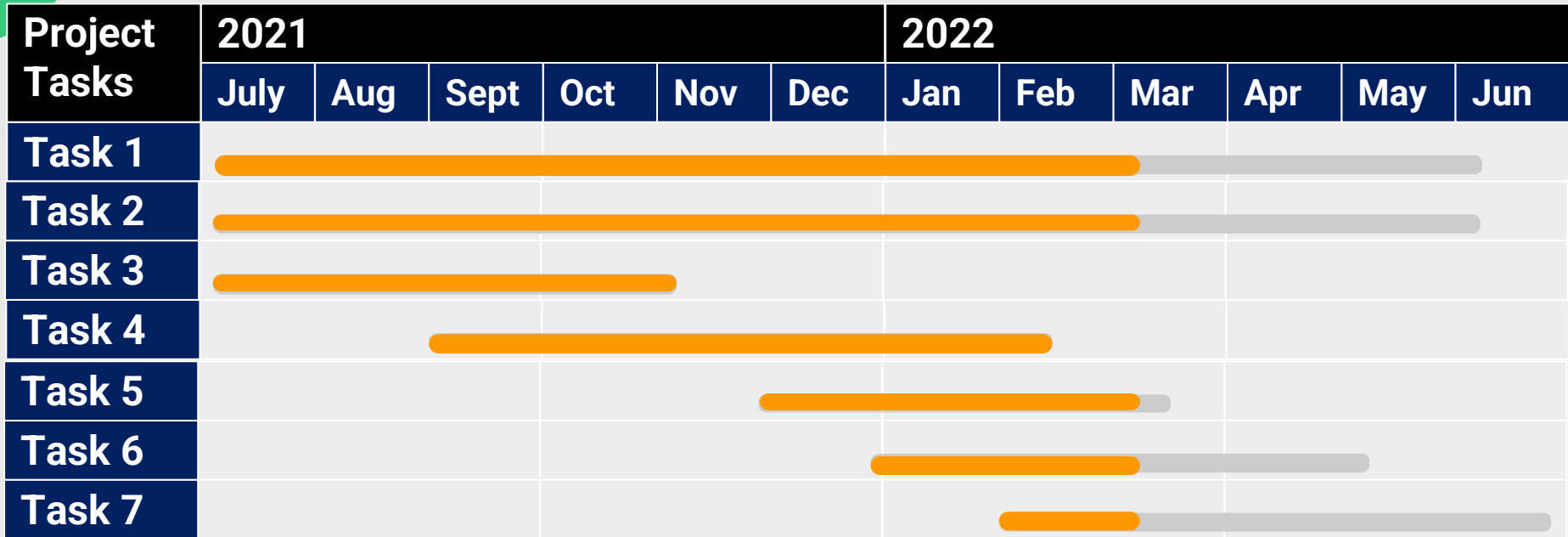
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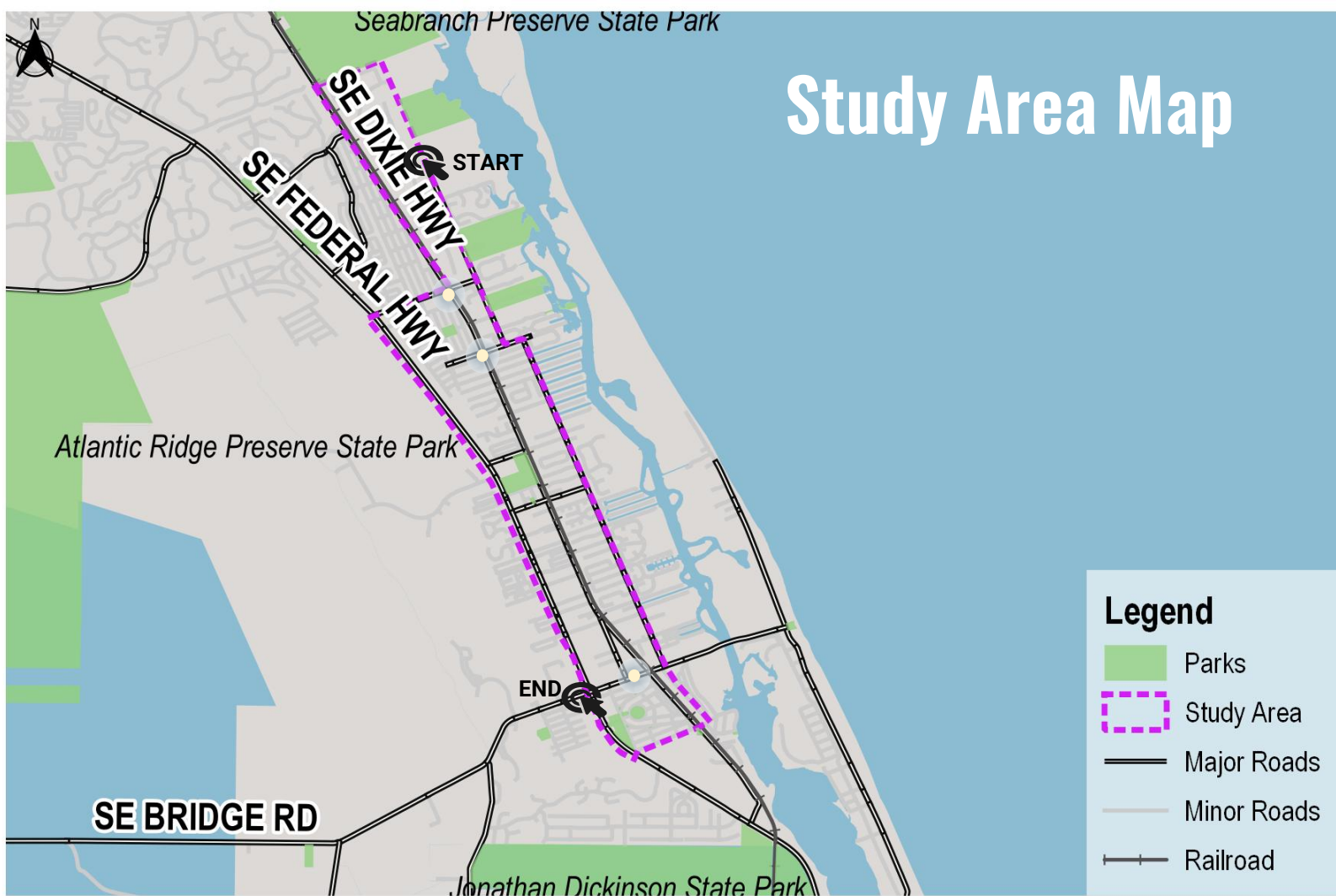


Schedule



TODAY ▲

Study Area Map



Purpose & Need

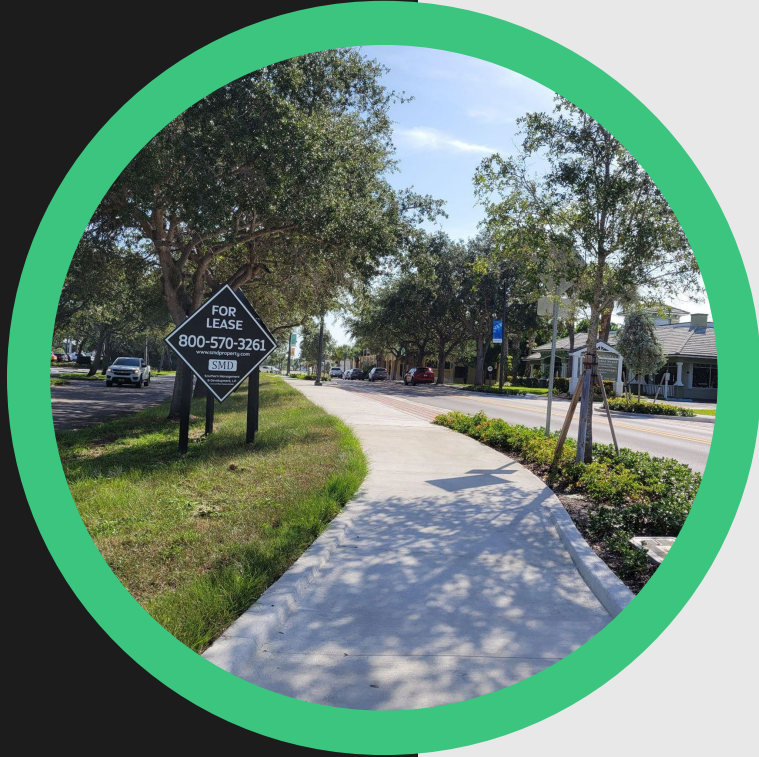
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Need

To Complete a separated facility which implements a portion of the Florida SUN Trail in Martin County, connecting Seabranh Preserve to Jonathan Dickinson.





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DATA COLLECTION & ANALYSIS



Traffic Data

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HIT BY A VEHICLE
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9 out of 10 pedestrians survive

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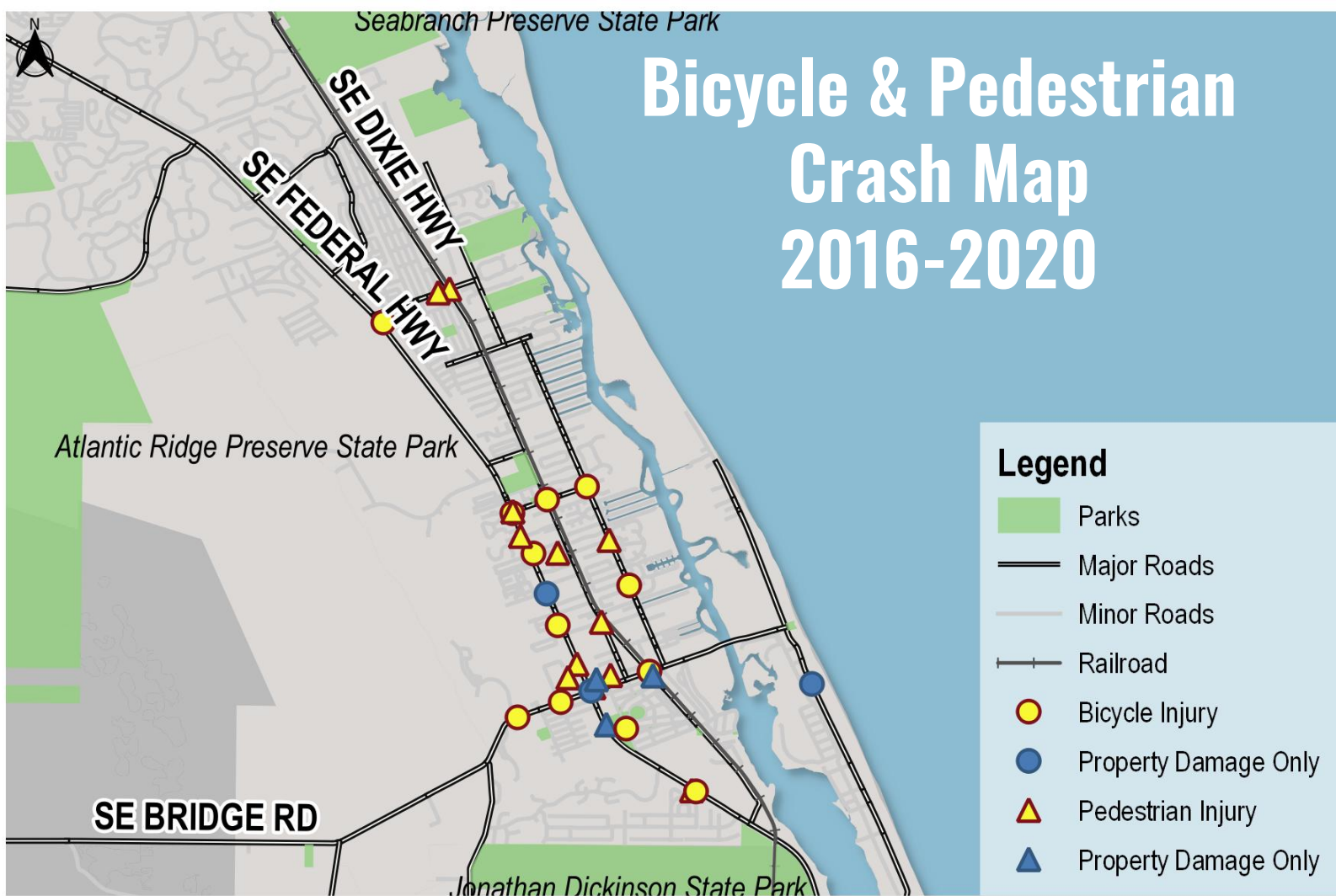


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MAPS

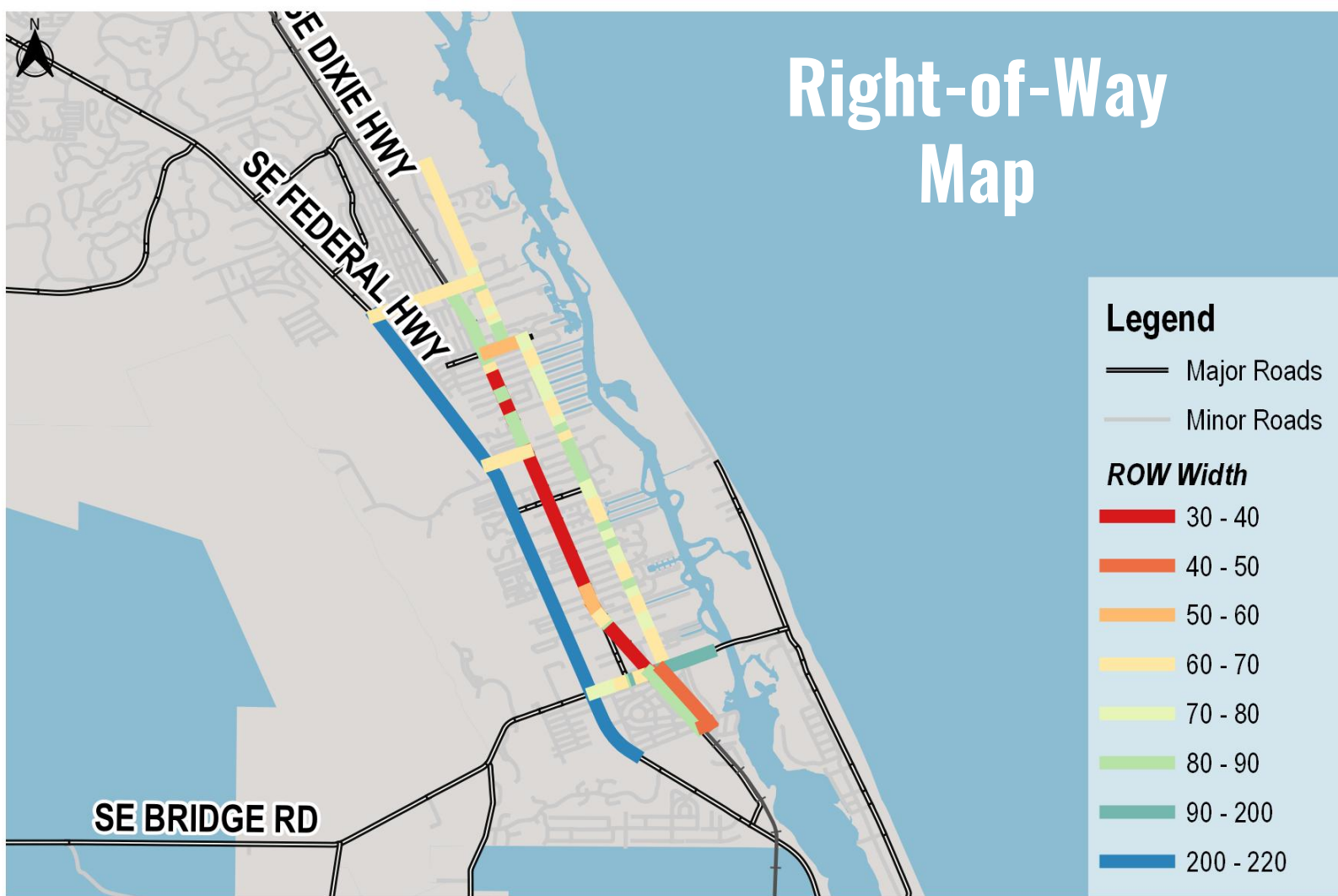
Bicycle & Pedestrian Crash Map 2016-2020



Legend

- Parks
- Major Roads
- Minor Roads
- Railroad
- Bicycle Injury
- Property Damage Only
- Pedestrian Injury
- Property Damage Only

Right-of-Way Map



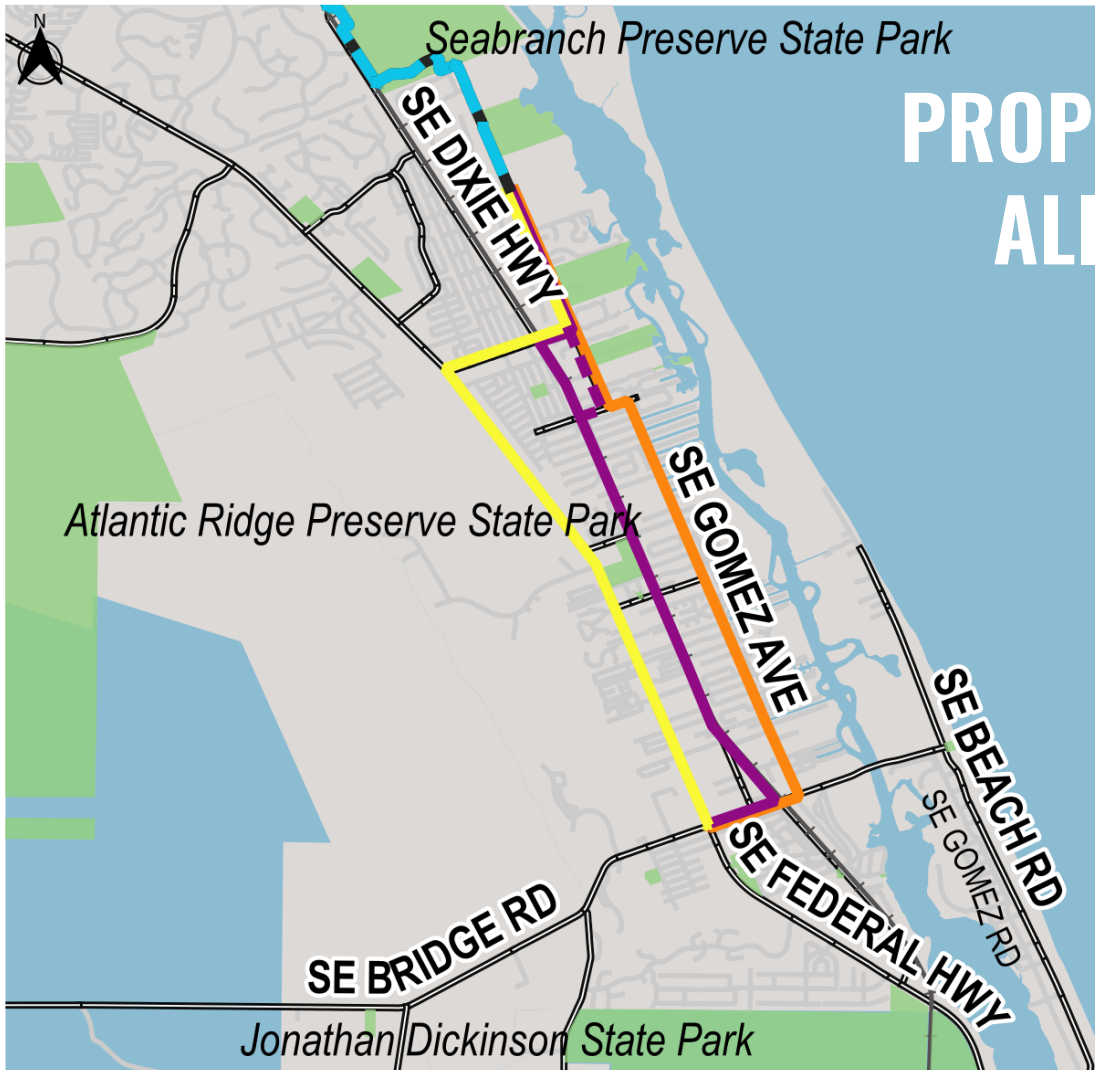


PROPOSED ALIGNMENTS & TYPICAL SECTIONS

GOMEZ AVE, DIXIE HWY, US-1



PROPOSED ROUTE ALIGNMENTS



Legend

- Major Roads
- Minor Roads

Potential Alignments

- SE Dixie Hwy
- SE Federal Hwy
- SE Gomez Ave

Alignments Continued



Gomez Ave

- Lower Speed Limit & Traffic
- Little to No ROW Restrictions
- Less Traffic & Crashes
- Least No. of Driveways
- Several Crossings
- Most Feasible



Dixie Hwy

- ROW Restricted - FEC Railroad/ROW Challenges
- Higher Speed Limits & Higher Traffic Volumes
- Several Ped/Bike Crashes
- Limited Crossings
- Least Feasible – Most Costly



US-1

- Limited ROW Restrictions
- Frontage Road (West Side)
- Higher Speed Limits & Heaviest Traffic Volumes
- Highest No. of Ped/Bike Crashes
- Limited Crossings
- Feasible

Cross Streets



Osprey St

- Limited ROW Restrictions (RR Crossing Restricted)
- Low Speed Limits



Crossrip St

- Limited ROW Restrictions (RR Crossing Restricted)
- Dixie Hwy & Crossrip St Intersection Unsignalized
- Low Speed Limits



Bridge Rd

- Partial Existing Pathway
- Few ROW Restrictions
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Evaluation Criteria/Matrix



Factor	Description	Total Points	Route 1 Gomez Ave		Route 2 Dixie Hwy		Route 3 US-1	
			East	West	East	West	East	West
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Infrastructure	Driveways, Ped/Bike Facilities, Crossings, ROW	44	14	15	36	41	15	20
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04 NEXT STEPS



What's Next?

