

CITY OF SANIBEL SHARED USE PATH MASTER PLAN



UPDATED 2023



City of Sanibel

Shared Use Path Master Plan

2023

Complete For:



City of Sanibel

In Cooperation With:



Lee County Metropolitan Planning Organization

As adopted by the City Council, on June 4th, 2024, the Shared Use Path Master Plan represents a living document which may be edited, evaluated and updated, as needed, to support its guiding Vision Statement and Goals and Objectives.

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Glossary of Terms

Americans with Disabilities Act (ADA)

The ADA is a civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life and all public and private places that are open to the general public. The purpose of the law is to make sure that people with disabilities have the same rights and opportunities as everyone else. The ADA gives civil rights protections to individuals with disabilities similar to those provided to individuals on the basis of race, color, sex, national origin, age, and religion. It guarantees equal opportunity for individuals with disabilities in public accommodations, employment, transportation, state and local government services, and telecommunications. The ADA is divided into five titles (or sections) that relate to different areas of public life.

Arterial Road

A two lane, two way road, designed to carry medium speed (30 - 35 mph) and medium capacity traffic volumes. An arterial roadway provides intra-community motor vehicle access and connections to a metropolitan wide road system.

Bicycle Lane

A Bike Lane is defined as a portion of the roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive use of bicyclists.

Buffer

A buffer is a strip of land situated between a Shared Use Path and a parallel roadway. A buffer may be either vegetated or open and can provide a contoured area that serves as a swale for storm water drainage purposes. The buffer provides not only physical separation between the Shared Use Path and motor vehicle traffic, but also provides visual screening

Collector Road

A two lane, two way road, designed to carry relatively low speed (25 - 30 mph) and lower traffic volumes than an arterial road. A

collector road provides connections between neighborhoods and arterial roads.

Connectivity

Connectivity refers to the degree to which the path system provides access to destinations through the availability of links and travel options.

Curb Ramps or Aprons

A curb ramp is a short ramp cutting through a curb or built up to it. If designed and constructed to be accessible, a curb ramp provides an accessible route that people with disabilities can use to safely transition from a roadway to a curbed sidewalk and vice versa.

A driveway apron is defined as the transitional area between the edge of street pavement and the property owner's driveway that's primarily used for vehicular access.

Delineators

A vertically installed flat or circular post that defines the outside limits of a vehicular travel lane and separates that lane from a Shared Use Path where the road and the Path may share a common paved surface. A delineator is normally composed of a polymer



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material that is highly visible, flexible and durable and can withstand impacts.

Electric-Bicycles

Electric-Bicycles, or E-bikes, are a bicycle, or tricycle, equipped with fully operable pedals, a seat or saddle for the use of the rider, and an electric motor of less than 750 watts. E-bikes are categorized into three categories:

- Class 1 is for bikes equipped with a motor that provides assistance only when the rider is pedaling, and it stops when the E-bike reaches the speed of 20 mph.
- Class 2 is for bikes equipped with a motor and throttle that can power up the bike even when the rider isn't pedaling, and it ceases to provide assistance when the E-bike reaches the speed of 20 mph.
- Class 3 applies to bikes equipped with a motor that provides assistance only when the rider is pedaling, and it stops when the E-bike reaches the speed of 28 mph.

In 2019, the City of Sanibel banned, via ordinance, the use of all but Class 1 E-bikes upon a bicycle path, sidewalk, shared use path, or other portion of a roadway set aside for the exclusive use of bicycles and pedestrians.

Electric-Scooters

An Electric-Scooter, or E-scooter, is an electric powered vehicle, two-axle, with a steering apparatus, without a seat and without pedals, that is designed to be driven only by the rider of that vehicle. E-scooters are permitted to operate in bike lanes and must follow road rules pertaining to bicycles. In the City, electric scooters are not permitted on the Shared Use Path system. The State of Florida states that riders must be 16 years old, but are not required to have a driver's license. Scooters must not exceed a maximum speed of 30 mph. The State law allows individual cities to regulate scooter programs, but personal scooter ownership cannot be bound by an individual cities' decisions.

Horizontal Clearance

The lateral offset distance from the edge of the Shared Use Path system to another object or roadside element.

Incapacitating Injury

An injury, other than a fatal injury, which prevents the injured person from walking, driving, bicycling, or otherwise continuing the activities the person was performing prior to the crash.

Limited Motorized User

Limited motorized users refer primarily to riders of e-scooters, e-bikes, mopeds, or other small motorized mobility devices.

Manual on Uniform Traffic Control Devices

The Manual on Uniform Traffic Control Devices defines the standards used by states, counties, cities and towns to install and maintain all forms of traffic control signage, pavement markings and other devices on roads and Shared Use Paths. The Manual is published by the Federal Highway Administration pursuant to Code of Federal regulations (CFR), Part 655, Subpart F.

Non-Motorized User

Non-motorized users are primarily comprised of bicyclists, pedestrians, equestrians, and horse-drawn vehicles but may also include other non-powered transportation devices.



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Path Incident

A path incident refers to any incident that occurs on or along the Shared Use Path which the Sanibel Police Department files a report on but does not rise to the status of requiring an accident report.

Point of Interest

Any heritage, recreational, institutional, or historic area, building, or facility along or nearby the Shared Use Path system.

Public Right-of-Way Accessibility Guidelines (PROWAG)

A set of guidelines by the United States Access Board for ensuring the accessibility of public right-of-way that includes guidelines for design, construction, and alteration of public and private facilities.

Shared Use Path

A paved path that serves pedestrians, bicyclists and other compatible forms of non-motorized transportation. A Shared Use Path serves two-way pedestrian and bicycle travel and is physically separated from a road and motor vehicle traffic by either open space, striping, signage, flexible delineators or a physical barrier. The Shared Use Path may be located within a right of way that also serves a road.

Sight Distance

Sight distance refers to the length of the roadway or Shared Use Path visible to a driver or Shared Use Path user. This area of visibility for path users and motorists is essential to ensure safe crossings at intersection of the Shared Use Path, roadways, and driveways.

Stewardship

Stewardship can be defined as an ethic or commitment formed by citizens to voluntarily and cooperatively pursue specific goals, policies, projects and programs designed to achieve specific and sustainable outcomes that will benefit the environmental and fiscal conditions of a community.

Stop Bars

A single line either applied as white paint or as a thermoplastic treatment that defines an approach to a road or Shared Use Path intersection.

Striping, Hatching and Markings

Single or multiple broken or unbroken lines applied as paint or as a thermoplastic treatment in white or yellow colors to delineate either a center line to separate travel lanes or outside edges of travel lanes along a Shared Use Path. Also applied as either solid unbroken lines across a road or as a series of closely spaced parallel lines to delineate a crosswalk. Applications also include stop bars at crosswalks or the delineation of obstructions along a Shared Use Path.

Support Facilities

Any infrastructure which contributes to or supports users of the Shared Use Path system. This includes water fountains, shade facilities, bicycle racks, and other amenities.

Swale

A shallow linear ditch either naturally formed or constructed at a lower contour and parallel to a road or Shared Use Path to detain, filter and transports storm water run off.



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Way Finding Signage

A comprehensive and uniform signage system designed and located to provide directions, orientation and information to both Shared Use Path users and motorists. Way Finding Signage also is graphically and structurally designed in a manner that is consistent with the community's unique identity and responsive to the natural and built environments.

Vertical Clearance

The height from the Shared Use Path surface to the lowest tree, branch, limb or other physical object that could be touched by a potential path user.

SECTION 1 INTRODUCTION AND PURPOSE





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Introduction

The City of Sanibel has a long-standing and celebrated commitment to providing residents and visitors with a variety of safe and convenient transportation and recreation options. In support of this commitment, the Lee County Metropolitan Planning Organization (MPO), in coordination with the City of Sanibel, have embarked on an update to the City's 2009 Shared Use Path Master Plan.

Following the 2009 Master Plan Update, the City of Sanibel conducted a Shared Use Pathway Intersection Improvement Study that was completed in November 2015. In addition to the location-specific recommendations of this study, review and update the 2009 Master Plan was noted as a specific action for the City to undertake based on the number of citizen comments and the issues that had been identified.

The Shared Use Path Master Plan update includes a review and update to the Plan's vision, goals, and objectives, an update to the inventory of existing paths and path support systems, an evaluation of path use and users, including emerging trends and associated technologies, a review of recommendations from previous planning and engineering efforts related to the Path system, an evaluation to identify improvements to address Path system gaps and enhance the safety and comfort of the existing system, and an evaluation of existing funding mechanisms to maintain and implement enhancements to the Shared Use Path system.

Sanibel Plan and Sanibel Vision

The Sanibel Plan, adopted by City Council and most recently revised in 2013, was developed based on the Sanibel Vision Statement. The Vision Statement reflects the community's desire to sustain an ecological balance and preserve and restore natural settings for residents, visitors, and wildlife. The Vision Statement is a three-pronged expression of the community's values for preserving the island's character. To accomplish this, a hierarchy of these three values (Sanctuary, Community, and Attraction) was

developed to illustrate how the vision of the Sanibel Plan would be enforced.

Sanibel Vision Statement Hierarchy of Values

Sanibel shall be developed as a **community** only to the extent to which it retains and embraces this quality of **sanctuary**. Sanibel will serve as **attraction** only to the extent to which it retains its desired qualities as **sanctuary** and **community**.

Purpose

The purpose of the Shared Use Path Master Plan can be summarized as follows:

- Support the implementation of the Sanibel Plan.
- Define the long-term vision for the future of the Shared Use Path system through established goals and objectives.
- Update and establish a baseline of information that defines the existing Shared Use Path system conditions and relationships to land use, destinations, natural resources, and other features.



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- Evaluate existing public perception on the Shared Use Path system, identify current concerns and challenges, and observe current use and user types along the existing Path system.
- Evaluate and define potential best management and design practices for the Shared Use Path system.
- Identify potential enhancements to improve safety, access, comfort, and mobility along the Shared Use Path system.
- Serve as a resource to support both public and private fund-raising efforts.

Elements of the Master Plan

The remainder of the Shared Use Path Master Plan includes the following elements:

- Section 1: Introduction and Purpose
- Section 2: Shared Use Path History
- Section 3: Vision, Goals and Objectives
- Section 4: Existing Conditions
- Section 5: Public Involvement
- Section 6: Shared Use Path Challenges
- Section 7: Shared Use Path Design Considerations
- Section 8: Shared Use Path Opportunities
- Section 9: Shared Use Path Implementation Program and Funding Opportunities
- A series of appendices is also included to provide additional support and detail regarding development of the Master Plan

SECTION 2 HISTORY OF THE SHARED USE PATH





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History of the Shared Use Path System

Since its inception, Sanibel's Shared Use Path system has been a community-involved initiative that began from a need to provide a safe way to get around the island without using an automobile. The existing Shared Use Path network has grown from its original segment along Periwinkle Way to a system of more than 26 miles of separated paths that stretch across the island from Lighthouse Beach Park on the eastern end to the Blind Pass Bridge on the western end.

In 1974, prior to the City's incorporation, Sanibel bicyclists rode from the Chamber of Commerce on Causeway Boulevard to Bailey's General Store at the intersection of Periwinkle Way and Tarpon Bay Road to demonstrate to the County's Commissioners the need for safe and separated paths on the island. That same year, Sanibel residents working with Lee County officials and the Project Bike Path Committee completed a county-wide eight-point plan to establish a network of paths and a funding strategy to support construction costs.

In 1975, three citizens (Grace Whitehead, Muriel Goss, and Starr Thomas) spearheaded a project to raise \$10,000, which was matched by the Florida Department of Transportation (FDOT), to build the first segment of the Shared Use Path system along Periwinkle Way from Lindgren Boulevard to Bailey's General Store. Between 1975 and 1996, a majority—more than 23 miles—of the existing Shared Use Path system was constructed.

Initially adopted in 1976 and last revised in 2013, the City's Comprehensive Plan, known as the Sanibel Plan, has recognized the importance of providing transportation alternatives to the automobile and the role of the Shared Use Path system in ensuring that the city is a walkable and bikeable community.

Shared Use Path Planning Efforts

In 2002, the City of Sanibel completed a Parks and Recreation System Master Plan that defined the importance of a unified park, recreation, and Path system. In 2003, the City's Parks and Recreation Advisory Committee

recommended that the term "Bike Path" be changed to "Shared Use Path" for the following reasons:

- To recognize the wide variety of non-motorized users and the separation of Paths from vehicular traffic.
- To indicate that both recreation and transportation services are provided.
- To enable the City to successfully apply for federal and state grant and funding.

In 2003, the City's Department of Public Works completed the Master Plan for Future Path Extensions. This plan, along with the Parks and Recreation System Master Plan, guided the implementation of several Path improvements, including the reconstruction of Periwinkle Way between Casa Ybel Road and Dixie Beach Boulevard that allowed for separation between the Path and adjacent travel lanes along with various other improvements.

In 2005, discussions on the necessity for a more comprehensive Shared Use Master Plan emerged. These discussions led to the development and adoption of the Shared Use Path Master Plan in 2009.



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2009 Shared Use Path Master Plan

Since the adoption of the Shared Use Path Master Plan in 2009, the City of Sanibel has completed more than five miles of improvements and extensions to the Path system. These improvements have included widening existing Path segments and constructing new Path connections. Some notable improvements include Shared Use Path widening and extension along Dixie Beach Boulevard, new Path connections along Bailey Road and Bowman's Beach Road, and the widening of the Shared Use Path along East Periwinkle Way from Lindgren Boulevard to Lighthouse Beach Park. Figure 2-1 and Table 2-1 show and list the Shared Use Path improvements and extensions completed since the adoption of the 2009 Plan.

2015 Shared Use Pathway Intersection Improvement Study

This study was conducted in 2015 in order to assess the interactions between pedestrians/cyclists and motor vehicles in or adjacent to intersections along the Shared Use Pathway system. During development of this study, however, it was determined that mid-block crosswalks along the pathways, and specifically at more active commercial driveways were the major conflict points where safety issues were observed. Recommendations from this study were made in an attempt to assist the City in achieving their objectives. The result of this study was a list of 19 specific recommendations for consideration by the City. A review of this study and the 19 recommendations are included in Appendix A.

Shared Use Path Recognition

In 2018, the City of Sanibel was recognized by the League of American Bicyclists as a "Gold" status Bicycle Friendly Community (BFC). This designation is based on a community's efforts to encourage people to bike for transportation through the five E's—Engineering, Education, Encouragement, Enforcement, and Evaluation. By obtaining gold status, Sanibel joined The Villages as the only other Florida community to obtain this level of designation. The award is a statement to the City's commitment to improving bicycling conditions and encouraging walking and biking as alternative modes of transportation and recreation.



Bicycle Friendly Community Gold Designation



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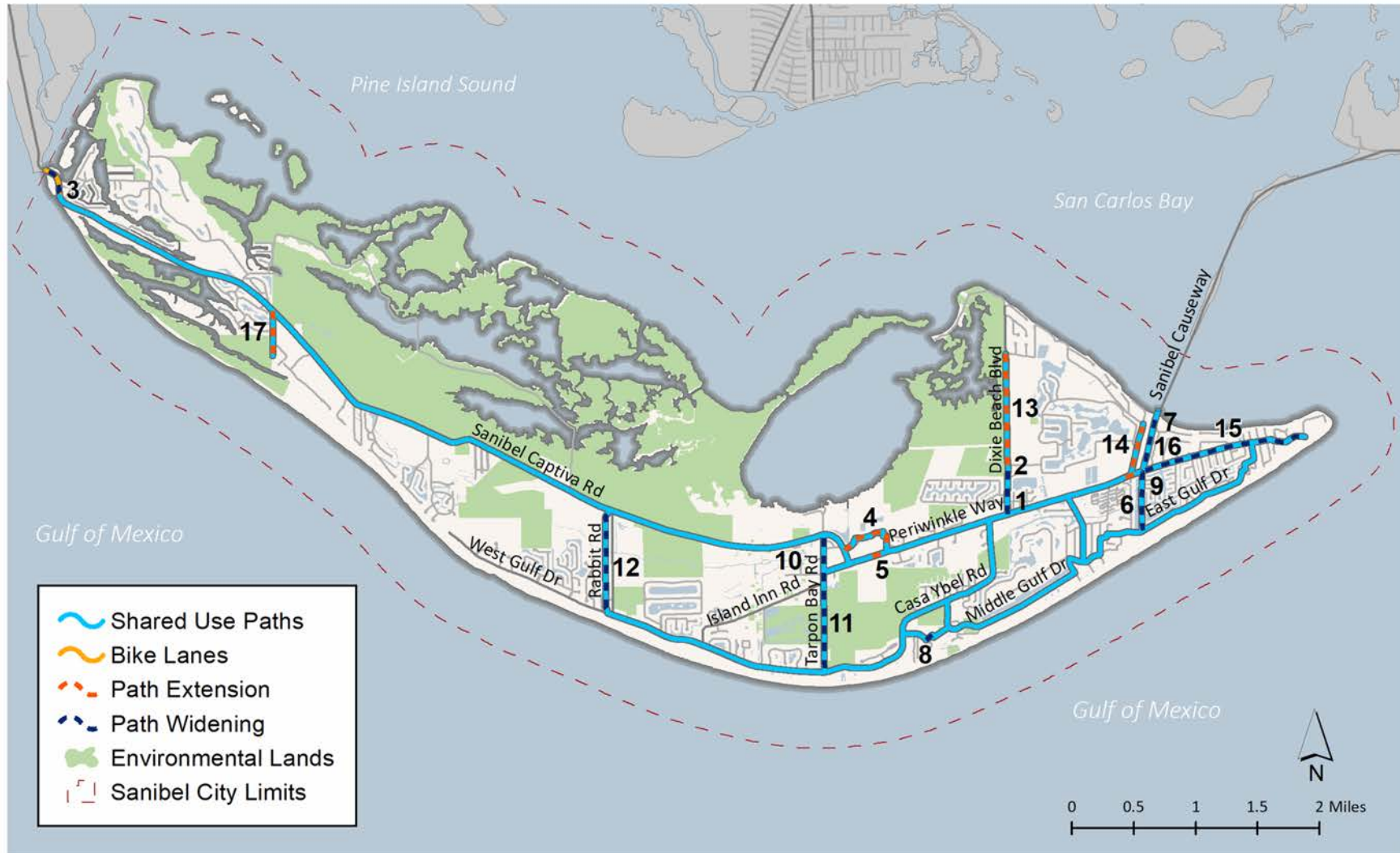


Figure 2-1: Shared Use Path Improvements (2008–2018)



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Table 2-1: Shared Use Path Improvements (2008–2018)

ID	Project	Description	Year	Length (mi)
1	Dixie Beach Blvd, Periwinkle Way to Bunting Ln	Widen Path from 6 ft to 8 ft	2008	0.14
2	Dixie Beach Blvd, Bunting Ln to Albatross Rd	Widen Path from 6 ft to 8 ft	2010	0.24
3	Sanibel Captiva Rd, Pine Ave to Blind Pass	New Path extension (8 ft Path and 5 ft bike lanes)	2011	0.31
4	Dunlop Rd and Wooster Ln	New Path extension (10 ft along Dunlop Rd and 8 ft along Wooster Ln)	2011	0.52
5	Periwinkle Way Path Extension (north side)	New 8 ft Path from SCA crosswalk to St Michael Church crosswalk	2011	0.14
6	Lindgren Blvd, East Gulf Dr to Periwinkle Way	Widen Path from 6 ft to 8 ft	2011	0.47
7	Causeway Blvd (east side only)	Widen Path from 6 ft to 8 ft	2011	0.32
8	Algiers Ln to Middle Gulf Dr Connector (Algiers Ln to bridge section only)	Widen Path from 6 ft to 8 ft	2011	0.11
9	Periwinkle Way, Lindgren Blvd to Kings Crown Dr	Widen Path from 6 ft to 8 ft	2011	0.28
10	Tarpon Bay Rd, Sanibel Captiva Rd to Island Inn Rd	Widen Path from 6 ft to 8 ft	2011	0.38
11	Tarpon Bay Rd, Island Inn Rd to West Gulf Dr	Widen Path from 6 ft to 10 ft, widen to 12 ft from Trost parking to West Gulf Dr	2012	0.72
12	Rabbit Road Shared Use Path to Sanibel Captiva Rd	Widen Path from 6 ft to 8 ft	2012	0.68
13	Dixie Beach Blvd, Albatross Rd to Royal Poinciana Dr	New Path extension (8 ft wide)	2012	0.91
14	Bailey Rd, Periwinkle Way to south of Bay Dr	New Path extension (8 ft wide)	2012	0.38
15	East Periwinkle Way Improvements, Kings Crown Dr to Lighthouse Beach	Widen Path from 6 ft to 10 ft	2013	1.11
16	Periwinkle Way (north side), Chamber of Commerce to Lazy Flamingo	New Path extension (8 ft wide)	2014	0.37
17	Bowman's Beach Rd, Parking to Sanibel Captiva Rd	New Path extension (10 ft wide); portion of Path within Bowman's Beach Park is shell	2018	0.50

SECTION 3 VISION, GOALS, AND OBJECTIVES





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Master Plan Vision, Goals, and Objectives

The Shared Use Path Master Plan is the guiding document for maintaining and improving the City's Shared Use Path system. A well-defined vision, and established goals and objectives, form the foundation for all Plan recommendations and ensure consistency with the Sanibel Plan. The 2009 Shared Use Path Master Plan established a vision and supporting goals and objectives to guide the Plan's implementation and improvements to the Path system. The vision, goals and objectives from the 2009 Plan were reviewed and evaluated for consistency and applicability with input from the community, the Project Advisory Committee, and key stakeholders, as part of the 2019 Plan update.

Vision for Sanibel Shared Use Path System

The following vision statement is an expression of the values and desires of the community and presents a depiction for the future of the Path system on Sanibel.

Sanibel's Shared Use Path system is and will continue to be an invaluable resource, one of the "crown jewels" of the island. Sanibel's Shared Use Path system will serve as a means for residents and visitors to move about the Island safely and easily under human power, reducing the need for using motorized vehicles on city streets and roads. The Path system will be designed and maintained in a manner that provides maximum access to frequently-visited island destinations and is attractive and consistent with Sanibel's unique character as a barrier island sanctuary and small-town community.





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Goals and Objectives

The goals and objectives for the Shared Use Path system address issues related to safety, quality of service, connectivity, and strengthening community input and ownership of the system. Goals and objectives from the previous 2009 Master Plan were reviewed for accuracy and completeness. A new goal addressing connectivity, in the form of improvements and extensions to the Shared Use Path system, along with five supporting objectives were added as part of the Master Plan Update. Other objectives were modified slightly to reflect the intent and purpose of each more accurately. The majority of the Goals and Objectives listed below were brought forward from the 2009 Shared Use Path Master Plan unchanged.

Goal: The safety of Sanibel's Shared Use Path system and its users shall be of the highest priority.

Objectives:

- Design the Path system's physical structure and signage to meet up-to-date standards so Path users are safe and feel comfortable.
- Improve bicycle, pedestrian, and motorist line of sight and overall visibility along the Path system, particularly at intersections, mid-block crossings, and commercial and residential driveways.
- Enforce City ordinances and State statutes to maximize Path safety and minimize crashes.
- Conduct an ongoing safety awareness program for Path users and motorists using the widest possible range of educational and outreach initiatives.

Goal: The Shared Use Path system will be managed and maintained in a quality manner that maximizes user comfort and enjoyment consistent with community character and the Sanibel Plan.

Objectives:

- Maintain the Path system in accordance with appropriate engineering and design practices and with State standards wherever possible, consistent with the City's unique right-of-way and land use conditions.
- Manage the Path system in a manner that protects the fragile nature of our island's environment and avoids disturbance of wildlife habitat.
- Implement a Shared Use Path monitoring and maintenance program that will proactively and systematically locate, schedule, and prioritize pavement, vegetation trimming, and related improvements.
- Ensure that Path rest areas, support facilities, and signage are visually appealing and consistent with the character of Sanibel.

Goal: Improvements and extensions to the Shared Use Path system will be done for the purpose of connecting residents and visitors with frequently visited island destinations and activity centers and to correspondingly reduce vehicular trips and energy consumption.

Objectives:

- Maintain a five-year capital improvement schedule for the Shared Use Path system, programmed and updated on an annual basis.
- Ensure that any proposed new Path improvement or extension addresses existing and future user demands.



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- Ensure that any proposed new Path improvements or extensions are consistent with the Sanibel Plan, the City's land use conditions, and the recommendations and priorities of the Shared Use Path Master Plan.
- Design Path improvements and extensions to meet up-to-date standards whenever possible.
- Ensure that Path improvements and extensions are visually appealing and consistent with the character of Sanibel.
- Provide opportunities for volunteers and City staff to work together on a wide range of programs and projects associated with Path system safety, education, conditions, and public information.
- Explore the formation of innovative public, private, and not-for-profit partnerships that have the capacity to pursue fundraising and financing strategies to support implementation of the Shared Use Path Master Plan.

Goal: The City will foster a sense of stewardship for the Shared Use Path system within the greater Sanibel Community.

Objectives:

- The City Council will uphold and establish policies and priorities that will support implementation of the Shared Use Path Master Plan and engage the entire Sanibel community throughout the implementation process.
- The City Manager will continue to lead and coordinate implementation of the Shared Use Path Master Plan and provide oversight of the Shared Use Path system within the City administration, ensuring that the Path system receives focused attention on a continuing basis.
- Foster a communications program to inform the public on the importance of the Path system to Sanibel. This communication program will:
 - Reinforce the Path system's role as a convenient means of non-motorized transportation that will help to reduce automobile trips, road congestion, and parking demands.
 - Underscore the impact the Path system can have in protecting the natural environment.
 - Encourage use of the Path system to promote health, wellness, and increased mobility.
- Encourage public-private partnerships to support the Path system.

SECTION 4 EXISTING CONDITIONS





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Existing Conditions

As discussed in Section 2, many improvements and additions have been made to the Shared Use Path system since the adoption of the previous Master Plan. As the City of Sanibel continues to identify opportunities to improve the Shared Use Path system it is important to conduct a thorough assessment of the existing system. This section reflects the current physical location and conditions of the Path system and the relationship the Paths have with Sanibel's natural and built environments.

Sanibel's Shared Use Path system is recognized as one of the most comprehensive, well-traveled, and enjoyable path systems in the United States. The system currently includes more than 26 miles of paved path that provides pedestrians, bicyclists, and other non-motorized users the opportunity to safely, comfortably, and conveniently travel around the island without the need for a motorized vehicle. As shown in Figure 4-1, the existing Shared Use Path system spans from Lighthouse Beach Park on the eastern end of the island to the Blind Pass Bridge on the western end and serves as a non-motorized alternative along most the City's main thoroughfares.

Management and Responsibilities

The City Charter, Sanibel Code, and other applicable State statutes and local laws and ordinances define the responsibilities of the City Council, City Manager, and all City Departments for the management, maintenance, safety, and improvement of Sanibel's Shared Use Path system.

The City Council is responsible for public policy, financing, budgeting, and legislation associated with Sanibel's Shared Use Paths; this includes the approval of the Shared Use Path Master Plan and any future amendments or updates to the Plan.

Under the direction of the City Council, the City Manager serves as the chief administrative officer of the City and is responsible for the administration,

direction, and supervision of all departments, staff, projects, and programs associated with the Shared Use Paths.

The City's Police Department is responsible for enforcement of all State and local laws that address safety along the Shared Use Path system. It also conducts outreach and educational programs designed to promote and increase safety along the Paths.

The Natural Resources Department reviews all plans for Shared Use Path design, improvements, and extensions to ensure the protection of Sanibel's natural environment. In coordination with Public Works staff, it also prepares and manages plans for vegetation planting and maintenance along the Path system.

The Public Works Department is responsible for the ongoing maintenance, design, and improvement of the Shared Use Path system. The Planning Department provides services associated with the planning and design of the Shared Use Path improvements and extensions to ensure compliance with the Sanibel Plan and the Land Development Code.

Since the Sanibel Plan was initially adopted (1976), the Economic Assumptions of the Plan have provided general guidance for the objectives and policies of the Plan. The Economic Assumptions of the Plan state that, "the most basic of all the economic assumptions of Sanibel's planning is that Sanibel's economic fortune is directly related to the viability of its natural systems". The Economic Assumptions of the Plan also prescribe that "planning priority should be given to reducing the need to use more motor vehicles as residents and visitors go about their daily activities". The maintenance and improvement of the Shared Use Path system can be an effective means of attaining that end.



