

Summary of Project Recommendation Elements:

Descriptions and Evaluations

PROJECT SUMMARY

In May 2006, the Refuge, working in partnership with the City of Sanibel and Lee County, applied for the Alternative Transportation in Parks and Public Lands Program now known as the Paul S. Sarbanes Transit in Parks Program. The program provides an opportunity to examine environmentally sensitive solutions to manage visitation through funding of capital and planning expenses for alternative transportation in national parks and other federal lands. As one of the most visited refuges in the nation, the Refuge struggles to meet its conservation goals while providing a positive visitor experience. This project seeks to evaluate alternative transportation solutions to alleviate Refuge and island congestion and circulation issues created by visitors to the Refuge.

The project goals listed below were used to measure each alternative's effectiveness in the technical evaluation process.

- Conserves natural, historic, and cultural resources
- Reduces congestion and pollution
- Improves visitor mobility and accessibility
- Enhances visitor experience
- Ensures access to all, including persons with disabilities
- Cost effective
- Public support

Public input has been central in developing alternatives for evaluation and advancement. A Draft Project Recommendation was presented at public meetings in 2011 and 2012. At these meetings, the majority of participants indicated a lack of support for the proposed circulator elements. Those circulator elements have since been removed.

Between April 2011 and April 2012, members of the public were encouraged to submit open-ended comments at workshops and through survey tools, and some consistent themes emerged:

- Emphasis should be on protecting the natural habitat.
- There should be NO circulator elements outside of the Refuge.
- The existing Refuge tram should be maintained with some enhancements.
- Wildlife Drive should be resurfaced for easier bicycling (Refuge plans to resurface in 2013).
- Existing Refuge trails should receive surface enhancements (crushed shell) for bicyclists and pedestrians.
- Improve the canoe launch at Tarpon Bay Explorers (completed as of April 2012).
- Provide a new trail connecting the Tarpon Bay Recreation Area to the Shared Use Path.
- Investigate parking options at the former Island Water site.
- Add more interpretive signs in the Refuge.
- Provide signs guiding users from the Shared Use Paths to the Bailey Tract Trail.
- Improve safety for wildlife to cross Sanibel-Captiva Road.
- Improve safety at pedestrian crossings along Sanibel-Captiva Road.
- Provide amenities that would improve safety for cyclists.

After considering both public input and the technical evaluation, the Steering Committee refined the Draft Project Recommendation to seven elements. The following pages contain the seven elements, a description, and the percent of the public support received at the open house in March 2012; this is the most recent public support data and reflects the present project recommendation. Please see page four for more details on public support (**Table 1**) as well as element location (**Figure 1**).

WILDLIFE CROSSINGS

Areas adjacent to the Refuge with high wildlife fatalities would be identified and evaluated for new wildlife crossings; specific locations and physical features would be determined in next phase of study. Design would be consistent with City of Sanibel design standards.

Environmental Impacts	Public Support	Description of Measures Satisfied
Potential environmental impacts will be determined in the next study phase.	92 percent support in 2012	<ul style="list-style-type: none"> • Reduces transportation impacts to Refuge fauna; • Reduces vehicle-animal collisions; • Supported by the public.

NEW TRAIL CONNECTING TARPON BAY RECREATION AREA TO THE SHARED USE PATH

A new trail for hikers and bicyclists would connect the Tarpon Bay Recreation Area to the City of Sanibel Shared Use Path, directly to the south and would take advantage of existing upland fill area to minimize habitat disruption. The new trail's surface should be similar to other Refuge trails for use by non-motorized users. The trail would increase safety by providing a separate non-motorized connection between the Tarpon Bay Recreation Area and the existing Shared Use Path adjacent to Sanibel-Captiva Road and parallel to the Refuge.

Environmental Impacts	Public Support	Description of Measures Satisfied
The trail alignment would take advantage of any existing or historic easements, and the trail surface would be upgraded for hikers and bicyclists while not impacting the sensitive habitats of the Refuge.	96 percent support in 2012	<ul style="list-style-type: none"> • Encourages alternative transportation use by providing additional access to the City of Sanibel Shared Use Path supporting pedestrian and bicycle travel; • May reduce air pollution emissions and fuel consumption by providing an alternative to a motorized vehicle; • Provides enhanced educational experience and enhances the visitor experience by providing a safe alternative to operating in traffic along Tarpon Bay Road; • Improves visitor mobility and accessibility; • Supported by the public.

ENHANCED REFUGE WAYFINDING PLAN FOR EXISTING REFUGE SIGNAGE

Small information kiosks and directional signage made of durable materials would inform visitors of the recreational opportunities offered by the Refuge in addition to other transportation and congestion information. All efforts would be taken to enhance, replace, and consolidate existing signage. Each kiosk would display information about its location and maps showing its location in relation to other island features and destinations. Information pertaining to restrictions on activities may also be posted at wayfinding kiosks¹.