- ✓ Maps
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Technical Advisory Committee (TAC)	4/4/22	6/6/22
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MPO Policy Board	4/18/22	6/20/22

Thank You

CONTACT INFORMATION:

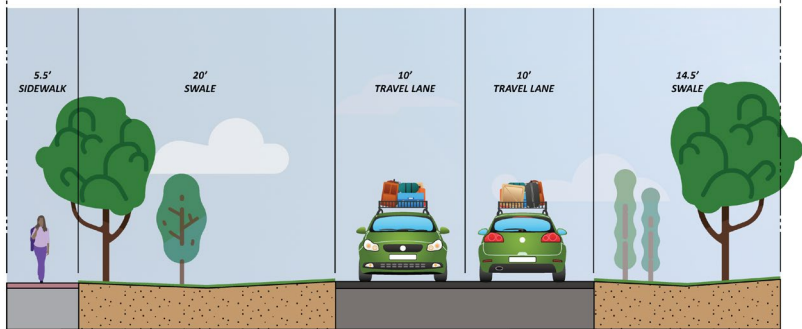
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Marlin Engineering, Inc.
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954-870-5064

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JPuerta@martin.fl.us
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Existing Typical for the Cross Streets

R/W (60')

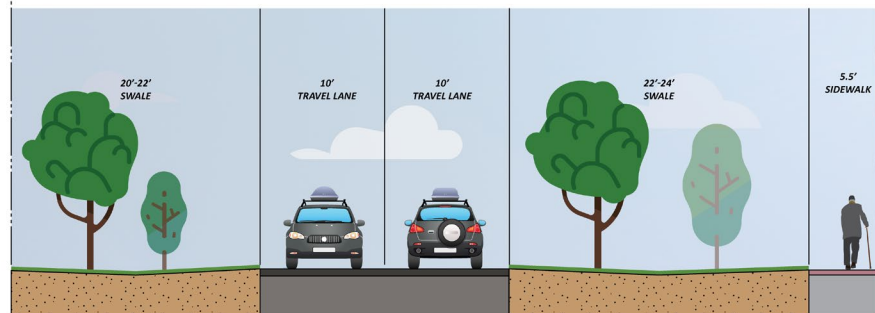


(ROW CONSISTENT +/- 60 FEET)

SE. CROSS RIP ST.



R/W (70')

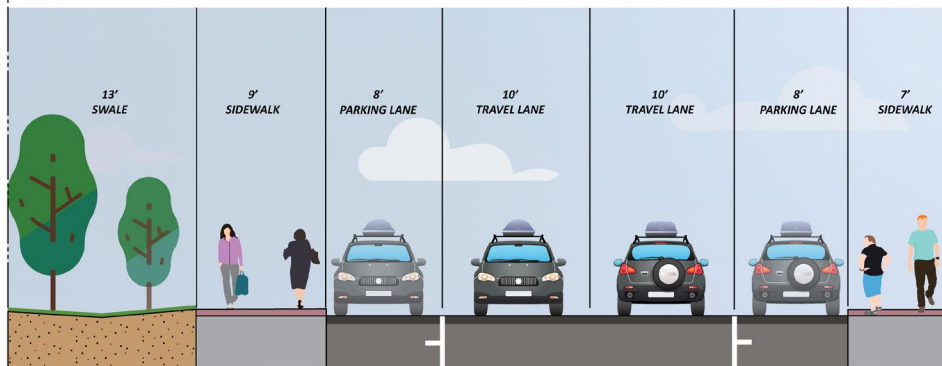


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R/W (65')



(ROW VARIES BETWEEN +/- 40 AND 80 FEET)

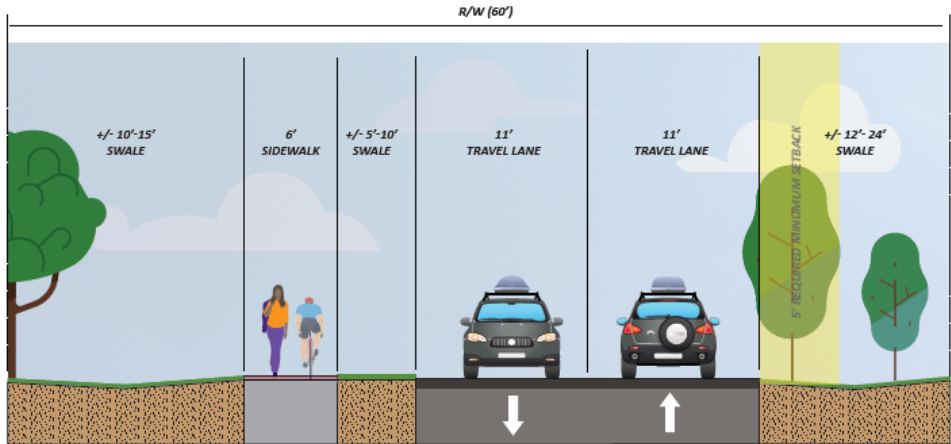
BRIDGE RD +/- 65 FT ROW





GOMEZ AVENUE

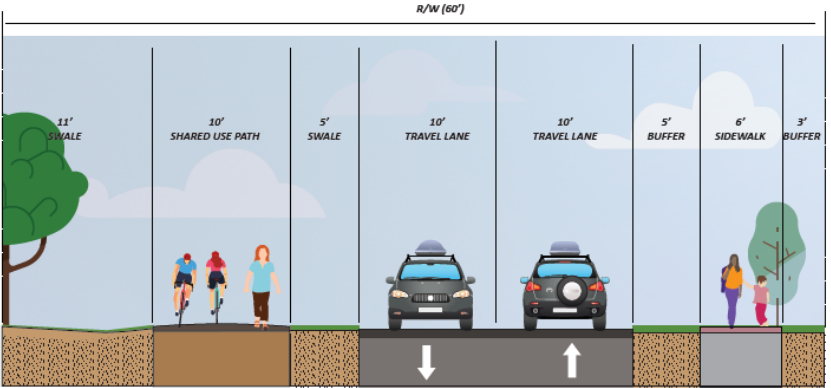
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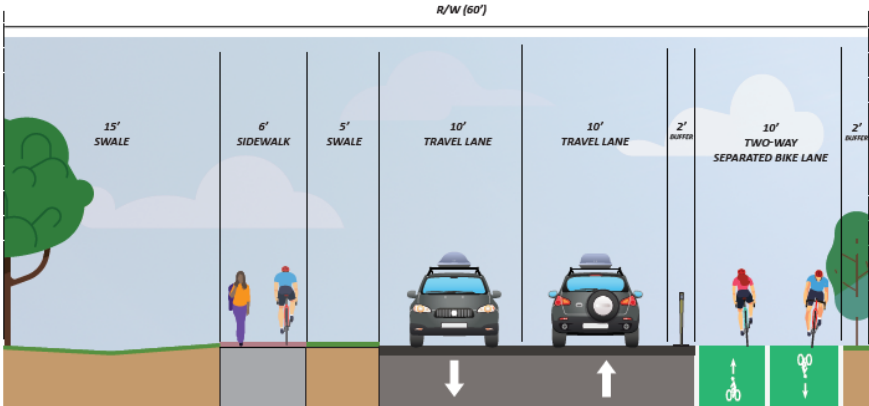
ALT. 1 S.E GOMEZ AV.



(ROW VARIES BETWEEN +/- 60 AND 90 FEET)



ALT. 2 S.E GOMEZ AV.



(ROW VARIES BETWEEN +/- 60 AND 90 FEET)



Gomez Avenue Rendering – North of Osprey



Hobe Sound North Corridor SUN Trail Study

Public Meeting #2
March 9, 2022



PREPARED BY

MARLIN



Welcome & Team Introductions

MARLIN



01

SCOPE & RECAP 1ST MEETING

Feasibility Study for a +/- 5-Mile Segment of Trail



02

DATA COLLECTION & ANALYSIS

Three (3) Potential Alignments/Pathways



03

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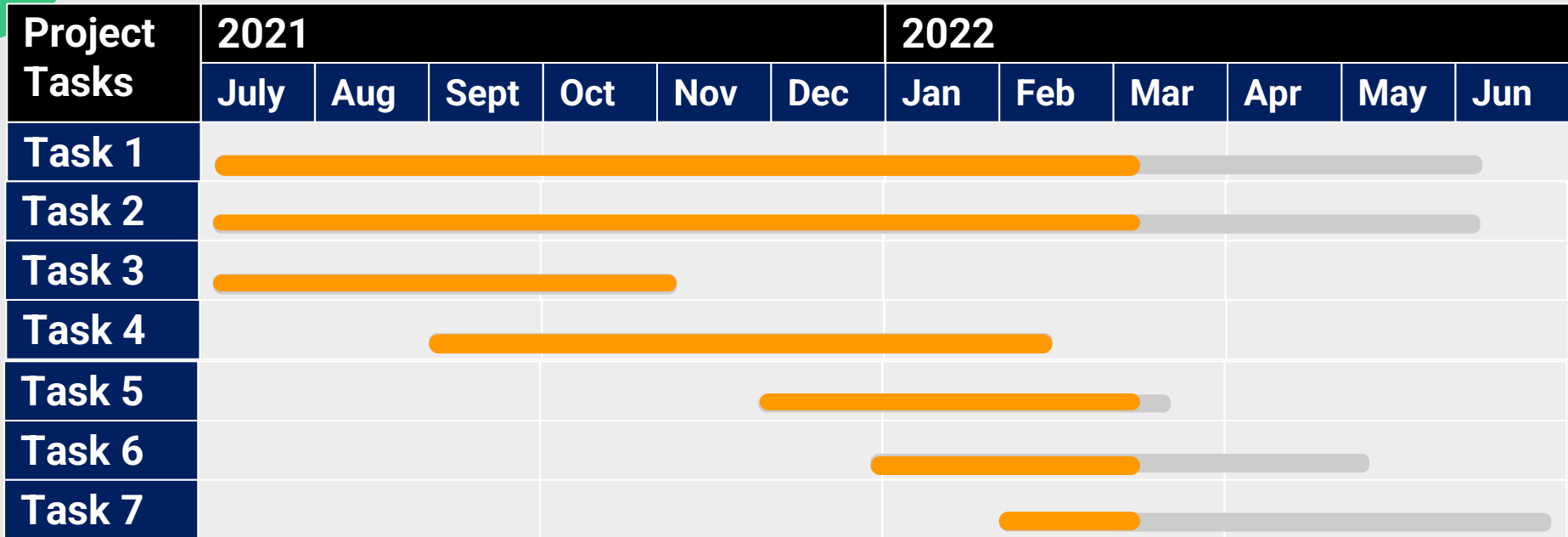
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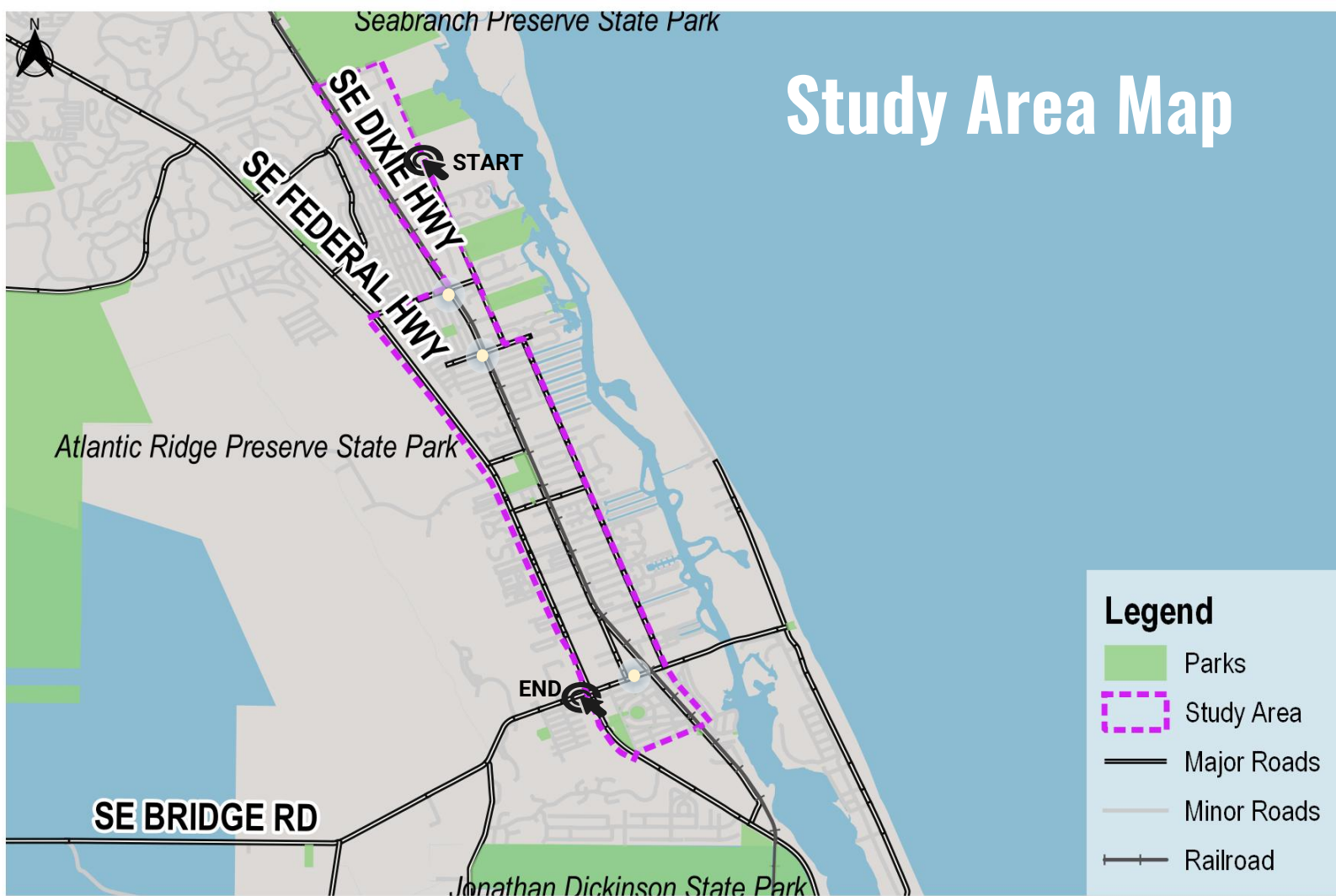


Schedule



TODAY ▲

Study Area Map



Seabrook Preserve State Park

SE DIXIE HWY

SE FEDERAL HWY

Atlantic Ridge Preserve State Park

SE BRIDGE RD

Jonathan Dickinson State Park

START

END

Purpose & Need

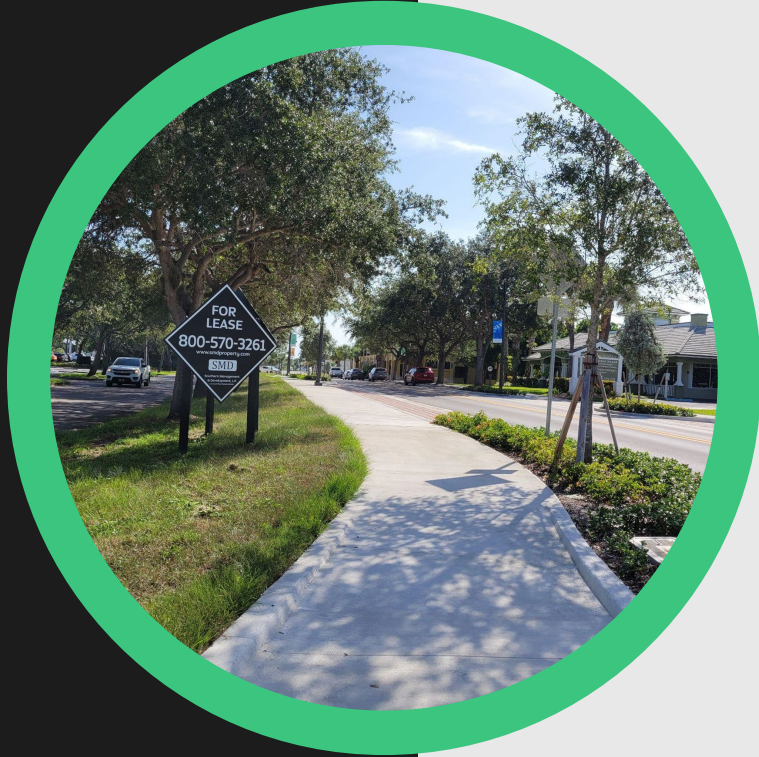
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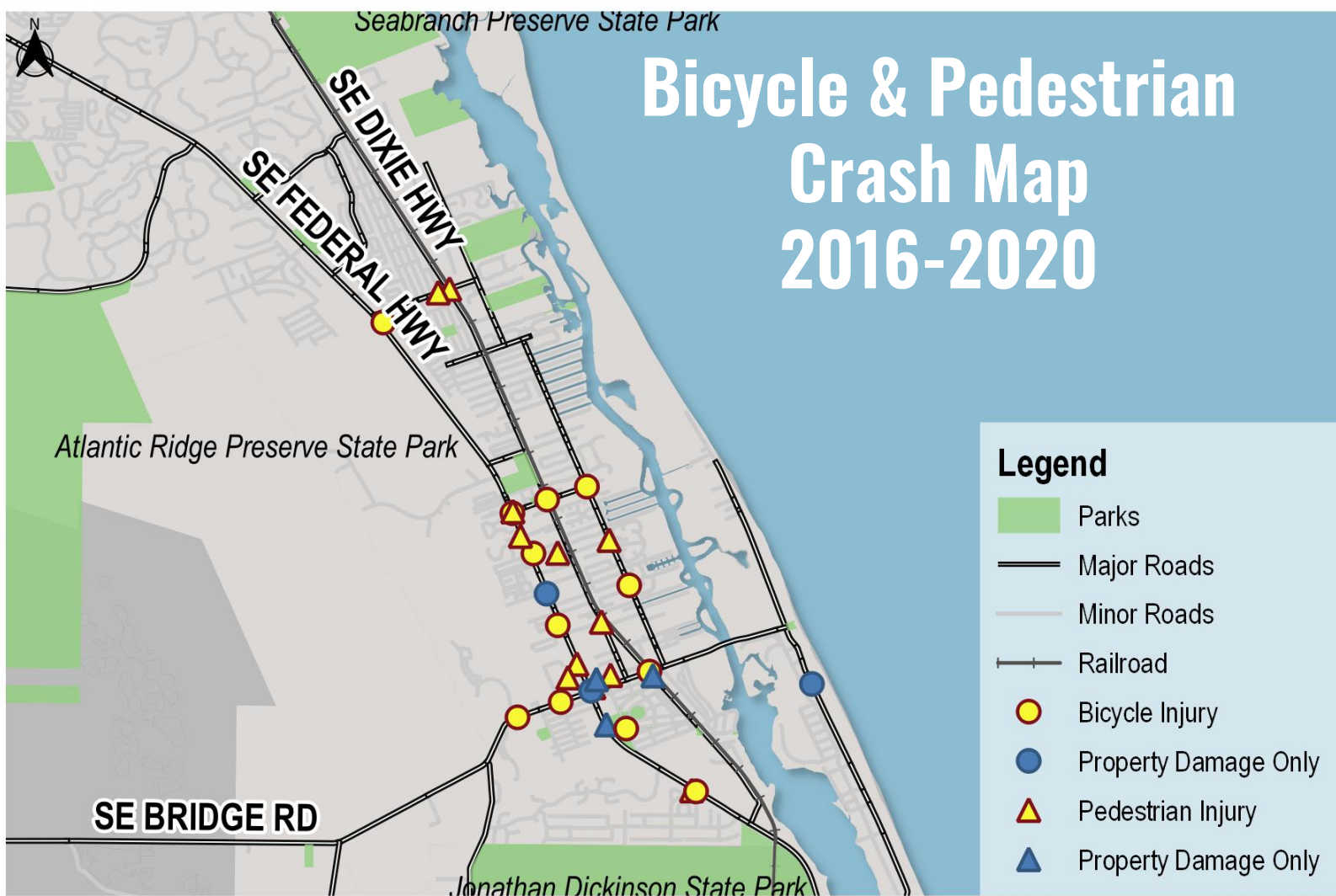