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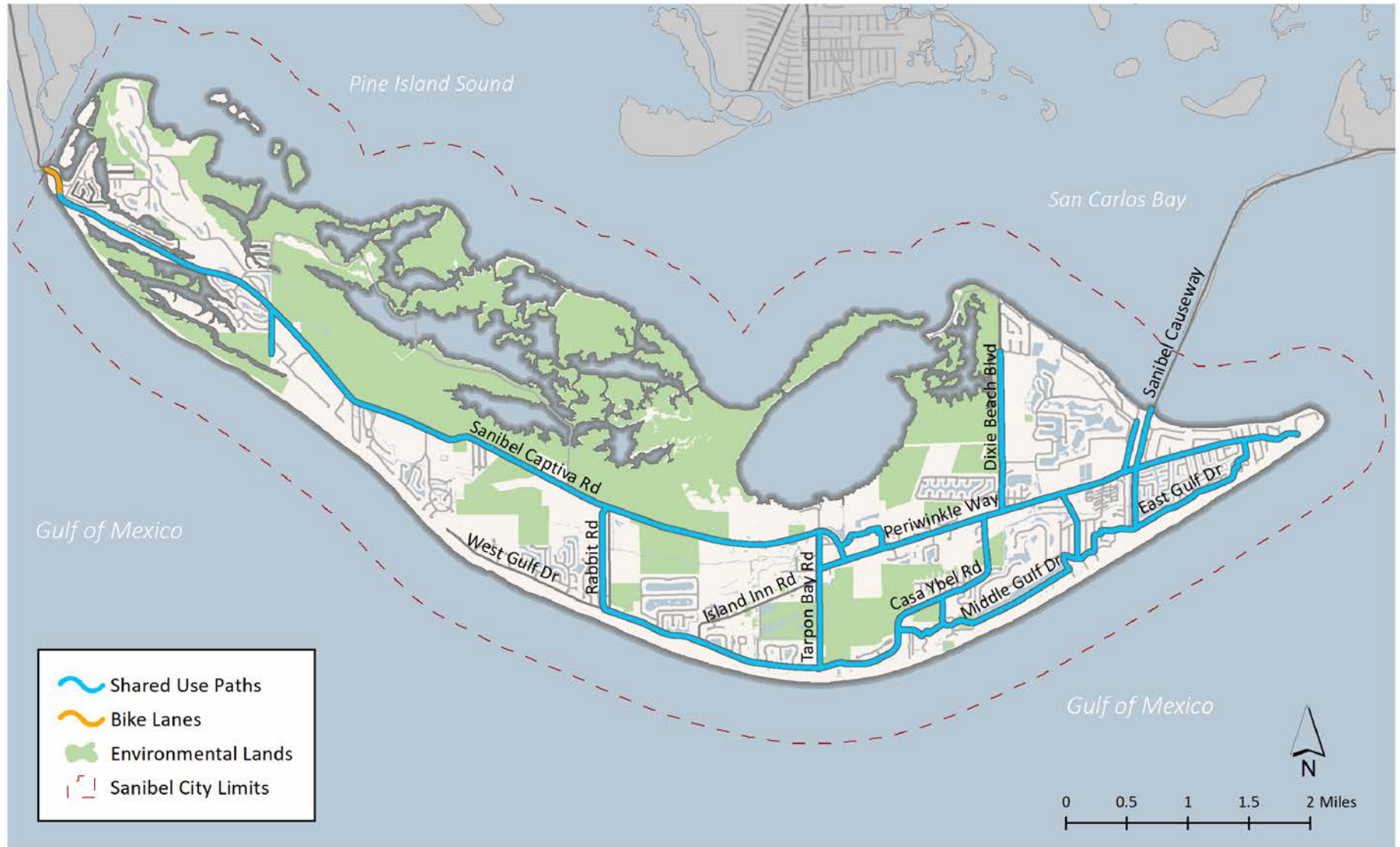


Figure 4-1: Shared Use Path System



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The quality of Sanibel's natural environment and the Island's economic base can both be sustained through the direct and indirect benefits derived from maintaining and enhancing the Shared Use Path system. Fostering Island-wide accessibility through enhanced pedestrian, bicycle and non-motorized forms of transportation will have many direct and indirect benefits, including reduced energy consumption, CO₂ emissions, automobile operating expenses and demand for multiple vehicle trips that contribute to congestion. The Island-wide condition and accessibility of the Share Use Path system also enhances property values.

The Public Works Department also reviews applications for development permits to ensure appropriate site planning and design of improvements to private property situated along the Shared Use Paths. The Planning Department also recommends amendments to the Land Development Code to address land use, design, site planning, and environmental goals, objectives, and policies associated with the implementation of the Sanibel Plan.

Figure 4-2 is a basic organizational chart that depicts the various City department responsibilities for the Shared Use Path system.

Shared Use Path Widths

The availability of right-of-way along with environmental and land use constraints often limit the City's ability to widen and expand the Path system. These constraints can create Path widths that typically would be considered sub-standard, especially given the number and diversity of users

on the Paths. The current Shared Use Path widths range between 6 and 12 feet. (see Figure 4-3). As shown in Table 4-1, most of the Shared Use Path system (80.09%) is 8 feet wide or greater.

Table 4-1: Shared Use Path Mileage by Width

Path Width	Mileage	Percent of Total System
6 Feet	5.12	19.91%
8 Feet	15.18	59.02%
10 Feet	5.28	20.53%
12 Feet	0.14	0.54%



8-Foot Shared Use Path along Sanibel Captiva Road at Wild Lime Drive



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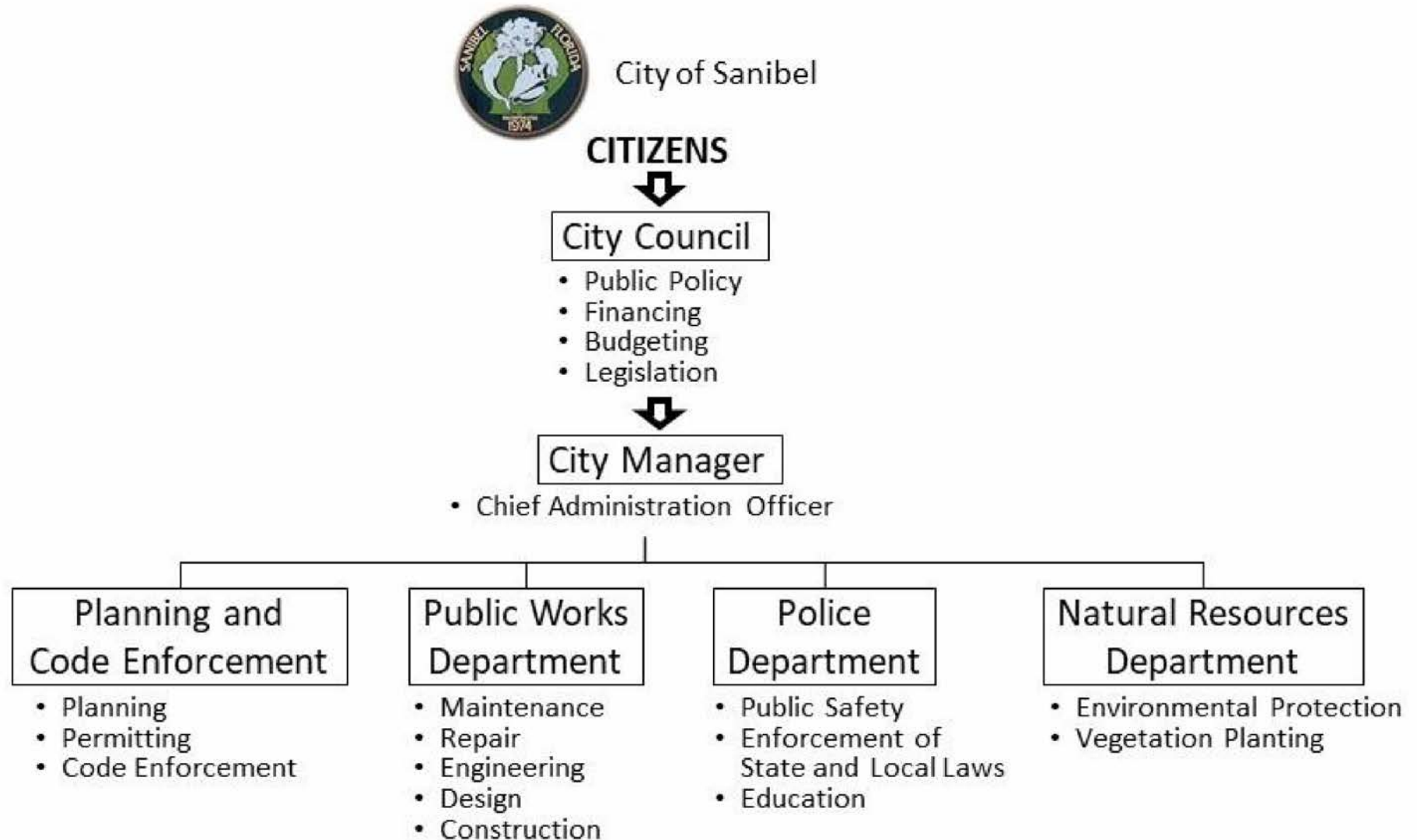


Figure 4-2: Shared Use Path System Management Organizational Chart



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Shared Use Path Crossings

Shared Use Path users often need to cross the adjacent street to either access the Path or their destinations. Helping to facilitate these crossings are 25 marked and signed crosswalks that connect the Shared Use Path system as illustrated below. Figure 4-4 shows the locations of the existing Shared Use Path marked and signed crossings. In addition to these mid-block crossings, there are over 130 marked crossings maintained by the city where the Path system crosses driveways or intersecting cross street. Included in the inventory of crossings is information regarding the crossing treatment, crossing, length, and type of roadway/driveway being crossed.



*Shared Use Path mid-block crossing along
Middle Gulf Drive near Cowry Court*

In 2013, the City adopted a revised Crosswalk Policy (Resolution No. 13-081) that established guidance and procedures for providing marked crosswalks throughout the city, as well as factors to be considered when evaluating potential crosswalk locations.

Included as part of the plans review listed in Appendix A, the City of Sanibel established a procedure, standards, and other factors for consideration and establishment of marked crosswalks within the city in November of 1996. An update to the crosswalk policy was passed in October 2013 which supersedes the 1996 policy.

The ordinance outlines the process for requesting, assessing, and designing a marked crosswalk within city limits including minimum warrants and design standards, as well as conditions that the city has established in addition to minimum standards. The ordinance identifies several types of crossings including midblock crossings and uncontrolled crossings and guidance documents on how these crossings should be evaluated, designed, signed and built.

The ordinance directs requests for a marked crosswalk to be forwarded to the City Manager, who in coordination with the City Engineer, shall conduct a traffic analysis if advisable, and make a recommendation to the City Council. Authority to permit a marked crosswalk rests with City Council.



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Figure 4-3: Shared Use Path Widths



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Figure 4-4: Shared Use Path Crossings



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Support Facilities

The Shared Use Path system is supported by a variety of amenities and facilities including rest areas, seating, water fountains, and bicycle racks. These facilities and amenities are an essential component of the Path system and improve the overall experience of using the Paths. Figures 4-5 through 4-8 depict the location of the existing support facilities including rest areas, benches, water fountains, and bike racks.



Support Facilities along Casa Ybel Road at Middle Gulf Drive



Shared Use Path Water Fountain near Lighthouse Beach Park



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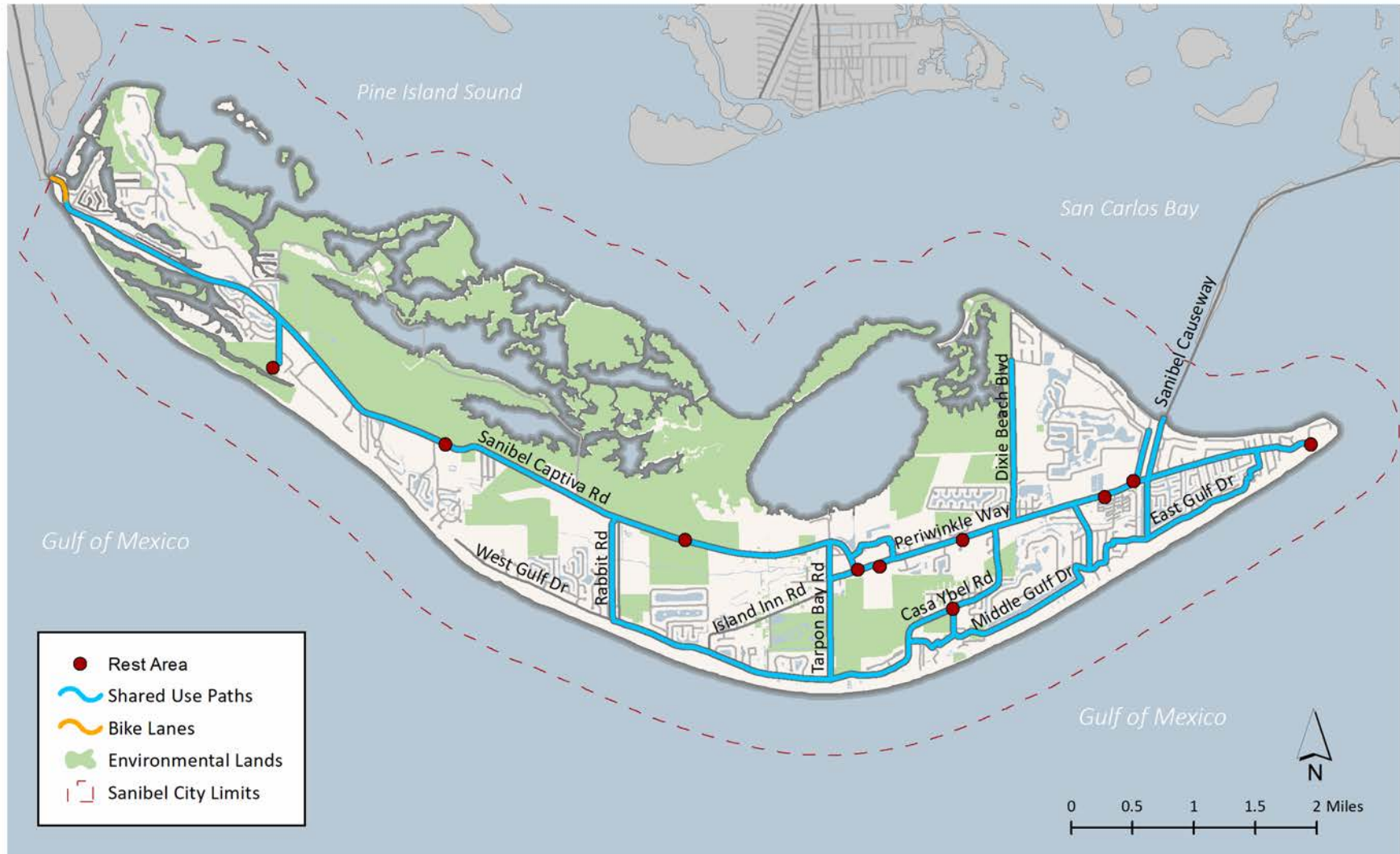


Figure 4-5: Shared Use Path Support Facilities – Rest Areas



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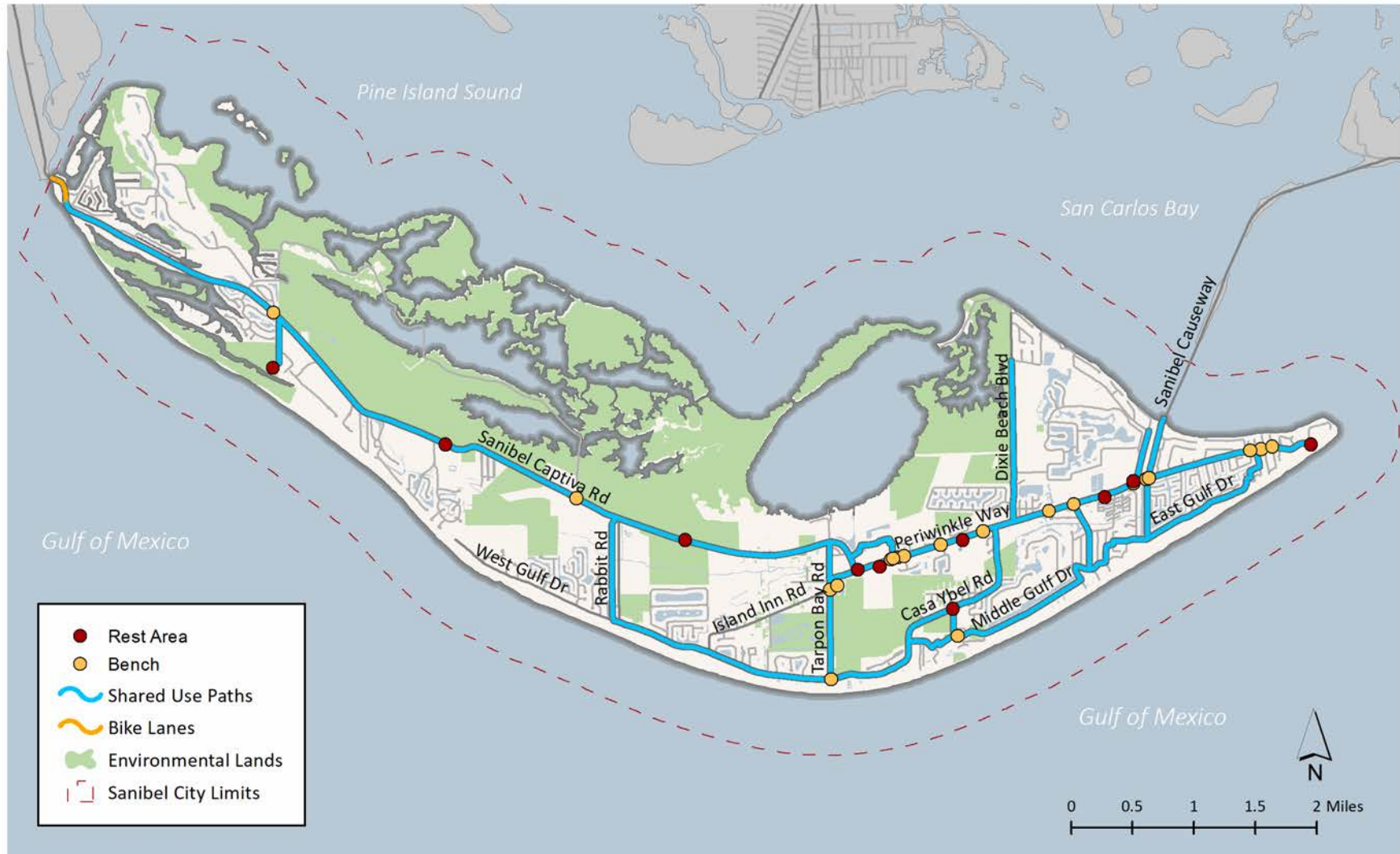


Figure 4-6: Shared Use Path Support Facilities – Benches



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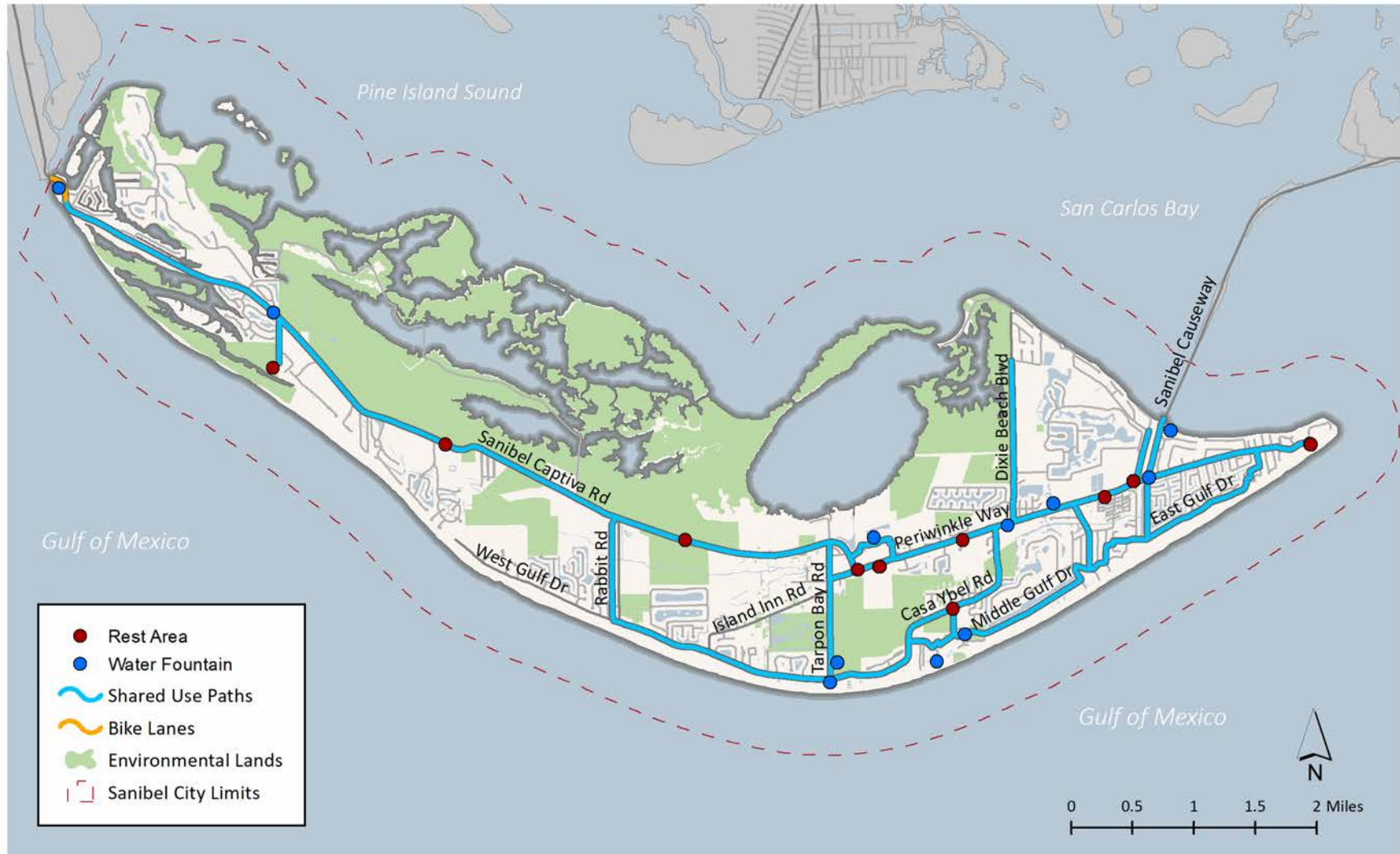


Figure 4-7: Shared Use Path Support Facilities –Water Fountains



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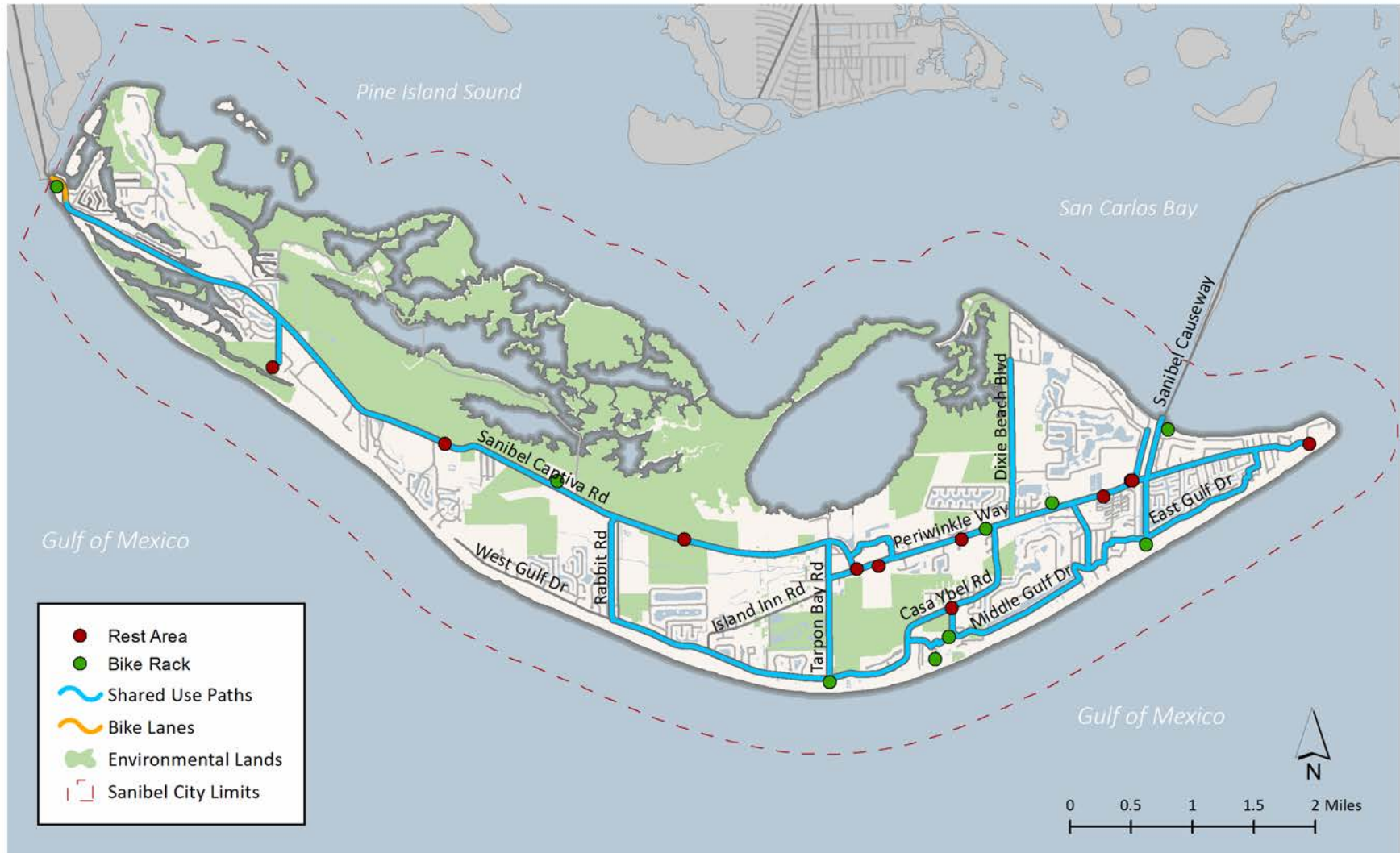


Figure 4-8: Shared Use Path Support Facilities –Bike Racks



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Connections to Recreational Trails

Although the Shared Use Path system is an important component of the City's overall transportation and recreation system, it is not the only option for non-motorized recreation; Sanibel has many additional recreational trails that provide residents and visitors with the opportunity to explore the island free of motorized transportation. These recreational facilities provide unique experiences and provide connections to locations otherwise not accessible from the Shared Use Path system are located in or primarily along natural and protected lands. Figure 4-9 depicts the relationship between the Shared Use Path system and the other recreational trails and facilities on the island. It is important to note that although these recreational trails are open to the public, many are located and maintained by private, semi-private and federal agencies such as the Sanibel-Captiva Conservation Foundation (SCCF) and the J.N. "Ding" Darling National Wildlife Refuge. Also important to note is that many of these recreational trails are unpaved and are of varying widths and conditions.



J.N. "Ding" Darling - Bailey Tract Trail
Photo Courtesy of www.oceansreach.com



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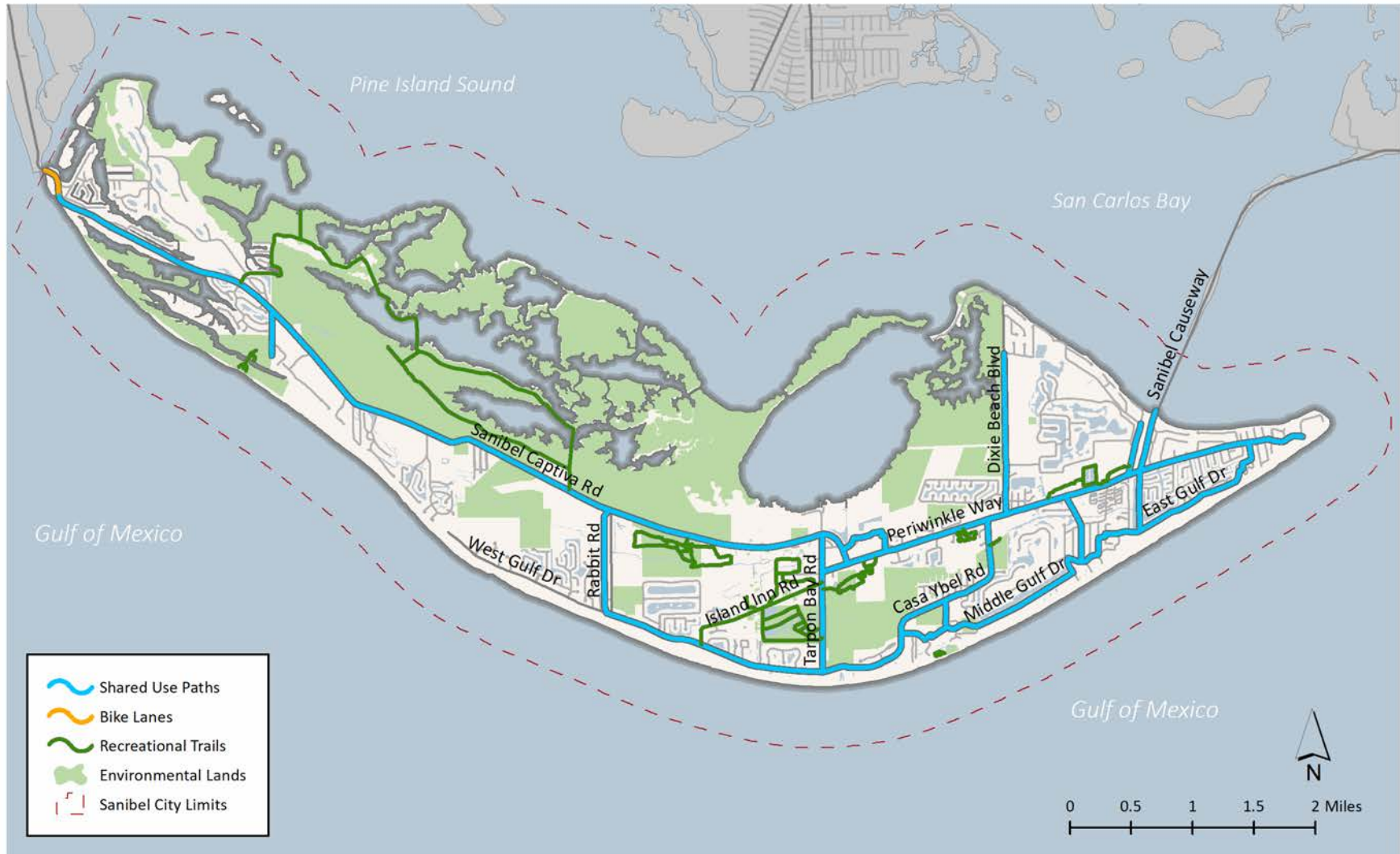


Figure 4-9: Shared Use Path System and Recreation Trails



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Connections to Regional Facilities

Sanibel's Shared Use Path system is connected to off-island pedestrian and bicycle facilities via the Blind Pass Bridge and the Sanibel Causeway. The Blind Pass Bridge has marked bicycle lanes and a separated pedestrian walkway that provide connections onto Captiva Island, which has paved shoulders along Captiva Drive. The Sanibel Causeway has wide outside shoulders that can accommodate bicycle travel between the island and the mainland; currently, pedestrian travel along the Sanibel Causeway is

prohibited. Figure 4-10 illustrates the relationship and connectivity between Sanibel's Shared Use Paths and the bicycle facilities throughout Lee County. The importance of providing a connection to regional facilities and ensuring its future viability is expressly stated as Objective 5 of the Sanibel Plan's Transportation Element, Section 3.3.3. Supported by four individual policy statements, this objective of the Sanibel Plan addresses the coordination and partnering activities of Sanibel, Lee County, The Lee County MPO, and FDOT for providing and maintaining this regional connection.