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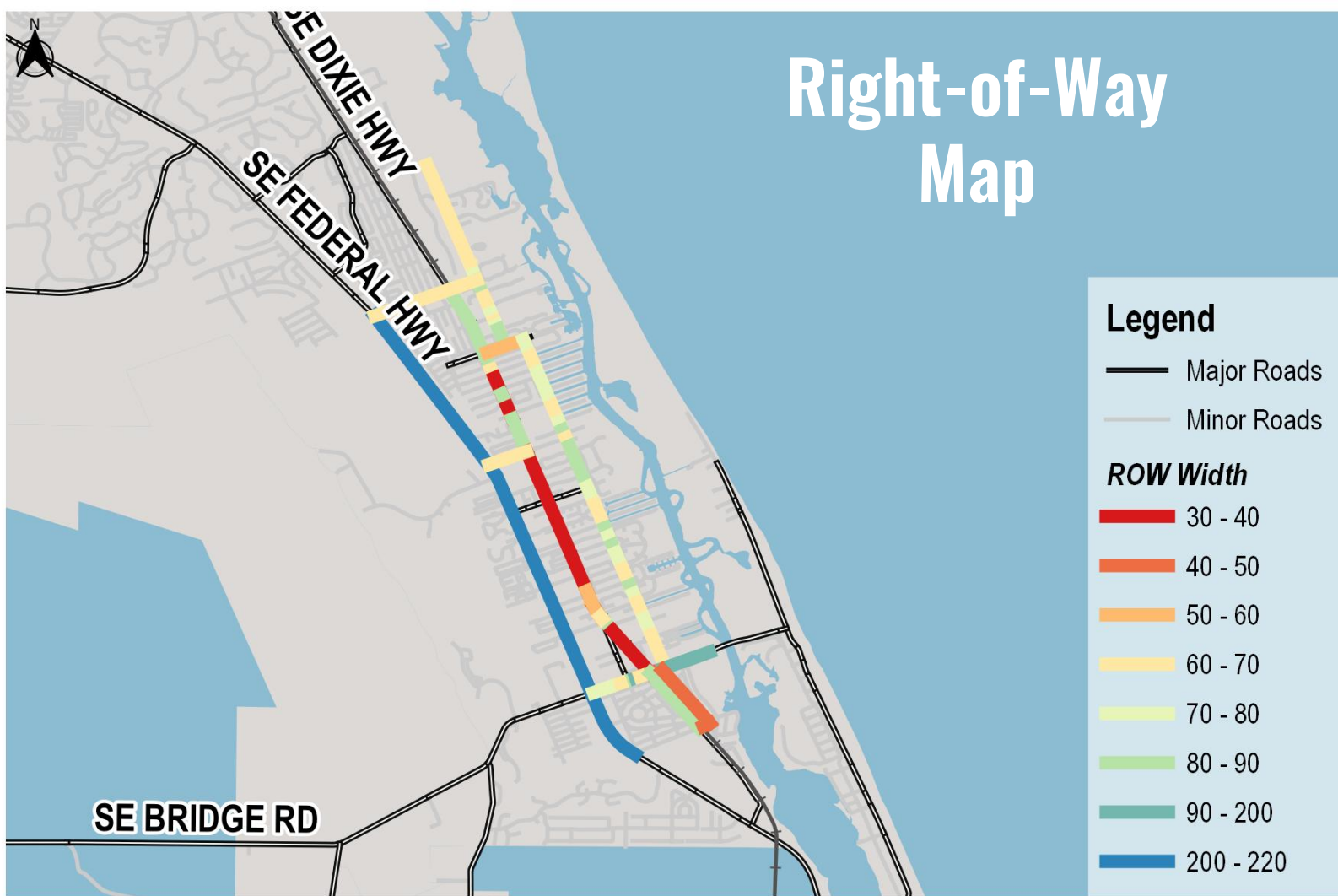


MAPS

Bicycle & Pedestrian Crash Map 2016-2020



Right-of-Way Map



Legend

- Major Roads
- Minor Roads

ROW Width

- 30 - 40
- 40 - 50
- 50 - 60
- 60 - 70
- 70 - 80
- 80 - 90
- 90 - 200
- 200 - 220

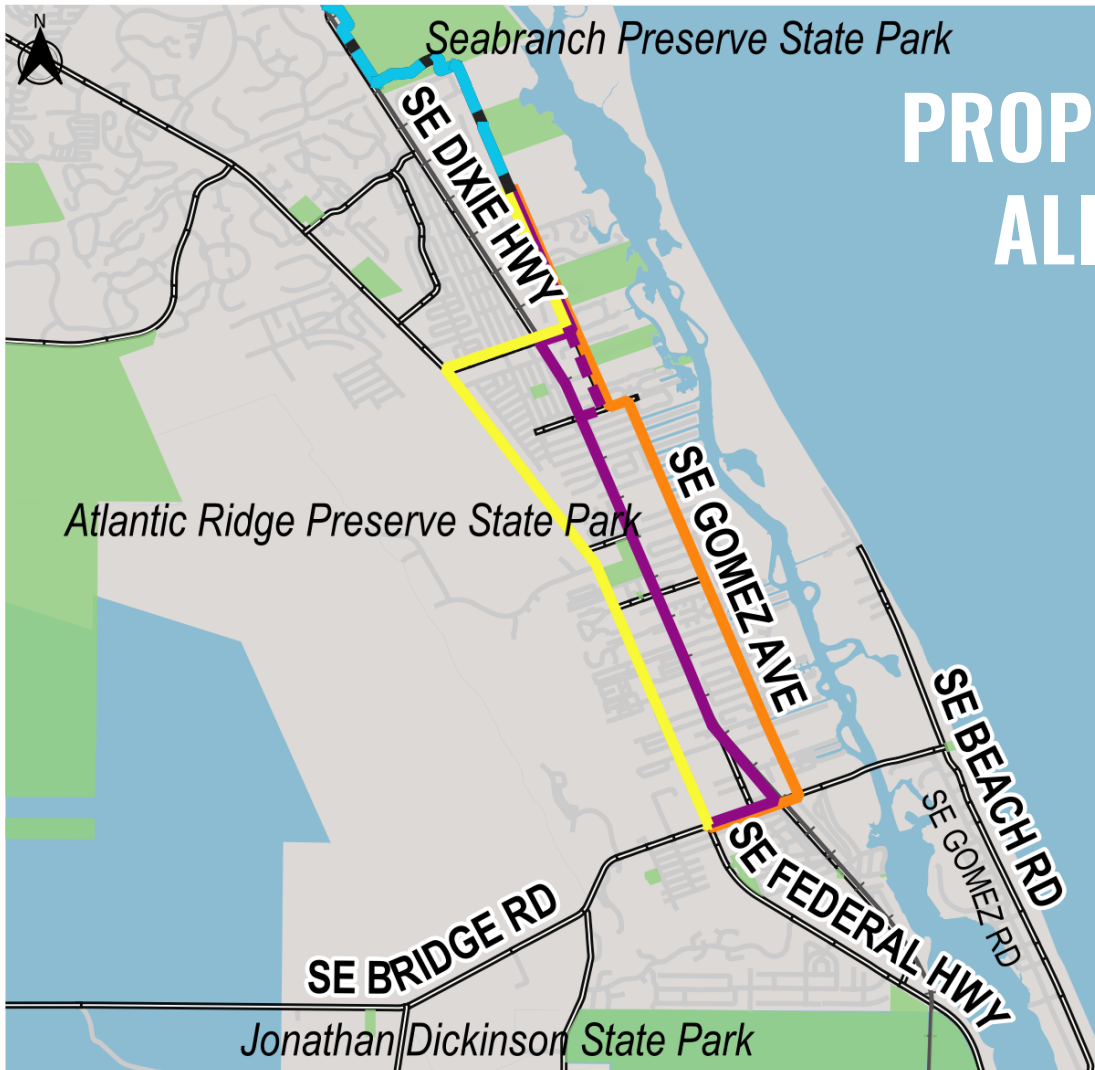


PROPOSED ALIGNMENTS & TYPICAL SECTIONS

GOMEZ AVE, DIXIE HWY, US-1



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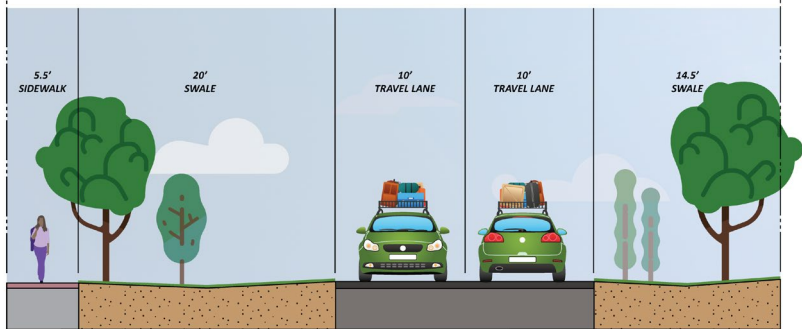
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Joy Puerta
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R/W (60')

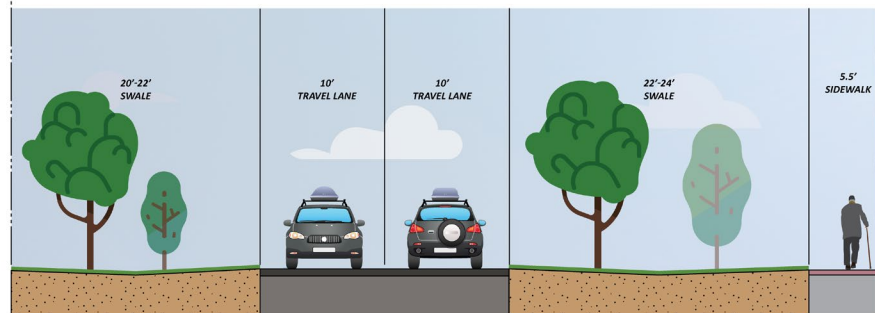


(ROW CONSISTENT +/- 60 FEET)

SE. CROSS RIP ST.



R/W (70')

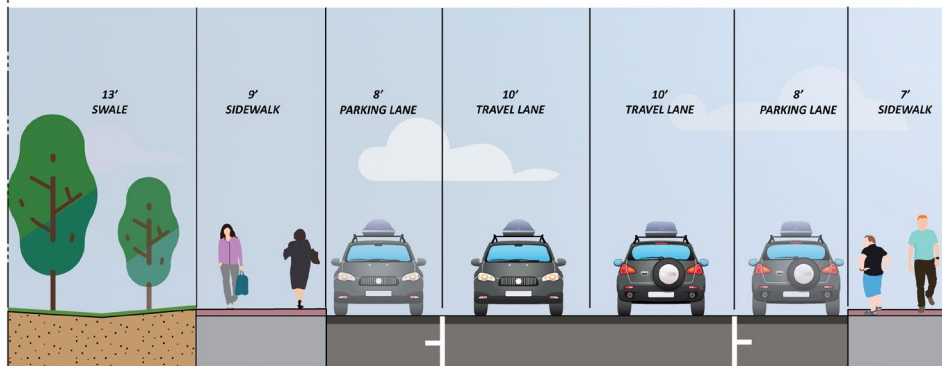


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SE. OSPREY STREET



R/W (65')



(ROW VARIES BETWEEN +/- 40 AND 80 FEET)

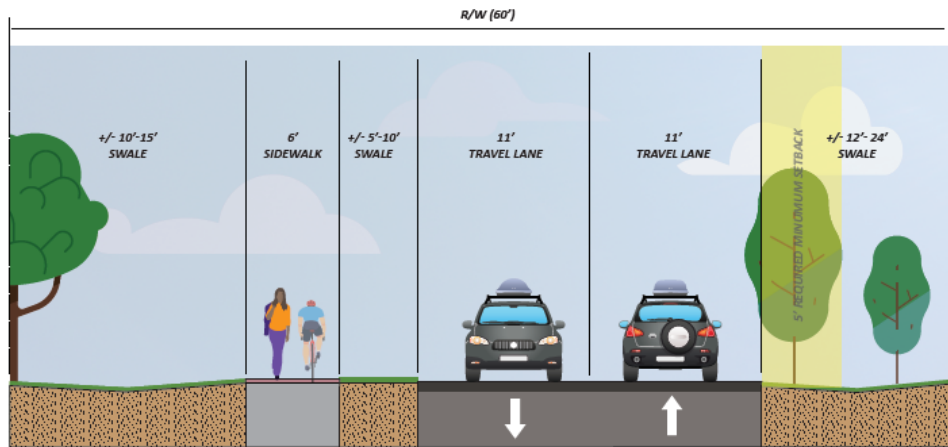
BRIDGE RD +/- 65 FT ROW





GOMEZ AVENUE

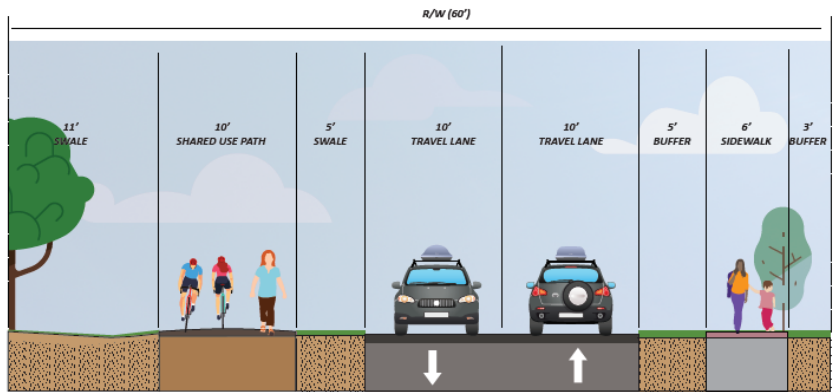
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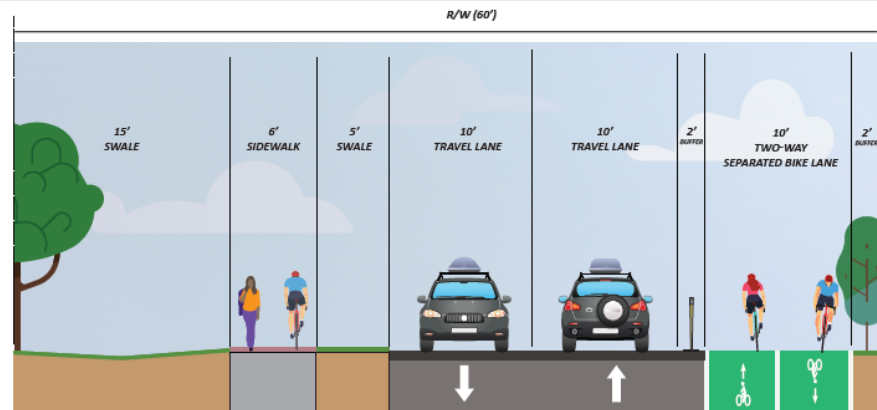
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ALT. 2 S.E GOMEZ AV.



(ROW VARIES BETWEEN +/- 60 AND 90 FEET)



Gomez Avenue Rendering – North of Osprey



SUN Trail Feasibility Study

SIGN-IN SHEET

March 9, 2022



Name	Address	Phone	Email
Terry Rauth	8836 SE Marine Bay		trauth760@gmail.com
Phil Dakin	170 S.E. St. Lucie Blvd. Unit I-214 Stuart		mikedakin@yahoo.com
Keith McGroarty	8213 SE Cumberland Cr		mcgroartyk@bellsouth.net
Henry Williams	9100 SE Gomez		
Sandy Williams			
Mike Williams			
Dean Curtland	9286 SE Venus St	3192709818	dcurtland@gmail.com
Beverly Halstead	9125 SE Morning St.	772-340-0121	glhalstead@aol.com
Wibet Hay	3400 Commercial Blvd	954-777-4573	Wibet.Hay@dot.state.fl.us
Jane Logan	7622 SE Dove HS	772-546-4069	jlogan@gate.net
Lawrence Cromwell	9895 SE Osprey Pointe Dr	772-402-5966	lcromwel@gmail.com

SUN Trail Feasibility Study

SIGN-IN SHEET

March 9, 2022



Name

Address

Phone

Email

Lucine Martens Stuart, FL 514-542-5182 lmartens@martin.fl.us

Dan Stetler Hobe Sound 772-486-1566 danielstetler@hsbc.edu

Katharine Kuller Hobe Sound FL 847-508-2402 katharinekuller@yahoo.com

ERIC WESEL 8512 SE DUNCAN ST. HOBE SOUND 772-341-7527 Ewesel1063@AOL.COM

Harold Jenkins 12260 SE Dixie Hwy HS. HaroldJenkins@Landscapes.com*

MARK PALMER 8907 SE STAR ISLAND 407 456 3429

Stacia Hemrick 8754 SE Jordan HS, FL skennaredee@aol.com

JOHN MAT WEDER 9071 SE Pomona St. H.S. YOSWED@GMAIL.COM

LARRY DOVER P.O. Box 864 H/S 33475 (772) 485-6697 ledover@bellsouth.net

Timothy VanHeuvel (LIST and Powerpoint) timothyvan@yahoo.com

Kelly Dollar 772 341 0184

SUN Trail Feasibility Study

SIGN-IN SHEET

March 9, 2022



Name	Address	Phone	Email
Joy Puerta		772-320-3015	jpuerta@martin.fl.us
Blake Capps	8686 SE Alabama Al., Hobe Sound, FL 33455	772-341-0382	blake@cappsroofing.com
Sandra Kruger		772 263 1649	
Stephen Beaudette		"	
Bill STOUT	8378 SE INDIAN RIVER DR		
Karen = Phil Greene	8026 S-e. Crossrip		
Tom CARROLL		546-8876	
Linda Race		772 546 2511	
Bert Krebs			bkrebs@iw-hs.com
Bonnie & Rich Green			bonniegreen@hotmail.com

SUN Trail Feasibility Study

SIGN-IN SHEET

March 9, 2022



Name	Address	Phone	Email
Rick Green	10002 SE Osprey Pt	914-715-	RHG324@YAHOO.COM
Gayle Miller	Po Box 8275 Hobe Sound	33475	gaylemiller66@gmail.com
Jerome Small	1246 Sweet Violet Ct		Jsmall@martin-
Christina Fernin	Martin Engineering		
Kathryn Mannace	Martin Engineering		
Walter Keller	"	"	
Jeff Weidner	"	"	
Ashok Sampath	"	"	

SUN Trail Feasibility Study

SIGN-IN SHEET

March 9, 2022



Name

Address

Phone

Email

* Beverly Halstead email for meeting for all
g1onhalstead@aol.com

SUN Trail Feasibility Study

Comment Card

March 9, 2022



Name

Phone

Address

Email

PHILLIP GREENE 772-285-5105 8026 S.E. CROSSRIP ST. PHILINSPECTS @
COMCAST.NET

Comments:

APPEARS OBVIOUS THAT OSPRY ST. TO U.S. 1 IS THE
BEST ROUTE. ① NO RESIDENTS ON OSPRY
② WIDE ACCESS ON U.S. 1.
③ NO RESIDENCE ON U.S. 1
④ EXISTING SIDEWALK THAT IS (AT BEST)
LIGHTLY USED.

SUN Trail Feasibility Study

Comment Card

March 9, 2022



Name	Phone	Address	Email
Beverly Halstead	772-240-0171	9135 S.E. Morning St	ghalstead@aol.com

Comments:

Bike Trail needs to cross on Osprey St. and go South on U.S. 1.
Please e-mail me of future meetings

SUN Trail Feasibility Study

Comment Card

March 9, 2022



Name	Phone	Address	Email
Alex + Kelly KUPISZ		9492 SE Jordan Way Hobe Sound FL	a.kupisz@gmail.com

Comments: god Bless you !!! Psalm 91 !!!

put Bike trail crossing on Osprey
go South on US1. Bike
Trail is a danger for Gome Ave
community !!! Accidents, strangers,
bike, pedestrian and auto accidents
will be greatly multiplied !!! Crime

will also be escalated !!! Thankyou for
your expertise to evaluated these remarks !!!

SUN Trail Feasibility Study

Comment Card

March 9, 2022



Name SARAH FAIR Phone 546-3419 Address P.O. Box 8334 Email _____

Comments:

The feasibility ^{study} was informative and gave everyone an opportunity to participate in the process. Thank you —
Please inform me when other mtgs are called for this project.

SUN Trail Feasibility Study

Comment Card

March 9, 2022



Name	Phone	Address	Email
Keith McGroarty	561 427 3159	8213 SE Cumberland Cr	mcgroarty@wellboath. net

Comments:

My first choice would be A1A, but it sounds like there are practical limitations. Therefore Gomez
I understand number of driveways is a concern, but I think number of cross streets should be also considered.

SUN Trail Feasibility Study

Comment Card

March 9, 2022



Name	Phone	Address	Email
MARK PALMER	(407) 456 - 3429	8907 SE STAR ISLAND WAY HOBE SOUND FL 33455	MARKSPALMER@YAHOO.COM

Comments:

I BIKE GOMEZ EACH DAY AND PREFER IT TO THE OTHER ROADS FOR SEVERAL REASONS. THE SPEED OF THE TRAFFIC, THIS BY FAR IS THE MOST IMPORTANT, 2ND THE VOLUME OF CARS & THIRD IT WHERE I'M ALREADY USING THE ROAD TO CONNECT WITH THE PARK ON THE NORTH SIDE OF GOMEZ. I WOULD NOT USE FEDERAL HWY DUE TO THE SPEED OF THE CARS, TRUCK TRAFFIC ETC.

I RECOMMEND GOMEZ 100%, I LIVE OFF GOMEZ! IT WOULD BE WELCOME AND DESIRABLE. I LIKE THE BIKE PATH OPTION ON THE EAST SIDE AS WELL. I BELIEVE THE TWO OTHER OPTIONS WONT GET USED AS MUCH AND WOULD ALSO BE A WAIST OF MONEY. THANK YOU, MARK

SUN Trail Feasibility Study

Comment Card

March 9, 2022



Name William Phone _____

Address 9100 SE Gomez Email _____

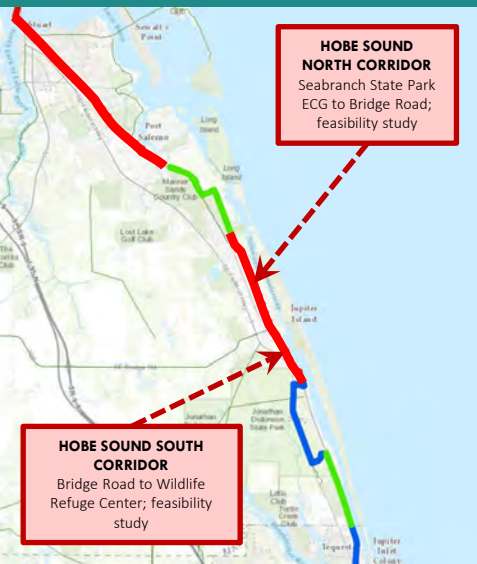
Comments:

our sidewalk is only 3'4" Not 6' existing - they have just been trying to rectify the Flooding in our area of Gomez so to add more concrete would stop more water from going into the ground. our Right of Way is 25' From the center of the Road - Not what is 60' as said.

We believe it would be very dangerous to put the High Speed Cyclists on the same path as the Recreational Families, children & dog walkers, Our area of the street should be left alone or the High Speed cyclers put on a separate path on the east side of Gomez & leave the rest of the sidewalks the way they are -

SUN TRAIL FEASIBILITY STUDY

Hobe Sound North Corridor



LEGEND

Completed

Grant Funded/feasibility

Grant Funded/construction



MARTIN COUNTY MPO

3481 SE Willoughby Blvd
Suite 101, Stuart, FL 34994

Join us for our exciting event:

March 9, 2022

5:00 PM

Contact us for more information:

772.320.3015

jpuerta@martin.fl.us

RECIPIENT NAME

Recipient Address

City, ST ZIP Code

Hobe Sound North Corridor SUN Trail Study

PUBLIC MEETING OPEN HOUSE #3 | January 11, 2023

MARTIN **MPO**
Metropolitan Planning Organization

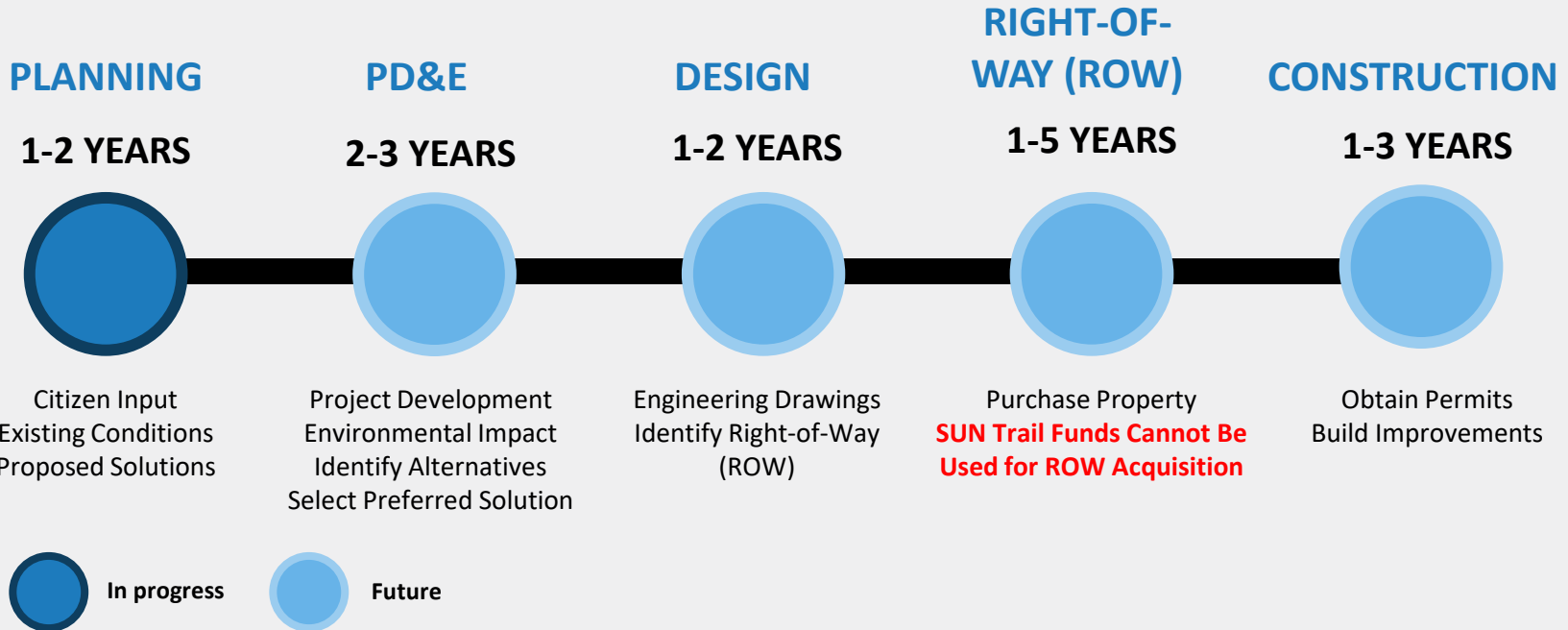
PREPARED BY

MARLIN



Life of a Project






TOTAL 6-14 YEARS FROM PLANNING TO CONSTRUCTION



Study Area Map



Legend

-  Parks
-  Study Area
-  Major Roads
-  Minor Roads
-  Railroad



Purpose & Need



Purpose

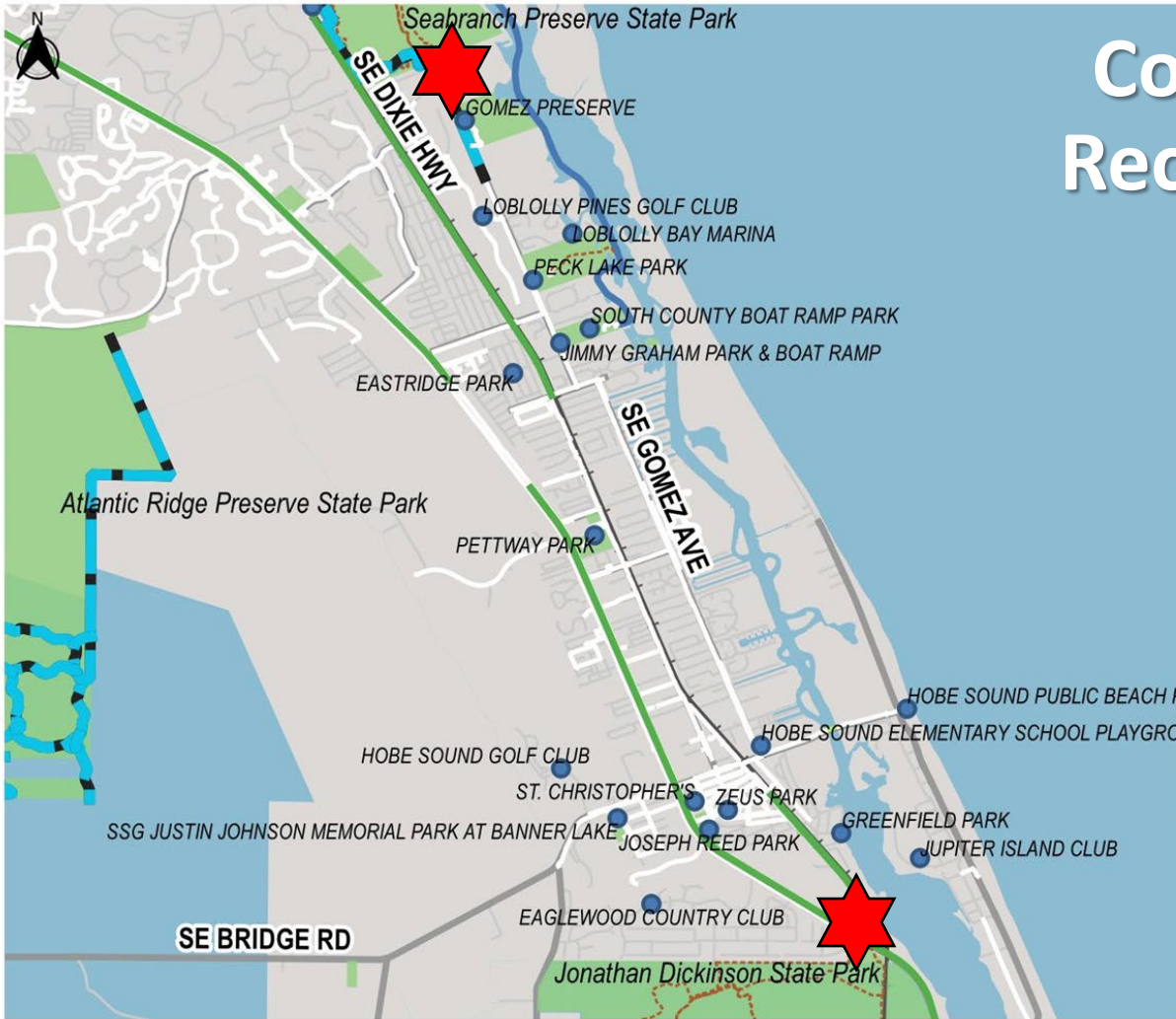
To provide for a safe, comfortable, equitable and accessible multipurpose pathway for non-motorized use.



Need

To complete a separated facility which implements a portion of the Florida SUN Trail in Martin County; connecting Seabranh Preserve to Jonathan Dickinson State Park.

Community Recreational Assets



Legend

- Parks
- Major Roads
- Minor Roads
- Shared Use Path
- Paddle
- Sidewalk
- Trails
- Recreation Assets



Florida Shared Use Non Motorized (SUN) Trail

The SUN Trail network is the statewide system of high priority (strategic) **paved** trail corridors for bicyclists and pedestrians.



East Coast Greenway

**3,000 MILES
OF TRAILS**

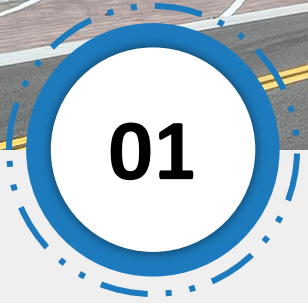
-
671 total miles in Florida



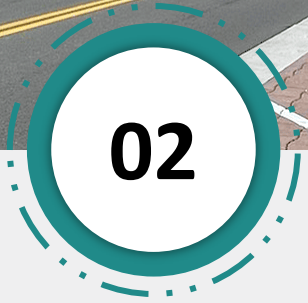
\$145 Billion

Total Economic Output Produced by Outdoor Recreation in Florida

Source: Statewide Comprehensive Outdoor Recreation Plan (SCORP)



**ROUTE ALIGNMENTS
& ALTERNATIVES**



**PREFERRED
ALIGNMENT**



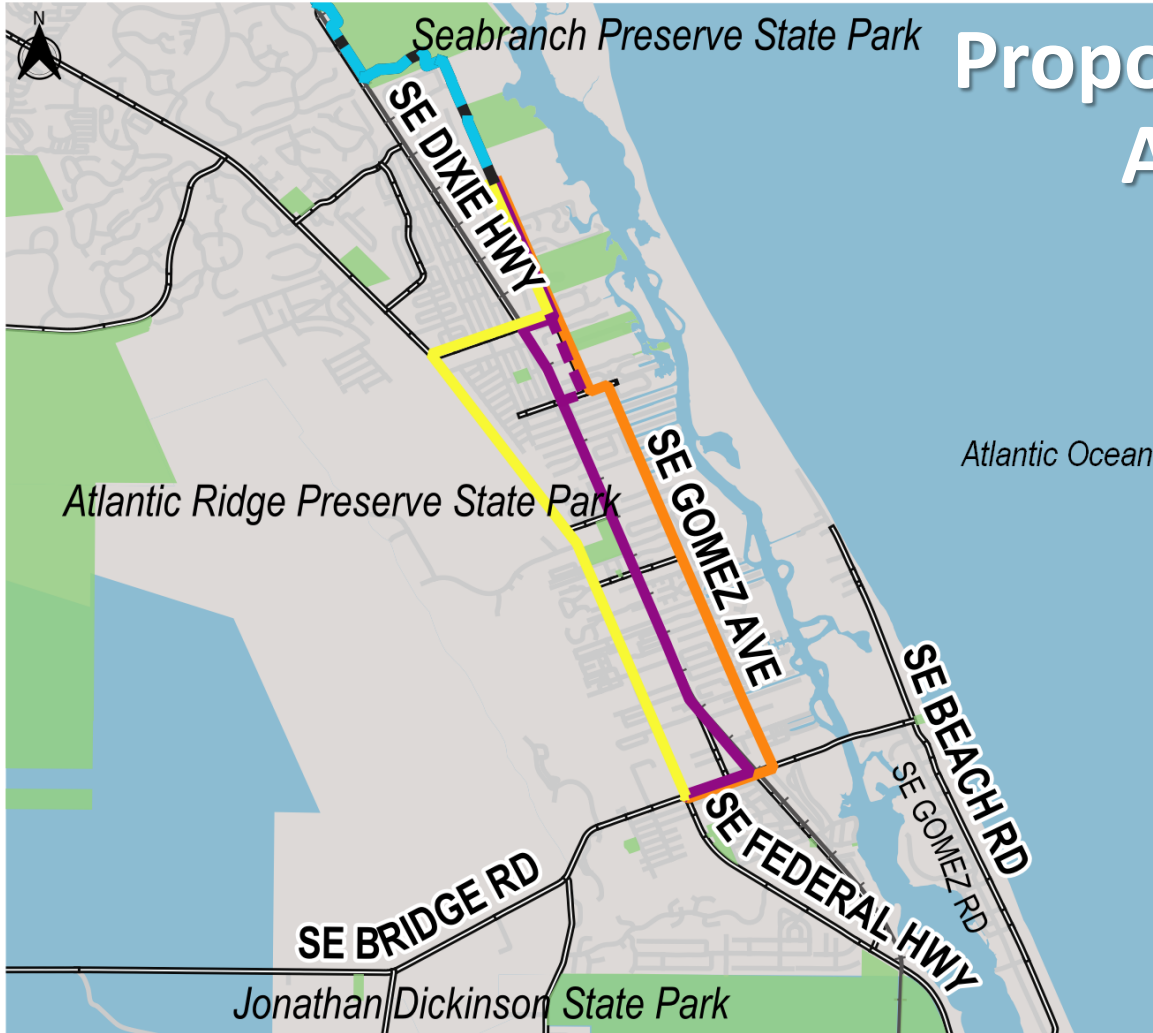
NEXT STEPS



01

Route Alignments & Alternatives

Proposed Route Alignments



Alignments Continued



SE Gomez Ave

- Lower Speed Limit
- Few ROW Restrictions
- Less Traffic & Crashes
- Least No. of Driveways
- Several Crossings
- Feasible
- Public Objection



SE Dixie Hwy

- ROW Restricted - FEC
Railroad/ROW Challenges
- Higher Speed Limits & Higher
Traffic Volumes
- Several Ped/Bike Crashes
- Limited Crossings
- Least Feasible – Most Costly



US-1

- No ROW Restrictions
- Frontage Road (Westside)
- Higher Speed Limits
- Heaviest Traffic Volumes
- Highest No. of Non-
Motorized Crashes
- Limited Crossings
- Feasible

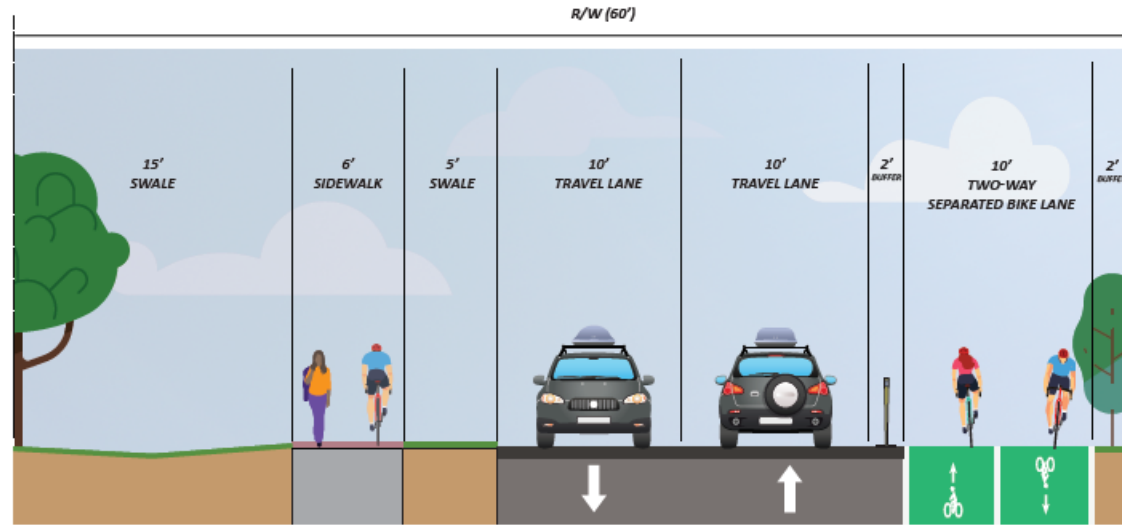
Gomez Ave Preferred Alternative

in March 2022

West

East

ALT. 2 S.E. GOMEZ AV.