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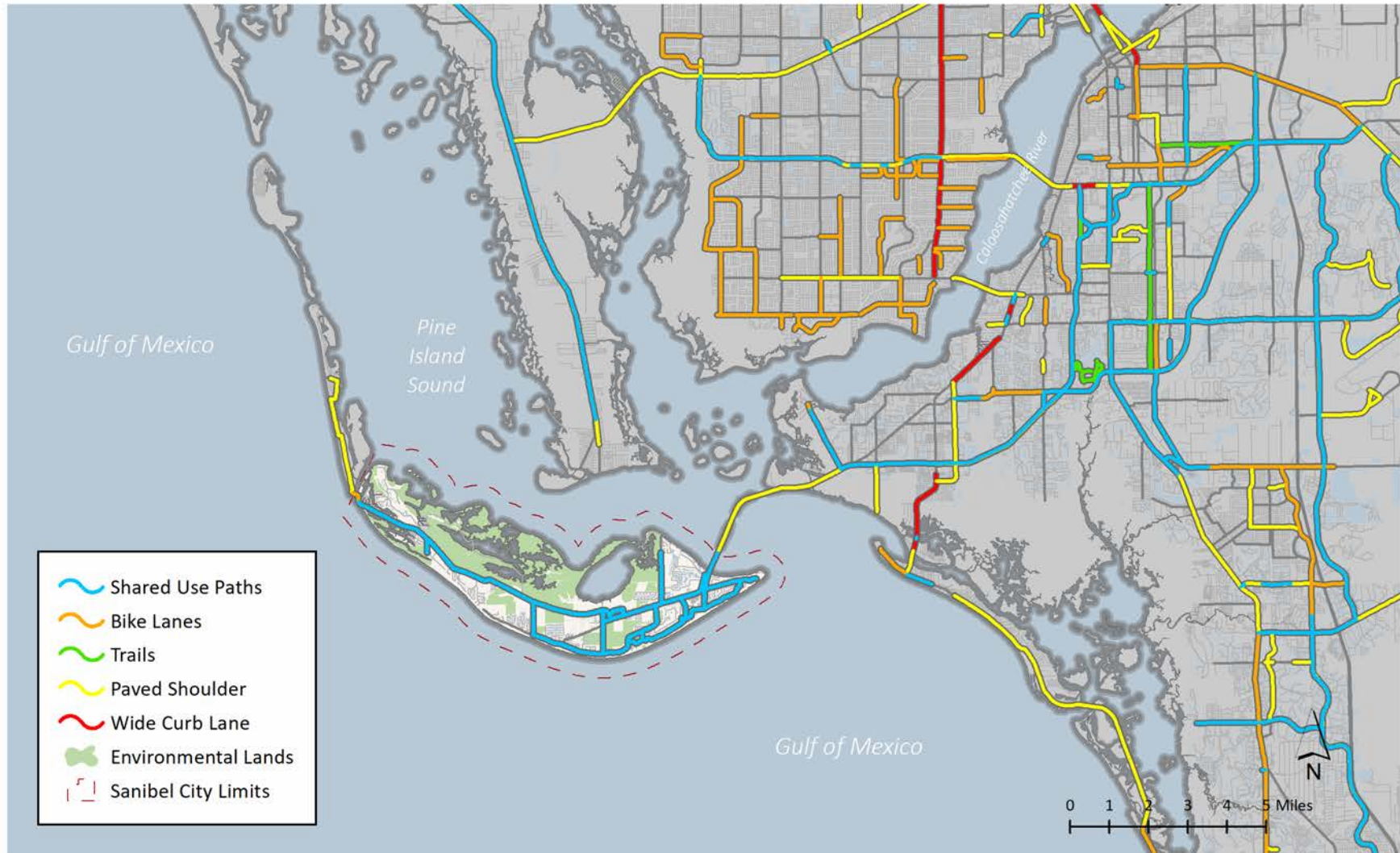


Figure 4-10: Regional Pedestrian and Bicycle Facilities



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Existing Land Use and Shared Use Path System

Sanibel's Shared Use Paths provide critical connections between the city's residential, commercial, resort, conservation, park, recreation, cultural and civic land uses. The interaction between these various land uses and the Shared Use Paths highlights the Path system's importance in accommodating alternative transportation modes. Continuing to understand the interaction that the Paths have with land use helps in providing connections between the places people are coming from and going to. Figure 4-11 shows how the existing Shared Use Path system interacts with the existing land uses.

To better understand how the existing Shared Use Path system interacts with the surrounding land uses, an analysis of land use within 200 feet of the Path system was conducted; the results of this analysis are shown in Table 4-2 and in Figure 4-12. As shown in Table 4-2, the existing Shared Use Path system is located within 200 feet of more than 97% of the city's commercial properties, 100% of institutional properties, and more than 40% of total properties on the island.

Table 4-2: Existing Land Use Adjacent to Shared Use Paths

Land Use	Total Acres	Acres Adjacent to Path	Percent Adjacent to Path
Conservation	4,777	1,932	40.4%
Residential	2,023	483	23.9%
Vacant *	1,259	600	47.7%
Recreation – Golf	432	150	34.7%
Residential – Condo	375	329	87.7%
Vacant – Public Land	311	123	39.5%
Commercial	159	155	97.5%
Public – Government	128	78	60.9%
Utilities	112	104	92.9%
Institutional	100	100	100%
Parks	85	69	81.2%
Commercial – Resorts	69	56	81.2%
Total	9,830	4,170	42.4%

Data Source: Lee County Property Appraiser Parcel Data.

*Property Appraiser database classifies some land owned by Sanibel Captiva Conservation Foundation (SCCF) as "Vacant" rather than conservation.



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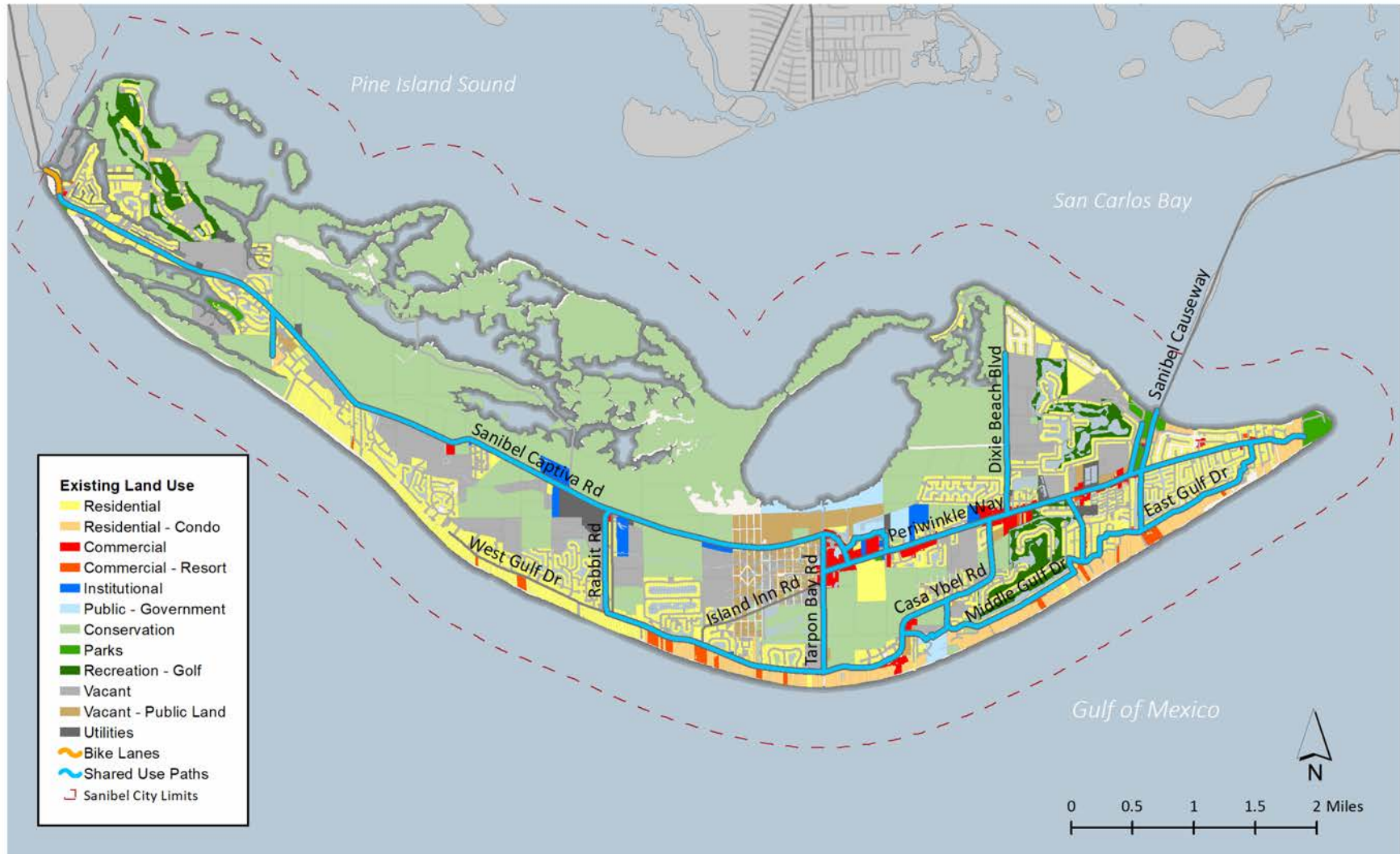


Figure 4-11: Shared Use Path System and Existing Land Uses



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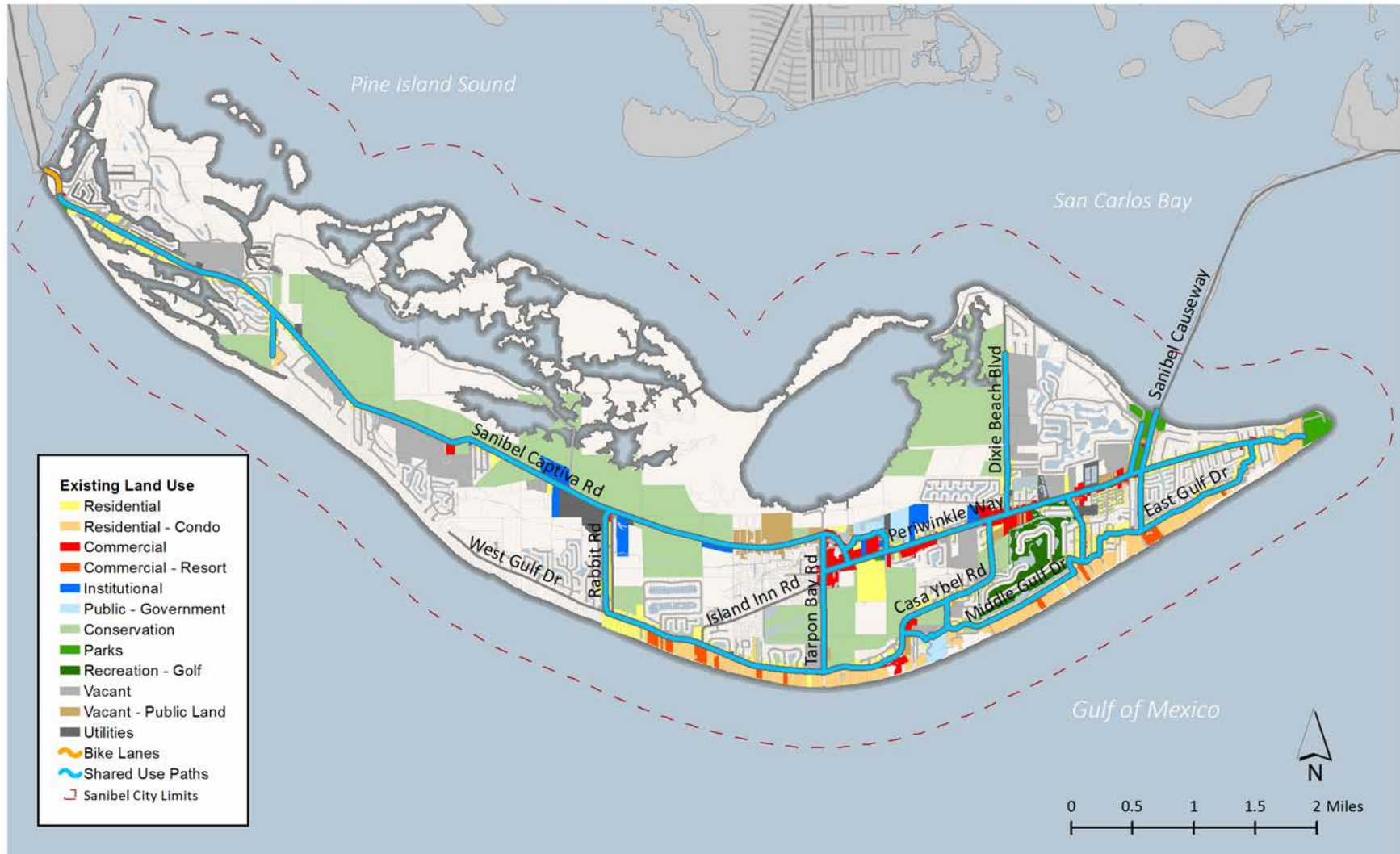


Figure 4-12: Existing Land Uses Adjacent to the Shared Use Path



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Shared Use Path Points of Interest

Sanibel's Heritage Trail

Sanibel's heritage is based upon the resourcefulness, persistence, hard work, and strong values of its people. The Sanibel Heritage Trail is a series of Path markers that provide information on many aspects of Sanibel's unique history and heritage. Figure 4-13 illustrates the location of the various Heritage Trail markers that provide information on the following:



Heritage Trail Pioneers Marker – Sanibel Cemetery

1. **Agriculture** – In the late 1860s, land was cleared and tilled for commercial farming. Flooding and cheaper shipping from the

mainland ended most farming on Sanibel in the 1920s. (There are two markers related to Agriculture – both shown as “1” on Figure 4-13).

2. **Architecture** – Clarence Rutland's home is characteristic of Sanibel architecture from the late 1800s through the next few decades. The Walker Guest House and St. Michael and All Angels Episcopal Church are notable architectural examples from later years. (There are two markers related to Architecture – both shown as “2” on Figure 4-13).
3. **Causeway** – Completion of the causeway in 1963 led to unprecedented population growth on Sanibel.
4. **Commerce** – Commercial farming thrived until major hurricanes and a new causeway transformed island trade. Sanibel commerce has since been driven by tourism and building construction.
5. **Community** – The Community House was built by island volunteers in the late 1920s. It hosts Sanibel's annual Shell Fair and island civic and social events.
6. **Conservation** – Named in honor of its principal advocate, the J. N. “Ding” Darling National Wildlife Refuge protects one of the country's largest mangrove ecosystems. The Sanibel-Captiva Conservation Foundation was organized after Darling's death to carry on his conservation work.
7. **Education** – The first tax-supported school was built in 1892. A segregated school for black children opened in 1927. In 1964, the current Sanibel School became the first in Lee County to be racially integrated.



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8. **Environment** – The Bailey-Matthews National Shell Museum presents extensive shell collections and addresses the many ways mollusks and their shells are important in nature and to mankind.
9. **Fishing** – By the 1920s, there were massive commercial catches off Sanibel. Visiting sport fisherman launched Sanibel’s hospitality industry.
10. **Governance** – In 1974, islanders voted to incorporate. As a new city, Sanibel adopted a land use plan that has become a landmark for conservation-oriented city planning.
11. **Hospitality** – For many years, beginning in the late 1890s, Sanibel’s hotels and boarding houses were destinations for visitors who sometimes would stay the whole winter.
12. **Navigation** – The Sanibel Lighthouse began operation in 1884 to warn ships of a sandbar that had damaged many vessels. In 1942, a detachment of Coast Guardsmen was stationed here to watch for enemy landings.
13. **Pioneers** – Early homesteaders are buried at the Sanibel Cemetery. These pioneers prevailed over hurricanes, mosquitoes, heat and humidity. The Gavin and Walker families were among Sanibel’s first people of color to settle.
14. **Preservation** – In 1982, the Rutland House was moved to City property and opened as Sanibel’s first historical museum.
15. **Racial Integration** – In 1962, St. Michael and All Angels Episcopal Church became the first church in the region to be racially integrated.
16. **Recreation** – Saturday night socials, shared meals, fishing, beach walks, shell collecting, and playing baseball were popular recreational pursuits for early settlers.

17. **Wildlife** – In 1968, Shirley Walters asked a veterinarian to help her treat an injured bird. The establishment of CROW, the Clinic for the Rehabilitation of Wildlife, soon followed. Sanibel Island is home to a wide variety of wildlife, including the American Alligator, West Indian Manatee, Bottlenose Dolphin, Gopher Tortoise, and nearly 300 bird species.
18. **Worship** – In 1917, the Sanibel Community Church was built by island volunteers. Organized as an independent congregation, it serviced as a center of island get-togethers.

Other Points of Interest

In addition to providing connections between the various land uses on the island, Sanibel’s Shared Use Path system intersects with most of the city’s major attractions, landmarks, conservation areas, and destinations. Figure 4-14 shows the relationship between the Shared Use Path system and the island’s institutional points of interest, which includes locations such as the Chamber of Commerce, the Sanibel School, City Hall, the Community House, and the Post Office. Figure 4-15 shows the relationship between the Paths and the City’s historical destinations, including the Historical Museum and Village, the Sanibel Cemetery, Bailey House, and the Sanibel Lighthouse. Figure 4-16 illustrates the connection between the Paths and the city’s recreational destinations, including public beach access points, community parks, the Sanibel Recreation Center, and the Ding Darling National Wildlife Refuge.



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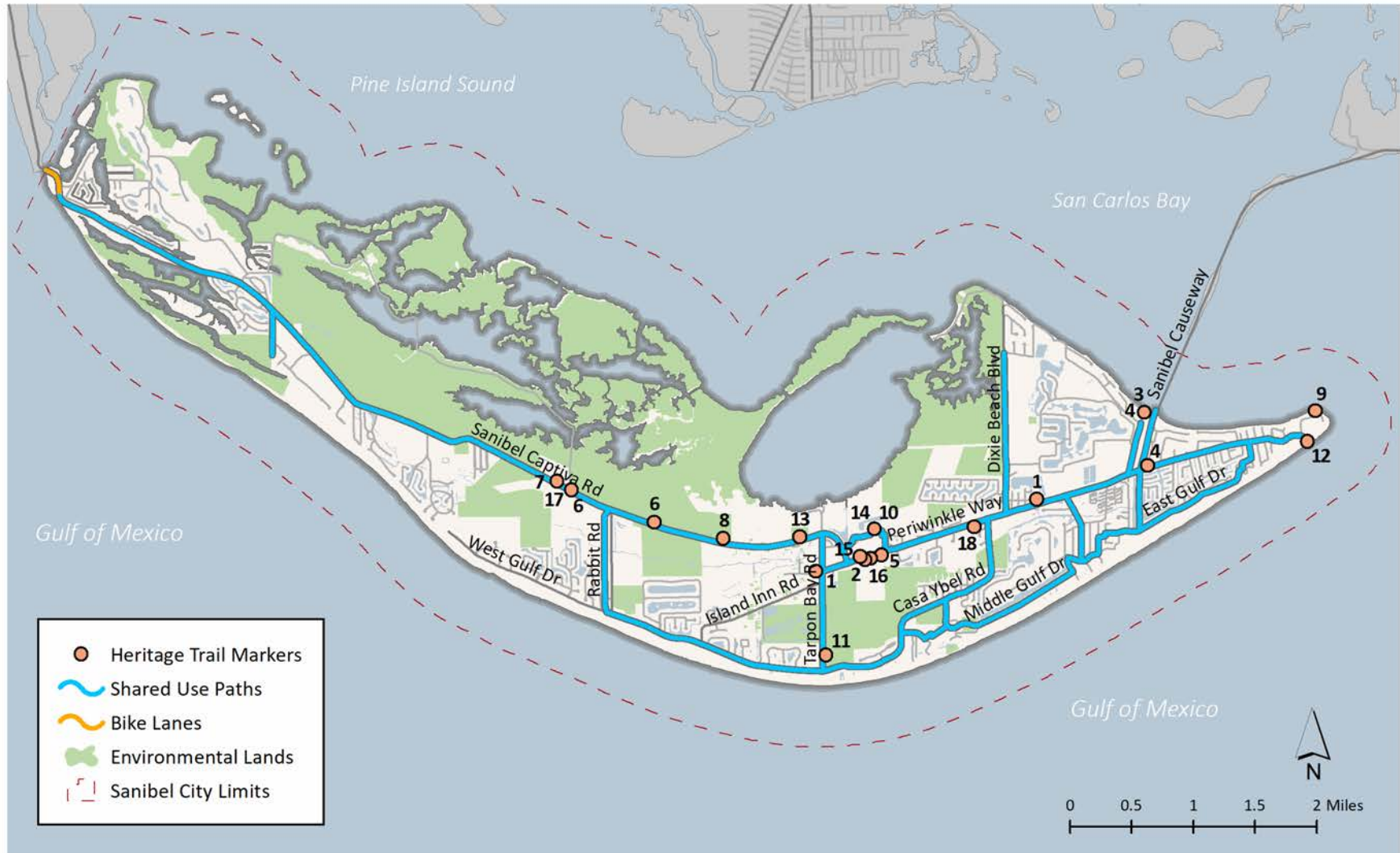
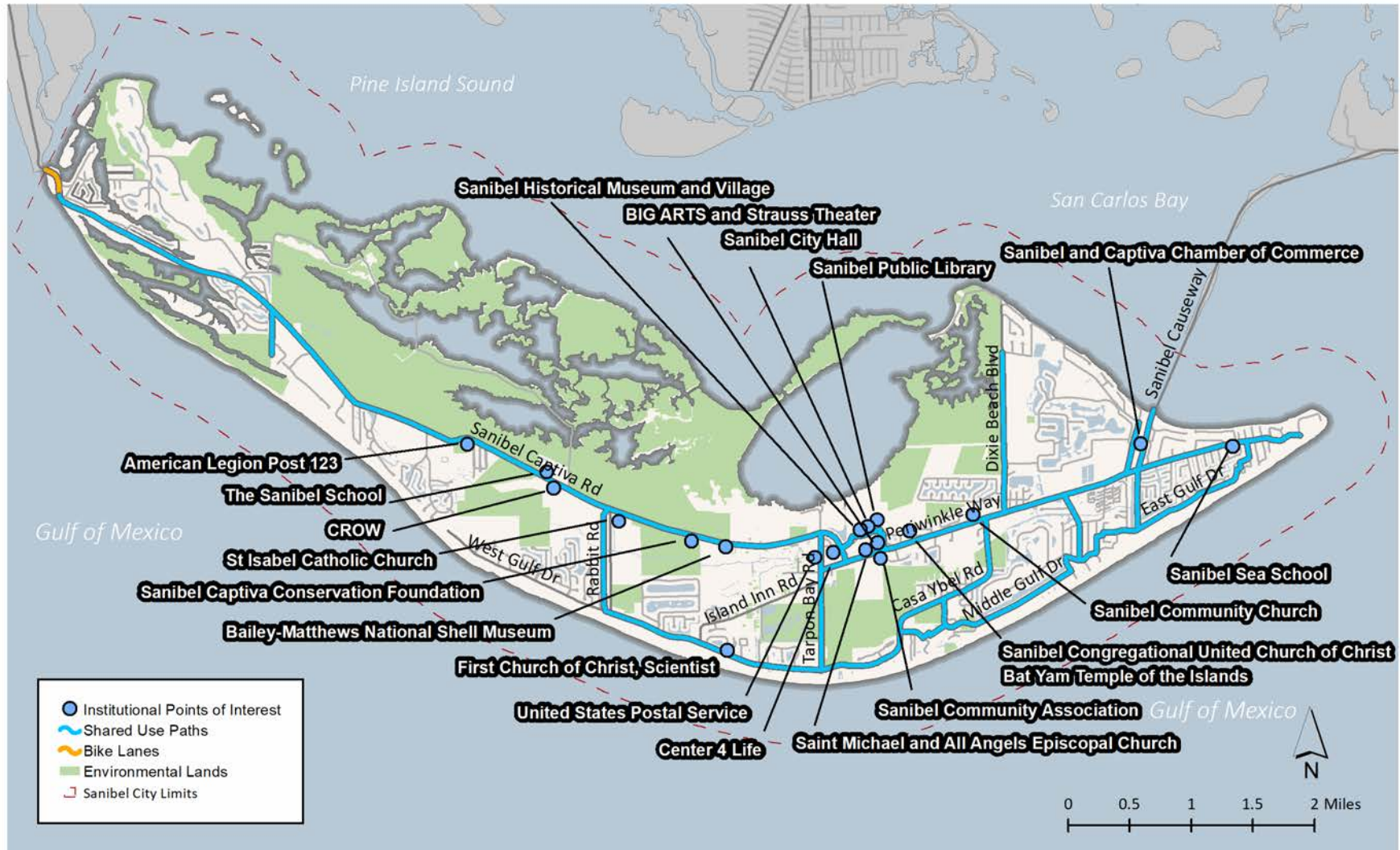


Figure 4-13: Shared Use Path Heritage Trail Points of Interest



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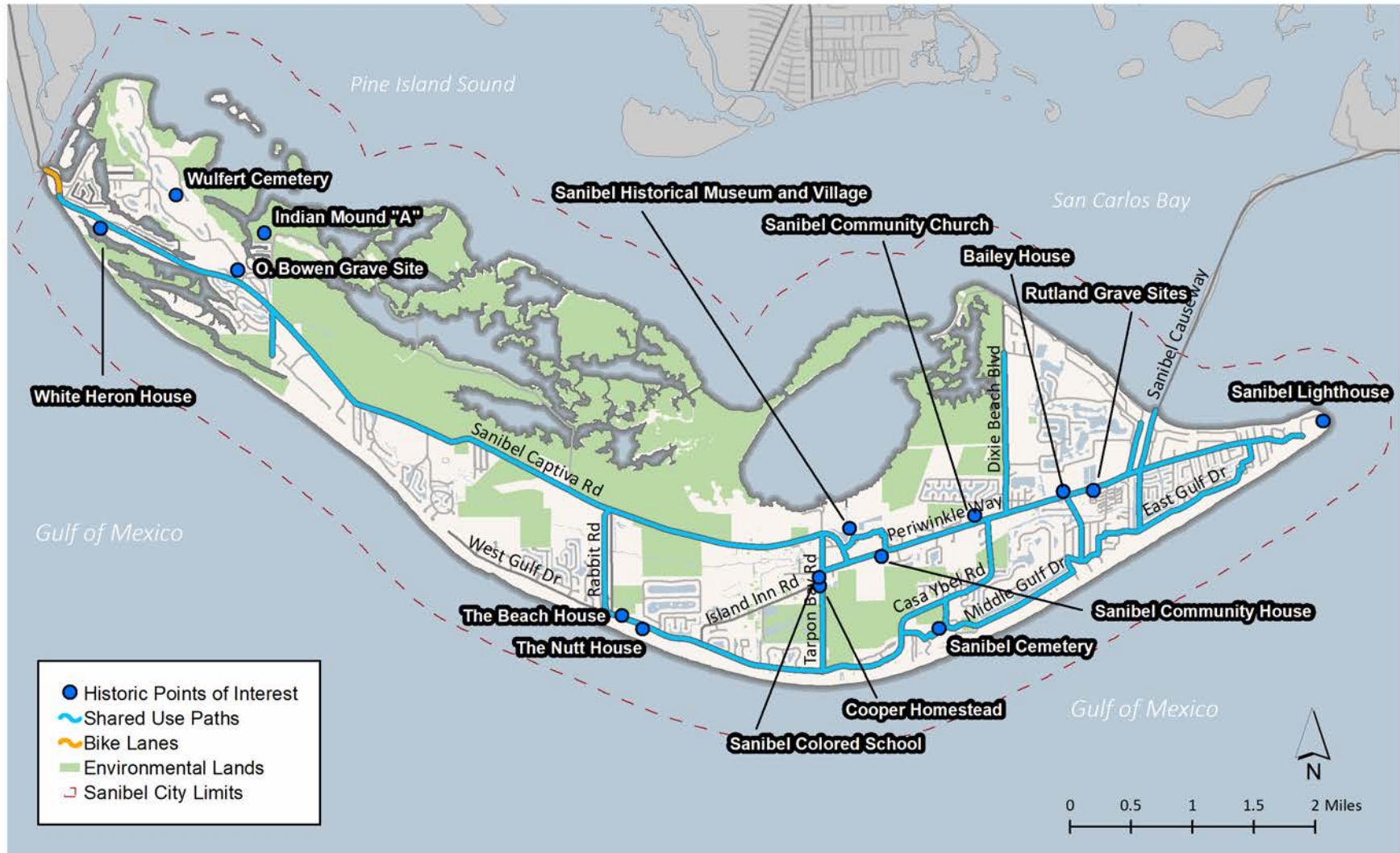


* As a result of damage caused by Hurricane Ian, the First Church of Christ, Scientist and the Center 4 Life buildings have been demolished.

Figure 4-14: Shared Use Path Points of Interest – Institutional



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* As a result of damage caused by Hurricane Ian, the Nutt House has been demolished.