(ROW VARIES BETWEEN +/- 60 AND 90 FEET)

- 10' Two-Way Protected Bikeway (Eastside)
- 2' Physical Barrier
- 6' Sidewalk (Westside)
- Selected as Preferred Alternative
- Opposed at April MPO Meeting



02

Preferred Alignment

November 2022

US-1/SR-5

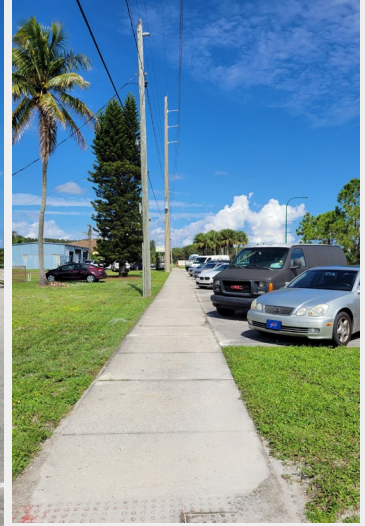
Evaluation Criteria/Matrix

Factor	Description	Total Points	Route 1 Gomez Ave		Route 2 Dixie Hwy		Route 3 US-1	
			East	West	East	West	East	West
Safety	No. of Crashes & Severity, Speed Limit, AADT	45	9		12		21	
Infrastructure	Driveways, Ped/Bike Facilities, Crossings, ROW	44	14	15	36	41	15	20
Lack of Connectivity	Schools, Transit, Places, Parks	11	5		8		7	
TOTAL SCORE*		100	28	29	56	61	43	48

**The lower the score the more feasible the corridor*

US-1/SR-5 Existing Conditions

- 26,500 AADT
- Posted Speed Limit 45 – 55 MPH
- 3 signalized intersections
- Sidewalk present
- Westside more ROW available
- Frontage Road and driveways
- Commercial properties
- Community entrances



US-1/SR-5

Segments

1. Gomez Avenue from Shared Use Pathway to Osprey Street
2. Osprey Street from Gomez Avenue to Dixie Highway
3. Osprey Street from Dixie Highway to US-1
4. US-1 from Osprey Street to Pettway Street
5. US-1 from Pettway Street to Bridge Road



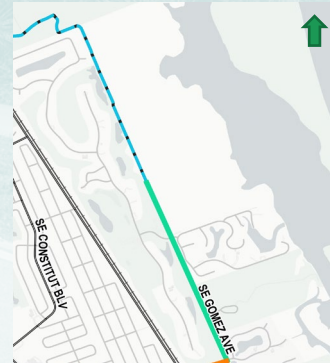


Segment 1

Seabranh Preserve State Park to Osprey Street

Segment 1 – Gomez Avenue

- Posted Speed Limit is 35 MPH
- Existing 8-foot shared use pathway part of East Coast Greenway
- ROW is approximately 60 feet
- Existing 6-foot concrete sidewalk on westside
- 10-foot swale
- Sidewalk ends at Peck Lake Park on eastside
- Remove existing sidewalk
- Constructing 12-foot shared use pathway
 - May require curb and gutter
- Design requires a distance of 5-feet from roadway



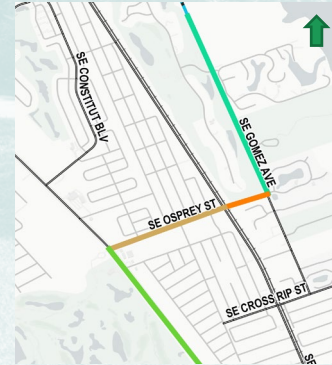


Segment 2

Osprey Street from Gomez Avenue to Dixie Highway/A1A

Segment 2 – Osprey Street

- Posted Speed Limit is 25 MPH
- AADT is 1,926 vehicles*
- Existing 5.5-foot concrete sidewalk on southside
- ROW is approximately 70 feet
- +/-22 foot swale
- No sidewalk on northside
- Railroad crossing
- Remove existing sidewalk
- Construct a 12 to 14-foot shared use pathway
- Design requires a distance of 5-feet from roadway



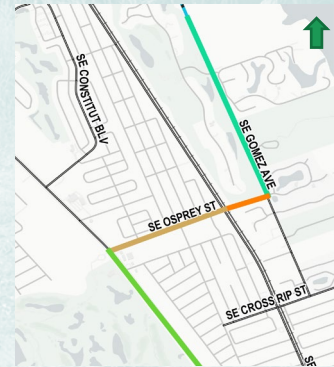


Segment 3

Osprey Street from Dixie Highway/A1A to US-1/SR-5

Segment 3 – Osprey Street

- Posted Speed Limit is 35 MPH
- AADT is 5,203 vehicles*
- Existing 5.5-foot concrete sidewalk on southside
- ROW is approximately 70 feet
- +/-17-foot swale
- No sidewalk on northside
- Remove existing sidewalk
- Construct a 12 to 14-foot shared use pathway
- Design requires a distance of 5-feet from roadway



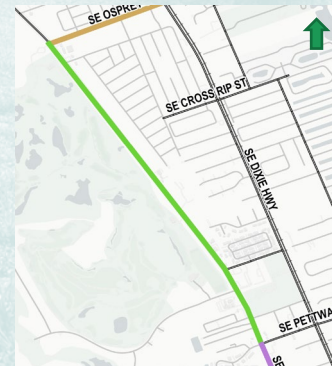


Segment 4

US-1/SR-5 from Osprey Street to Pettway Street

Segment 4 – US-1/SR-5

- Posted Speed Limit is 55 MPH
- AADT is 26,500 vehicles*
- Existing 5 to 6-foot concrete sidewalk on both sides
- ROW is over 200-feet
- Swale varies 20-35 feet on average, some areas less
- Elevation changes
- Eastside has more driveways than the west
- Westside has a frontage road between Medalist Place and Wagon Trail (One-way)
- Remove existing sidewalk
- Construct a 12 to 14-foot shared use pathway
- Design requires a distance of 5-feet from shoulder break



*FDOT 2021 Daily Traffic Info

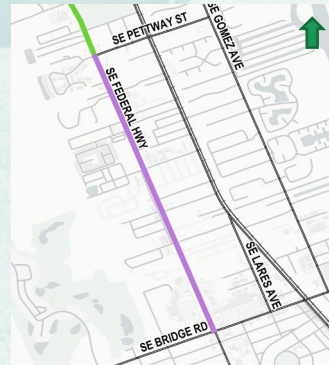


Segment 5

US-1/SR-5 from Pettway Street to Bridge Road

Segment 5 – US-1/SR-5

- Posted Speed Limit is 45 MPH
- AADT is 26,500 vehicles*
- Existing 5 to 10-foot concrete sidewalk on both sides
- ROW is over 200-feet
- Swale varies 20-35 feet on average, some areas less
- Remove existing sidewalk
- Construct a 12 to 14-foot shared use pathway
- Design requires a distance of 5-feet from roadway
- Eastside has more driveways than westside
- Westside has more intersections
- Frontage Road present in several areas
 - Fairchild Way to Mansion Lane (One-way)
 - Sand Street (Two-way)
 - Lake Drive to Pine Circle (Two-way)
 - Catfish House Restaurant

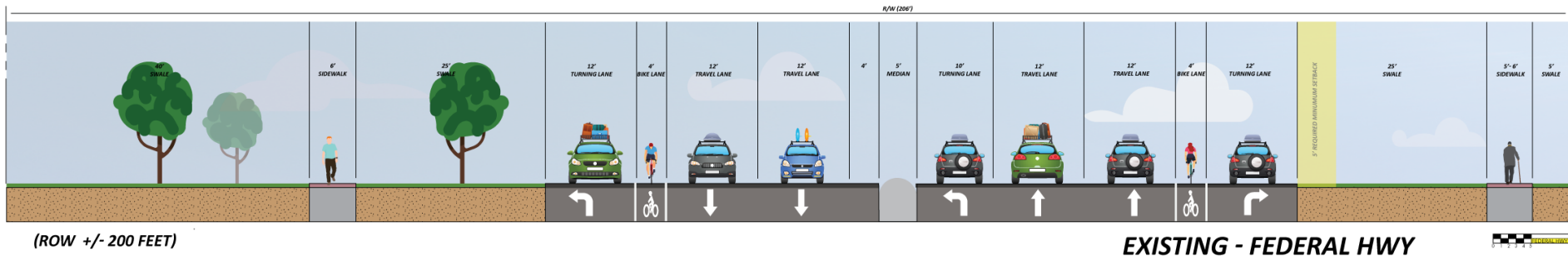


*FDOT 2021 Daily Traffic Info

US – 1 Existing Typical Section

West

East

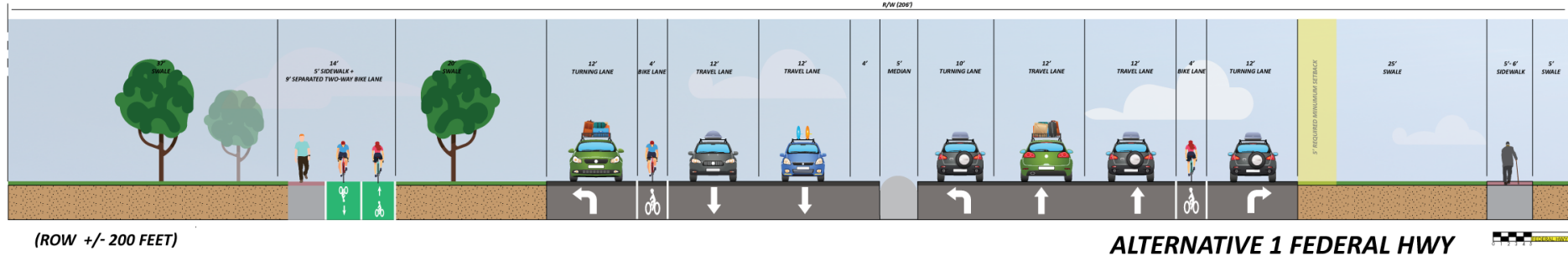


- ROW consistently +200 Feet
- Posted Speed Limit is 45 – 55 MPH
- Existing 5 to 6-foot concrete sidewalks
- Existing 4-foot bike lane along portions of US-1
- 4 to 8 lanes of traffic, divided by a median center island
- Commercial uses, some residential
- Eastside more restricted than westside
- Frontage roads with parking for businesses along portions of westside
- Suburban development pattern
- Trees mostly located on westside

US-1 Alternative 1

West

East



Pros

- Separated 14-foot facility
- Existing shade/trees on westside
- ROW available
- Bike/Ped traffic to existing businesses on westside
- Opportunities for safety improvements

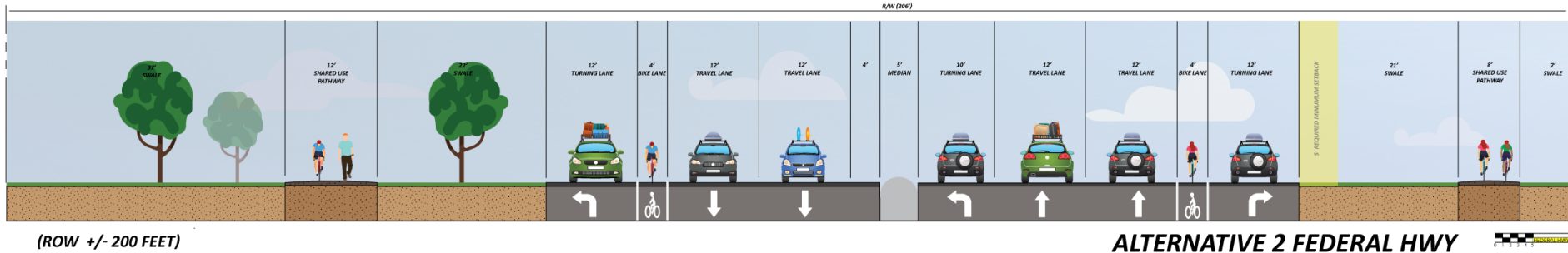
Cons

- Driveway and intersection conflicts
- Limited opportunities to cross the street
- Not suited for hardcore cyclists
- Potential impacts to parking along Frontage Road
- High traffic volumes and speeds may deter users

US-1 Alternative 2

West

East



Pros

- Separated 10-12 foot facility on both sides
- Existing shade/trees on westside
- ROW available
- Bike/Ped traffic to existing businesses
- Opportunities for safety improvements
- Improved connectivity for Bike/Peds

Cons

- Driveway and intersection conflicts
- Not suited for hardcore cyclists
- Potential impacts to parking along Frontage Road
- High traffic volumes and speeds may deter users
- Potential impacts to drainage and utilities
- Only one side could be funded by SUN Trail

Average Cost for Route Alignments Pathway Only

Route	Length in Miles	Estimated Average Cost (Millions)
Gomez Avenue Alternative 1	4.6	\$2.31
Gomez Avenue Alternative 2	4.6	\$2.6 / (\$3.2 w/ Curb & Gutter)
Dixie Highway Alternative 1	4.6	\$1.37 / (\$1.63 w/ Curb & Gutter)*
Dixie Highway Alternative 2	4.6	\$1.63 / (\$2.04 w/ Curb & Gutter)*
US-1 Alternative 1	4.7	\$2.27
US-1 Alternative 2	4.7	\$2.83

*Addition cost involved with ROW acquisitions and/or FEC easement agreements

Source: FDOT Cost Per Mile Models for Long Range Estimating
Curb & Gutter Price Based off Past Experience with Cost Estimates



03

Next Steps

6' BIOSW...

SHELTER / BARRIER

What's Next?

- ✓ Maps
 - ✓ Comparative Matrix
 - North/South Routes
 - East/West Connectors
 - ✓ Evaluation Criteria
 - ✓ Identify Alternatives
 - Three Best Alignments
 - ✓ Typical Cross Section Development
 - ✓ Public Outreach & Involvement
- Conceptual Design**
 - Permit Review
 - Cost Estimates
 - Renderings
 - Finalize Typical Sections, Cost Estimates, Permit Requirements & Graphics
 - Final Report

Meetings

Public & Stakeholders

	Stakeholder	Public
Agency Stakeholders November 4, 2021	▶	
Community Stakeholders November 8, 2021	▶	
Public Meeting #1 November 10, 2021		▶
Agency Stakeholder March 2, 2022	▶	
Public Meeting #2/Open House March 9, 2022		▶
Public Meeting/Open House #3 January 11, 2023		▶

MPO Policy Boards

	Meeting Dates	
Citizens Advisory Committee (CAC)	4/4/22	02/08/23
Technical Advisory Committee (TAC)	4/4/22	02/06/23
Bicycle & Pedestrian Advisory Committee (BPAC)	4/4/22	02/13/23
MPO Policy Board	4/18/22	02/27/23

Schedule

Project Tasks	2021			2022								2023
	JUL/AUG	SEP/NOV	DEC	JAN	FEB	MAR	APR	AUG	SEP	NOV	DEC	APR
Task 1	[Green bar spanning from Jul/Aug 2021 to Dec 2022]											
Task 2	[Green bar spanning from Jul/Aug 2021 to Dec 2022]											
Task 3	[Green bar spanning Jul/Aug 2021 to Sep/Nov 2021]											
Task 4			[Green bar spanning Dec 2021 to Feb 2022]									
Task 5			[Green bar spanning Dec 2021 to Mar 2022]									
Task 6			[Green bar spanning Dec 2021 to Dec 2022]									
Task 7							[Green bar spanning Apr 2022 to Dec 2022]					

TODAY ▲

Alternative Trail Opportunities

- SUN Trail alignment provides opportunities for additional trails.
- Proposed opportunity trail would require community support and coordination with multiple stakeholders/property owners.
- Proposed opportunity trail is an off-road, unpaved trail.
- County would require dedicated funding source, grant money, or other funding mechanism for trail study and implementation.



DRAFT



Thank You

CONTACT INFORMATION:

Christina Fermin, AICP
MARLIN Engineering, Inc.
CFermin@marlinengineering.com
954-870-5064

Joy Puerta
Martin MPO
JPuerta@martin.fl.us
772-320-3015

SUN Trail Feasibility Study

SIGN-IN SHEET

November 11, 2023



Name	Phone	Address	Email
Don Brown	772 485 0322	8765 SE BATHMACER	BROWN DON PAT @GMAIL.COM
Donna McLaughlin		8048 SE Coconut St	
Kathy Lapul	772 486-6788	8460 S.E. Sabal St	
JOHN SEDWITZ	772-932-4095	11851 SE PLANDOME DR.	J SEDWITZ @GMAIL.COM
Ricardo Vazquez			
Ed TYLER	561 847 1874	8276 SE GOVERNORS	TYLER CYCLES RENT @GMAIL.COM
Joanne Towner	561-349-5911	7973 SE Carlton St	jrtowner@comcast.net
Sandra Kruger	772 263 1649	8713 SE Jardin	
Colleen Pachowicz	772-221-2351	County Employee	Comaide3@martin.fl.us
Eric & Linda Wolf	772 932 7969	8509 SE Retreat Dr.	
Cathy Reasoner	772 263 1343	8301 SE Quail Ridge	May Cathyreasoner@abell
Wibet Haya	854-777-4573		Wibet.Haya dot Stat dot South
John Maehl	305-433-0585		jmaehl@martin.fl.us

SUN Trail Feasibility Study

COMMENT CARD

November 11, 2023



Name R. Fricker Phone 772 263 0750 Address 7991 SG Helen Ter Email r.w.fricker1@gmail

Comments:

With the expansion of the trail, where will people park to have access? There is limited parking at Seabrunch along Dixie. Many of the bikers that ride Gomez and Jupiter Island park at the beach. Doing so limits residents from using our beach. How will this be different?

~~At~~

SUN Trail Feasibility Study

COMMENT CARD

November 11, 2023



Name Garry Adams Phone 772-245-2675 Address 8541 SE Royal St Email _____

Comments:

US 1 route is ① least expensive ② more room ③ Gomez Ave is too narrow to accept any more bike traffic. Bridge Rd. is too congested as is East of US 1 to add any more.

SUN Trail Feasibility Study

COMMENT CARD

November 11, 2023

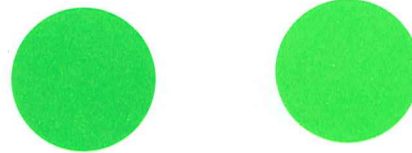


Name Eric Wolf Phone 772 932-7969 Address 8509 SE Retreat Dr Email _____

Comments:

Fed Hwy alternatives are not acceptable for light recreational use. The Gomez route is the path that works best for light recreation, e.g. skaters, walking, baby carriage, slow bicyclists. Fed Hwy would only make sense for a bicycle trail - hardcore bicyclists.

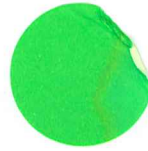
A compromise would be Gomez south to Pettway, then across Pettway to either Old Dixie Hwy or US1 Fed Hwy. This pathway avoids the 55-mph limit between Osprey and Pettway on Fed Hwy.



SUN Trail Feasibility Study

COMMENT CARD

November 11, 2023



Name

E O TYLER

Phone

561-947-1874

Address

Email

TYLERCYCLESPOINT
@GMAIL.COM

Comments:

THIS PROJECT SHOULD ONLY BE CONSIDERED
ON GOMEZ CANAL.

SUN Trail Feasibility Study

COMMENT CARD

November 11, 2023



Name JOHN SEDWITZ Phone 772-932-4095 Address 11951 SE PLANDOME DR. Email J.Sedwitz@gmail.com

Comments:

I VOTED FOR ALTERNATIVE 1.

You should consider having a few "rest stops" with Benches :
Some shade trees, water fountains. This approach is used in
Minneapolis/St. Paul - BEST IN CLASS!