Figure 4-15: Shared Use Path Points of Interest – Historical Sites and Structures



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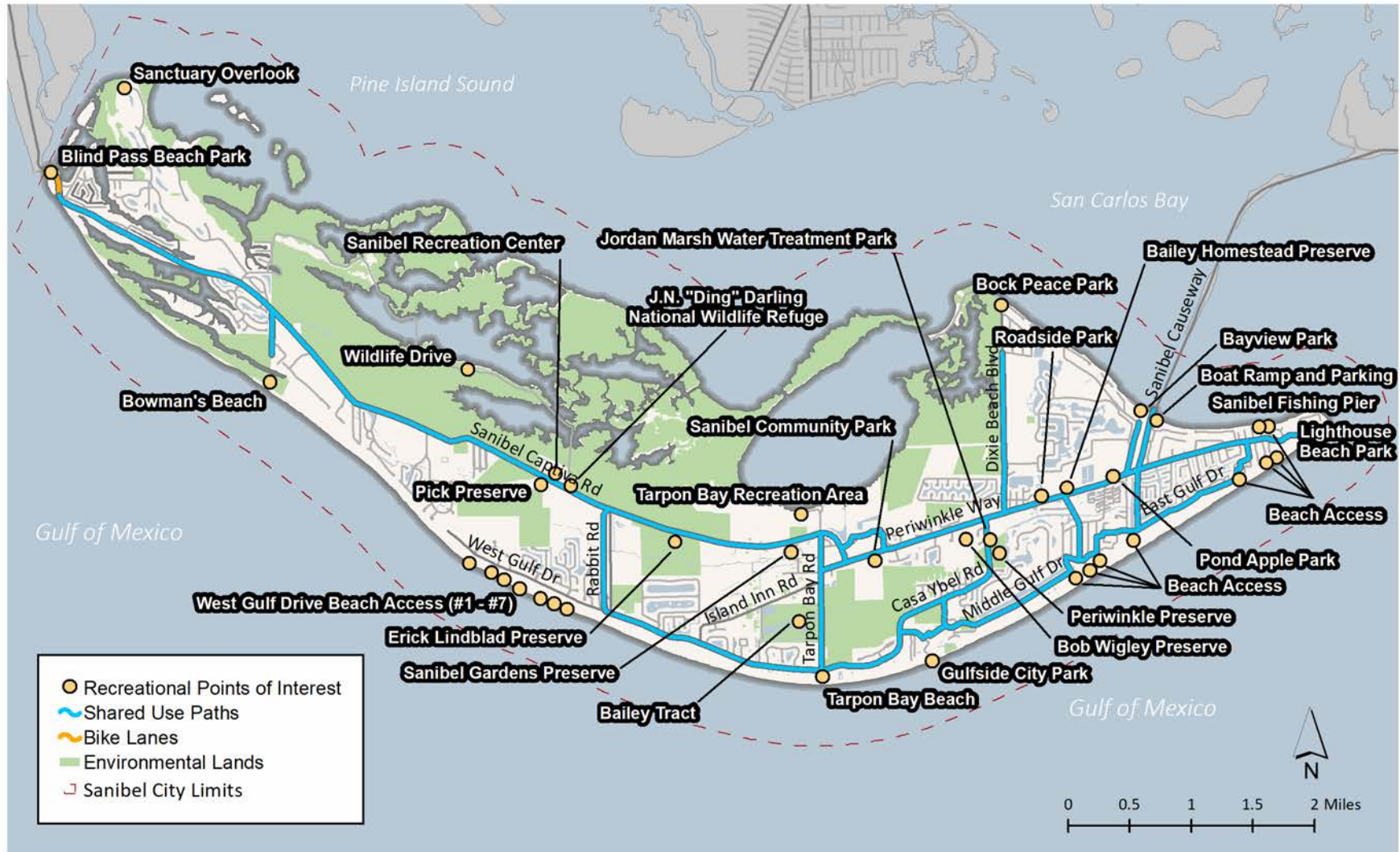


Figure 4-16: Shared Use Path Points of Interest – Recreational



Shared Use Path Safety

The first goal of the Shared Use Path Master Plan states, “The safety of Sanibel’s Shared Use Path system and its users shall be of the highest priority.” As the popularity of the Path system continues to grow, ensuring that its users are safe is an increasingly important issue. Evaluation of pedestrian and bicycle crash data and reported incidents along the Shared Use Path system can help identify areas that may need additional attention to ensure that users are able to safely enjoy the Path system.

Pedestrian and Bicycle Crash History

A five-year history of crashes involving pedestrians or bicyclists throughout Sanibel was obtained and mapped. Between 2013 and 2017, there were 39 reported pedestrian and bicycle crashes on Sanibel. Table 4-3 lists the number of crashes by crash severity, and Figure 4-17 shows the locations and frequency of pedestrian and bicycle crashes. Crashes that occurred within 200 feet of each other were grouped (clustered) to highlight areas with more frequent crash occurrences. Largely, pedestrian and bicycle crashes are concentrated along the Periwinkle Way corridor between Tarpon Bay Road and Lindgren Boulevard. The intersections of Periwinkle Way at Tarpon Bay Road and Periwinkle Way at Bailey Road have experienced the largest clustering of pedestrian and bicycle crashes.

Table 4-3: Sanibel Pedestrian and Bicycle Crashes by Severity, 2013–2017

Crash Severity	Crashes
Fatal	0
Incapacitating Injury	4
Non-Incapacitating Injury	15
Possible Injury	8
Property Damage Only	12
Total	39

Data Source: Signal Four Analytics

Shared Use Path Incidents

In addition to evaluating the location and frequency of pedestrian and bicycle crashes throughout Sanibel, a review of incident reports involving user of the Shared Use Path system (compiled by the Sanibel Police Department) was conducted. These incident reports include multi- and single vehicle crashes, as well as non-collision events, such as users falling off their bicycles. The reported incidents from 2017 and 2018 were mapped and evaluated to help identify areas along the Path that may require additional attention to ensure user safety along the Path. Figure 4-18 shows location and frequency of all reported incidents from 2017 and 2018, including pedestrian and bicycle crashes. Incidents that occurred within 100 feet of each other were grouped or clustered to help highlight areas with higher frequency of incidents. Similar to crash data, many reported incidents occurred along the Periwinkle Way corridor between Tarpon Bay Road and Lindgren Boulevard. Figures 4-19 through 4-21 show the location of various incident types including, fall-off-bike incidents, bike-vehicle incidents, and bike-bike incidents.



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Figure 4-17: Pedestrian and Bicycle Crashes (2013–2017)



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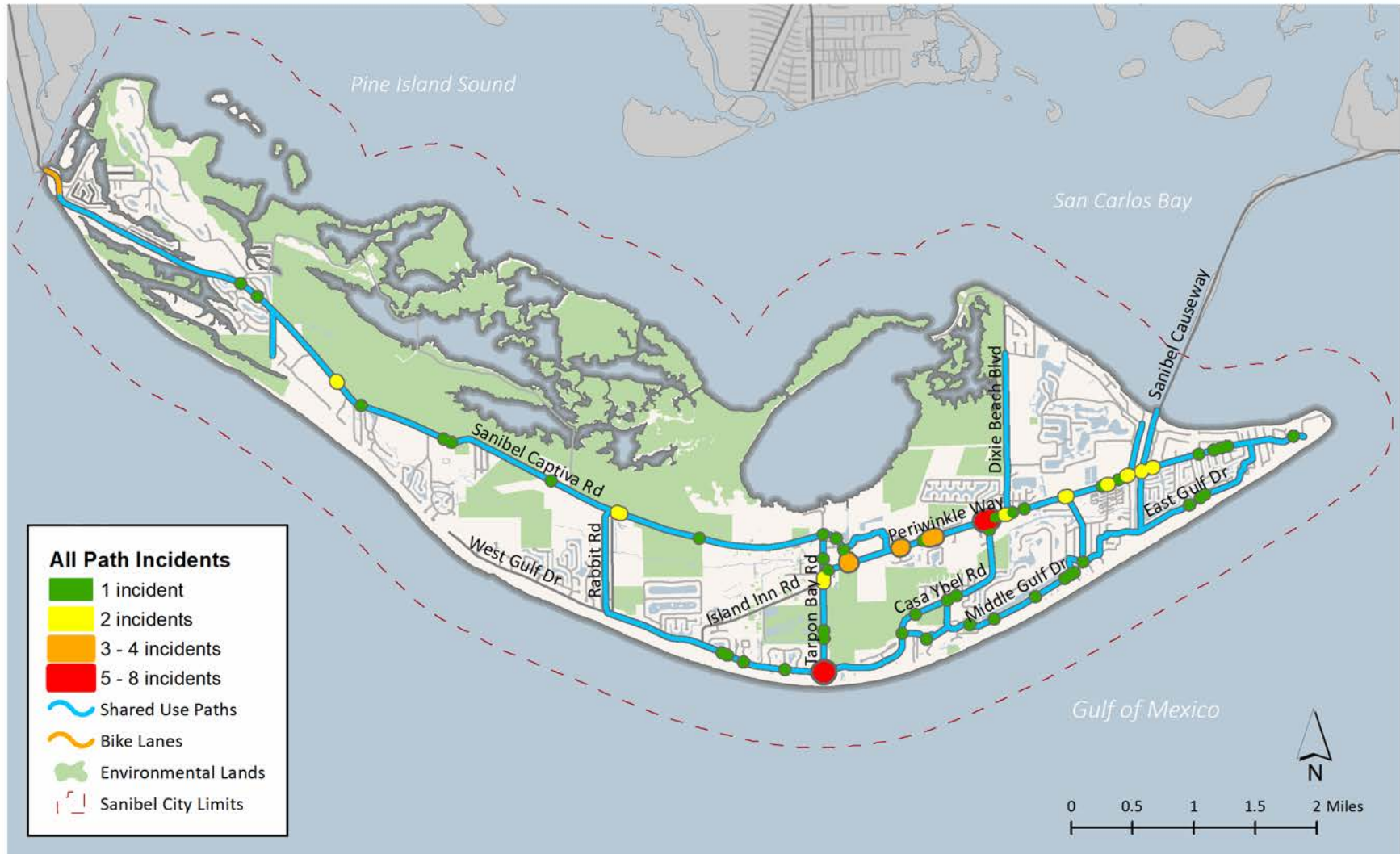


Figure 4-18: Reported Shared Use Path Incidents, Total (2017–2018)



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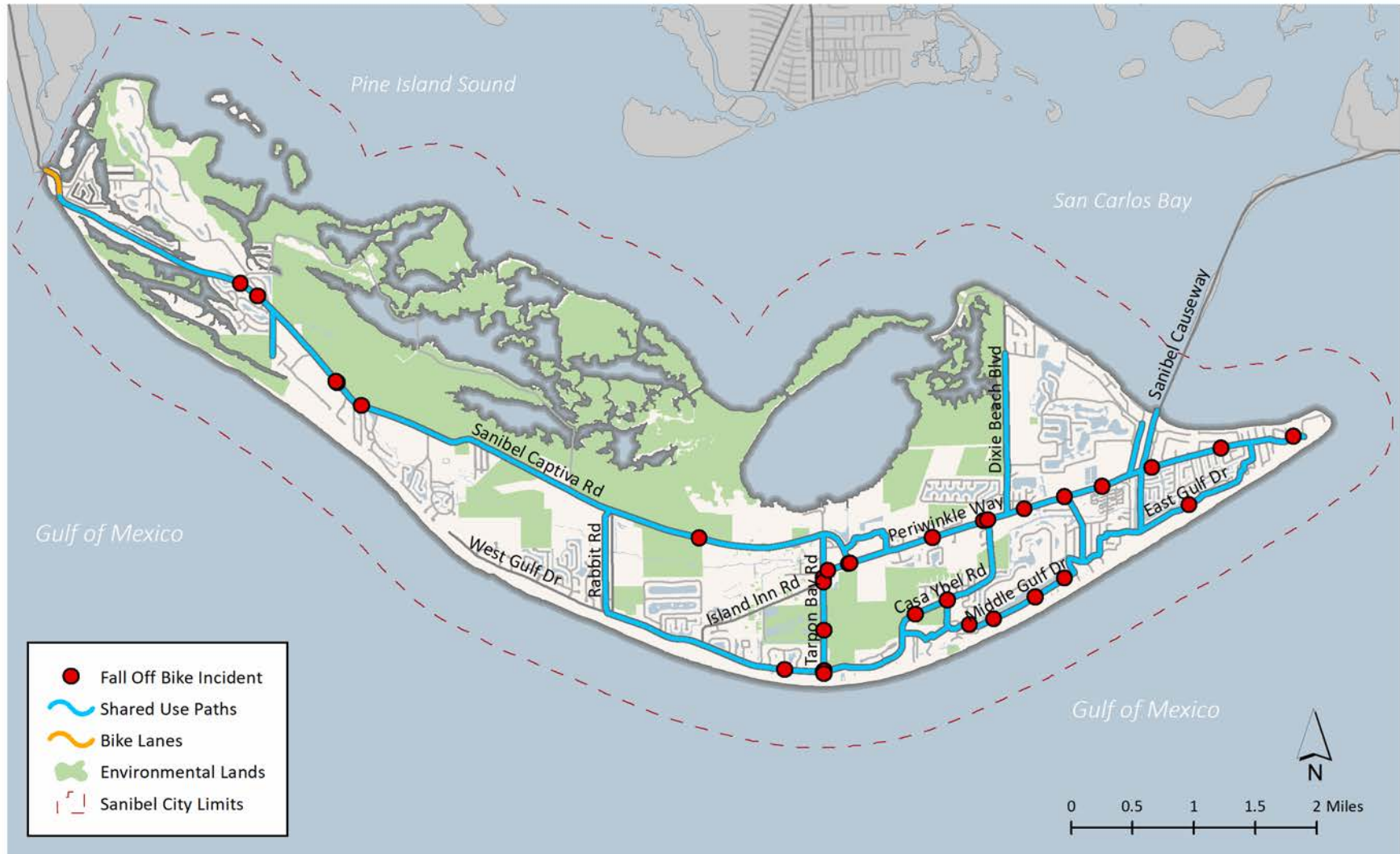


Figure 4-19: Reported Shared Use Path Incidents, Fall Off Bike (2017–2018)



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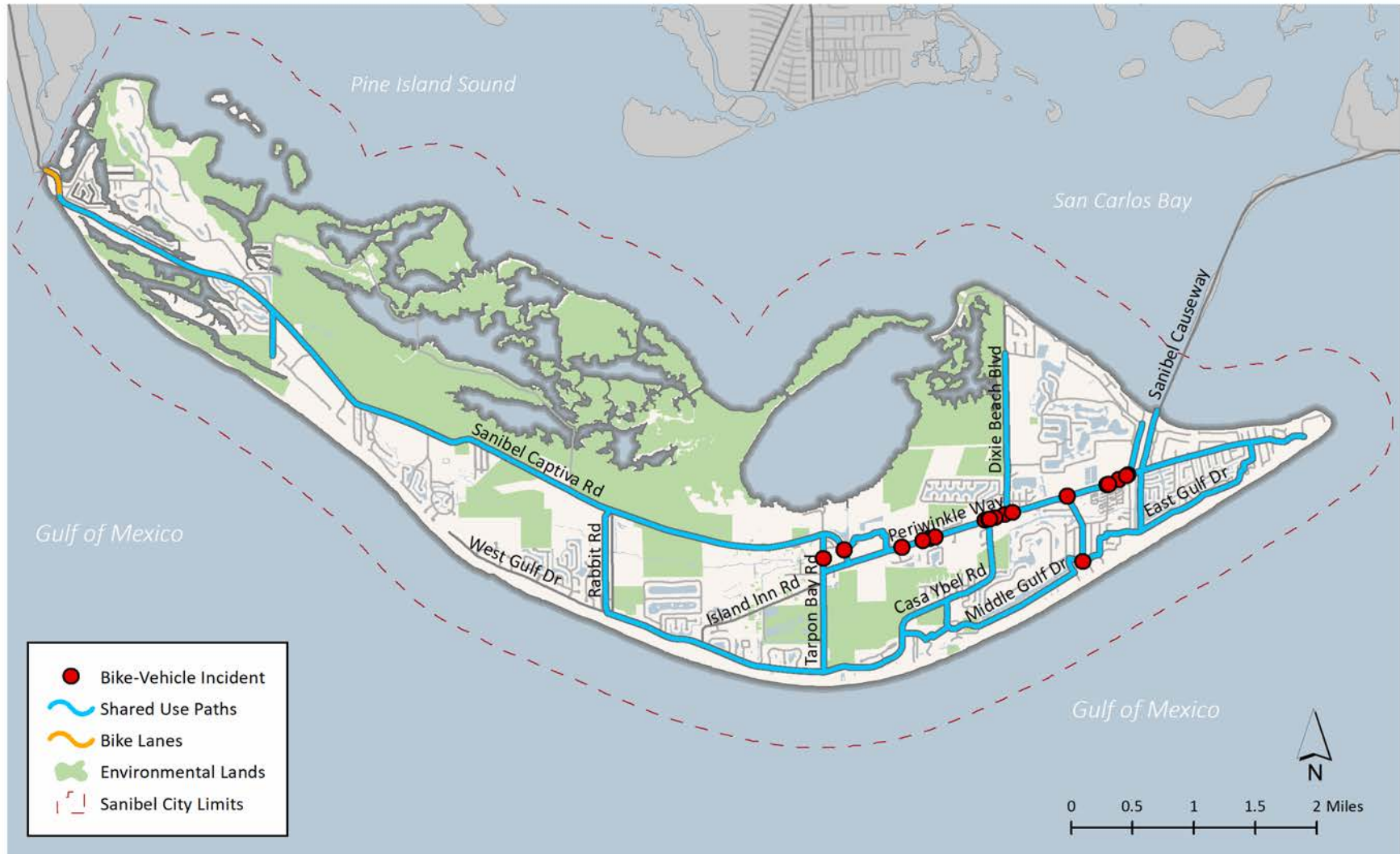


Figure 4-20: Reported Shared Use Path Incidents, Bike vs. Vehicle (2017–2018)



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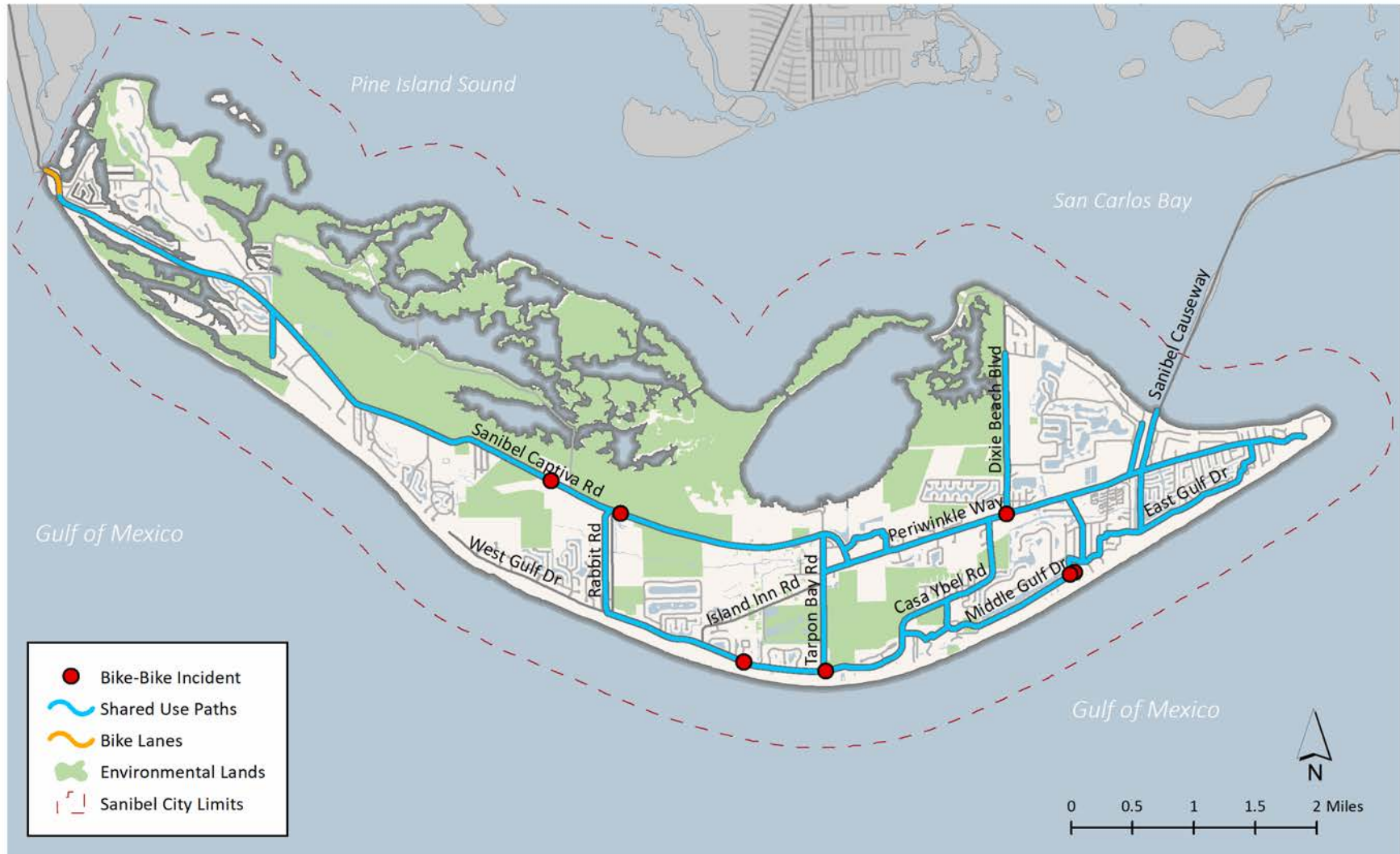


Figure 4-21: Reported Shared Use Path Incidents, Bike vs. Bike (2017–2018)



Shared Use Path Users and Usage

The Shared Use Paths are used by a large and diverse group of users. Understanding the number and diversity of users along the Paths helps with assessing demand along the Paths and in the development of strategies to improve the user experience along the Shared Use Path system.

The 2009 Shared Use Path Master Plan developed a list that documented the range of Shared Use Path users on Sanibel and included various types of bicyclists, pedestrians, other non-motorized users, and limited motorized users. A more recent addition to the various user types is electric motor assisted bicycles and scooters (e-bikes and e-scooters). Field observations were conducted to gauge the diversity of user types along the Paths. The following is an overview of the various observed user types:

- Bicyclists
 - Recreational (slow-moving) bicyclists
 - Recreational (speed) bicyclists
 - Groups leisurely traveling together, often side by side
 - Novice and first-time bicyclists
 - Children on tricycles or two wheelers with training wheels
 - Children on two-wheel bikes
 - Bicyclists carrying children in bicycle seats
 - Bicyclists pulling children in bike trailers
 - Recumbent bicyclists
 - Adults on three-wheel bikes (tricycles)
 - Tandem bicycles
 - Bicyclists with cargo, e.g., groceries and beach supplies
 - Bicyclists with restricted hearing, e.g., headphones and mounted speakers on bikes
- Pedestrians
 - Single walkers
 - Groups of walkers, often side-by-side

- Joggers
- Pedestrians pushing strollers
- Dog walkers with one or multiple dogs on leashes
- People using wheelchairs
- Walkers and joggers with headphones or other restricted hearing devices
- Walkers using mobile devices
- Other Non-Motorized Users
 - Surreys
 - In-line skaters
 - Skateboarders
 - Kick (human-powered) scooters
- Limited Motorized Users
 - Motorized wheelchairs or similar mobility device
 - Segways (as part of guided tours)
 - Electric motor-assisted bicycles (E-bikes)
 - Electric motor-assisted scooters (E-scooters)

In addition to observing the various types of Path users, Path user counts were collected at two intersections, Periwinkle Way at Casa Ybel Road and Tarpon Bay Road at West Gulf Drive. These user counts were completed to assess traffic along the Shared Use Path and to supplement the more comprehensive Path counts that were completed in 2012. Table 4-4 is a summary of the 2019 Path user counts, and Table 4-5 is a summary of the 2012 Path user counts.



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Table 4-4: Shared Use Path User Counts, 2019

Intersection	Bicycles	Pedestrians	Other	Total
Periwinkle Way at Casa Ybel Rd	1,358	74	26	1,458
West Gulf Dr at Tarpon Bay Rd	392	423	14	829

Counts represent combined data from counts collected over a two-day period on Tuesday, 3/29/19, and Saturday, 4/13/19; for both days, Periwinkle Way at Casa Ybel Road was counted between 10:00 a.m. and 12:00 p.m. and West Gulf Drive at Tarpon Bay Road was counted between 1:00 p.m. and 3:00 p.m.

Table 4-5: Shared Use Path User Counts, 2012

Intersection	Bicycles	Pedestrians	Total
Sanibel Captiva Rd at Rabbit Rd	616	28	644
Sanibel Captiva Rd at Tarpon Bay Rd	509	10	519
West Gulf Dr at Tarpon Bay Rd	886	818	1,704
Periwinkle Way at Casa Ybel Rd	806	115	921
Middle Gulf Dr at Donax St	754	175	929
Periwinkle Way at East Gulf Dr	935	195	1,200

Counts represent combined data from counts collected over a two-day period on a Thursday from 12:30 p.m. to 4:30 p.m. and a Saturday from 8:00 a.m. to 12:00 p.m.



Periwinkle Way at Casa Ybel Road, Tuesday 3/26/19

SECTION 5 PUBLIC INVOLVEMENT





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Public Involvement

Public involvement is a critical component of the planning process and the long-term success of the Shared Use Path Master Plan. The Plan update included a variety of involvement and engagement activities that provided Sanibel's residents and visitors with the opportunity to shape the future of Sanibel's Shared Use Paths. The input, ideas, and discussions held through the public involvement process guided the development of this Plan. The following is a summary of the public involvement activities that occurred during the 2019 Master Plan update.

Project Advisory Committee

At the onset of the Master Plan update, a Project Advisory Committee (PAC) was formed to represent the diverse needs and interests of the community, provide input, and guide the Master Plan update to completion. Members of the PAC included:

- Chief William Dalton, Sanibel Police Department
- Sally Kirkland, Lee County MPO Bicycle Pedestrian Coordinating Committee (BPCC)
- Tom Sharbaugh, Sanibel Bike Club
- Evelyn Stewart, Sanibel & Captiva Islands Chamber of Commerce
- Ty Symroski, MPO Citizens Advisory Committee (CAC)
- Mark Thompson, Citizen and Bicycle Commuter
- Keith Williams, Sanibel Director of Community Services and City Engineer

The PAC met three times during the Master Plan update, providing valuable feedback on existing conditions and challenges, public engagement, visioning, recommendations, and implementation strategies. Its participation was vital to the development and completion of the Shared Use Path Master Plan update. Materials from the three PAC meetings are included in Appendix B.



Project Advisory Committee Meeting, January 2019

Public Meetings

Public meetings are an integral component of the public involvement process. Two public open house meetings held at the Sanibel Recreation Center gymnasium from 10:00 am to 6:00 pm were designed to inform the public on the progress of the Plan update and provide participants an opportunity to provide input.

The first open house meeting held on Tuesday, February 19, 2019, was oriented towards informing the public about the Master Plan Update and on gaining insight from the public regarding concerns and potential



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opportunities to improve the Path system. The meeting was attended by 125 people, generating a variety of constructive ideas and informative comments. Participants suggested several opportunities for Path extension and improvements and were helpful in identifying current challenges along the Shared Use Path system. Suggested extensions to the Shared Use Path system identified by the meeting attendees were facilitated through an interactive mapping exercise. The proposed extensions were reviewed by city staff and the project advisory committee in order to conduct a preliminary feasibility assessment.

The second open house meeting was held on Monday, April 22, 2019, and focused on identifying and affirming the opportunities identified in the Master Plan. The project team interacted with nearly 100 people at the event and received verbal and written comments related to the presented materials.

A summary of both open house events, including received comments, is included in Appendix B of this Plan update.



Open House event, February 19, 2019



Open House event, March 22, 2019

Pop-Up Events

Whereas traditional public meetings can foster open dialog and generate meaningful input, attendees at these meetings typically represent a small portion of the larger community. To reach a wider audience and generate interest in planning efforts, the project team conducted several “pop-up” meetings at community events to help promote and publicize the Master Plan update. The locations and events that were selected for the pop-up events were strategically selected in order to attract a large share of bicycle and pedestrian activity.

- Saturday, February 16, 2019 – Path Intercept Event, locations:
 - Periwinkle Way at Casa Ybel Road
 - Periwinkle Way at Tarpon Bay Road
 - West Gulf Drive at Tarpon Bay Road
 - Periwinkle Way at East Gulf Drive
 - Middle Gulf Drive at Fulgur Street
 - Sanibel Captiva Road at Rabbit Road



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- Sanibel Captiva Road at Bowman's Beach Road
- Sanibel Captiva Road at Pine Avenue
- Sunday, February 17, 2019 – Rotary Club Arts and Crafts Festival
- Sunday, February 24, 2019 – Sanibel Sunday Farmers' Market
- Sunday, March 3, 2019 – Sanibel Sunday Farmers' Market
- Saturday, March 16, 2019 – Lions Club Arts and Crafts Festival

The goal of these events was to engage with a wide variety of people, inform them of the Plan update, provide them with information materials, and encourage them to participate in the online survey through either tablets, paper surveys onsite, or at their own convenience at home through the project website. Generally, the project team received positive input from participants and were able to engage in several informative conversations related to experiences along the Shared Use Path system.



Outreach pop-up event



Community engagement at an outreach pop-up event



Taking surveys at an outreach pop-up event

Project Website

A project website (www.sanibelbikeped.com) and email account were created at the beginning of the Plan update process as methods for communicating status on the Plan update and for public outreach and engagement opportunities. The website was updated periodically with project-related materials, meeting summaries, and announcements on public engagement opportunities. Along with the email address, the website also provided an opportunity to submit comments and provide general in



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put related to the Shared Use Paths and the Master Plan Update. Records of the comments submitted through the project website are included in Appendix D.



Front page of www.sanibelbikeped.com

Print Materials

Although more and more people rely on the Internet and digital content to access news and information, being able to reach people and provide information through print materials helped the project team reach the widest possible audience. Informational brochures and project information cards were developed and distributed at all engagement meetings, provided to local businesses, and handed out at community and neighborhood meetings to create awareness and encourage participation in the Master Plan Update process. Appendix C provides a copy of the project brochure and other print materials that were distributed and made available throughout the Plan update.



Informational brochures and public engagement materials

Online Mapping Tool

An online interactive map was developed as a tool to provide users of the Shared Use Path an opportunity to identify location specific issues, express areas of concern, and to share their ideas for improving the Paths. Accessed via the project website, the interactive map enabled users to pin their comments to a precise location of the Shared Use Path system. Another interactive feature allowed users to comment on other user comments, facilitating additional input. The tool was made available for comment for 14 weeks; within this time, 103 unique points and comments were placed on the map, with 58 additional comments made from other users providing additional comment on the created points.

Comments on the interactive map ranged from the extent of the Shared Use Path network to maintenance and signage along the Path. Respondents identified specific locations where they wanted wider paths, where they



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would like the Path extended and locations where crossings are difficult or feel unsafe. The interactive map allowed respondents to place points of concern on the map and provide input and comments related to specific locations. A significant cluster of points was noted along Periwinkle Way and included comments about visibility at intersections and problem locations along the Path. See Appendix E for details. Several comments noted that signage at intersections and crosswalks could be improved. A variety of comments expressed a desire for wayfinding signage for all paths on the island, including informal paths, park paths and trails in the wildlife refuge. Appendix E contains a record of each comment submitted through the online mapping tool along with detailed maps of the submitted map points.

Online Survey

Online surveys provide residents and visitors with a quick, accessible platform to provide input and ideas related to the Shared Use Path system. An online survey was developed for the Master Plan update and was made available for 11 weeks (February 11 through April 30, 2019); during this time, 2,745 surveys were completed.

The survey asked respondents about how they use the current Path system, their perceptions of current conditions, ideas for improvements, and demographic information on age and place of residence. The following pages provide a summary of the online survey results; a complete copy of the survey questions and results is included in Appendix F.

Path Significance & Usage

When asked about the importance of Sanibel's Shared Use Paths to the quality of life on Sanibel, an overwhelming majority (96.6%) of respondents answered "Very Important" or "Important," with less than 1% responding "Not Very Important" (Figure 5-1).

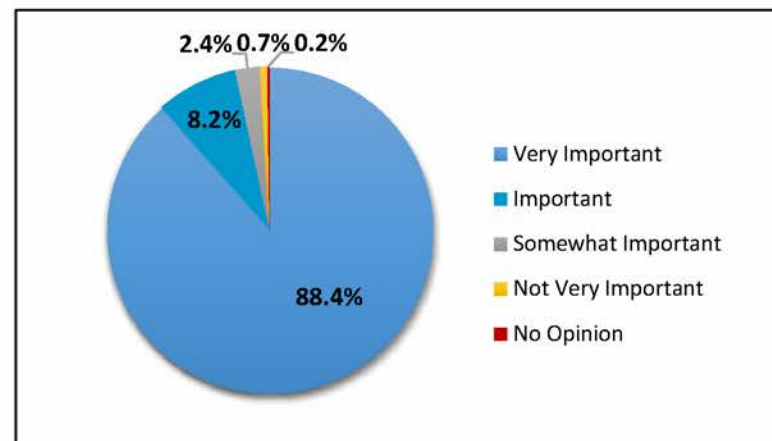


Figure 5-1: How important are Sanibel's Shared Use Paths to the quality of life on Sanibel?

The survey asked respondents to describe the Shared Use Paths in three words or less. The most common words are shown in Table 5-1.

Table 5-1: "In three words or less, what is your general impression of Sanibel's Shared Use Paths?"

Crowded	328
Well-maintained	259
Safe	250
Great	243
Good	219
Convenient	212
Narrow	178
Dangerous	172
Fun	151
Busy	149
Useful	143
Wonderful	102
Excellent	101



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When asked if they have ever used the Shared Use Path, 98.9% of respondents answered “Yes” (Figure 5-2); respondents who answered “No” were asked if there was a reason that they did not use one of the Paths and what would encourage them to use the Paths. Of the 24 respondents who answered “No”, some reported that they did not use the Paths because they did not live or recreate in Sanibel; others reported that they did not feel safe due to the driveway crossings along the Path and the speed and number of cyclists using the Path. Safety concerns, such as these, were important considerations when design considerations for the Shared Use Path system were developed. Widening the Path and creating designated sections for walking on the Paths were noted as ways to encourage their use of the Paths.

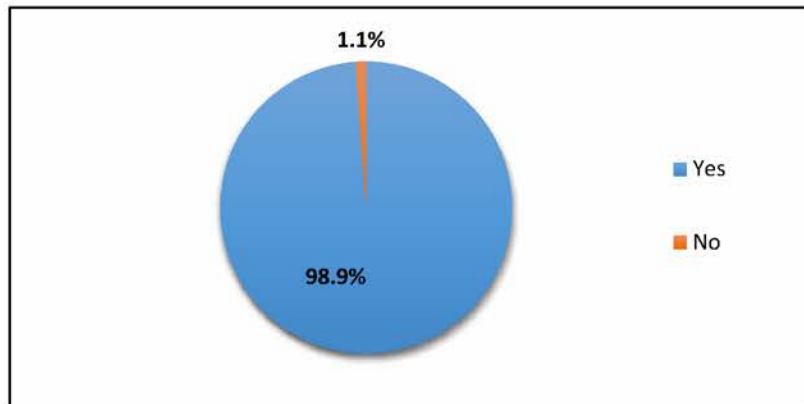


Figure 5-2: Have you ever used Sanibel's Shared Use Path?

For respondents who have used Sanibel's Shared Use Paths, 70.4% indicated that they accessed the Path via a bike. Respondents that selected “Other” indicated that their home or vacation rentals were directly adjacent to the Path or that they walked and bike to access the Path. Figure 5-3 shows the results of the question asking how users typically get to the Path.

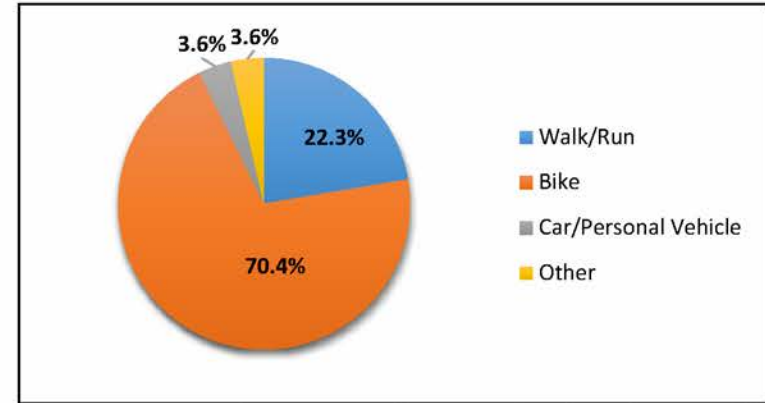


Figure 5-3: How do you typically get to the Shared Use Path?

Survey respondents were asked where they park to access the Shared Use Path (Figure 5-4); the majority selected the response “Private Lot/Residence.” Responses to “Other” included parking at bike rental facilities, community facilities (library, recreation center, public park), and home or rental property.

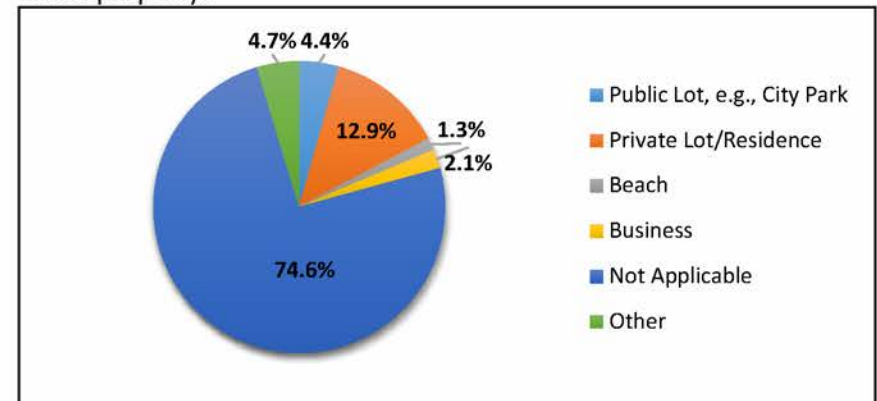


Figure 5-4: If you typically get to the Shared Use Path by car/personal vehicle, where do you typically park?



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Among respondents who used the Shared Use Path, 74.8% selected biking as the most popular way to use the Path (Figure 5-5). A majority (84.7%) of bicyclists on the Path use self-owned bikes. Less than 10% indicated that they used rented bikes. Figure 5-6 shows results for the question about the types of bikes people used on the Path.

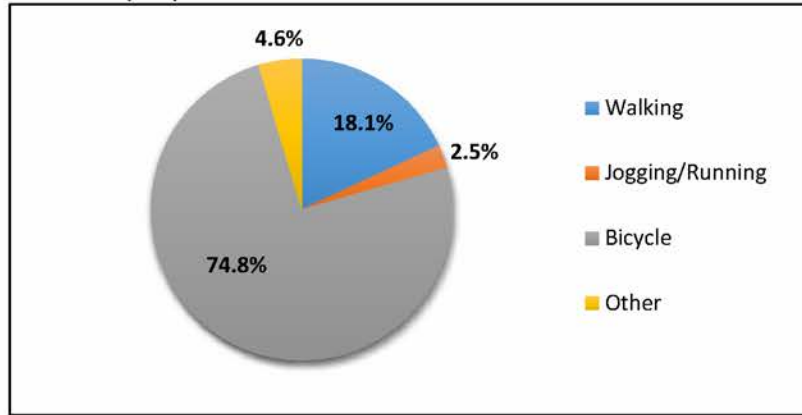


Figure 5-5: How do you typically travel along the Sanibel Shared Use Path?

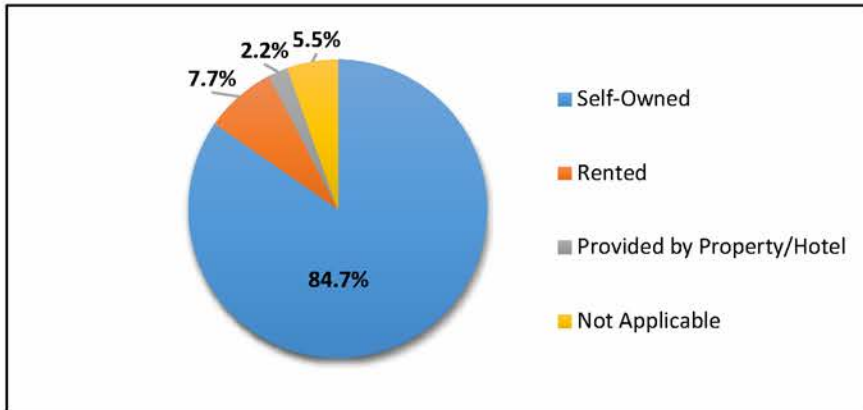


Figure 5-6: If you ride a bicycle on the Shared Use Path, what type of bicycle do you ride?

Trip Characteristics & Travel Patterns

The most commonly reported purposes for trips were “Exercise/ Fitness” and “Leisure/ Recreation.” Other purposes that were frequently selected were “Shopping/Errands” and “To Avoid Traffic,” as shown in Figure 5-7. “Commuting to Work” and “Travel To/From School” were the least commonly reported, making up less than 5% of the selection. Respondents who chose “Other” answered that the purposes of their trips included traveling to social events, enjoying nature, and dog walking.

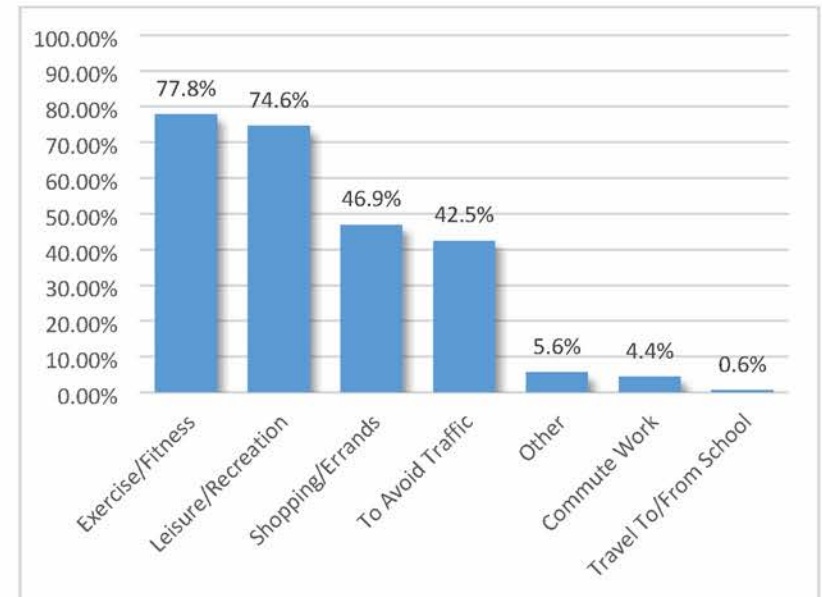


Figure 5-7: When using Sanibel's Shared Use Path, what is the typical purpose of your trip? Please select all that apply.

Respondents reported using the Path frequently, with 76.4% of the respondents answering that they use the path “Daily” or “Several Times a Week” (Figure 5-8).



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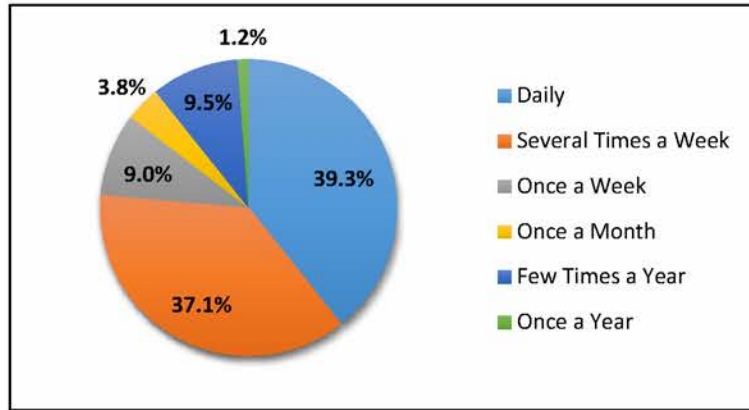


Figure 5-8: How often do you use the Sanibel Shared Use Path?

Figure 5-9 shows that short to mid-length trips make up the majority of user trips, with 29.1% of respondents traveling 1–3 miles and 37.5% of respondents traveling 3–7 miles per trip.

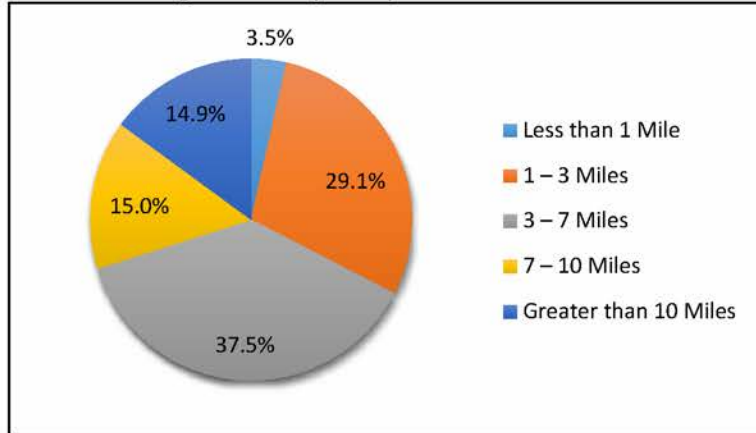


Figure 5-9: How far do you typically travel (per trip) when using Sanibel's Shared Use Path?

Path Experience & Satisfaction

When asked about overall experience of the Shared Use Path, there was reasonable satisfaction with the Path, with 56.5% of respondents answering, “Very Satisfied” and 32.1% “Somewhat Satisfied” with their experience (Figure 5-10). Congestion in season, users not following Path rules, and conflict between the speed of bikers and walkers were listed as explanations by the 7.1% of respondents who answered “Dissatisfied.”

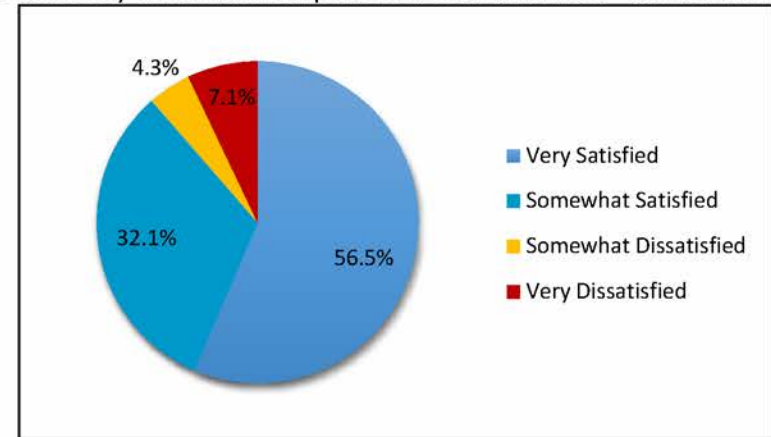


Figure 5-10: How would you rate your overall experience along Sanibel's Shared Use Path?

Overall satisfaction with the amenities was high, with 92.5% of respondents answering, “Very Satisfied” or “Somewhat Satisfied,” as shown in Figure 5-11. Of the 3.7% of respondents who answered “Dissatisfied,” more amenities such as restrooms, benches, and water fountains were listed as explanations for their dissatisfaction.



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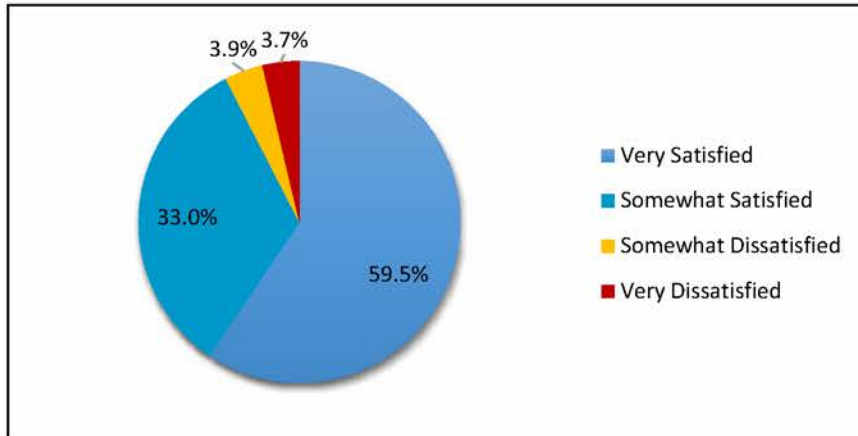


Figure 5-11: How would you rate your satisfaction with amenities, including benches, water fountains, shelters, and bathrooms, along the Sanibel Shared Use Path?

Overall satisfaction with signage/wayfinding along the Shared Use Path was also high, with 87.9% of respondents answering, “Very Satisfied” or “Somewhat Satisfied” (Figure 5-12). The main reason listed by the respondents who selected “Dissatisfied” (3.7%) was the lack of consistent safety, directional, and educational signage. Specific areas identified by respondents for more signage included Path and roadway intersections and wayfinding at Rabbit Road.

The survey asked respondents to rate their comfort using the Shared Use Path. Figure 5-13 shows that the majority of respondents rated their comfort as “Very Comfortable” (46%) or “Somewhat Comfortable” (37.2%).

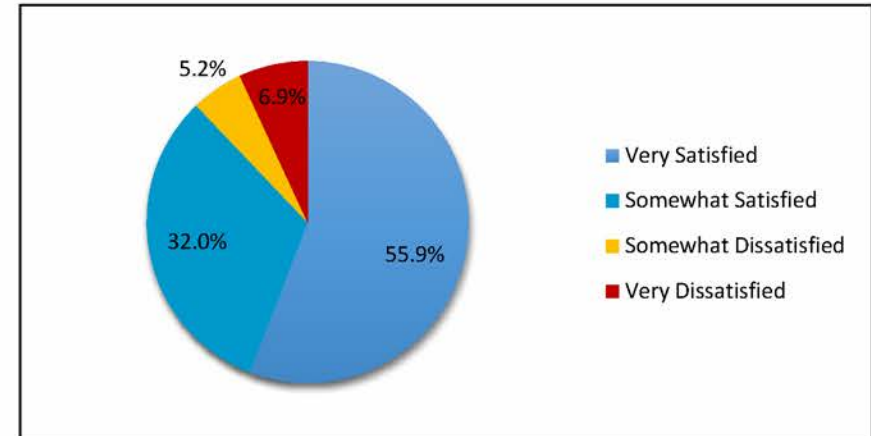


Figure 5-12: How would you rate your satisfaction with the signage/wayfinding along Sanibel's Shared Use Path?

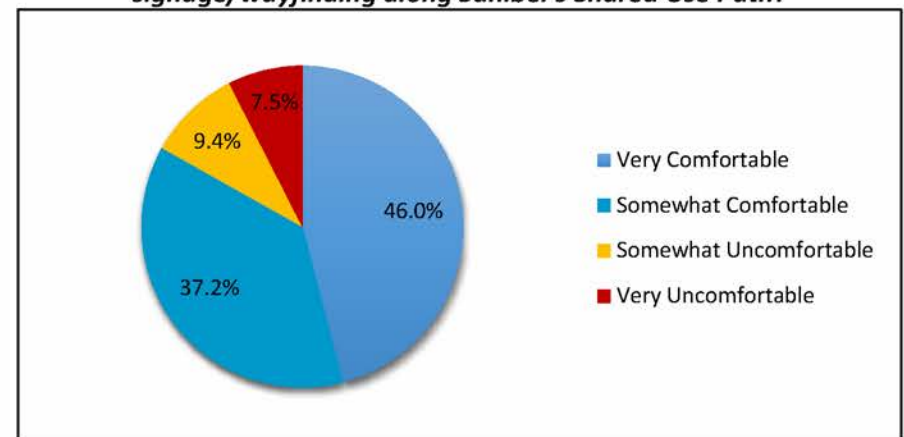


Figure 5-13: How would you rate your level of comfort along Sanibel's Shared Use Path?



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The survey included two follow-up questions about comfort and safety. The first follow-up question was about the elements that made Path users feel uncomfortable or unsafe while using the Shared Use Path (Figure 5-14). The top three elements reported by survey respondents were “Other Path User Behavior or Attitude,” “Paths are Overcrowded or Congested,” and “Visibility Intersections, Driveways, Curves,” followed closely by “Path or Lane too Narrow.” Additional comment/explanations included bike and path user etiquette (e.g., cellphone use, indicating when passing, speed), types of vehicles using the Path (e-bikes, surrey bikes, Segways, scooters), and safety and visibility at intersections (automobiles and path users failing to stop at intersections). To view all responses to this question, the full survey and detailed responses are provided in Appendix F.

A second follow-up question was about elements that made people feel uncomfortable or unsafe when operating a motor vehicle near or adjacent to the Shared Use Path (Figure 5-15). The four main elements reported by survey respondents were “Path User Failure to Stop or Yield at Crossings,” “Lack of Visibility at Intersections, Turns, Driveways, or Crossings,” and “Path User Attitudes or Behavior Path Users without Proper Lighting or Reflective Gear (at night).” Additional comments/explanations included desires for more warning signage at roadway crossings (for automobiles)

and fewer bikes using the roadway. Problem areas highlighted in the comments were driveway crossings, parking lot exits, and intersections along Periwinkle Way, specifically at Donax Street. To view all responses to this question, the full survey and detailed responses are provided in Appendix F.



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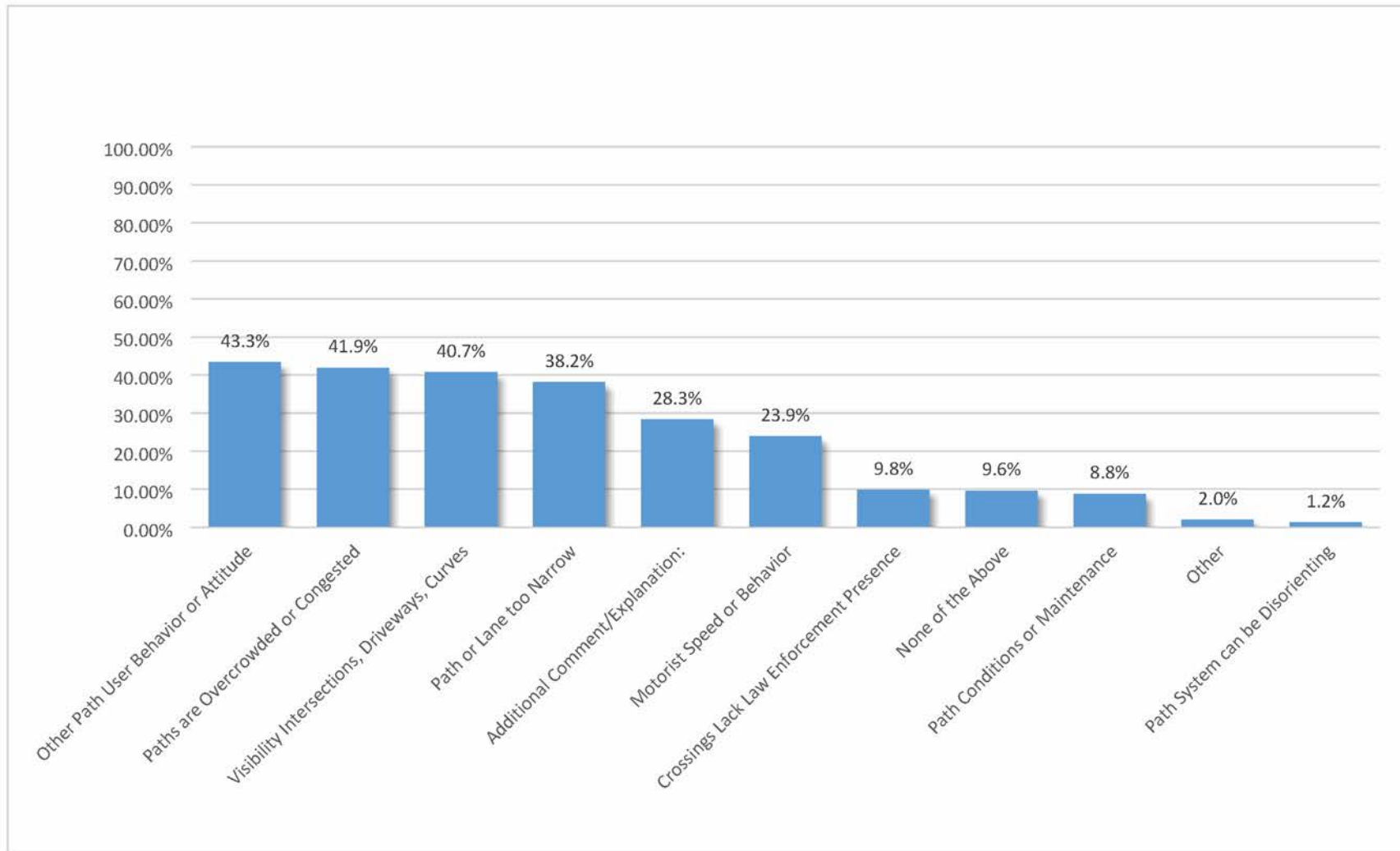


Figure 5-14: Do any of the following elements make you feel uncomfortable or unsafe while using the Shared Use Path?



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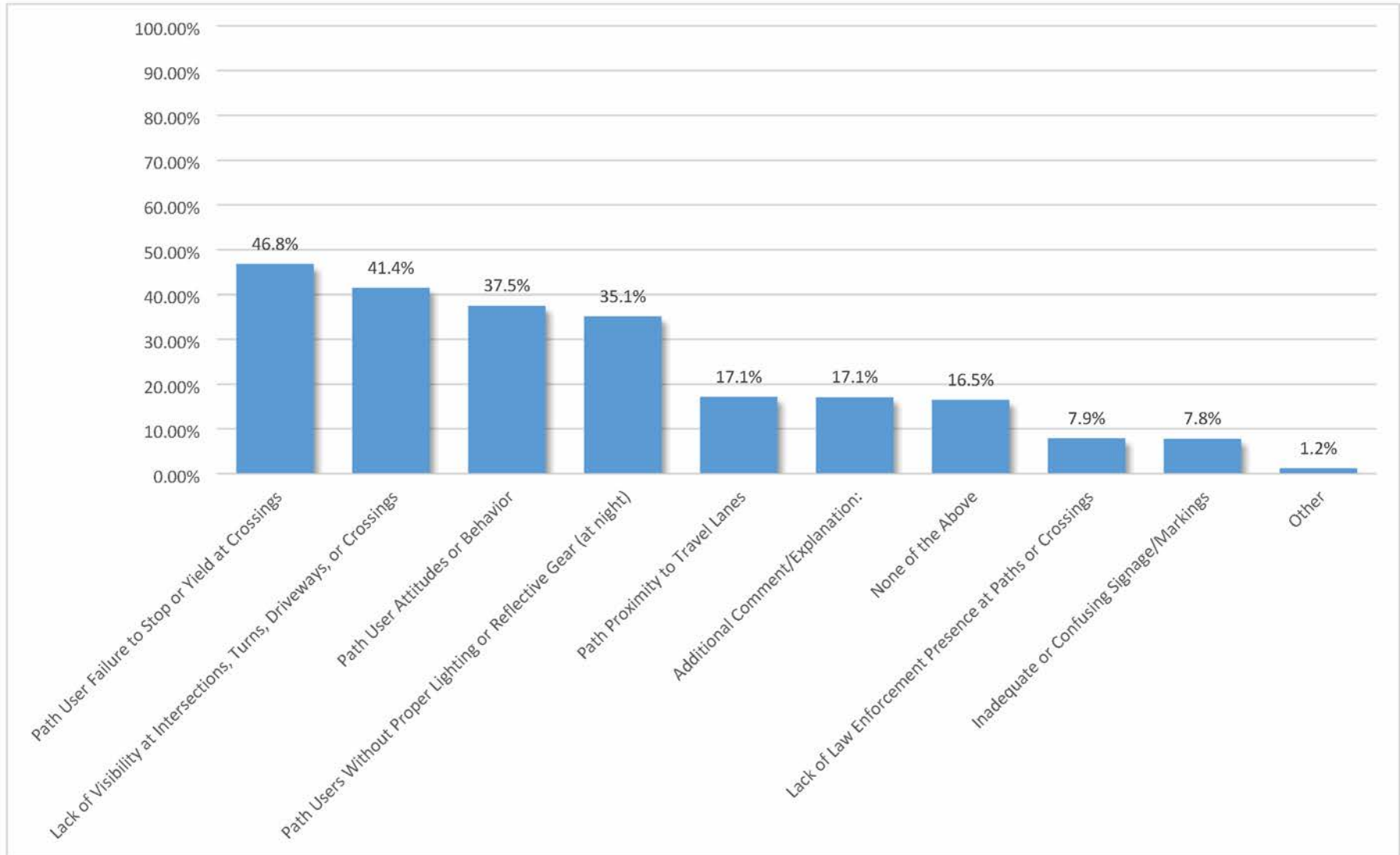


Figure 5-15: Do any of the following elements make you feel uncomfortable when operating a motor vehicle near or adjacent to the Shared Use Path?