Appendix D

Existing Condition
Photos

HOBE SOUND NORTH CORRIDOR SUN TRAIL FEASIBILITY STUDY EXISTING CONDITIONS PHOTO SUMMARY

US 1 / Bridge Rd Intersection



Intersection at US 1 & Bridge Rd (NWC) - Southeast



North Leg Crosswalk (NEC) – Drainage Grate, Faded Crosswalks, Delineators Partially Obstructing Pathway, Missing Tactile Surface - West



East Leg Crosswalk (NEC) – Missing Delineators and Tactile Surface - South



South Leg Crosswalk (SEC) – Delineators partially obstructing pathway, Missing Tactile Surface - West



NEC – Potential Water Pooling of Pedestrian Pathway, Missing Tactile Surface, No Curbing, Wide Curbs - West



West Leg Crosswalk (NWC) – Multiple Missing Delineators, Missing Tactile Surface



West side Pathway (9' – 9'') - US 1 North



SWC Protected by Multiple Delineators, Missing Tactile Surface - East



NEC Ped Signal Obstructing Walkway, Drainage, No Curbing, No Tactile Mats - South



West Side Sidewalk - US 1 South

East Side Sidewalk - US 1 South

Bridge Road



South Side Sidewalk, Missing North Side – At US 1 - East



South Side Sidewalk (6'0") - West of Hercules Ave



North Side Missing Sidewalk (NEC) – Hercules & Bridge Intersection - West



Patterned Crosswalks, Street Lighting - Hercules & Bridge Intersection (SWC) - East



Tree Canopy and Flexible Pavement - South Side Sidewalk - East



Patterned Pavement - North Side Sidewalk - West



Parallel Parking and Building Fronts - South Side Sidewalk – East



Bridge Road Back-in Only Parking - West



Missing Sidewalk Near Dixie Hwy - Northeast



Sidewalk Ends on the North Side, +/- 145 Feet from Intersection - West



Missing Sidewalks on North Side of Bridge Road at Dixie Hwy Intersection – East



Sidewalk Missing North Side of Bridge Rd - East



Recreational Cyclists on Sidewalk - East



Missing Sidewalk on South Side of Bridge Road near Gomez Avenue – East



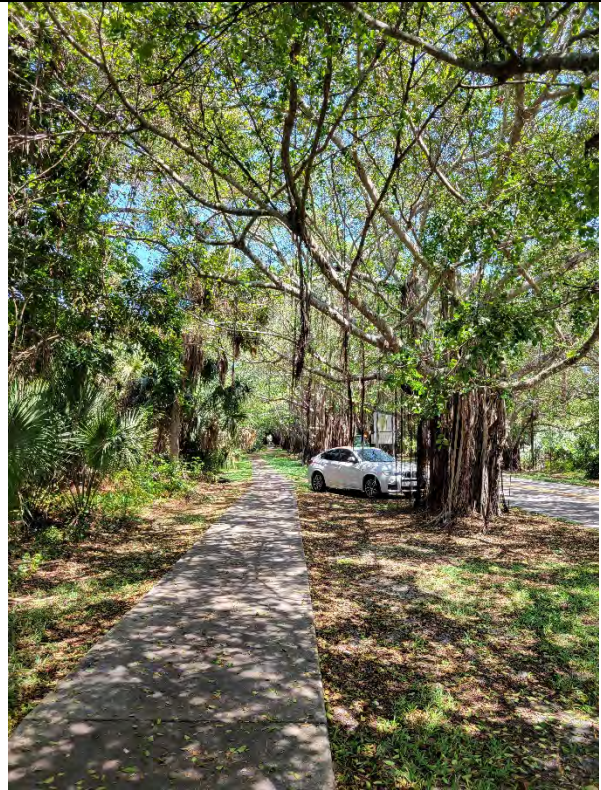
Sidewalks Missing North Side of Bridge Road - West



Bridge Road East of Gomez Avenue Crossing and Utilities - West



South Side Sidewalk on Bridge Road near Gomez Ave - West



Parents Parked and Waiting to Pickup School Kids on Bridge Road - East of Gomez

Bridge Road & Dixie Highway Intersection



Bridge Road & Dixie Highway Intersection - East



Dixie Highway & Bridge Road Intersection – NWC



Missing West Leg Crossing at Bridge Road and Dixie Hwy - South



South Leg Crossing at Bridge Road and Dixie Hwy - East



South Leg Crosswalk at Bridge Road and Dixie Hwy - West



Dixie Highway



Hobe Sound Scrub Preserve Missing Sidewalks West Side - North



Missing Sidewalks on East Side Near Hobe Sound Preserve, Train – East



Partial Sidewalk East Side 79", One-Way Perimeter Road on West Side – North



Perimeter Road West Side One-Way - South



Sidewalks Missing near Bridge Rd intersection - North



Pettway Market – Sidewalk West Side (76") - North



Ped Path/Missing Sidewalk Segment, Light Pole Obstructing Sidewalk (77.5") near Wittman Textiles - South



Light Pole Partially Obstructing Sidewalk, Missing Textile Surfaces, adjacent to Wittman Textiles - North



Faded Crosswalk near William 'Doc' Myers Park - South



Bench and Existing Sidewalk West Side adjacent to William 'Doc' Myers Park - North



New Sidewalks North Side, Missing Sidewalks South Side on Kimberly Way – West



Pinch Point near SE James Road and SE Courtney Terrace - South



Dixie Hwy Bike Lanes Present South of Crossrip Street – South



Sidewalks Missing on Both Sides of Dixie Highway, Bike Lanes Present - North of Osprey Street



Railroad Crossing near Seabach Preserve Park, Sidewalks Missing on both sides of Dixie - Southwest



Shared Use Path (145") near Seabach Preserve Park, East Side, No Sidewalks on West Side - Northwest

Gomez Avenue



Gomez Avenue at Bridge Road – Sidewalks on Both Sides - North



Gomez Ave at Bridge Road – School Crossing Guards - North



Gomez Ave at Bridge Road - School Children Walking and Biking after School - Southwest



Hobe Sound Elementary School on Gomez Avenue



Existing Sidewalks, Utilities in ROW East Side - South



Crosswalk Across Gomez Ave at Pettway St, Sidewalks on Both Sides - South



Sidewalks Missing on East Side of Gomez Ave - North



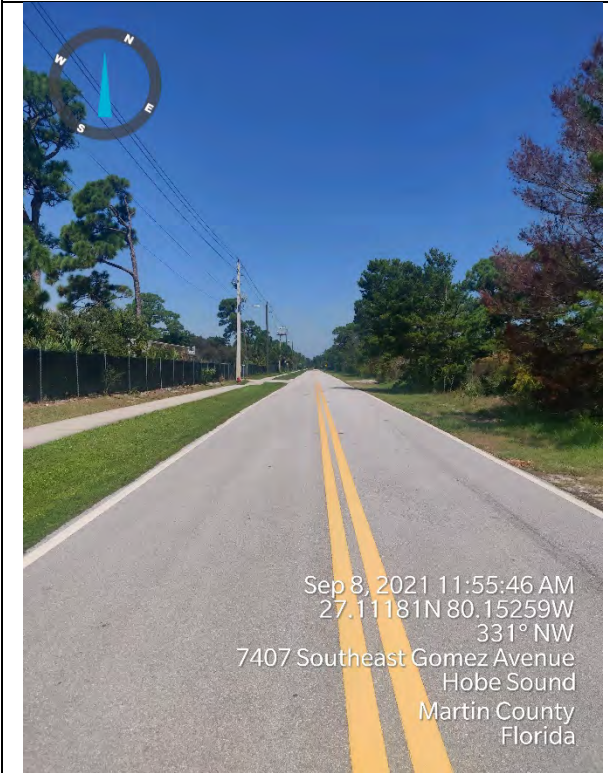
Tight ROW on West Side of Gomez Ave - South



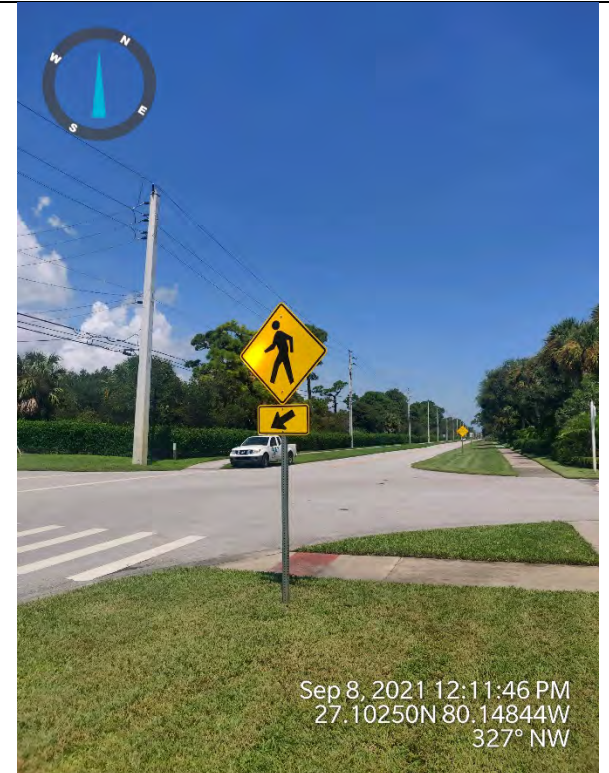
Existing Conditions near Crossrip St and Gomez - North



Sidewalk Missing on West Side of Gomez Ave south of Osprey St - South



Sidewalk Missing on East Side of Gomez Ave - North



Midblock Crossing at Osprey on Gomez Ave - North

Pettway Street



Pettway Street and Dixie Highway Intersection - North



Pettway Street Intersection – Missing Sidewalks East Side – Sidewalk (76") on West Side



Crosswalks Missing at Intersection of Pettway St - Northwest



Pettway Street Sidewalks on both sides - East



Sidewalk Missing on South Side of Pettway St, North Side Well Shaded - Southwest

Crossrip Street



Crossrip Street near Dixie Highway, Sidewalks Missing over Railroad Crossing – West



Crossrip Street near Dixie Highway – Sidewalks Missing both sides - West



Sidewalks Missing Over Crossrip – West



Sidewalk Missing on South Side of Crossrip Street - East



Sidewalk Ends at Railroad Crossing, Northside of Crossrip - West



Opportunity to Widen Existing Sidewalk on Crossrip, North Side - East



Sidewalk coming soon on Crossrip Street?
Railroad Crossing Arms - North

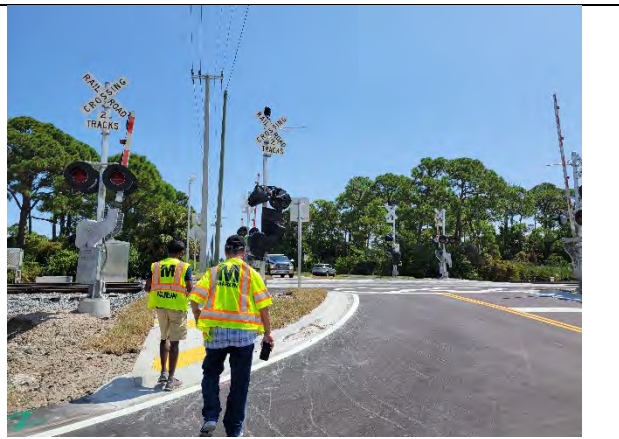


Crosswalk at Dixie Highway and Crossrip Street –
West Leg - North

Osprey Street



Intersection of Osprey Street and Dixie Highway –
Crosswalks Missing, No Ped Signals - West



Osprey Street Crossing, Sidewalks on both sides -
East



Railroad Crossing on Osprey Street, Existing
Sidewalk on South Side - Northwest



Railroad Crossing on Osprey Street, Existing
Sidewalk on North Side - West



Osprey Street Existing Conditions - West



Sidewalk ends on North Side of Osprey, East of the Railroad Crossing



Sidewalks on South Side, No Sidewalk on North Side of Osprey Street - East

Shell Avenue/ Gleason Street



Shell Avenue south of Bridge Road, Sidewalks on West Side, Sidewalks Missing on East Side – South



Shell Avenue Speed Limit - South



Sidewalks Missing on Both Sides of Gleason Street - East



Sidewalks Missing at Railroad Crossing at Gleason and Dixie - West



Sidewalks Missing on Gleason/Saturn Ave West of Dixie Hwy

Appendix E

Evaluation Criteria

Evaluation Criteria and Scoring

Factors	Item Description	Metric	Total Points	Osprey St to SR-5		CR-A1A to Crossrip to Bridge Rd		Gomez Ave to CR-708	
				East/South	West/North	East/North	West	East/South	West/North
Safety	Pedestrian crash severity	Is the pedestrian crash rate above the average of the three segments AND have a fatal crash?	Y = 10	0		0		0	
		Is the pedestrian crash rate equal to or above the average OR have a fatal crash?	Y = 3	3		0		0	
		Is the pedestrian crash rate at the location above zero and below the average, but does NOT have any fatal crashes?	Y = 2	0		2		2	
	Bike crash severity	Is the bike crash rate above the average of the three segments AND have a fatal crash?	Y = 10	0		0		0	
		Is the bike crash rate equal to or above the average OR have a fatal crash?	Y = 3	3		3		3	
		Is the bike crash rate at the location above zero and below the average, but does NOT have any fatal crashes?	Y = 2	0		0		0	
	Speed	Posted speed limit:	>40 mph = 5 35~40 mph = 4 30~35 mph = 3 <30 mph = 1	5		4		3	
AADT	Average Daily Traffic (AADT)	<5000 = 1 5000~10000 = 3 10000~15000 = 5 15000~20000 = 7 20000~25000 = 9 <25000 = 10	10		3		1		
Safety Score			45	21		12		9	
	No. of Driveways	Total number of driveways (not at an intersection):	0~10 = 1 11~20 = 2 21~30 = 3 31~40 = 4 >41 = 5	2	5	1	4	2	4
	Pedestrian Facilities	What percentage of sidewalk is missing?	1% - 5% = 1 5% - 10% = 2 10% - 15% = 3 15% - 20% = 4 > 20% = 5	2	4	3	5	5	4
		How many traffic signals are along the segment?	2 Signals = 1 3 Signals = 2 4 or more Signals = 3	2		2		0	

Infrastructure Score		How many midblock crossings are there along the segment?	0 ~ 3 Crossings = 5 4 ~ 6 Crossing = 3 > 6 Crossings = 1	5	5	1			
	Bike Facilities	Are there alternative paths available within 1/4 miles of the segment?	Y = 1	1	1	0			
		Are there bicycle lanes along the segment?	N = 1	0	0	1			
	Shared Use Path / Multi-use Trail	Does the corridor connect to at least one shared use pathway or multi-use trail?	N = 1	1	1	0			
		Has the corridor been identified for a potential shared use pathway or multi-use trail? (TIP, LRTP, Master Plans)	N = 1	1	1	0			
	Shade	Are sidewalks consistently shaded throughout the segment?	N=1	1	1	0			
	Right-of-way	Are there ROW restrictions?	Y = 1	0	1	0			
ROW length/Area needed (in square feet):		<5000 SF = 5 >150000 SF = 20	0	20	5				
Infrastructure Score			44	15	20	36	41	14	15
Connectivity Score	Schools	Number of school along the corridor?	Number of Schools 0 - 1 = 3 2 - 3 = 2 4 - 5 = 1	3	2	1			
	Transit	Is there any transit route and bus stops along the corridor?	No = 1	0	1	1			
	Places	Number of key destinations (i.e. Grocery Store, Shopping Center or Plaza, Medical Use, Church, or Office Park) along the corridor?	>16 destinations = 1 11 - 15 destinations = 2 6 - 10 destinations = 3 1 - 5 destinations = 4	1	2	2			
	Connection to Parks	How many parks/recreational areas are along the corridor?	> 4 Parks = 1 2 - 3 Parks = 2 1 Park = 3	3	3	1			
Connectivity Score			11	7	8	5			
TOTAL SCORE			100	43	48	56	61	28	29

Notes: Y = Yes; N = No

Explanation of Metric

Average pedestrian crash for all three corridors is 1.4. Total Ped crash was 7 in 5 years. No fatal crash.

Average bicycle crash for all three corridors is 2.2. Total Bike crash was 11 in 5 years. No fatal crash.

Points awarded to roadways with higher speeds; lower speeds are associated with ped/bike safety.

Points allocated to corridors with higher AADT -----Gomez = 4000, Dixie Hwy = 7300, US 1 = 25500

Higher scores indicate potential conflicts for bicycles and pedestrians

Points allocated to corridors with more driveways _____
Option 1: Gomex Ave - 4.3 miles from Loblolly Golf Course to Bridge Road to US 1
Option 2: Dixie Hwy - 4.25 miles from Loblolly Golf Course to SE Crossrip St. to Bridge Road to US 1
Option 3: US 1 - 4.43 miles from Loblolly Golf Course to SE Osprey St. to US 1
Gomez Ave = E - 12, W- 38; Dixie Hwy = E - 7, W - 32; US 1 = E - 19 W - 46

Gomez: 8915 feet missing (east); 4015 feet missing (west)
Dixie Hwy: 2645 feet missing (west) and 17000 ft or 3.22 miles missing (east); railroad on that side
US 1 - No missing sidewalk at US 1 but missing sidewalk at Gomez and Osprey St. (E=2115 ' and w = 3660')

Total number of regular traffic signals between peck lake park to bridge Road. More points allocated to corridors with traffic signals as there are potential conflict points.

Total number of midblock crossings along corridor between , more points allocated to corridors with few to no crossing facilities. Gomez = 6

Points allocated to corridors with an alternative pathway available within 1/4-mile.

Points provided to corridors without bicycle lanes

Points allocated to corridors without shared use or multi-use pathways connecting to the corridor

Points allocated to corridors that have not been identified for a shared use path or multi-use trail

Points allocated to corridors without shade trees consistently adjacent to sidewalks for more than 50% of the length of the corridor (excludes Palm Trees).

Restrictions within the right-of-way that may hinder construction of multimodal pathways; restrictions include required easements, eminent domain, unplatted properties, etc.

Point allocated with the length/area needed for ROW in SF
Gomez = 768 SF, Dixie = 151,376 SF

Higher scores indicate less desirable path for ped/bike facilities and initial right-of-way availability.

Points allocated to the corridor with the least number of public and private schools along the corridor.

Points allocated to corridors without transit stops along the corridor.

Points allocated to the corridor with the least number of destinations (i.e. food, medical, offices, places of worship, entertainment).

Points allocated to the corridor with the least amount of parks


Higher scores indicates least amount of connectivity to nearby destinations within and surrounding the area

Higher the score indicate less desirable segments for shared use pathway

Appendix F

Concept Plan Sheet



N  Scale: 1" = 1,300'

SUNTRAIL CONCEPTUAL PLANS

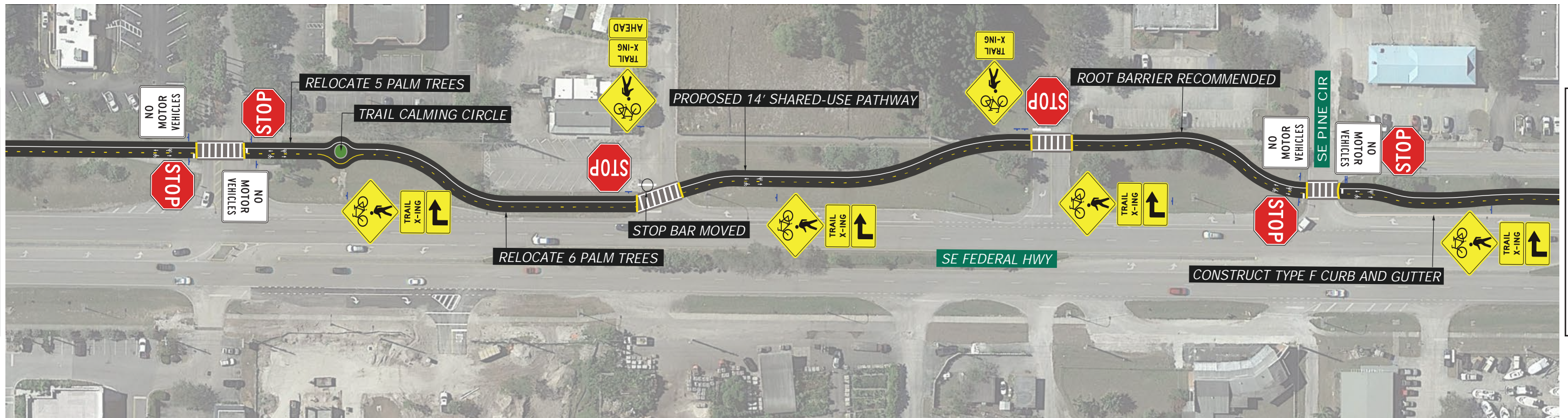
Hobe Sound, Martin County, Florida
Conceptual Plan Sheet Layout



MARLIN



Match Line 1



Match Line 1

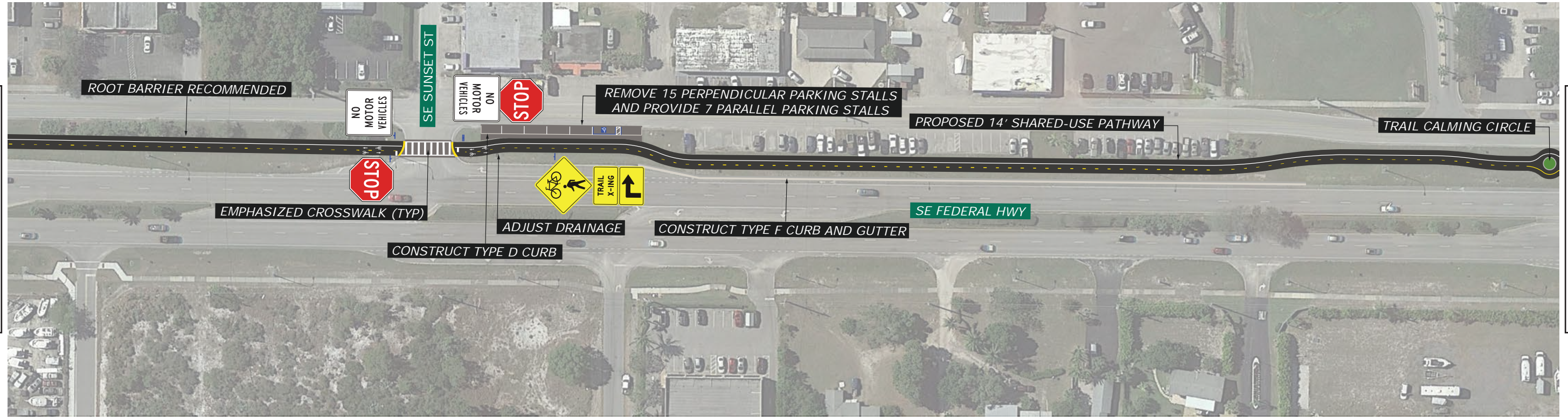
Match Line 2

Scale: 1" = 100'