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Improvement Suggestions & Comments

When asked if they would like to see more new paths added to the Shared Use Path, a little over half (53.1%) of survey respondents answered “Yes” and 19% of respondents answered “No” (Figure 5-16). Respondents who answered “Yes” were asked where they would like to see paths extended. A total of 883 responded, with the most popular locations being of the north side of Periwinkle Way, Rabbit Road, Sanibel-Captiva Road, and West Gulf Drive (Rabbit Road to end of West Gulf Drive).

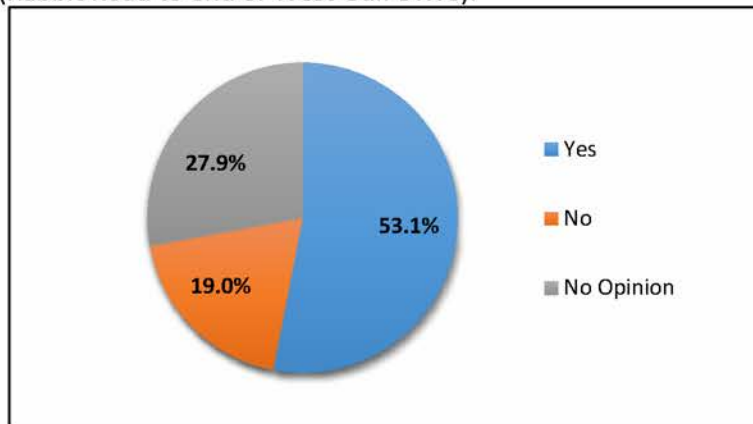


Figure 5-16: Sanibel currently has more than 26 miles of paved Shared Use Path. Would you like to see new paths added?

Survey respondents were also asked what they would recommend to improve Sanibel’s Shared Use Path. In total, 1,614 comments were provided, with most of the comments fitting into the following categories:

- Safety
- Signage
- Rules and Regulations
- Widening Paths
- Additional Paths
- Maintenance

- Types of Vehicles Permitted on Path (E-bikes, Scooters, Segways, Surrey Bikes),
- Amenities (Benches, Water Fountains, Shelters, Bathrooms)
- Education

To view all responses to this question, the full survey and detailed responses are provided in Appendix F.

In addition, in an open comment section, 854 comments were provided by survey respondents. Although the comments varied in topic, many fit within the above categories. See Appendix F for all the responses provided in the open comment section.

Demographics & Place of Residence

The majority of the survey respondents (94.3%) were over age 45, and 51.7% were age 65 or older. Less than 1% were ages 18–24 or under age 18 (Figure 5-17). There was almost an even split between female and male respondents, as shown in Figure 5-18.



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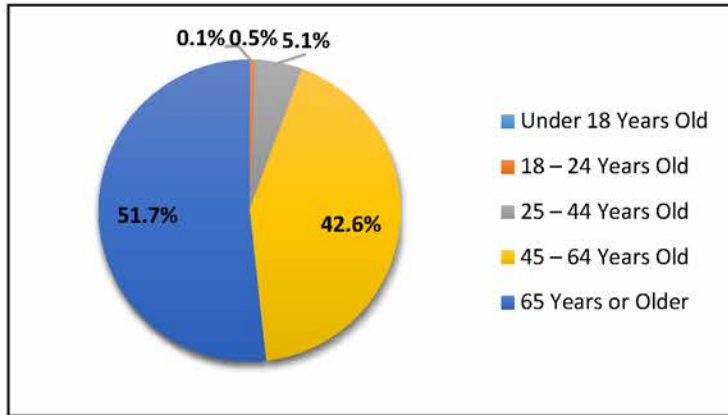


Figure 5-17: What is your age?

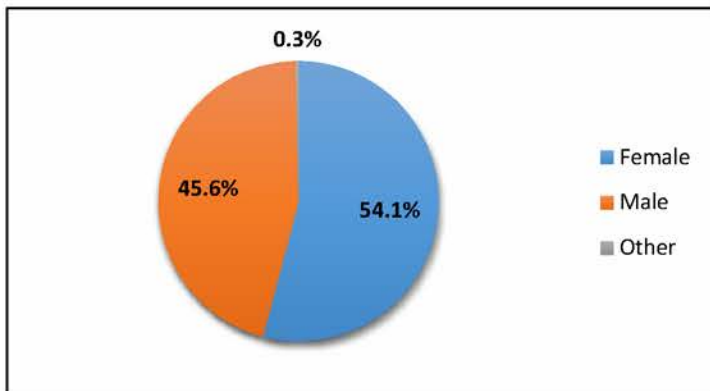


Figure 5-18: What is your gender?

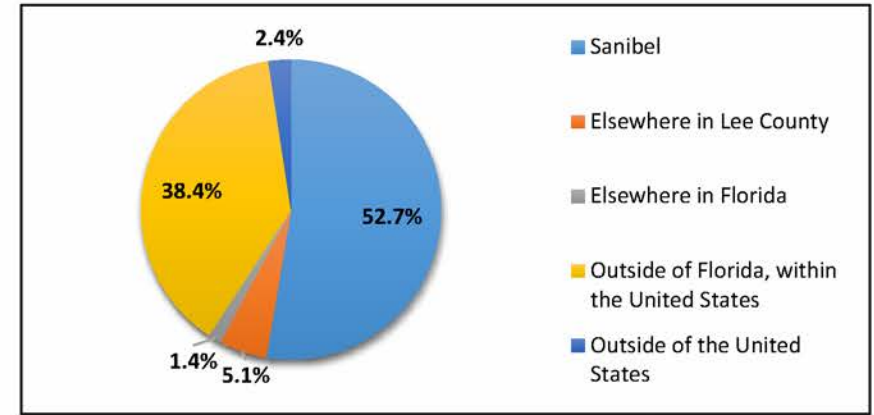


Figure 5-19: Where is your primary residence?

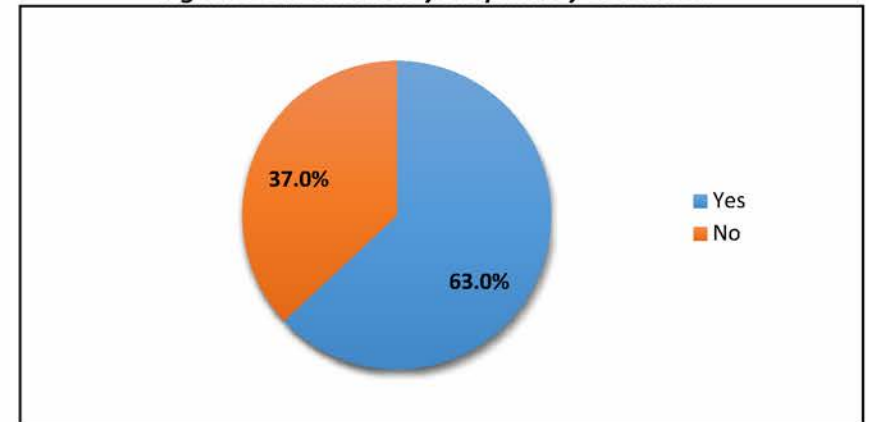


Figure 5-20: If Sanibel is your primary residence, do you live here year-round?

Survey respondents were asked where their primary residence was, and approximately half (52.7%) indicated Sanibel (Figure 5-19). Of those, 63.0% live on Sanibel year-round, as shown in Figure 5-20, with November to April as the most popular months to be on Sanibel for respondents whose primary residence was on Sanibel but who did not live on Sanibel year-round (Figure 5-21).



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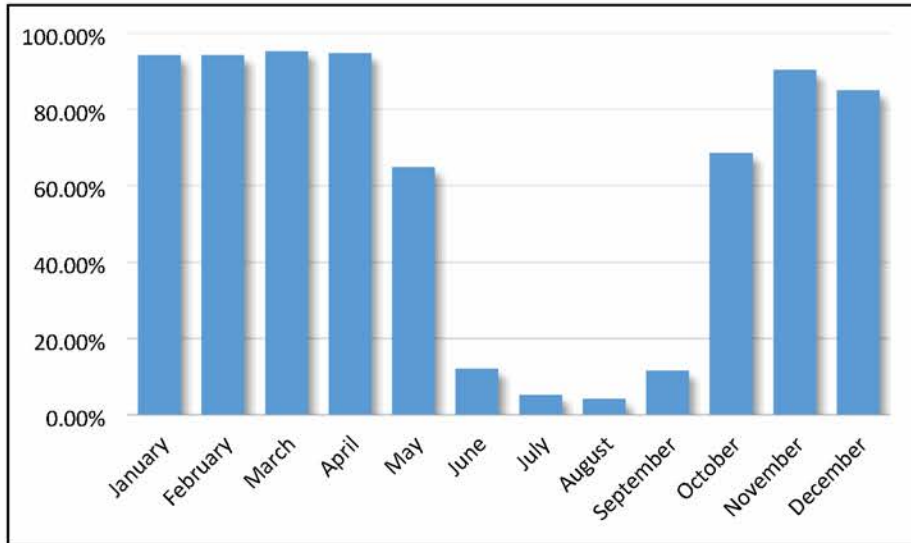


Figure 5-21: If you do not live on Sanibel year-round, what months do you live on Sanibel? (Select all that apply)

Survey respondents who reported that they were not Sanibel residents were asked where they normally reside. Figure 5-19 shows that 38.4% indicated “Outside of Florida, within the United States,” with the top 10 states most frequently listed as:

- Ohio
- Illinois
- Massachusetts
- New York
- Indiana
- New Jersey
- Pennsylvania
- Michigan
- Missouri
- Minnesota

Survey respondents were asked about the length of their visit. Figure 5-22 shows that many respondents stay on Sanibel for longer visits, with 43.4% indicating that they stayed on Sanibel for longer than 60 days.

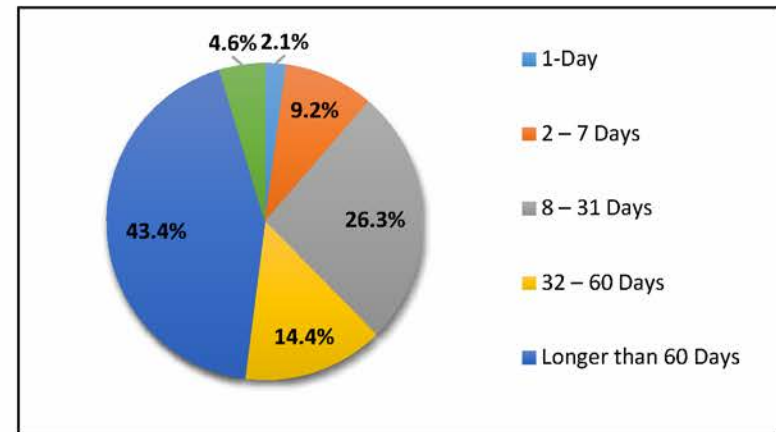


Figure 5-22: If Sanibel is not your primary residence, what is the length of your current stay?

SECTION 6 SHARED USE PATH CHALLENGES





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Shared Use Path Challenges

Sanibel's Shared Use Path is used by pedestrians, joggers, bicyclists, skaters, wheelchair users, and a variety of other non-motorized users; for most they provide a low-stress environment separated from motor vehicle traffic and serve the transportation and recreational needs of residents and visitors throughout the island. Maintaining and improving a system that is recognized as a world-class Shared Use Path system does not come without challenges. Public outreach and discussions with stakeholders and City staff produced a list of key challenges to Master Plan Vision, Goals, and Objectives. Many were identified in the 2009 Master Plan, and although efforts have been made to address them, many have and will continue to exist. The following is an overview of the key challenges that influence Design Considerations and Opportunities described by this Master Plan Update.

Environmental, Land Use, and Right-of-Way Challenges

- The proximity of the island's natural resources and unique wildlife habitats to the Shared Use Path system is a major resource that is enjoyed by island residents and visitors. However, close proximity to environmentally-sensitive lands, and the City's commitment to avoid human and land use impacts that may degrade natural areas and the island's ecological system, also constrain the range of potential Shared Use Path improvements, particularly future widenings, extensions, and locations for the introduction of rest areas and support facilities.
- Right-of-way, environmental, and land use constraints will continue to limit the City's ability to uniformly apply State or Federal standards for Path width and design. The City will need to look at each path segment carefully to ensure that everything possible is

done to meet the safety needs of Path users, especially during seasonal high-traffic periods.

- Constraints presented by existing width of right-of-way and Sanibel's commitment to maintaining a scenic and limited capacity road system will continue to present challenges for future Shared Use Path improvements and extensions.
- The Sanibel Plan and the Land Development Code place high priority on the installation of native vegetation buffers along roadway frontages to maintain and enhance community character. These important goals will continue to present a challenge in balancing vegetation requirements with site planning and design to ensure Path safety and visibility.
- Pedestrians and bicyclists traveling along Sanibel's Shared Use Path frequently cross streets outside of existing marked and signed mid-block crosswalks due to many land use and locational factors. Providing appropriately-located crosswalks, particularly mid-block crosswalks, will be challenging given right-of-way limitations, dispersion of land uses that generate crossing demands, seasonal visitor populations unfamiliar with the island, and locations where existing Shared Use Paths are present on only one side of the road right-of-way.
- The City of Sanibel has made significant progress in separating Shared Use Paths from direct contact with roadways and the reduction of motor vehicle access to the Paths through signage and other measures. Right-of-way, utility, and capital improvement priorities and other constraints will continue to challenge this important effort necessary for Shared Use Path safety.



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- Future rest areas, support facilities, and signage will require careful planning and design due to environmental and right-of-way constraints and the importance of maintaining Sanibel's unique community character.

Connectivity Challenges

- Although the city's residential neighborhoods, commercial districts, resort housing, and recreational, civic, cultural, and other land uses are generally well connected by the Shared Use Path system at this time, the challenge will be to ensure that the Shared Use Path system evolves with the changing needs of the community.
- The Shared Use Path system currently provides residents and visitors with direct connections to the majority of Sanibel's passive and active recreation facilities. The challenge will be to ensure that any future park and recreation facilities are also connected by extending the existing Path system. Opportunities to improve or extend existing segments of the Shared Use Path system to current and future park and recreation facilities must be addressed.

Maintenance Challenges

- Whereas Sanibel's Shared Use Paths are recognized as being well-maintained, the City continues to face several challenges related to the ongoing maintenance of the Shared Use Path system. These challenges include limited staff resources, competing budget needs and priorities, and the aggressive nature of island vegetation that continues to grow over and under the Paths and obscure visibility or present obstructions for Path users.

Signage

- Appropriately located and designated wayfinding signage will be important to ensure motorist and Path user orientation and education. Sign design and messages must address the multi-lingual nature of Sanibel's visitors. Traditional sources of funding for design, fabrication, installation and maintenance may not be available to support a comprehensive wayfinding signage program.
- Right-of-way and environmental conditions and constraints limit Sanibel's ability to apply State and Federal specifications for signage, striping, and pavement markings in many locations.

Educational and Behavioral Challenges

- Providing a broad array of ongoing Shared Use Path safety and education programs will require advocacy and the initiation of partnerships between the City and various community partners. Limited staffing and funding resources available to the Sanibel Police Department and other essential partners may, in the short term, limit the delivery of both existing and new programs that could significantly enhance Shared Use Path safety.
- The delivery of safety and educational programs to new Shared Use Path users and motorists who visit Sanibel and may be unfamiliar with the island's unique environment and character will continue to be a challenge.
- Uninformed, unintentional, unskilled, and careless actions by Path users are frequently mentioned as the causes of many problems along the Shared Use Path. Given the transient nature of many Path uses, delivering programs that promote desired Path etiquette or courtesy will be a continuous challenge.



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Emerging Challenges

Electric Bicycles (E-Bikes) and Scooters (E-Scooters)

- Although they have been around for decades, E-bikes are becoming increasingly popular, with many different types of E-bikes that offer various levels of assistance and controls. Some E-bikes have mechanisms that control the maximum speed of the user under assisted means, and others have no maximum speed. Additionally, some E-bike assistance mechanisms are triggered by throttles, pedaling, or even the push of a button. Technologies for E-bikes are constantly changing and require attention and responsiveness to ensure the safety and enjoyable user experience on Sanibel's Shared Use Paths.
- Similar to the proliferation of E-bikes, E-scooters are becoming an increasingly popular mode of transportation across the country. An E-scooter is similar to a manual scooter in design, but operates using a throttle switch, with many capable of reaching speeds up to 15 mph. The smaller wheels and lower center of gravity of an E-scooter can increase rider sensitivity to uneven surfaces and risk of falling. Although E-scooters can have a positive effect on encouraging people away from automobiles and potentially providing increased mobility for people with disabilities, there are operational and safety concerns associated with them, especially within a shared environment such as Sanibel's Shared Use Path system. As with E-bikes, attention and responsiveness to this emerging trend will be needed to ensure that Sanibel's Paths continue to be a safe and enjoyable environment for all users.

Connected and Automated Vehicle Technology

- As technology continues to advance, the potential for an increased presence of connected and automated vehicles (C/AV) becomes closer to reality. Although it is unclear how these technologies will ultimately affect pedestrians and bicyclists, it is predicted that vehicles, bicyclists, and pedestrians will have to maneuver in an environment with varying levels of C/AV technology for decades to come. Continued monitoring of C/AV technologies and their ability to interact with pedestrians and bicyclists will need to occur to ensure the least amount of impact to Path users.

SECTION 7 SHARED USE PATH DESIGN CONSIDERATIONS





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Shared Use Path Design Considerations

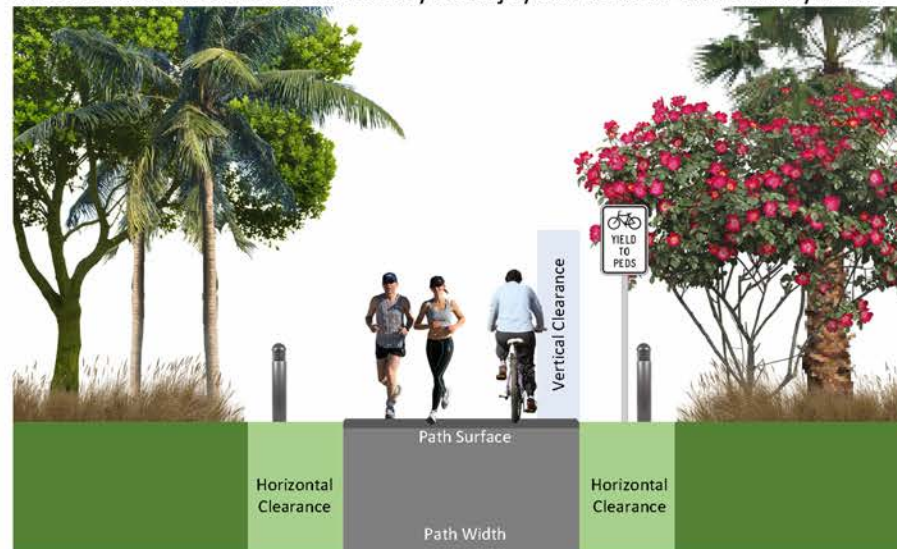
The design criteria of Shared Use Paths should be based on physical conditions and the operating characteristics of Path users. Sanibel's Shared Use Path system is used by bicyclists and pedestrians (adults and children), as well as inline skaters, skateboarders, joggers, and others. Often, the biggest challenge in the design of shared use paths is accommodating these multiple user groups and minimizing conflicts that can arise with the shared use of one facility.

The guidelines outlined in this section are based primarily on information found in the *FDOT Design Manual* (FDM), the American Association of State Highway and Transportation Officials (AASHTO) *Guide for the Development of Bicycle Facilities*, 4th Edition, the *Manual on Uniform Traffic Control Devices* (MUTCD), and the National Association of City Transportation Officials (NACTO) *Urban Bikeway Design Guide*. Although these guides are an appropriate starting point for the basis of design, it is important to recognize that Sanibel's unique island character and valued commitment to protecting the natural environment limits the application of certain design principles on a system-wide level. The Sanibel Plan provides additional direction and guidance on certain design features and on the City's commitment to preserving its sanctuary island character.

Accessibility

Sanibel's Shared Use Paths provide an important transportation alternative and recreational opportunity for everyone. Applying universal design principles to new paths and Path improvements will ensure that the Path system is accessible to all users and abilities. The Americans with Disabilities Act (ADA) requires that all public facilities, including shared use paths, are designed in accordance with the accessibility standards established by the ADA and corresponding Public Rights-of-Way Accessibility Guidelines (PROWAG). Many of these guidelines apply to gradient and dimensional requirements as well as to street crossings and curb ramps.

Whereas the intent is to provide a Path system that is accessible to all users, it is recognized that there are factors that make meeting ADA standards difficult. Designing new and reconstructed Paths to accessibility standards, while developing a plan to identify and address accessibility deficiencies on existing Paths segments over time, will help ensure that all users and abilities have access and the ability to enjoy the Shared Use Path system.



Shared Use Path Design Components

Path Surface

Long-term durability, safety, accessibility, cost, and maintenance are usually the most important criteria when selecting paving and surface materials. To the extent possible, Shared Use Paths should be paved or constructed of



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hard-surfaced materials and should provide a firm, stable, and slip-resistant surface. As part of a regular maintenance program, Path conditions should be checked periodically for cracks or potholes, and repairs should be made when necessary to maintain a smooth, hazard-free surface. Although most existing Shared Use Paths are constructed of impervious materials such as asphalt, the use of pervious materials, such as permeable pavement, that meet the desired surface criteria may be considered where necessary to mitigate stormwater impacts of new Path construction or widening of existing paths.

Path Width

The appropriate paved width of a shared use path is largely dependent on the context, volume, mix of users, and available right-of-way. According to Chapter 224 of the FDM and AASHTO, the recommended width for a two-directional shared use path range from 10 feet to 14 feet, with 10 feet being the recommended minimum width. A width of 8 feet is acceptable for use in short or physically-constrained conditions such as environmental features, bridge abutments, utility structures, fences, etc. Generally, wider paths are recommended where:

- There is a high percentage of pedestrian use (greater than 30% of total volume) or where there is high overall use (greater than 300 users in the peak hour).
- There will be significant use by inline skaters, adult bicyclists, children, or other users that need more operating width.
- The path will be used by larger maintenance vehicles.
- Through curves to provide more operating space.

Right-of-way constraints, along with the Sanibel Plan's focus on limiting development activity to preserve the island as a sanctuary, have contributed to Path widths that are generally narrower than typical shared use paths (See Section 4 for existing Shared Use Path widths). These narrower Path widths require Path users to be more vigilant and courteous to ensure that

the Path system remains safe and enjoyable, especially during peak times of year.

Horizontal and Vertical Clearance

Adequate horizontal and vertical clearances along the Shared Use Paths provide users with a safe operating environment and helps ensure that they have optimal space to avoid hazards and correct errant movements. The FDM provides the following guidance on horizontal and vertical clearance:

- Provide a 4-foot clear area adjacent to both sides of the path, including placement of signs.
- Maintain a 2-foot-wide graded area with a maximum 1:6 slope adjacent to both sides of the path.
- For restricted conditions, bridge abutments, sign posts, fencing, and railing may be located within 4 feet of the edge of pavement but not less than 2 feet.
- Provide a 10-foot vertical clearance from the lowest edge of an overhead obstruction to any portion of the path under the obstruction.
- An 8-foot clearance is allowed for overhead signs and for other overhead obstructions under constrained conditions.

When horizontal and vertical clearances cannot be maintained, consideration should be given to warning trail users with pavement markings and/or signs to slow and exercise extra caution.



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Sight Distance

Designing Paths with adequate sight and stopping distances provides Path users the opportunity to see and react to unexpected conditions. The distance needed to bring a Path user to a fully-controlled stop is a function of the user's perception and braking reaction times, initial speed, coefficient of friction between the wheels and the Path surface, braking ability of the user's equipment, and grade of the Path. The minimum stopping sight distance for a bicyclist traveling at 12 mph on a flat surface is 75 feet; at 18 mph the minimum stopping sight distance is 134 feet.

Signage

A comprehensive signage program includes different types of signs: regulatory/warning, directional, and interpretive. Sign designs should be consistent throughout the path system to provide the user with a sense of continuity, orientation, and safety. Signs should also be in accordance with local ordinances, and placement should comply with MUTCD recommendations. The Sanibel Plan places an emphasis on maintaining the natural character of the island and avoiding sign clutter. Accordingly, caution should be exercised to avoid visual pollution caused by excess signage and consideration should be given to using pavement markings in place of signs other than those required by the MUTCD.

- *Regulatory signage* – Regulatory and warning signs are important in alerting path users to conditions that require caution and extra attention or in relying other key messages. The MUTCD clearly delineates how regulatory signage should be incorporated into shared use paths.
- *Directional signage* – Directional signage, or wayfinding, provides orientation to Path users and emphasizes the continuity of the Path system. Landmarks, destinations, businesses, natural features, and other visual cues help users navigate the Shared Use Paths; however, given the number of visitors and tourist that use Sanibel's

Paths, many people may be less familiar with navigating the system. Providing directional signage at key locations and intersections can help Path users navigate the system.

- *Interpretive signage* – Interpretive signage provides enrichment to the path user experience, focuses attention on the unique attributes of the path, and provides educational opportunities. An example of this type of signage is the interpretive panels of the Heritage Trail.
- *Etiquette signage* – Path etiquette signs may be used to list proper rules and customs for path users.

Path and Pavement Markings

Pavement markings can provide important guidance and information for Path and roadway users. Per the MUTCD, all Path and pavement markings must be retroreflective. In combination with signage, pavement markings and messages may be used to convey secondary information that may include messaging related to courteous Path behavior and supplemental wayfinding.

Centerline Striping

The use of a yellow (4–6-inch) centerline stripe may be used to separate opposite directions of travel where passing is inadvisable. On the approaches to tight curves with limited sight distances (less than 50 feet) and intersections, a solid yellow (4-inch) centerline stripe should be applied at least 85 feet prior to the curve or intersection. A consistent approach to intersection and curve striping can help increase awareness of potential conflict points.



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Edgeline Striping

Edgeline striping may be considered for use under several situations. The use of white edge lines may be considered at approaches to intersections to alert Path users of changing conditions. Additionally, where vertical obstructions or drop-offs near the Paths, within 2 feet for vertical obstructions (utility poles, etc.) and within 5 feet; where drop-offs (drainage swales, etc.) exist, 4-inch-wide white edge striping should be considered.

Markings to Supplement Intersection Control

Stop and yield lines may be used to indicate the point at which a Path user should stop or yield at a traffic control device. Stop or yield lines may be placed across the entire width of the Path; if used, the stop or yield line should be placed a minimum of 2 feet behind the edge of roadway (or behind the nearest sidewalk).

Supplemental Markings on Approaches

Advance pavement markings may be used on roadway or Path approaches at crossings where the crossing is unexpected or where there is a history of crashes, conflicts, or complaints. Markings may be placed closer to the crossing if needed but should be at least 50 feet from the crossing and can be placed across the entire width of the Path or within the approach lane. Pavement markings should not replace the appropriate signs and should reference the MUTCD for appropriate words and symbols.

Shared Use Path Crossings

Crosswalks provide critical clarification at intersections, identifying a safe space for pedestrians and bicyclists to cross and heightening the visibility of users of the crossing. The design of crossings between the Shared Use Paths and roadways or driveways has a significant impact on Path user comfort and mobility. Due to the potential for conflict where a Path intersects a street or driveway, careful design (including the consideration of markings,

signage, and lighting) should be used for predictable and orderly operation between Shared Use Path users and other traffic. Although every intersection and driveway is unique and requires sound engineering judgment to determine the appropriate treatment, there are some general guidelines that should be considered when addressing Shared Use Path crossings. These guidelines are included in the City of Sanibel's adopted Crosswalk Policy (Resolution #13-081) that provides guidance on procedures, standards and factors for considering, establishing, and designing marked crosswalks within the City.

Curb Ramps and Aprons

The opening of a Shared Use Path at the roadway should be at least the same width as the Shared Use Path itself. If a curb ramp is provided, the ramp should be the full width of the Path, not including any side flares if used. The approach should provide a smooth and accessible transition between the Path and roadway. The ramp should be designed in accordance with the Public Right-of-Way Accessibility Guidelines (PROWAG). Detectable warnings should be placed across the full width of the ramp.

Use of Stop Signs

The application of intersection controls ("Yield" and "Stop" signs) should follow the principle of providing the least amount of restriction that is effective. Installing unwarranted or unrealistically restrictive controls on Path approaches to protect users can result in Path users disregarding the signs and can lead to a loss of respect for traffic control at more critical locations. Poor bicyclist compliance with "Stop" signs at Path-roadway intersections is well documented at a national level. Bicyclists tend to operate as though there are "Yield" signs at these locations. Therefore, yield



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control can often be an effective solution for most Path crossings, as it encourages caution without being overly restrictive. For more complex intersections, all-way stop intersections, locations with limited visibility, and where there are higher motor vehicle speeds, “Stop” signs along the Shared Use Path should be considered to make sure that all road and Path users have a chance to see each other before continuing through an intersection or crossing.

Vegetation and Landscaping

When feasible, landscaping is a recommended choice for creating separation between the Path and adjacent properties and streets.

Vegetative buffers can provide both a natural privacy screen and provide habitat for some of the wildlife that lives near the Path. Landscaping and vegetative buffers can also be used as an effective and attractive barrier to unwanted access where needed.

Plant materials placed along shared use paths should be selected to avoid the need for excessive pruning, cleanup of fallen debris, and other maintenance. Native, non-invasive plants are often a good choice. Trees and shrubs with aggressive root systems may raise and buckle the surface of the shared use path. These types of trees and shrubs should be avoided near paths, or root barriers should be installed. Additionally, consistent with the Sanibel Plan, new Paths or widening of existing Paths should avoid impacts to existing natural vegetation.

Sanibel’s Land Development Code prescribes regulations on the planting and maintenance of vegetation adjacent to the Path system, street, and driveways; these regulations are designed to ensure that adequate visibility is maintained.

Lighting

When shared use paths are used during night-time hours, lighting is an important consideration to maintain visibility and safety. Lighting should be

designed according to any applicable dark sky, energy conservation, or other local lighting standards, with consideration toward maximizing path user safety while minimizing glare and obtrusiveness to motorists of nearby roadways, surrounding neighborhoods, and wildlife. Path lighting to enhance safety may be considered at motor vehicle conflict points such as intersections, major driveways, crosswalks, or where abrupt changes to the Path’s geometry may require additional visibility.

Consistent with State law, bicycles operated at night must be equipped with a headlight that is strong enough to allow for safe navigation and a taillight to make them visible to motorists and other Path users.

Bicycle Parking

Providing bicycle parking facilities is an essential component of a Shared Use Path system. Installing well-designed bicycle parking facilities in appropriate locations can contribute to a more orderly and aesthetic appearance of the Path and building sites. Bicycle parking should be provided at all public facilities, incorporated into roadway and streetscape projects, and an integral aspect of land development and redevelopment process. Bicycle parking should be conveniently placed in a location that is highly visible and as close to the building entrance as practical so as to not interfere with pedestrian traffic and consistent with City vegetation buffer standards.

Restricting Motor Vehicle Access

Unauthorized use of the Path system may occasionally occur. At some locations, drivers unfamiliar with Sanibel’s streets may perceive the Path



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adjacent to the roadway as a motor vehicle lane and drive onto the Path. Other motor vehicle drivers may use the Path as a right-turn lane to avoid waiting in traffic at an intersection. To discourage automobiles from driving onto the Shared Use Path, “No Motor Vehicle” (R5-3) signs can be installed and evaluated for effectiveness. Providing a vegetated buffer between the Shared Use Path and the roadway can be an effective and aesthetically pleasing way to define the Shared Use Path and prevent motorized access.

Minimizing Conflicts Among Users

Shared use paths are typically designed to accommodate a wide range of uses, motions, and speeds. However, the mix of pedestrians, bicyclists, skaters, and other users is not always a desirable situation due to the high potential for conflict. As Path volume and the diversity of users increase the potential for conflict between users is intensified.

As described in Section 5, most Shared Use Path users are satisfied with their experiences. However, conflicts among Path users do exist and can have consequences. The Federal Highway Administration (FHWA) and National Recreational Trails Advisory Committee have performed research on multi-use facility conflicts and have found that conflict in settings such as Sanibel’s Shared Use Path can best be defined as “goal interference attributed to another’s behavior.” Conflict has often been found to be related to activity style/mode of travel, focus of trip, expectations, attitudes toward and perceptions of the environment, level of tolerance for others, and different norms held by different users. A review of the literature¹ and best practices has led to the following principles related to minimizing conflict and improving user behavior on shared use paths:

- **Recognize conflict as goal interference** – Do not treat conflict as an inherent incompatibility among different path activities, but goal interference attributed to another’s behavior.
- **Provide adequate path opportunities** – Offer adequate opportunities for a variety of path experiences. This will help reduce congestion and allow users to choose the conditions that are best suited to the experiences they desire.
- **Minimize number of contacts in problem areas** – Each contact among path users has the potential to result in conflict. So, as a rule, reduce the number of user contacts whenever possible. This is especially true in congested areas and key destinations/attractions. Disperse use and provide separate facilities where necessary after consideration of environmental impacts and lost opportunities for positive interactions.
- **Involve users as early as possible** – Identify the present and likely future users of the path system and involve them in a process of avoiding and resolving conflicts as early as possible, preferably before conflict occurs. Possible conflicts and their solutions should be addressed early in the planning and design stage for new and improved paths. New and emerging uses should be anticipated and addressed as early as possible with the involvement of participant. Address existing conflicts quickly and include participation from those affected.
- **Understand user needs** – Determine the motivations, desired experiences, norms, setting preferences, and other needs for the

¹ Conflicts on Multiple-Use Trails: Synthesis of the Literature and State of the Practice, Federal Highway Administration and National Recreational Trails Advocacy Committee, 2004.



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present and likely future users of each trail. This user information is critical for anticipating and managing conflicts.

- **Identify the actual sources of conflict** – Help users identify the specific tangible causes of any conflicts they are experiencing. In other words, get beyond emotions and stereotypes as quickly as possible, and get to the roots of any problems that exist.
- **Work with affected users** – Work with all parties involved to reach mutually agreeable solutions to these specific issues. Users who are not involved as part of the solution are more likely to be part of the problem now and in the future.
- **Promote path etiquette** – Minimize the possibility that any particular path contact will result in conflict by actively and aggressively promoting responsible path behavior. Use existing educational materials or modify them to better meet local needs. Target these educational efforts, get the information into users' hands as early as possible, and present it in interesting and understandable ways.
- **Encourage positive interaction among different users** – Path users are usually not as different from one another as they believe. Providing positive interactions both on and off the paths will help break down barriers and stereotypes, and build understanding, good will, and cooperation.
- **Favor "light-handed management"** – Use the most "light-handed approaches" that will achieve area objectives. This is essential to provide the freedom of choice and natural environments that are so important to shared use. Intrusive design and coercive management are not compatible with high-quality path experiences.
- **Plan and act locally** – Whenever possible, address issues regarding shared use paths at the local level. This allows greater sensitivity to local needs and provides better flexibility for addressing difficult issues on a case-by-case basis. Local action also facilitates involvement of the people who will be most affected by the decisions and most able to assist in their successful implementation.

- **Monitor progress** – Monitor the ongoing effectiveness of the decisions made and programs implemented. Conscious, deliberate monitoring is the only way to determine if conflicts are indeed being reduced and what changes in programs might be needed. This is only possible within the context of clearly understood and agreed upon objectives for the shared use path system.

Guidelines for Sharing Space

All Shared Use Path users have responsibilities for the safety of others they are sharing the space with. People riding bicycles tend to be the fastest users on the Paths and need to consider their speed to not startle other users, particularly those who may be more vulnerable to injury or who have reduced sight, hearing, or mobility. The following is a list of general guidelines for sharing space along Shared Use Paths:

- Use the Path in a way that is considerate to the comfort and safety of others.
- Keep to the appropriate side of the Path (to the right, except when passing).
- When riding a bicycle, travel at a speed appropriate to the conditions and ensure you can stop in time.
- Be courteous and patient with other path users who are moving more slowly than you, and slow down as needed when space is limited or if you cannot see clearly ahead.



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- Be aware and give way to more vulnerable and slower Path users such as older people, people with small children, people in wheelchairs, or the hearing and visually impaired.
- When riding a bicycle, make an audible signal (e.g., ring a bell) well in advance if approaching people from behind.
- Keep dogs under control.
- Be particularly careful at intersections, curves, driveways, entrances onto the Path, or any other “blind spots” at which people could appear in front of you with limited warning.
- When it is dark, or in low-light conditions, make sure you are visible to others, use lights at night.

SECTION 8 SHARED USE PATH OPPORTUNITIES





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Shared Use Path Opportunities

The opportunities in this section were developed to support Sanibel's world-class Shared Use Path system and are based on a variety of sources and input, including the general public, the Master Plan's Project Advisory Committee (PAC), City staff, and technical analysis. This section presents a comprehensive set of opportunities tailored to reach the Plan vision, which states: of a ***system that serves as a means for residents and visitors to move about the island safely and easily under human power, reducing the need for using motorized vehicles on City streets and roads. The Path system will be designed and maintained in a manner that provides maximum access to frequently visited island destinations and is attractive and consistent with Sanibel's unique character as a barrier island sanctuary and small-town community.***

This section is divided into two elements, programmatic and infrastructure opportunities. Together, these elements constitute a comprehensive, five E's (Education, Enforcement, Evaluation, Encouragement, and Engineering) approach to strengthening Sanibel's Shared Use Path system.

Programmatic Opportunities

The programmatic opportunities are structured around the four goals defined in this Master Plan.

- **Safety** – The safety of Sanibel's Shared Use Path system and its users will be of the highest priority.
- **Quality of Service** – The Shared Use Path system will be managed and maintained in a quality manner to support the full range of current and projected future user demands.
- **Connectivity** – Improvements and extensions to the Shared Use Path system will be done for the purpose of connecting residents and visitors with frequently-visited island destinations and activity centers and to correspondingly reduce vehicular trips and energy consumption.

- **Stewardship** – The City will foster a sense of stewardship for the Shared Use Path system within the greater Sanibel Community.

Safety

Opportunities to improve the safety of the Shared Use Path system and its users have been categorized into three groups—Engineering, Education, and Enforcement.

Engineering

Providing a comfortable, convenient, and safe Path system that accommodates many different types of users begins with the construction and design of the Shared Use Path system.

- Consistent with the Sanibel Plan, continue to evaluate and apply appropriate design standards and best practices associated with future Path improvements and extensions based on context, volume, mix of users, availability of right-of-way, and drainage and environmental impacts.
 - Consider establishing a policy to construct any new additions or extensions to the Shared Use Path at a minimum width of 8' where ever environmental conditions allow.
- Along higher volume Path segments (e.g., Periwinkle Way and Tarpon Bay Road), continue to provide a minimum Shared Use Path



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width of 10 feet, subject to the availability of right-of-way and drainage and environmental impacts.

- Nearly 5.5 miles (21%) of the existing Shared Use Path system has a width of 10 feet or more.
 - **Continue** to improve and widen all Shared Use Paths to an appropriate width, no less than 8 feet, based on the context, volume, mix of users, availability of right-of-way, and drainage and environmental impacts.
 - A little more than 5 miles, or almost 20%, of the Shared Use Path system have been identified as being less than 8 feet in width.
 - **Continue** to monitor and evaluate opportunities to improve safety at locations with higher concentrations of pedestrian and bicycle crashes and Shared Use Path related incidents.
 - Consider conducting a comprehensive corridor study of Periwinkle Way to assess roadway, right-of-way and adjacent land use conditions. As it relates to the Shared Use Path, specifically examine driveway design, number and location, visibility at intersections and curb cuts, and presence of landscape buffers to determine specific right-of-way improvements.
 - **Continue** to explore opportunities to improve Shared Use Path and driveway interactions.
 - To the extent possible, apply appropriate design standards and best practices associated with intersection and driveway interactions with the Shared Use Path.
 - Explore Land Development Code opportunities to enable or incentivize shared ingress/egress on adjoining properties, improve off-street parking and driveway design, and continue to encourage shared driveway connections between adjacent properties and pedestrian-friendly site planning.
- **Continue** to evaluate and improve conditions, where feasible, at locations with higher concentrations of pedestrian and bicycle crashes and Shared Use Path incidents.
 - **Continue** to evaluate opportunities to improve Shared Use Path crossings at intersections and mid-block locations, in accordance with the City's Crosswalk Policy.
 - Monitor and evaluate the effectiveness of the City's Crosswalk Policy.
 - Consider a pilot study of additional enhancements to improve visibility and driver awareness at midblock crosswalks, such as motion-activated in-pavement puck lighting.
 - To the extent possible, ensure that the Shared Use Path system is accessible by designing new and retrofitted Paths in compliance with applicable ADA design guidelines and corresponding PROWAG, or subsequent guidance that may supersede PROWAG in the future.
 - **Continue** to incorporate design principles that accommodate users of all ages and abilities into all roadway projects.
 - Evaluate opportunities to provide additional and enhanced pedestrian and on-street bicycle facilities along roadways to supplement the Shared Use Path system. This includes but is not limited to new and improved facilities, sidewalks, bicycle lanes etc., landscaping, land use and design, traffic calming, and traffic engineering. Evaluate opportunities for potential pedestrian and on-street bicycle facilities along, but not limited to, the following roadway segments (shown later in Figure 8-3):
 - Donax Street from Middle Gulf Drive to Periwinkle Way



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- Rabbit Road from West Gulf Drive to Sanibel Captiva Road
- Periwinkle Way from Tarpon Bay Road to Lindgren Boulevard
- Library Way from Tarpon Bay Road to Palm Ridge Road, and
- Sanibel Captiva Road from Mangrove Lane to Tarpon Bay Road
- **Continue** to monitor and evaluate the development and application of new and emerging technologies (e.g., electric bicycles, electric scooters, and connected and automated vehicles) and how they relate to mixing of transportation modes, variable travel speed, and overall user safety along the Path system.

Education

Providing information to Shared Use Path users and motorists on laws, rules, and appropriate behaviors can lead to more positive interactions between different user groups and a generally safer Shared Use Path environment.

- **Continue** to work with local partners on developing and distributing educational materials related to the Shared Use Path system.
 - Use a consistent and aesthetically-pleasing messaging brand (i.e., Bike or Hike) for all education materials, including brochures, advertisements, and safety videos to build a strong presence throughout the community.
- Encourage participation from all responsible parties, bike rental companies, advocacy groups, resorts, business community, and employers to develop and distribute educational materials to all Path users.
- **Continue** to explore opportunities to provide programs and materials that effectively reach a large number of Sanibel's daily and seasonal visitors.
- **Continue** to conduct annual public forums on Shared Use Path safety for island residents and visitors.

- The Sanibel Police Department, in conjunction with the Lee County School District, will **continue** to conduct bicycle safety courses to elementary and middle school students at The Sanibel School.
 - Education courses designed to build bicycling skills for children are an effective way to instill safe and responsible bicycle practices and support bicycling as a means of transportation for the next generation.
- **Continue** to identify opportunities to offer additional bicycle safety courses to City residents.
- **Continue** to actively and regularly promote the use of safety equipment including helmets, lights, and bells for all bicyclists.

Enforcement

Enforcement plays a daily role in helping to foster a culture of respect and responsibility among both Path users and motorists. Enforcement can help modify Path user and motorist behavior and encourage compliance with applicable traffic laws and appropriate behaviors. While enforcement alone is not likely to have a long-term effect, especially given the transient character of Sanibel's population, it is, in combination with engineering and education, an important factor in addressing safety along the Shared Use Path system.

- **Continue** to provide regular training sessions for law enforcement officers and traffic aides relating to bicyclist, pedestrian, and motorist traffic laws.



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- **Continue** to regularly update law enforcement officers on state and local legislative actions pertaining to the rights and responsibilities of Path users.
- **Continue** to focus enforcement efforts on education and compliance to help establish community awareness of the laws and unsafe behavior.
- Explore opportunities to expand law enforcement presence along the Shared Use Path system, including the Sanibel Police Department's Bicycle Patrol Unit, to strengthen enforcement efforts and expand ties with the community.
- Use a three-stage enforcement process that includes educating, warning, and ticketing Path users and motorists who fail to obey applicable traffic laws.
- **Continue** to track and monitor warnings, tickets, collisions, crashes, and other incidents that occur along the Shared Use Path system.
 - The Sanibel Police Department will continue to prepare an annual report and map showing the location and frequency of pedestrian and bicycle crashes and Shared Use Path incidents that will be presented to City Council. The annual report will assist with the ongoing assessment of public safety along the Shared Use Path system and to determine if additional enforcement measures or improvements are needed.
- Encourage safe and courteous behavior through positive enforcement and recognition programs.
 - Explore partnerships between private sector providers and law enforcement or volunteer groups to recognize Path users who exhibit safe and courteous behavior with incentives such as coupons or certificates.

Quality of Service

Maintenance and management of the Shared Use Path system are critical to the overall success and safety of the system. Regularly-maintained Paths not

only improve the comfort and safety of the Paths, but also extend the lifespan of the physical Path system. Continuity and consistency in management is also an important element and helps the public understand how issues and concerns related to the Path system are addressed.

Maintenance

- **Continue** to conduct a proactive maintenance program to ensure that the Shared Use Paths are safe and well maintained.
 - Continue to conduct regular inspections of the Path system to evaluate surface conditions and to ensure that adequate clearances are maintained.
 - Continue to inspect the condition of Path striping, markings, and signage for visibility and retro-reflectivity.
 - Continue to apply root barriers and evaluate their effectiveness at controlling Path heaves and damage in conjunction with Shared Use Path system improvements.
 - Continue to operate a 20-year schedule for Path resurfacing, subject to the availability of funding.
- **Continue** to employ best practice design standards associated with Shared Use Path markings, buffers, and signage as part of the City's ongoing maintenance program.
- **Continue** to identify and evaluate alternative forms of Shared Use Path surfaces and construction standards that mitigate impacts to the environment, such as storm water runoff and heat island effect.



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- Explore new opportunities for residents to report maintenance issues along the Shared Use Path through an online reporting mechanism or hotline.

Management

- **Continue** to inform residents of improvements to the Shared Use Path system through an engagement process that addresses concerns and builds support.
- **Continue** to enhance the Shared Use Path system through the addition of rest areas and related support facilities.
 - Support facilities including rest areas, shelters, benches, bicycle racks, water fountains, and restroom facilities are an important element of Sanibel's Shared Use Path system. These facilities help create a sense of place, identity, and provide users a safe and comfortable place to rest and retreat. Rest areas and support facilities should be designed as functional improvements that make the Path experience more pleasant, not as attractions in and of themselves.
 - Shared Use Path rest areas and facilities will be located within existing and future rights-of-way and easements and subject to future funding availability and site, environmental and engineering analyses.
 - All future Shared Use Path rest areas and related support facilities should match and fit harmoniously with their surrounding landscape and be made of materials that are accessible, durable, attractive, comfortable, and consistent with the character of Sanibel.
 - Continue to foster public/private partnerships to aid in the siting, funding, and maintenance of existing and future Shared Use Path rest areas and related support facilities.
- **Continue** to provide adequate bicycle parking in public spaces including Shared Use Path rest areas and civic, cultural, and recreational facilities.

- Consider conducting a bike parking demand study for all public facilities.
- Consider developing bicycle parking guidelines and standards for commercial and institutional uses, especially for properties adjacent to the Shared Use Path.

- **Continue** to manage Special Event permitting adjacent to the Shared Use Path. Monitor capacity and safety impacts and ensure appropriate accommodations for temporary bike parking demand.
- **Continue** to regularly evaluate and update City laws, regulations, and policy documents addressing the Shared Use Path system.
- **Continue** to monitor State and Federal legislative initiatives related to pedestrian, bicyclist, and Shared Use Path related activities.
- Update the Shared Use Path Master Plan on a regular schedule to document completed improvements, reflect current trends, and address changing community needs.

Connectivity

As stated in Section 3 (Vision, Goals and Objectives), improvements and extensions to the Shared Use Path system will be done for the purpose of connecting residents and visitors with frequently visited island destinations and activity centers, and to correspondingly reduce vehicular trips and energy consumption. Continuing to improve connectivity and responsibly



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expand the existing Shared Use Path system will help ensure that Sanibel continues to be a walkable and bikeable community for people of all ages and abilities.

- **Continue** to maintain an updated survey of the existing Shared Use Path system widths and conditions.
- Monitor and evaluate usage and volumes along the Shared Use Path system.
 - Explore opportunities to install automated Path counters that could help provide real-time Path usage and volume information.
 - Consider study of usage and volume to establish an operational carrying capacity for the Shared Use Path system that will guide future management, infrastructure improvements, and land use planning; specifically adopt a corresponding specific condition for Vehicle Rental and Leasing uses to ensure external compatibility and control expansion of this use.
- Complete planned and programmed Shared Use Path improvements and widenings, including planned improvements along the following segments:
 - Middle Gulf Drive, Fulgur Street to Beach Road
 - East Gulf Drive, Beach Road to Periwinkle Way
 - Palm Ridge Road, Tarpon Bay Road to Periwinkle Way
- Consistent with the Sanibel Plan (Section 3.3.3 Policy 2.7), continue to expand the Shared Use Path system whenever it can be accomplished in a fiscally sound manner compatible with surrounding land uses. See the Infrastructure Opportunities portion of the section for suggested Shared Use Path extensions.
 - Evaluate suggested Shared Use Path extensions for consistency with the Sanibel Plan, engineering feasibility, cost, and environmental and quality of life impacts.

- Consistent with the Sanibel Plan (Section 3.3.7, Policy 3.3), continue to provide safe and convenient Shared Use Paths and routes as a means of encouraging pedestrian and bicyclist access to public recreation facilities and open space areas.
- **Continue** to identify and evaluate opportunities to connect Sanibel's residents and visitors with frequently visited destinations and activity centers, such as the planned improvements along Palm Ridge Road.
- **Continue** to coordinate with Lee County and other local agencies on opportunities to enhance bicycle and pedestrian connections to/from the City of Sanibel.

Shared Use Path Stewardship

This Master Plan update recognizes that maintaining and improving a world-class Shared Use Path system requires partnerships and efforts that extend beyond the reach of the City of Sanibel. Fostering a sense of stewardship for the Path system while developing creative partnerships with local organizations, institutions, and community groups are critical to the continued success of the Shared Use Path system.

- **Continue** to engage and seek input from the community on matters related to the Shared Use Path system.
- **Continue** to support programs that build awareness and stewardship for the island's natural resources and the importance of alternative forms of transportation.
 - Consider adopting a ban or prohibition of bike activity on the beach and discourage biking on unimproved trails



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through conservation lands, as a measure of environmental stewardship.

- Promote public and privately sponsored events and programs that encourage the use of alternative forms of transportation.
- **Continue** to work with community partners in planning and executing events focused around the Shared Use Path system.
- Consider participating in events, such as Florida (March) and National (May) Bike Month, to celebrate and promote the Shared Use Path system.
- Consider creating an Adopt-a-Path program to encourage local businesses, community institutions, and residential neighborhoods to take on some level of responsibility for the Paths.
- **Continue** to produce and distribute informational guides related to the Shared Use Path system.
 - Continue to pursue alternative sources of funding for the production and distribution of informational materials.
- Partner with local resorts, bicycle-related businesses, restaurants, and destinations to distribute materials that inform and educate Path users on rules, regulations, and appropriate Path behavior.
- Expand the Shared Use Path system's presence on the City of Sanibel's website. Consider providing a dedicated page that could serve as a platform for information on the Path system, laws, and appropriate user behavior.
 - Continue to use the City's existing Sanibel Bound mobile application as a platform for information on the Shared Use Path system, including educational materials and as an interactive Path user guide.

Infrastructure Opportunities

The Sanibel Plan has established, by policy, measures to reduce auto ridership that include improving the safety of the existing Path system and expanding the Shared Use Path system throughout the city. Helping to fulfill this objective is a comprehensive Shared Use Path system that provides numerous transportation and recreation opportunities that connect neighborhoods, parks, schools, community venues, and business districts and serves multiple users, interests, and improves access for residents of varying physical capacities, ages, and skill levels. Opportunities for Path infrastructure enhancements was developed through the following process:

- Identify potential Shared Use Path related improvements based on public and City staff input, previous planning efforts, and an evaluation of existing conditions.
- Assess suggested Shared Use Path enhancements based on an evaluation process.

Suggested Shared Use Path Enhancements

Intersection and Crossing Improvements

Safe crossings and well-designed intersections are a critical component of a connected Path system. Throughout the Master Plan update several intersections and crossing locations were suggested for various improvements. As displayed in Figure 8-1 and listed in Table 8-1, 16 intersections and crossing locations were suggested for enhancements. Additional detail on the suggested intersection and crossing improvements is provided in Appendix G.



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Shared Use Path Extensions

In total, 13 extensions to the existing Shared Use Path system were suggested for further evaluation by the public, City staff, and Plan stakeholders. Many have been discussed or identified in previous planning efforts and others are being suggested for the first time. The suggested Path extensions shown in Figure 8-2 and listed in Table 8-2 are largely conceptual and do not represent recommended Path extensions. The intent was to identify potential Path extensions that will need to be evaluated for feasibility and further studied before ever becoming potential projects. At the request of City staff, three suggested Path extensions—Periwinkle Way from Tarpon Bay Road to Palm Ridge Road, Palm Ridge Road from Periwinkle Way to Tarpon Bay Road, and Periwinkle Way from Dunlop Road to Bailey Road—were evaluated in greater detail for potential project

feasibility and environmental, right-of-way, drainage, and utility impacts. Details from this evaluation are included in Appendix H.

Other Pedestrian and Bicycle Enhancements

In addition to the suggested Shared Use Path enhancements, several pedestrian and bicycle facility enhancements were suggested during the development of this Plan. Many include improving on-street facilities (e.g., bike lanes or shared lane markings) to either improve connections between the existing Shared Use Path system or to supplement the existing Path system by providing additional opportunities to support additional pedestrian and bicycle travel. Figure 8-3 and Table 8-3 list the suggested on-street enhancements identified during the Plan update. Additional detail on the suggested pedestrian and bicycle enhancement opportunities is provided in Appendix I.



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Figure 8-1: Suggested Intersection Enhancements



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Table 8-1: Suggested Shared Use Path Crossing Enhancements

ID	Intersection	Suggested Enhancement
1	Sanibel Captiva Rd at Ding Darling Entrance	Improve visibility of Path users
2	Sanibel Captiva Rd at Rabbit Rd	Improve crosswalk alignment and visibility
3	West Gulf Dr at Rabbit Rd	Improve wayfinding
4	Sanibel Captiva Rd at Tarpon Bay Rd/Palm Ridge Rd	General crossing improvement, assignment of right-of-way
5	Periwinkle Way at St Michael Church	Visibility and crossing improvements
6	Periwinkle Way at Meridian Dr	Visibility and crossing improvements
7	Casa Ybel Rd at Algiers Ln	Crosswalk alignment
8	Middle Gulf Dr at Casa Ybel Rd	Crosswalk alignment
9	Middle Gulf Dr at Cowry Ct	Improve visibility and crosswalk alignment
10	Middle Gulf Dr at Par View Dr	Enhance connection to Shared Use Path
11	East Gulf Dr at Nerita St	General crossing improvements
12	Periwinkle Way at Roadside Park	General crossing improvements
13	Periwinkle Way at Bailey Rd	Visibility and crossing improvements
14	Bailey Rd at Sand Castle Ct	New crossing potential
15	Causeway Blvd at Chamber of Commerce	General crossing improvements
16	Periwinkle Way at Yachtsman Dr	New crossing potential



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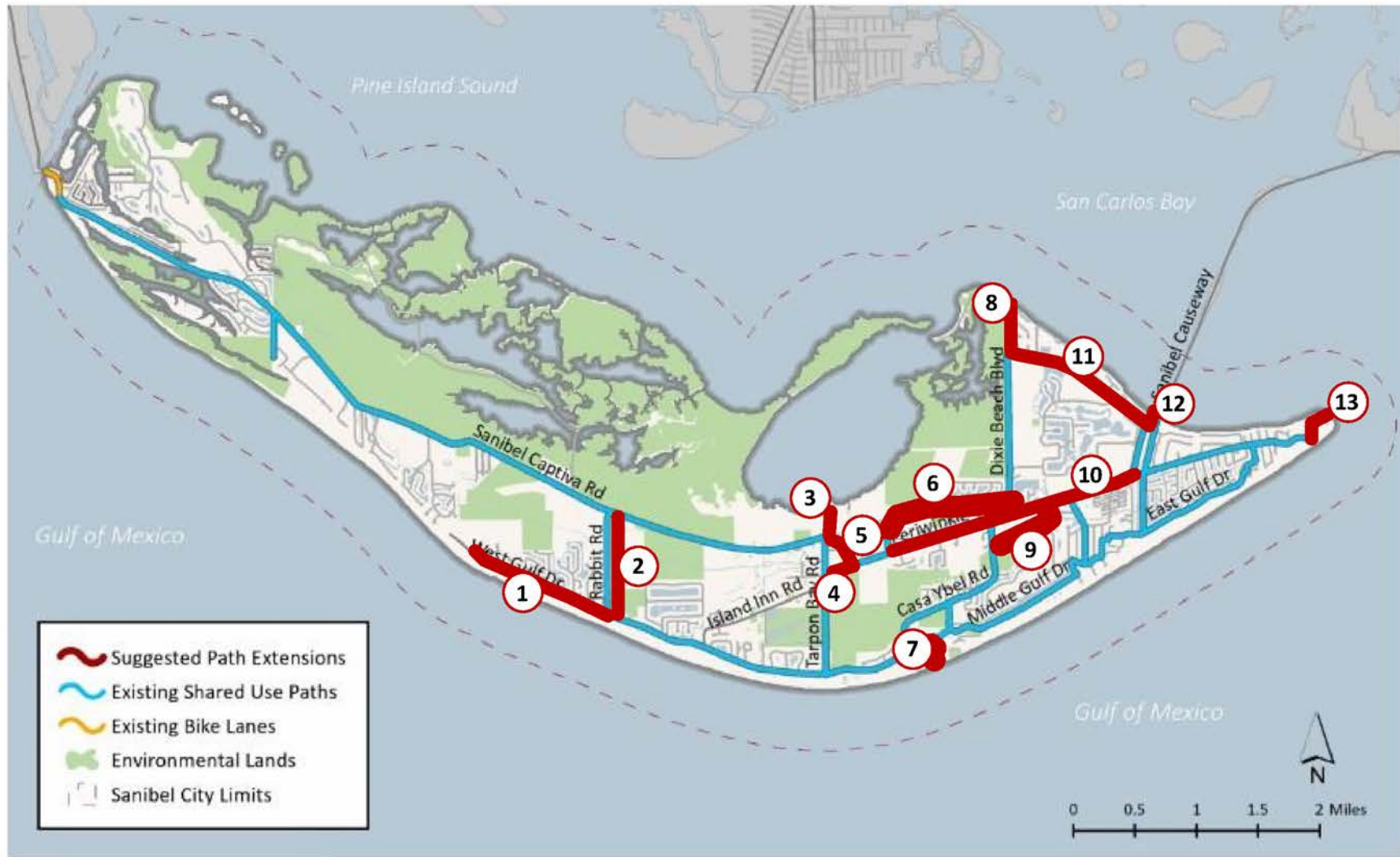


Figure 8-2: Suggested Shared Use Path Extensions



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Table 8-2: Suggested Shared Use Path Extensions