SUNTRAIL CONCEPTUAL PLANS

**Note: Existing sidewalks along the corridor that are impacted, will be removed and replaced with the shared-use pathway.*

Match Line 2



Match Line 3

Match Line 3



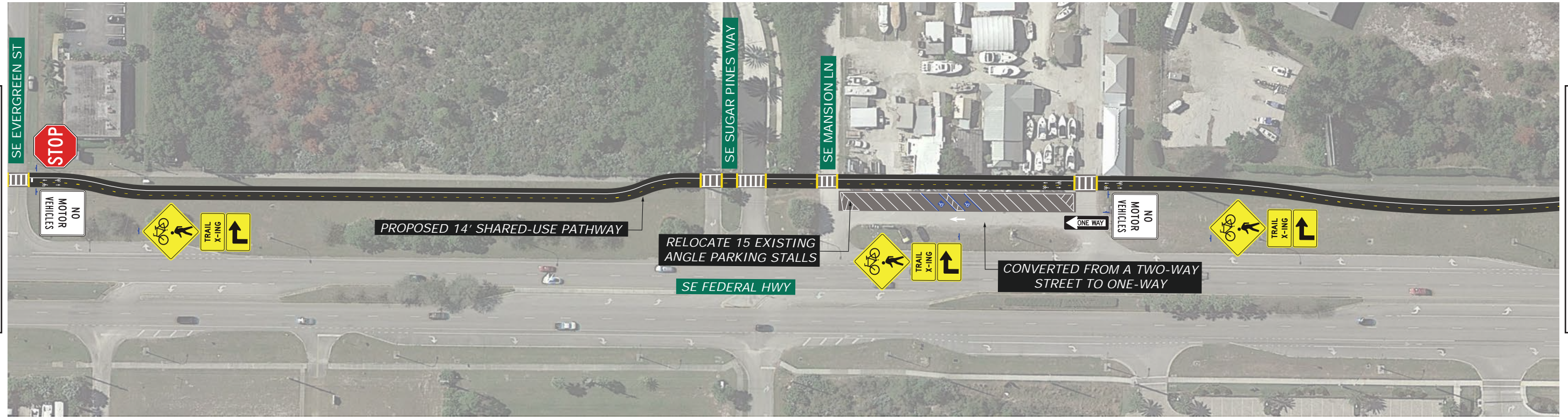
Match Line 4

Scale: 1" = 100'

SUNTRAIL CONCEPTUAL PLANS

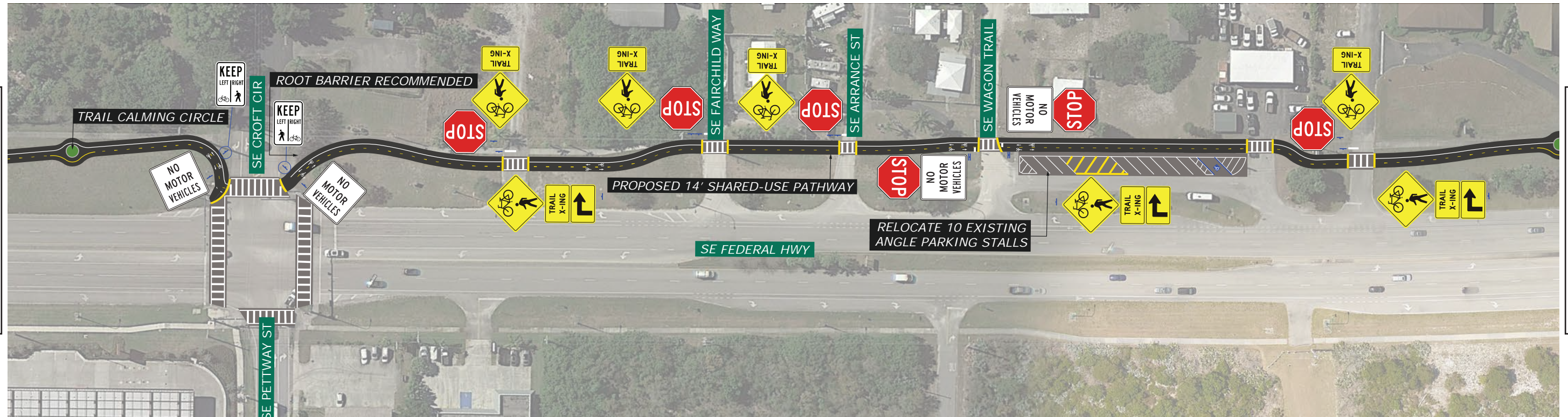
**Note: Existing sidewalks along the corridor that are impacted, will be removed and replaced with the shared-use pathway.*

Match Line 4



Match Line 5

Match Line 5



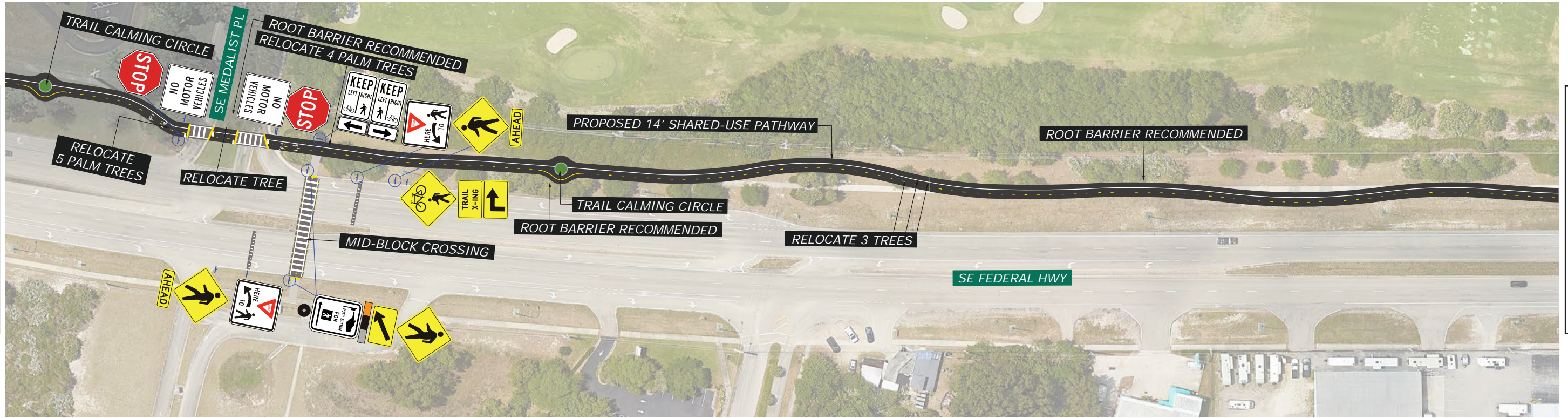
Match Line 6

N Scale: 1" = 100'

SUNTRAIL CONCEPTUAL PLANS

**Note: Existing sidewalks along the corridor that are impacted, will be removed and replaced with the shared-use pathway.*

Match Line 6



Match Line 7

Match Line 7



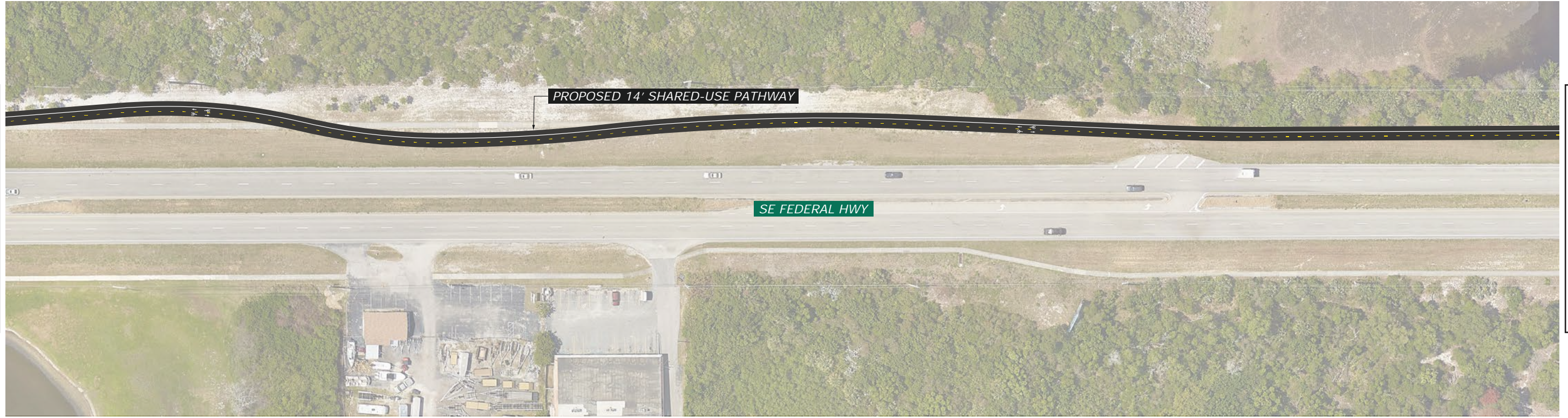
Match Line 8

Scale: 1" = 100'

SUNTRAIL CONCEPTUAL PLANS

***Note:** Existing sidewalks along the corridor that are impacted, will be removed and replaced with the shared-use pathway.

Match Line 8



Match Line 9

Match Line 9



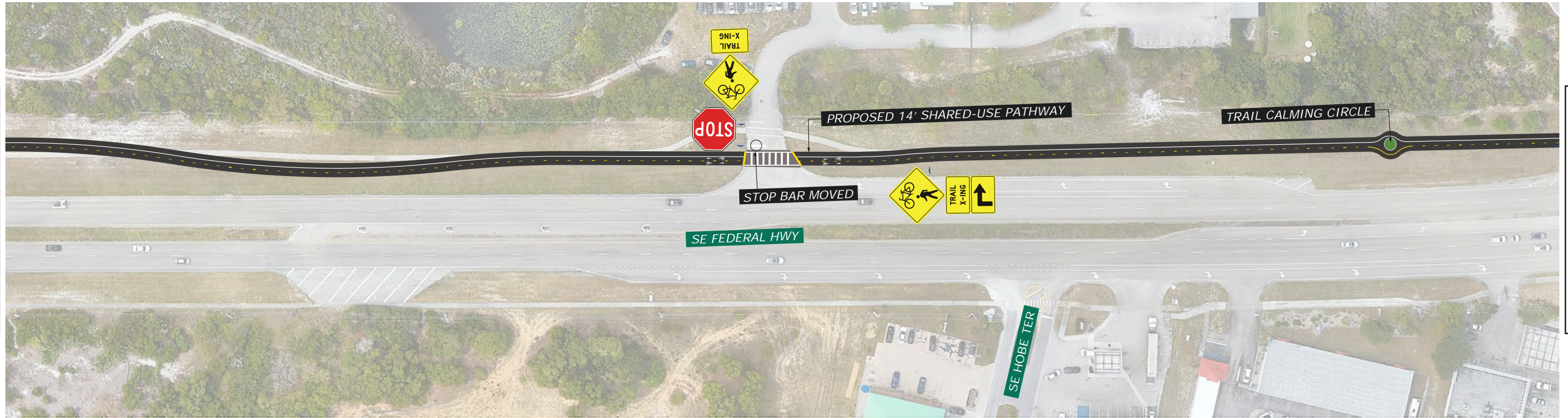
Match Line 10

Scale: 1" = 100'

SUNTRAIL CONCEPTUAL PLANS

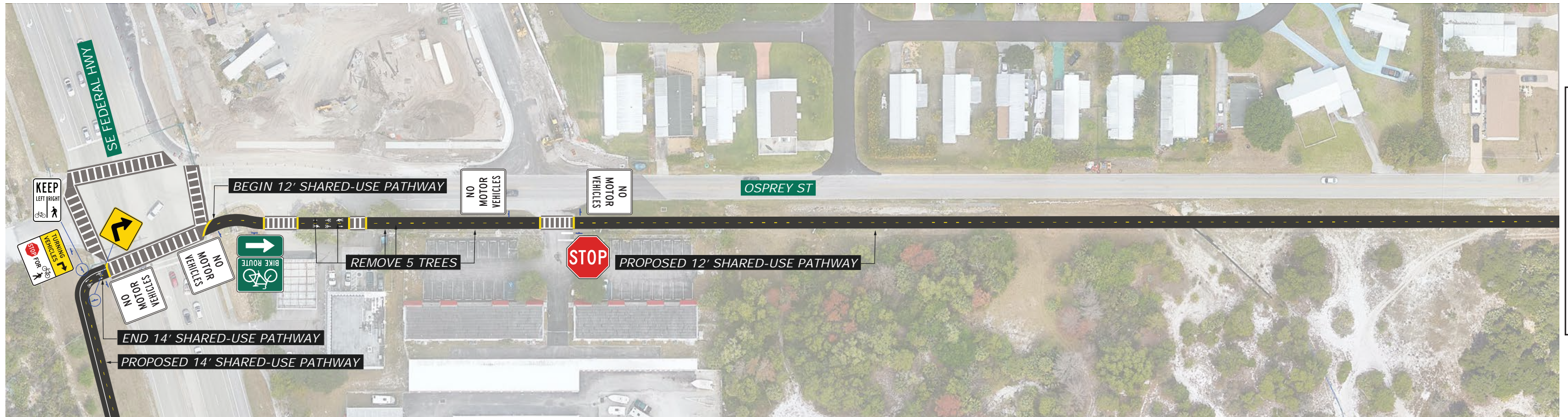
**Note: Existing sidewalks along the corridor that are impacted, will be removed and replaced with the shared-use pathway.*

Match Line 10



Match Line 11

Scale: 1" = 100'



Match Line 12

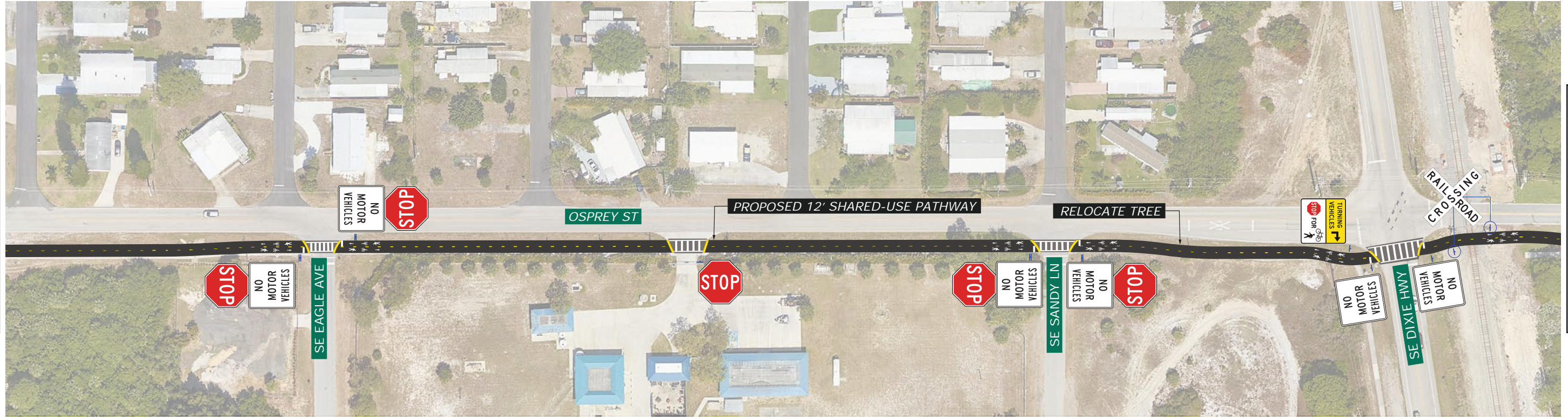
Match Line 11

Scale: 1" = 100'

SUNTRAIL CONCEPTUAL PLANS

**Note: Existing sidewalks along the corridor that are impacted, will be removed and replaced with the shared-use pathway.*

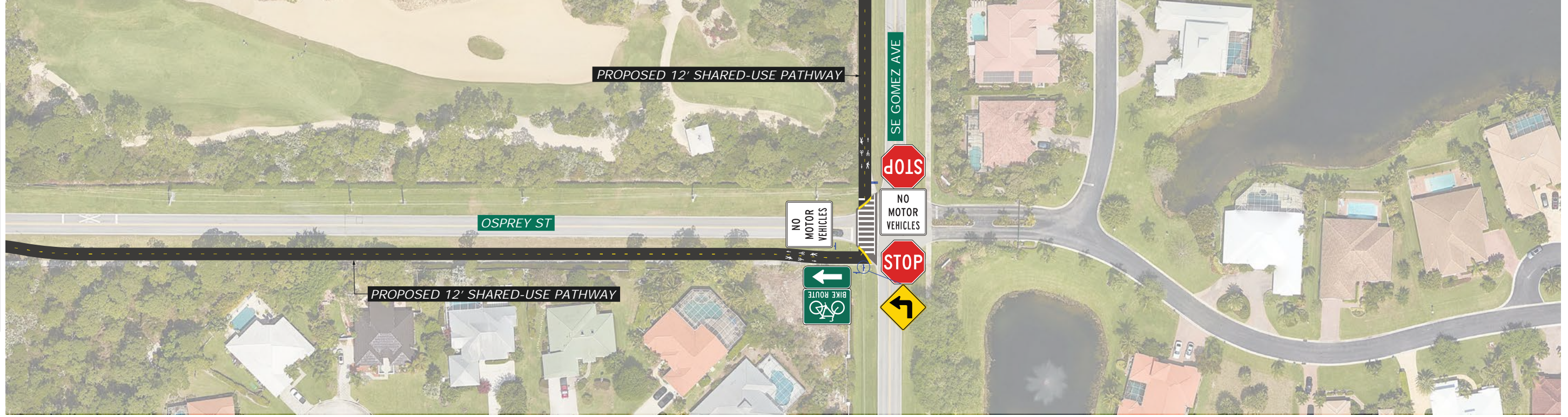
Match Line 12



Match Line 13

Match Line 14

Match Line 13



Scale: 1" = 100'

SUNTRAIL CONCEPTUAL PLANS

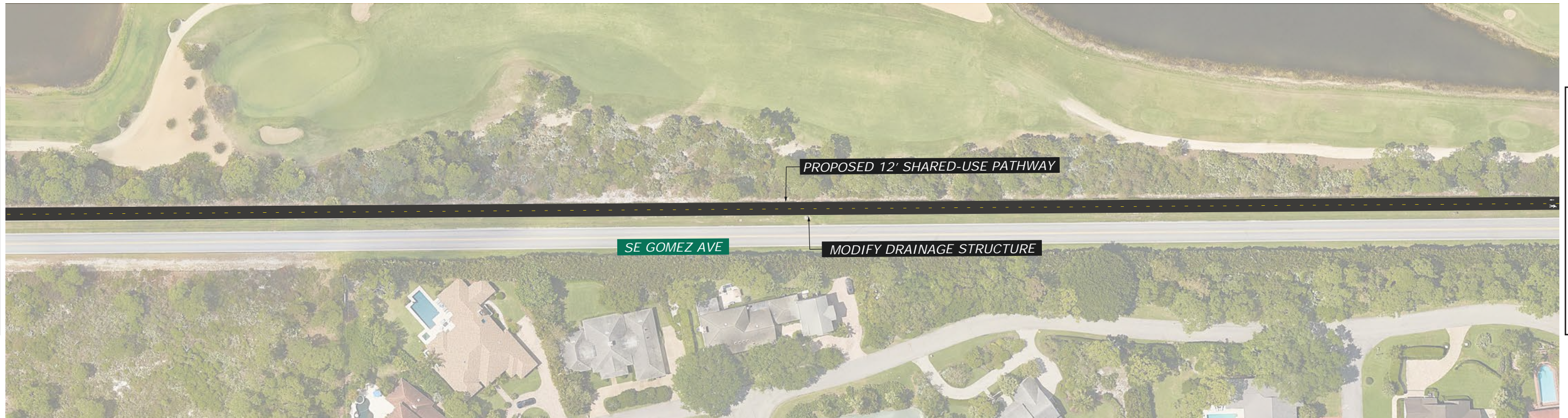
**Note: Existing sidewalks along the corridor that are impacted, will be removed and replaced with the shared-use pathway.*