ID	Suggested Extension	Description
1	W Gulf Dr, Rabbit Rd to Dingman Dr	Extend Path west along W Gulf Dr from where it curves at Surf Sound Ct
2	Rabbit Rd, W Gulf Dr to Sanibel Captiva Rd	Provide Path connection directly along Rabbit Rd between W Gulf Dr and Sanibel Captiva Rd
3	Tarpon Bay Rd, Sanibel Captiva Rd to Tarpon Bay Explorers	Extend Path along Tarpon Bay Rd north of Sanibel Captiva Rd toward Tarpon Bay Explorers
4	Periwinkle Way, Tarpon Bay Rd to Palm Ridge Rd	Provide Path along north side of Periwinkle Way between Tarpon Bay Rd and Palm Ridge Rd
5	Palm Ridge Rd, Periwinkle Way to Tarpon Bay Rd	Provide Path along west side of Palm Ridge Rd between Periwinkle Way and Tarpon Bay Rd
6	New Path Connection, Dunlop Rd to Dixie Beach Blvd	Provide new Path connection connecting Dunlop Rd to Dixie Beach Blvd north of Periwinkle Way
7	Algiers Lane, East of Camino Del Mar to Gulfside City Park Parking Lot	Extend the Path along the east side of Algiers Ln from its current terminus/where it turns through the park to the Gulfside City Park parking lot.
8	Dixie Beach Blvd, Royal Poinciana Dr to San Carlos Bay Dr	Extend Path along Dixie Beach Blvd from current terminus to Parking lot north of San Carlos Bay Dr
9	New Path Connection, Casa Ybel Rd to Main St	Provide new Path connection along south side of Periwinkle Way, behind businesses, between Casa Ybel Rd and Main St
10	Periwinkle Way, Dunlop Rd to Bailey Rd	Provide Path along north side of Periwinkle Way to improve access to businesses and neighborhoods and relieve congestion along existing Path
11	New Path Connection, Dixie Beach Blvd to Bailey Rd	Provide new Path connection between Dixie Beach Blvd and Bailey Rd within Royal Poinciana Dr and Bay Dr corridors
12	Bailey Rd, s of Bay Dr to Bay Shore Dr	Extend existing Path along Bailey Rd from current terminus to parking lot on Bay Shore Dr
13	Periwinkle Way, Lighthouse Beach Park entrance to Lighthouse Park Fishing Pier Parking Lot	Extend Path from Lighthouse Beach Park entrance to Fishing Pier parking lot



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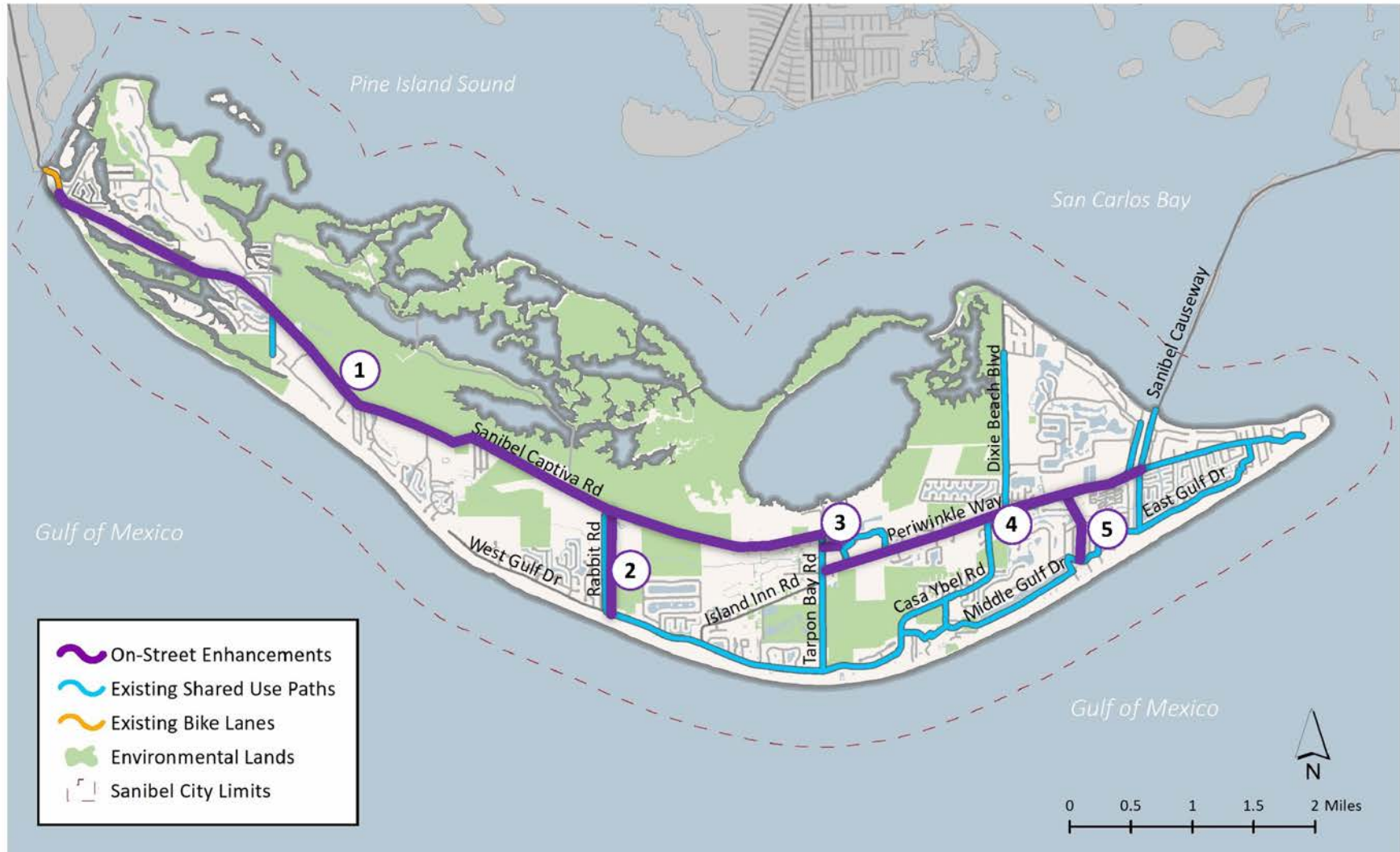


Figure 8-3: Suggested Pedestrian and Bicycle Improvements



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Table 8-3: Other Suggested Pedestrian and Bicycle Improvements

ID	On Street (From-To)	Suggested Enhancement
1	Sanibel Captiva Rd, Mangrove Ln to Tarpon Bay Rd	On-street bicycle enhancements, marked bike lanes or paved shoulder
2	Rabbit Rd, W Gulf Dr to Sanibel Captiva Rd	On-street bicycle enhancements, marked bike lanes or shared lane markings
3	Library Way, Tarpon Bay Rd to Palm Ridge Rd	On-street bicycle enhancements, marked bike lanes or shared lane markings
4	Periwinkle Way, Tarpon Bay Rd to Lindgren Blvd	On-street bicycle enhancements, marked bike lanes or paved shoulder
5	Donax St, Middle Gulf Dr to Periwinkle Way	On-street bicycle enhancements, marked bike lanes or shared lane markings



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Evaluating Suggested Shared Use Path Enhancements

A procedure for evaluating suggested Shared Use Path enhancements was developed to help inform the decision-making process through a set of consistent and repeatable criteria. An overview of the identified evaluation considerations is provided in Figure 8-4 and includes the following:

- **Consistency with the Sanibel Plan:** Is the suggested Path enhancement consistent with the Policies, Goals, and Objectives of the Sanibel Plan? Suggested enhancements that are consistent and support the goals and objectives of the Sanibel Plan should be considered for further evaluation, suggestions that are found to not be consistent with the Sanibel Plan should be considered not feasible.
- **Consistency with the Shared Use Path Master Plan:** Does the suggested Path enhancement contribute to the Shared Use Path Vision and accommodate the Goals and Objectives of this Plan? Like the decision with consistency to the Sanibel Plan, if a suggested enhancement is not consistent with the Shared Use Path Master Plan Vision, Goals and Objectives it should be considered not feasible; suggested enhancements that do support the Master Plan should be considered for further evaluation.
- **Supported by the Public:** Is the suggested Path enhancement supported by the public? Would the enhancement negatively impact the quality of life of nearby residents and businesses?
- **Identified Impacts, Environmental, Right-of-Way, Drainage, Utilities:** How difficult or expensive would it be to implement the suggested enhancement? What are the environmental, right-of-way, drainage, utility, and financial impacts? Suggested enhancements that have significant impacts to the surrounding environment, right-of-way, drainage, and utilities would most likely need further evaluation or may be determined to not be physically or financially feasible, at least for the time being.

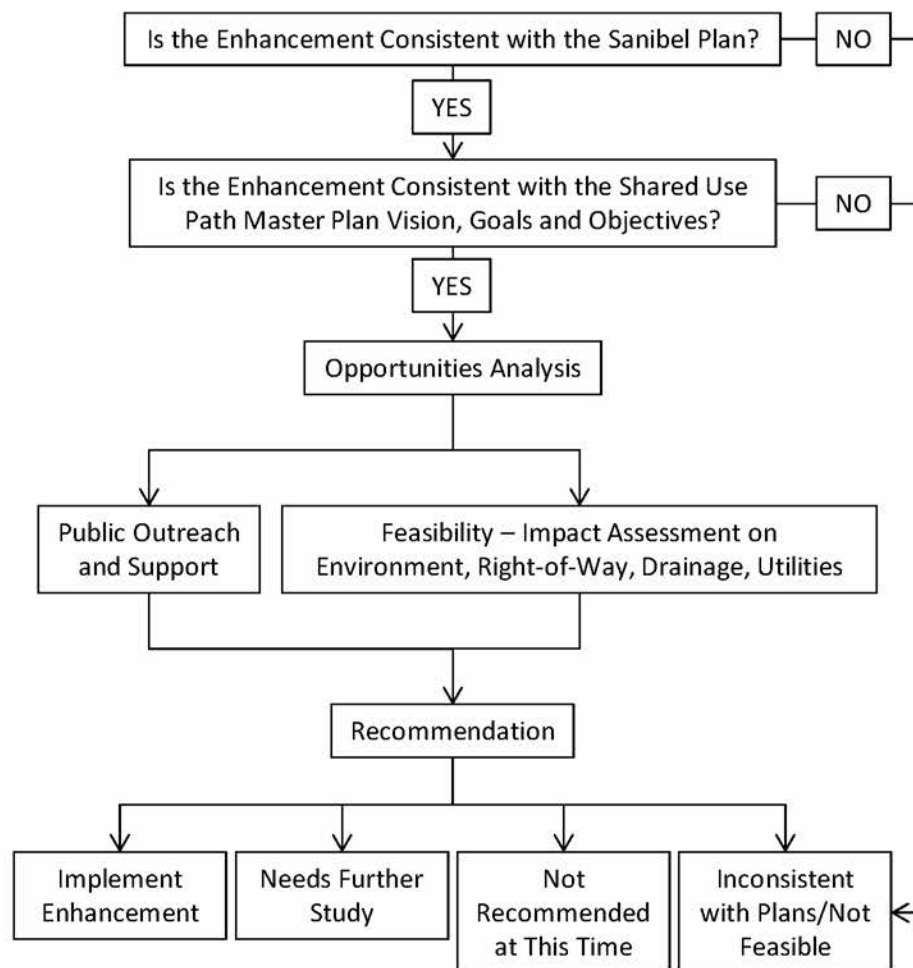


Figure 8-4: Shared Use Path Enhancement Evaluation Considerations

SECTION 9 IMPLEMENTATION AND FUNDING STRATEGIES





Implementation Strategy

Implementing the Shared Use Path Master Plan ultimately will depend on available funding, resources, and community support. However, recognizing strategies towards implementation ensures the successful execution of the Plan. The implementation strategy shown in Table 9-1 is organized by the goals and opportunities listed in this Master Plan and is presented by opportunity, lead department, and general phasing timeline. The general phasing timeline includes:

- Ongoing – continuation of current programs and projects
- Immediate – less than 2 years
- Short-Term – between 2 and 5 years
- Long-Term – greater than 5 years

Not all Shared Use Path opportunities are captured through master planning efforts. As the community changes overtime, so do its priorities. Therefore, the implementation strategy should be viewed as a strategic and dynamic planning tool that responds to changing conditions and opportunities. Equally important is that progress towards achieving implementation is examined and reported on a regular basis.



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Table 9-1: Shared Use Path Master Plan Implementation Strategy

Opportunity	Primary Responsibility	Ongoing/Continuous	Immediate	Short-Term	Long-Term
Supporting Goal – Safety					
Consistent with the Sanibel Plan, continue to evaluate and apply appropriate design standards and best practices associated with future Path improvements and extensions based on context, volume, mix of users, availability of right-of-way, and drainage and environmental impacts.	Public Works and Planning	X			
Along higher volume Path segments (e.g., Periwinkle Way and Tarpon Bay Road), continue to provide a minimum Shared Use Path width of 10 feet, subject to the availability of right-of-way and drainage and environmental impacts.	Public Works	X		X	X
Continue to improve and widen all Shared Use Paths to an appropriate width, no less than 8 feet, based on the context, volume, mix of users, availability of right-of-way, and drainage and environmental impacts.	Public Works	X	X	X	X
Continue to monitor and evaluate opportunities to improve safety at locations with higher concentrations of pedestrian and bicycle crashes and Shared Use Path related incidents.	Public Works and Sanibel Police Dept	X	X		
Continue to explore opportunities to improve Shared Use Path and driveway interactions.	Public Works and Planning	X		X	
Explore Land Development Code opportunities to enable or incentivize shared ingress/egress on adjoining properties, improve off-street parking and driveway design, and continue to encourage shared driveway connections between adjacent properties and pedestrian-friendly site planning.	Public Works and Planning	X		X	
Continue to evaluate opportunities to improve Shared Use Path crossings at intersections and mid-block locations, in accordance with the City's Crosswalk Policy.	Public Works	X	X		
Continue to evaluate and improve conditions, where feasible, at locations with higher concentrations of pedestrian and bicycle crashes and Shared Use Path incidents.	Public Works and Sanibel Police Dept	X	X		
To the extent possible, ensure that the Shared Use Path system is accessible by designing new and retrofitted Paths in compliance with applicable ADA design guidelines and corresponding PROWAG, or subsequent guidance that may supersede PROWAG in the future.	Public Works	X		X	X



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Opportunity	Primary Responsibility	Ongoing/Continuous	Immediate	Short-Term	Long-Term
Continue to incorporate design principles that accommodate users of all ages and abilities into all roadway projects.	Public Works	X	X	X	
Evaluate opportunities to provide additional and enhanced pedestrian and on-street bicycle facilities along roadways to supplement the Shared Use Path system. This includes but is not limited to new and improved facilities, sidewalks, bicycle lanes etc., landscaping, land use and design, traffic calming, and traffic engineering. Evaluate opportunities for potential pedestrian and on-street bicycle facilities along, but not limited to roadway segments shown in Figure 8-3.	Public Works	X	X	X	
Continue to monitor and evaluate the development and application of new and emerging technologies (e.g., electric bicycles, electric scooters, and connected and automated vehicles) and how they relate to mixing of transportation modes, variable travel speed, and overall user safety along the Path system.	City Manager, Public Works, Planning, and Sanibel Police Dept		X	X	
Continue to work with local partners on developing and distributing educational materials related to the Shared Use Path system.	City Manager and Planning	X	X		
Encourage participation from all responsible parties, bike rental companies, advocacy groups, resorts, business community, and employers to develop and distribute educational materials to all Path users.	City Manager and Planning		X	X	
Continue to explore opportunities to provide programs and materials that effectively reach a large number of Sanibel's daily and seasonal visitors.	City Manager and Planning	X	X		
Continue to conduct annual public forums on Shared Use Path safety for island residents and visitors.	City Manager, Public Works, Planning, and Sanibel Police Dept	X	X	X	X
The Sanibel Police Department, in conjunction with the Lee County School District, will continue to conduct bicycle safety courses to elementary and middle school students at The Sanibel School.	Sanibel Police Department	X		X	
Continue to identify opportunities to offer additional bicycle safety courses to City residents.	City Manager and Sanibel Police Dept	X		X	
Continue to actively and regularly promote the use of safety equipment including helmets, lights, and bells for all bicyclists.	City Manager, Sanibel Police Dept, Public Works and Planning	X	X		



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Opportunity	Primary Responsibility	Ongoing/ Continuous	Immediate	Short-Term	Long-Term
Continue to provide regular training sessions for law enforcement officers and traffic aides relating to bicyclist, pedestrian, and motorist traffic laws.	Sanibel Police Dept	X			
Continue to regularly update law enforcement officers on state and local legislative actions pertaining to the rights and responsibilities of Path users.	Sanibel Police Dept	X			
Continue to focus enforcement efforts on education and compliance to help establish community awareness of the laws and unsafe behavior.	Sanibel Police Dept and City Manager	X			
Explore opportunities to expand law enforcement presence along the Shared Use Path system, including the Sanibel Police Department's Bicycle Patrol Unit, to strengthen enforcement efforts and expand ties with the community.	Sanibel Police Dept		X	X	X
Use a three-stage enforcement process that includes educating, warning, and ticketing Path users and motorists who fail to obey applicable traffic laws.	Sanibel Police Dept	X	X		
Continue to track and monitor warnings, tickets, collisions, crashes, and other incidents that occur along the Shared Use Path system.	Sanibel Police Dept	X	X		
Encourage safe and courteous behavior through positive enforcement and recognition programs.	Sanibel Police Dept	X			



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Opportunity	Primary Responsibility	Ongoing/Continuous	Immediate	Short-Term	Long-Term
Supporting Goal – Quality of Service					
Continue to conduct a proactive maintenance program to ensure that the Shared Use Paths are safe and well maintained.	Public Works	X	X	X	X
Continue to employ best practice design standards associated with Shared Use Path markings, buffers, and signage as part of the City's ongoing maintenance program.	Public Works and Planning	X	X	X	X
Continue to identify and evaluate alternative forms of Shared Use Path surfaces and construction standards that mitigate impacts to the environment, such as storm water runoff and heat island effect.	Public Works			X	
Explore new opportunities for residents to report maintenance issues along the Shared Use Path through an online reporting mechanism or hotline.	Public Works		X	X	
Continue to inform residents of improvements to the Shared Use Path system through an engagement process that addresses concerns and builds support.	City Manager, Public Works and Planning	X	X	X	X
Continue to enhance the Shared Use Path system through the addition of rest areas and related support facilities.	Public Works	X			X
Continue to provide adequate bicycle parking in public spaces including Shared Use Path rest areas and civic, cultural, and recreational facilities.	Public Works and Planning	X		X	
Continue to manage Special Event permitting adjacent to the Shared Use Path. Monitor capacity and safety impacts and ensure appropriate accommodations for temporary bike parking demand.	Public Works and Planning	X	X	X	X
Continue to regularly evaluate and update City laws, regulations, and policy documents addressing the Shared Use Path system.	City Manager, Public Works and Planning	X	X	X	X
Continue to monitor State and Federal legislative initiatives related to pedestrian, bicyclist, and Shared Use Path related activities.	City Manager, Public Works and Planning	X	X	X	X
Update the Shared Use Path Master Plan on a regular schedule to document completed improvements, reflect current trends, and address changing community needs.	City Manager, Public Works and Planning				X



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Supporting Goal – Connectivity					
Continue to maintain an updated survey of the existing Shared Use Path system widths and conditions.	Public Works and Planning	X	X		
Monitor and evaluate usage and volumes along the Shared Use Path system.	City Manager, Public Works and Planning		X		
Complete planned and programmed Shared Use Path improvements and widenings, including planned improvements along the following segments: <ul style="list-style-type: none"> • Middle Gulf Dr, Fulgur St to Beach Rd • East Gulf Dr, Beach Rd to Periwinkle Way • Palm Ridge Rd, Tarpon Bay Rd to Periwinkle Way 	Public Works	X	X		
Consistent with the Sanibel Plan (Section 3.3.3 Policy 2.7), continue to expand the Shared Use Path system whenever it can be accomplished in a fiscally sound manner compatible with surrounding land uses. See the Infrastructure Opportunities portion of the section for suggested Shared Use Path extensions.	Public Works and Planning	X	X	X	X
Consistent with the Sanibel Plan (Section 3.3.7, Policy 3.3), continue to provide safe and convenient Shared Use Paths and routes as a means of encouraging pedestrian and bicyclist access to public recreation facilities and open space areas.	Public Works	X	X	X	X
Continue to identify and evaluate opportunities to connect Sanibel's residents and visitors with frequently visited destinations and activity centers, such as the planned improvements along Palm Ridge Road.	Public Works and Planning	X			
Continue to coordinate with Lee County and other local agencies on opportunities to enhance bicycle and pedestrian connections to/from the City of Sanibel.	City Manager, Public Works and Planning	X			X



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Supporting Goal – Stewardship					
Continue to engage and seek input from the community on matters related to the Shared Use Path system.	City Manager, Public Works and Planning	X	X	X	X
Continue to support programs that build awareness and stewardship for the island's natural resources and the importance of alternative forms of transportation.	City Manager, Public Works, Planning and Natural Resources	X			
Promote public and privately sponsored events and programs that encourage the use of alternative forms of transportation.	City Manager and Planning	X		X	
Continue to work with community partners in planning and executing events focused around the Shared Use Path system.	City Manager and Planning	X	X		
Consider participating in events, such as Florida (March) and National (May) Bike Month, to celebrate and promote the Shared Use Path system.	Planning		X		
Consider creating an adopt-a-path program to encourage local businesses, community institutions, and residential neighborhoods to take on some level of responsibility for the Paths.	City Manager and Public Works			X	
Continue to produce and distribute informational guides related to the Shared Use Path system.	City Manager and Planning	X	X	X	X
Partner with local resorts, bicycle-related businesses, restaurants, and destinations to distribute materials that inform and educate Path users on rules, regulations, and appropriate Path behavior.	City Manager, Public Works and Planning		X	X	X
Expand the Shared Use Path system's presence on the City of Sanibel's website. Consider providing a dedicated page that could serve as a platform for information on the Path system, laws, and appropriate user behavior.	City Manager and Planning	X	X		



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Funding Strategies

Although the City of Sanibel pursues alternative funding sources, the primary source of funds for the maintenance and management of the existing Path system and improvements come from local funding sources. To ensure the continued success of the Path system, it is essential that the City of Sanibel, in partnership with other public, private and not-for-profit interests, pursue all funding sources that are applicable to Sanibel's unique community character, right-of-way constraints, and environmental conditions. Identifying and leveraging several funding sources will be essential to the successful implementation of the Master Plan, especially as infrastructure costs rise and the competition for state and federal funds increase. The following examines local funding sources used for improving and maintaining the existing Shared Use Path system as well as identifying potential additional funding sources.

Existing Funding Strategies

The City of Sanibel is already leveraging several local funding options to fund Shared Use Path maintenance and improvement projects. User fees (tolls), impact fees, sales tax and gas tax, as well as property tax are all used to fund different infrastructure projects. Some of the revenue can be used only in specific locations or for specific types of projects and some have more flexibility. Table 9-2 provides a summary of the current local funding sources used to implement enhancements to the Shared Use Path system.

Potential Additional Funding Sources

Several federal, State, and private/grant funding opportunities could be used towards the planning, development, and implementation of improvements to the Shared Use Path system. Table 9-3 describes a variety of funding sources that may be available to supplement the City's local funding sources toward the planning and implementation of Shared Use Path projects.



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Table 9-2: Existing Local Funding Sources

Funding Source	Definition	Eligibility
General Fund	The General Fund is the main operating fund of the City and supports public safety, general government operations, parks and recreation, economic development programs and other non-enterprise related operations. Revenues from property taxes, sales tax, electric franchise fees, utility services taxes, communication services taxes, charges for services rendered and other revenues are used to pay for General Fund programs.	General fund revenues can be used to fund planning, maintenance, and improvements to the Shared Use Path system and other transportation related projects. Additionally, General Fund revenues can be used for public safety, including police services.
Transportation Fund	The primary revenue sources of the Transportation Fund comprise collected gas taxes and surplus toll revenue from the Sanibel Causeway through the County.	The Transportation Fund is used to clearly align transportation expenditures with gas tax revenue, as required by Florida Statutes, and toll revenue, as required by an interlocal agreement with Lee County. Revenues from this fund are used for repair and maintenance, operating supplies and road material supplies related to transportation.
Beach Parking Fund	Beach Parking Fund revenues are generated, pursuant to ordinance, through parking fees, permits, and violations	In addition to the enforcement of parking violations, revenues are used to maintain beach facilities as well as provide Shared Use Path access to the beaches.
Road Impact Fee Fund	Impact fees are levied on new construction. The funds are collected through an interlocal agreement between the City and Lee County.	Pursuant to the interlocal agreement, road impact fees are retained by the City and can be used only for improvements made to Sanibel Captiva Rd, Palm Ridge Rd, Tarpon Bay Rd, Periwinkle Way, Causeway Blvd, Lindgren Blvd, East Gulf Dr, Middle Gulf Dr, West Gulf Dr, and Rabbit Rd.



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Table 9-3: Potential Funding Mechanisms

Funding Source	Summary
Surface Transportation Block Grant Program (STBG)	The FAST Act replaced the TA Program with set-aside funds under the STBG. Eligible activities include on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities such as historic preservation and vegetation management, environmental mitigation related to storm water and habitat connectivity, recreational trail projects, and Safe Routes to School projects. A 20% local match is required. Typically, right-of-way issues and environmental concerns must have been addressed prior to the submission of the application.
Transportation Alternatives Program (TA or TAP)	Set-aside under STBG Program; authorizes funding for programs and projects defined as transportation alternatives, including 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. Note that this fund encompasses Safe Routes to School funding. <ul style="list-style-type: none">• Eligible projects include but are not limited to construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation, as well as recreational trails program projects
Highway Safety Improvement Program (HSIP)	HSIP funds can be used for pedestrian and bicycle safety improvements. States may obligate funds under HSIP to carry out any highway safety improvement project on any public road or publicly owned bicycle or pedestrian pathway or trail, or as provided under Flexible Funding for States with a Strategic Highway Safety Plan, and other safety projects.
National Highway Performance Program (NHPP)	NHPP funds may be obligated only for a project on an “eligible facility” – a project, part of a program of projects, or an eligible activity supporting progress toward the achievement of national performance goals for improving infrastructure condition, safety, congestion reduction, system reliability, or freight movement on the National Highway System (NHS). Project must be identified in the Statewide Transportation Improvement Program (STIP)/Transportation Improvement Program (TIP) and be consistent with the Long-Range Statewide Transportation Plan and Metropolitan Transportation Plan(s).
Congestion Mitigation and Air Quality Improvement (CMAQ)	Flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act, improving air quality and reducing congestion <ul style="list-style-type: none">• Funding for projects in non-attainment and maintenance areas based on Clean Air Act; states with neither of these areas still get some funding• Project must be included in MPO TIP or state TIP.
State/Metropolitan Planning Funds (PLA)	Metropolitan Planning funds are available to MPOs to carry out the metropolitan transportation planning process required by 23 U.S. Code Section 134.



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Funding Source	Summary
State and Community Highway Safety Grant Program (Section 402)	The Section 402 program provides grants to states to improve driver behavior and reduce deaths, injuries, and property damage from motor vehicle-related crashes. At least 40% of the statewide funds are to be used by or for the benefit of local jurisdictions, including counties, cities, law enforcement agencies, and other agencies, to address local traffic safety problems. To receive Section 402 funds, a state must have an approved Highway Safety Plan and provide assurances that it will implement activities in support of national goals and may spend Section 402 funds in accordance with the approved Highway Safety Plan for a wide variety of activities including improving pedestrian and bicycle safety.
Safe Routes to Schools (SRTS)	Provides funds to substantially improve the ability of primary and middle school students to walk and bicycle to school safely. Funds may be used for the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity (approximately 2 miles) of primary and middle schools.
Florida Recreational Trails Program (RTP)	Administered by the Florida Department of Environmental Protection, the RTP is a federally funded grant program that provides financial assistance to agencies and jurisdictions for the development of recreational trails, trailheads, and trailside facilities.
FDOT Pedestrian and Bicycle Safety Grants	Subgrants to traffic safety partners to improve traffic safety and reduce crashes, serious injuries, and fatalities.
TIGER Discretionary Grants Program	Capital projects that generate economic development and improve access to reliable, safe and affordable transportation for communities, both urban and rural.
Greenways and Trails Acquisition Program	To conserve, develop, and use natural resources for healthful and recreational purposes and provide open space benefiting environmentally sensitive lands and wildlife and providing people with access to healthy outdoor activities; and as an implementation tool for ecosystem management concepts, while providing recreational opportunities such as hiking, bicycling, and jogging, thereby improving the health and welfare of the people.
Land and Water Conservation Fund (LWCF)	Development of recreation areas such as beaches, picnic areas, trails, ballfields, tennis and basketball courts and playgrounds along with associated support facilities such as lighting, parking, restrooms and landscaping. Also may be used for acquisition of land for outdoor recreation purposes. The matching ratio is one applicant dollar to one federal dollar (50%/50%); the maximum grant request is \$200,000.
Florida Forever	Aimed at conservation of Florida's natural resources through land acquisition, as well as restoration of environmental system, implementation of local comprehensive plans, increased public access, recreational opportunities, and public lands management/maintenance.
People for Bikes Community Grants Program	People for Bikes, formerly known as Bikes Belong, is a national organization working to make bicycling better throughout the United States through programs and advocacy work. Funds can be used toward infrastructure projects and education and encouragement programs.
Droppelt Family Trail Development Fund	The Rails to Trails Conservancy awards about \$85,000 per year to support organizations and local governments that implement projects to build and improve multi-use trails.



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Funding Source	Summary
Kodak American Greenways Grants	Provides small grants from \$500 to \$2,500 to projects that enhance greenways opportunities, which could include mapping, ecological assessments, interpretative displays, surveying, conferences, design activities, brochure development, audio-visual productions or public opinion surveys; hiring consultants, incorporating land trusts, building footbridges, planning a bike path, or other creative projects and for all appropriate expenses needed to complete, expand, or improve a greenway project including planning, technical assistance, legal and other costs.
Northface Explore Fund	A competitive grant program that supports non-profit organizations and their efforts to provide participants experiences that nurture an enduring appreciation of the outdoors, support projects that protect the environment through environmental stewardship, use outdoor exploration as the catalyst for positive personal or societal change, and encourage participants to try new outdoor activities.