Match Line 14



Match Line 15

Match Line 15



Match Line 16

N Scale: 1" = 100'

SUNTRAIL CONCEPTUAL PLANS

**Note: Existing sidewalks along the corridor that are impacted, will be removed and replaced with the shared-use pathway.*

Match Line 16



Scale: 1" = 100'

SUNTRAIL CONCEPTUAL PLANS

**Note: Existing sidewalks along the corridor that are impacted, will be removed and replaced with the shared-use pathway.*

Appendix G

Cost Estimate

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 443500-1-54-01

Letting Date: 01/2099

Description: SE GOMEZ AVENUE FROM SE OSPREY STREET TO SE BRIDGE ROAD

District: 04 **County:** 89 MARTIN **Market Area:** 11 **Units:** English

Contract Class: Lump Sum Project: N **Design/Build:** N **Project Length:** 2.647 MI

Project Manager: Wibet Hay

Version 1-P Project Grand Total

\$7,287,033.71

Description: SE GOMEZ AVENUE FROM SE OSPREY STREET TO SE BRIDGE ROAD

Sequence: 1 WDR - Widen/Resurface, Divided, Rural

Net Length: 4.672 MI
24,668 LF

Description: Construct Shared Use Path

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	12.00 / 12.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	4.672
Top of Structural Course For Begin Section	101.00
Top of Structural Course For End Section	101.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	13.59	AC	\$46,177.97	\$627,558.61

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
120-1	REGULAR EXCAVATION	7,930.00	CY	\$22.66	\$179,693.80

Earthwork Component Total **\$807,252.41**

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	1

Existing Roadway Pavement Width L/R	24.00 / 24.00
Structural Spread Rate	220
Friction Course Spread Rate	80
Widened Outside Pavement Width L/R	14.00 / 0.00
Widened Inside Pavement Width L/R	0.00 / 0.00
Widened Structural Spread Rate	330
Widened Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	39,277.19 SY	\$34.29	\$1,346,814.85
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	6,331.49 TN	\$155.39	\$983,850.23

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	10,200.00 SY	\$25.19	\$256,938.00
160-4	TYPE B STABILIZATION Comment: Stabilization is 2' on both sides of 14' path	87,880.00 SY	\$12.30	\$1,080,924.00
327-70-12	MILLING EXIST ASPH PAVT,1 1/4" AVG DEPTH Comment: Milling for restriping at the midblock crossings	1,244.00 SY	\$7.67	\$9,541.48
337-7-82	ASPH CONC FC,TRAFFIC C,FC- 9.5,PG 76-22 Comment: For resurfacing ad midblock crossings	86.00 TN	\$251.28	\$21,610.08
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4" Comment: Sidewalks at Midblock crossings	50.00 SY	\$55.25	\$2,762.50
527-2	DETECTABLE WARNINGS Comment: required at midblock crossings.	48.00 SF	\$41.73	\$2,003.04
570-1-1	PERFORMANCE TURF Comment: required at midblock crossings.	15.00 SY	\$2.29	\$34.35
706-1-3	RAISED PAVMT MARK, TYPE B	8.00 EA	\$3.97	\$31.76
711-11-123	THERMOPLASTIC, STD, WHITE, SOLID, 12" Comment: required for midblock crossings	352.00 LF	\$2.42	\$851.84
711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24" Comment: Required for midblock crossings for stop bar and high emphasis crosswalks.	552.00 LF	\$5.45	\$3,008.40
711-11-141	THERMOPLASTIC, STD, WHITE, DOT GUIDE, 6"	0.01 GM	\$1,885.03	\$18.85

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	0

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	9.34 GM	\$1,182.09	\$11,040.72
711-15-101	THERMOPLASTIC, STD-OP,	9.34 GM	\$5,360.15	\$50,063.80

WHITE, SOLID, 6"

Roadway Component Total

\$3,769,493.90

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	10.00 / 10.00
New Total Outside Shoulder Width L/R	10.00 / 10.00
Total Outside Shoulder Perf. Turf Width L/R	2.67 / 2.67
Existing Paved Outside Shoulder Width L/R	5.00 / 5.00
New Paved Outside Shoulder Width L/R	5.00 / 5.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips 1/2 No. of Sides	0

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,133.00	LF	\$41.32	\$46,815.56
522-2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	432.00	SY	\$73.04	\$31,553.28
527-2	DETECTABLE WARNINGS	776.00	SF	\$41.73	\$32,382.48

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	56,736.77	LF	\$2.49	\$141,274.56
104-11	FLOATING TURBIDITY BARRIER	467.20	LF	\$12.32	\$5,755.90
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	467.20	LF	\$9.26	\$4,326.27
104-15	SOIL TRACKING PREVENTION DEVICE	5.00	EA	\$3,767.83	\$18,839.15
107-1	LITTER REMOVAL	33.97	AC	\$45.52	\$1,546.31
107-2	MOWING	33.97	AC	\$94.30	\$3,203.37

Shoulder Component Total

\$285,696.88

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND, 24" SD	2,000.00	LF	\$188.95	\$377,900.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36" S/CD	376.00	LF	\$168.59	\$63,389.84
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	100.00	EA	\$3,332.91	\$333,291.00
570-1-2	PERFORMANCE TURF, SOD	33,000.00	SY	\$4.57	\$150,810.00

Drainage Component Total

\$925,390.84

SIGNING COMPONENT

Pay Items				
Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	13.00 AS	\$416.43	\$5,413.59
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	50.00 AS	\$1,322.76	\$66,138.00
700-1-50	SINGLE POST SIGN, RELOCATE	5.00 AS	\$220.95	\$1,104.75
700-1-60	SINGLE POST SIGN, REMOVE	50.00 AS	\$35.73	\$1,786.50
Signing Component Total				\$74,442.84

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	4 Lane Mast Arm
Multiplier	1
Description	

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	750.00 LF	\$11.92	\$8,940.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	250.00 LF	\$26.35	\$6,587.50
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00 PI	\$7,577.11	\$7,577.11
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	20.00 EA	\$897.88	\$17,957.60
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00 AS	\$1,046.20	\$1,046.20
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00 LF	\$5.79	\$347.40
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	12.00 AS	\$1,209.29	\$14,511.48
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	\$690.70	\$5,525.60
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	12.00 EA	\$362.84	\$4,354.08
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	12.00 AS	\$1,262.56	\$15,150.72
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	\$154.65	\$1,237.20
665-1-12	PEDESTRIAN DETECTOR, F&I, ACCESSIBLE	8.00 EA	\$969.38	\$7,755.04
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00 AS	\$42,780.50	\$42,780.50
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00 EA	\$127.00	\$508.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
654-2-21	MID BL:RECT RAPID FLASH BE, F&I SOL,SING	4.00 AS	\$8,715.03	\$34,860.12
Comment: Required at midblock crossings.				

EX-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-12-21	SIGN BEACON F&I GROUND MOUNT, SOLAR POWERED, ONE BEACON	4.00 AS	\$10,738.41	\$42,953.64
Comment: Required at midblock crossings.				

Signalizations Component Total

\$212,092.19

Sequence 1 Total

\$6,074,369.06

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 443500-1-54-01

Letting Date: 01/2099

Description: SE GOMEZ AVENUE FROM SE OSPREY STREET TO SE BRIDGE ROAD

District: 04 **County:** 89 MARTIN **Market Area:** 11 **Units:** English

Contract Class: Lump Sum **Project:** N **Design/Build:** N **Project Length:** 2.647 MI

Project Manager: Wibet Hay

Version 1-P Project Grand Total **\$7,287,033.71**

Description: SE GOMEZ AVENUE FROM SE OSPREY STREET TO SE BRIDGE ROAD

Project Sequences Subtotal **\$6,074,369.06**

102-1	Maintenance of Traffic	8.00 %	\$485,949.52
101-1	Mobilization	10.00 %	\$656,031.86

Project Sequences Total **\$7,216,350.44**

Project Unknowns	0.00 %	\$0.00
Design/Build	0.00 %	\$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	\$70,683.27	\$70,683.27
Project Non-Bid Subtotal					\$70,683.27

Version 1-P Project Grand Total **\$7,287,033.71**

Appendix H

Funding Programs

Sponsor	Program Name	Funding Type	Description of Funding Program	Further Information
FEDERAL FUNDING SOURCES				
USDOT	Safe Streets and Roads for All (SS4A)	Capital / Planning	The Bipartisan Infrastructure Law (BIL) established the new Safe Streets and Roads for All (SS4A) discretionary program with \$5 billion in appropriated funds over the next 5 years. The SS4A program funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries. Eligible activities include developing or updating a comprehensive Safety Action Plan, conducting planning, design, and development activities in support of a Safety Action Plan, and carrying out projects and strategies identified in a Safety Action Plan.	https://www.transportation.gov/grants/SS4A
USDOT	RAISE (Rebuilding American Infrastructure with Sustainability and Equity)	Capital / Planning	The Rebuilding American Infrastructure with Sustainability and Equity, or RAISE Discretionary Grant program, provides a unique opportunity for the DOT to invest in road, rail, transit, and port projects that promise to achieve national objectives. Previously known as the Better Utilizing Investments to Leverage Development (BUILD) and Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants, Congress has dedicated nearly \$8.9 billion for twelve rounds of National Infrastructure Investments to fund projects that have a significant local or regional impact. The eligibility requirements of RAISE allow project sponsors at the State and local levels to obtain funding for multi-modal, multi-jurisdictional projects that are more difficult to support through traditional DOT programs. RAISE can provide capital funding directly to any public entity, including municipalities, counties, port authorities, tribal governments, MPOs, or others in contrast to traditional Federal programs which provide funding to very specific groups of applicants (mostly State DOTs and transit agencies). This flexibility allows RAISE and our traditional partners at the State and local levels to work directly with a host of entities that own, operate, and maintain much of our transportation infrastructure, but otherwise cannot turn to the Federal government for support.	https://www.transportation.gov/RAISEgrants
USDOT	Mega, INFRA, Rural Surface Transportation Grant	Capital / Planning	INFRA (known statutorily as the Nationally Significant Multimodal Freight & Highway Projects) awards competitive grants for multimodal freight and highway projects of national or regional significance to improve the safety, efficiency, and reliability of the movement of freight and people in and across rural and urban areas. The INFRA grant program funding was made available in 2022 under the Multimodal Project Discretionary Grant Opportunity (MPDG) combined Notice of Funding Opportunity (NOFO) that allows applicants to use one application to apply for up to three separate discretionary grant opportunities. Eligible projects are ones that improve safety, generate economic benefits, reduce congestion, enhance resiliency, and hold the greatest promise to eliminate freight bottlenecks and improve critical freight movements. Although not available for stand alone bicycle only projects, larger multimodal projects that include bike components are. As part of the FY22 Multimodal Project Discretionary Grant Opportunity (MPDG) applicants can use one application to apply up to the three discretionary grant opportunities.	https://www.transportation.gov/grants/infra-grants-program
USDOT	Reconnecting Communities Pilot Program	Capital / Planning	Federal program dedicated to reconnecting communities that were previously cut off from economic opportunities by transportation infrastructure. Funding supports planning grants and capital construction grants, as well as technical assistance, to restore community connectivity through the removal, retrofit, mitigation, or replacement of eligible transportation infrastructure facilities. Eligible facilities include highways, including a roads, streets, or parkways or other transportation facilities, such as a rail line, that creates a barrier to community connectivity, including barriers to mobility, access, or economic development, due to high speeds, grade separations, or other design factors.	https://www.transportation.gov/grants/reconnecting-communities

Sponsor	Program Name	Funding Type	Description of Funding Program	Further Information
USDOT	Active Transportation Infrastructure Investment Program	Planning / Design	The Fiscal Year (FY) 2023 Omnibus Appropriations bill that passed on December 23, 2022, includes funding to kick-start the Active Transportation Infrastructure Investment Program (ATIIP). The bill includes \$45 million for the program. While short of the \$200 million ATIIP authorization in the Bipartisan Infrastructure Law and the \$500 million that the Rails to Trails Conservancy (RTC) and Congressional champions called for in proposing the Connecting America's Active Transportation System Act, this funding is critical to launch the program and demonstrate that connectivity investments are in high demand across the country. The program will establish competitive grants that strategically invest in projects that connect active transportation networks and spines, accelerating local and regional plans to create safe and convenient walking and biking routes to everyday destinations and to fill gaps in trails between communities. This unique program will enable communities to build from existing infrastructure for walking and biking to safely connect people to the destinations they travel to routinely, while also creating opportunities for sustainable transportation and recreation. The US Department of Transportation has not yet released information on the application timeline or directions on how to apply.	https://www.railstotrails.org/policy/funding/active-transportation-infrastructure-investment-program/
FHWA	Transportation Alternatives	Capital	Eligible activities include construction, planning, and design of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity. For example, new sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting, ADA compliance projects, and other safety-related infrastructure.	https://www.fhwa.dot.gov/fastact/factsheets/transportationalternativesfs.cfm
FHWA	Surface Transportation Block Grant Program (STBG)	Capital / Operations & Maintenance / Planning & Research (SU Flexed to FTA)	The STBG program provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.	https://cms7.fta.dot.gov/funding/grants/flexible-funding-programs-surface-transportation-block-grant-program-23-usc-133
FHWA	Recreational Trails Program (23 USC 206)	Capital / Operations & Maintenance / Programming	Develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. States are encouraged to enter into contracts and cooperative agreements with qualified youth conservation or service corps. Eligible projects include: Maintenance and restoration of existing trails; Development and rehabilitation of trailside and trailhead facilities and trail linkages; Purchase and lease of trail construction and maintenance equipment; Construction of new trails (with restrictions for new trails on Federal lands); Acquisition of easements or property for trails; Assessment of trail conditions for accessibility and maintenance; Development and dissemination of publications and operation of educational programs to promote safety and environmental protection related to trails (including supporting non-law enforcement trail safety and trail use monitoring patrol programs, and providing trail-related training) (limited to 5 percent of a State's funds); State administrative costs related to this program (limited to 7 percent of a State's funds).	https://floridadep.gov/lands/land-and-recreation-grants/content/rtp-assistance
FHWA	Highway Safety Improvement Program (HSIP)	Capital	The overall purpose of this program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads through the implementation of infrastructure-related highway safety improvements.	http://safety.fhwa.dot.gov/hsip/
FTA	5305d	Planning	The program provides funding and procedural requirements for multimodal transportation planning in metropolitan areas and states. Planning needs to be cooperative, continuous, and comprehensive, resulting in long-range plans and short-range programs reflecting transportation investment priorities. Funds shall only be used on approved work tasks within an adopted Unified Planning Work Program (UPWP).	https://www.transit.dot.gov/funding/grants/metropolitan-statewide-planning-and-nonmetropolitan-transportation-planning-5303-5304
USDA	Forest Legacy Program	Acquisition / Conservation	The purpose of the Forest Legacy Program is to identify and conserve environmentally important forest areas that are threatened by conversion to non-forest uses. Providing economic incentives to landowners to keep their forest as forests encourages sustainable forest management and supports strong markets for forest products. Landowners may participate in the Forest Legacy Program by either selling their property outright or by retaining ownership and selling only a portion of the property's development rights; both are held by state agencies or another unit of government. The use of a conservation easement, a legal agreement between a	https://www.fs.usda.gov/managing-land/private-land/forest-legacy/program

Sponsor	Program Name	Funding Type	Description of Funding Program	Further Information
			landowner and a non-profit land trust or governmental agency, allows the land to remain in private ownership while ensuring that its environmental values are retained. The program is funded by the Land and Water Conservation Fund, which invests a small percentage of federal offshore drilling fees toward the conservation of important land, water, and recreation areas for all Americans. The passage of the Great American Outdoors Act provides permanent funding for the Land and Water Conservation Fund.	
EPA	Climate Pollution Reduction Grant (CPRG)	Planning	The CPRG program is designed to provide flexible support to states, local governments, tribes and territories regardless of where they are in their climate planning and implementation process. Planning funds can be used to update existing climate, energy, or sustainability plans, or to develop new plans. The CPRG program, will support the development and deployment of technologies and solutions that will reduce GHGs and harmful air pollution, as well as transition America to a clean energy economy.	https://www.epa.gov/inflation-reduction-act/climate-pollution-reduction-grants
National Endowment for the Arts (NEA)	Access to Artistic Excellence, "Our Town" Program	Programming	Based on the availability of funding, the National Endowment for the Arts will provide a limited number of grants, ranging from \$25,000 to \$150,000, for creative placemaking projects that contribute toward the livability of communities and help transform them into lively, beautiful, and sustainable places with the arts at their core. Creative placemaking is when artists, arts organizations, and community development practitioners deliberately integrate arts and culture into community revitalization work - placing arts at the table with land-use, transportation, economic development, education, housing, infrastructure, and public safety strategies. The Arts Endowment plans to support a variety of diverse projects, across the country in urban and rural communities of all sizes. Projects may include planning, design, and arts engagement activities.	https://www.arts.gov/grants-organizations/our-town/introduction
HUD	CDBG Section 108	Capital / Programming	Section 108 is the loan guarantee provision of the Community Development Block Grant (CDBG) program. Section 108 provides communities with a source of financing for economic development, housing rehabilitation, public facilities, and large-scale physical development projects. This makes it one of the most potent and important public investment tools that HUD offers to local governments. It allows them to transform a small portion of their CDBG funds into federally guaranteed loans large enough to pursue physical and economic revitalization projects.	https://www.hudexchange.info/programs/section-108/

STATE / FLORIDA FUNDING SOURCES

DEP	Florida Recreation Development Assistance Program (FRDAP)	Acquisition / Development	The Land and Recreation Grants staff administers grants to local governments through the Florida Recreation Development Assistance Program (FRDAP). This competitive, reimbursement grant program provides financial assistance for the acquisition or development of land for public outdoor recreation. Eligible participants include all county governments, municipalities in Florida, and other legally constituted local governmental entities with the responsibility for providing outdoor recreational sites and facilities for the general public.	https://floridadep.gov/lands/land-and-recreation-grants/content/frdap-assistance
FDOT	Park & Ride Lot Program	Capital / Programming	The Park & Ride Program provides funds for the planning, design, ROW acquisition, engineering, construction, inspection, and marketing of Park-and-Ride lots that are part of an approved Park-and-Ride project list or other locally adopted plan and is outlined in FDOT Procedure Topic 725-030-002-f.	https://www.fdot.gov/docs/default-source/transit/pages/finalparkandrideguide20120601.pdf
FDOT	Transit Corridor Program	Capital / Operations	The Transit Corridor Program provides funding to support new services within specific corridors when the services are designed and expected to help reduce or alleviate congestion or other mobility issues within the corridor and is outlined in FDOT Procedure Topic 725-030-003.	chrome-extension://efaidnbmnnnibpcajpcqlclefindmkaj/https://www.fdot.gov/docs/default-source/transit/documents/TransitResourceGuide.pdf

PRIVATE FUNDING SOURCES

Sponsor	Program Name	Funding Type	Description of Funding Program	Further Information
Jeff Doppelt	Doppelt Family Trail Development Fund	Capital	RTC launched a new grant program in 2015 to support organizations and local governments that are implementing projects to build and improve multi-use trails. Under the Doppelt Family Trail Development Fund, RTC will award approximately \$85,000 per year, distributed among several qualifying projects, through a competitive process.	https://www.railstotrails.org/our-work/grants/doppelt/
Rails to Trails Conservancy	Trail Development Grant	Capital	This grant program emphasizes strategic investments that support significant regional and community trail development goals. Many of our funded projects are small in scope and scale and can be hard to finance within traditional funding streams. These projects are essential to building, maintaining and managing the trails that so many of us love and that communities rely upon for recreation, transportation and economic vitality. Through these relatively small investments, we are able to help complete and connect trails, improve the trail user experience and support local organizations dedicated to new and existing trails across the country. Over \$300,000 worth of grants were awarded to support inclusive trail projects across the nation in 2022.	https://www.railstotrails.org/our-work/grants/