Environmental Impacts	Public Support	Description of Measures Satisfied
No impacts to natural environment.	95 percent support in 2012	<ul style="list-style-type: none"> • Reduces visitor impacts to Refuge flora and sensitive habitats by focusing pedestrian movements; • Provides enhanced educational experience; • Supported by the public.

BAILEY TRACT WAYFINDING TO SHARED USE PATH

Improved wayfinding techniques would instruct users to the available connection between the Refuge's Bailey Tract, other areas of the Refuge, and to the Shared Use Path along Tarpon Bay Road and Sanibel-Captiva Road. This strategy focuses on providing enhanced connectivity between the Refuge and Shared Use Path; the Refuge would collaborate with the City of Sanibel and its Shared Use Path Master Plan. All efforts will be made to enhance, replace, and consolidate existing signage.

Environmental Impacts	Public Support	Description of Measures Satisfied
No impacts to natural environment.	95 percent support in 2012	<ul style="list-style-type: none"> • Reduces visitor impacts to Refuge flora and sensitive habitats by focusing pedestrian movements; • Provides enhanced educational experience; • Supported by the public.

¹ Wayfinding improvements should follow the existing Sanibel Plan and the Shared Use Path Master Plan, where applicable.

EXPANDED REFUGE PARKING OPTIONS AT EXISTING SATELLITE OVERFLOW PARKING

The Refuge owns the former Island Water Association site located on the south side of Sanibel-Captiva Road, east of Rabbit Road. The site is currently being used as an overflow parking facility for large events. The site is proposed to be converted to a formal parking site that would be consistent with the parking design standards, vegetation and landscaping requirements, drainage and environmental performance standards as stated by the City of Sanibel's Land Development Code. Staying within the previously disturbed footprint of the former Island Water Association site would minimize negative impacts. If additional safety measures are needed to support this parking option, such as pedestrian safety measures, they would be designed to meet all Sanibel standards, and would only be implemented as needed. Formalizing Refuge parking options at the site would help address the need for additional parking during peak season.

Environmental Impacts	Public Support	Description of Measures Satisfied
Potential environmental impacts will be determined in the next study phase.	91 percent support in 2012	<ul style="list-style-type: none"> • Provides improved visitor accessibility; • Supported by the public.

Existing capacity: The Refuge has 187 parking spaces (93 unrestricted, 7 handicap and 2 RV spaces in the Primary and Secondary lots; 85 spaces at Tarpon Bay Recreation Area), excluding employee parking. Each space can accommodate an average of 6 cars per day with an average of 2.5 passengers each, resulting in a monthly parking capacity of 26,928 vehicles or 67,320 visitors. This does not meet the 10-year average demand during January through April, which ranges from 68,200 to 93,000 monthly visitors.

Expanded capacity: During special events, the Refuge can accommodate 174 vehicles at their former Island Water Association site, bringing the approximate new total parking capacity to 361 spaces. Keeping other assumptions constant, the Refuge can accommodate 51,984 vehicles or 129,960 visitors monthly, thereby meeting demand during the high-visitation season.

BICYCLE RENTALS AT REFUGE (CONTINGENT UPON PRECEDING ELEMENT)

Due to current parking limitations at the Refuge Education Center, bicycle rental facilities are only feasible at the Refuge if additional parking capacity is formalized at the existing satellite overflow parking site. The bicycle rental facilities could be operated by a project partner, concessionaire, or private entity.

Environmental Impacts	Public Support	Description of Measures Satisfied
Potential impacts to the natural environment are to be determined in the next phase of study.	86 percent support in 2012	<ul style="list-style-type: none"> • Encourages reduction in single occupancy vehicles on Wildlife Drive (reducing emissions and congestion); • May reduce noise pollution (Db) by encouraging more bicycle use; • Supported by the public.

ENHANCEMENTS TO REFUGE TRAM AND NEW REFUGE SHUTTLE SERVICE

The existing Refuge Tram circulator would continue to operate along Wildlife Drive and Sanibel-Captiva Road. An additional drop-off and pick-up location is proposed at the former Island Water Association site. Refuge visitors may take the existing 90-minute guided tour, or visitors would also be able to access the Refuge through a new non-guided shuttle service to the Education Center and through the Refuge. Within the Refuge, the guided tour and non-guided tour would operate every 30 minutes during peak season and would use fixed stops built at places of interest and at connecting trailheads on Wildlife Drive. The non-guided shuttle service would only operate during peak season. The mode of transport chosen would accommodate bicycles, canoes/kayaks, and other recreational equipment. The expanded and new services would be environmentally friendly, running on compressed natural gas or solar-electric propulsion technology, and they would give visitors a choice to driving alone.

Environmental Impacts	Public Support	Description of Measures Satisfied
New vehicles would be the same size and style as existing Refuge tram vehicles, which seat 25. Propulsion of new vehicles would be compressed natural gas or solar-electric. May reduce air and noise pollution by encouraging alternative modes of travel to the personal automobile.	85 percent support in 2012	<ul style="list-style-type: none"> • May reduce single occupancy vehicles on Wildlife Drive (reducing emissions and congestion); • Increased number of guided tours allows for increased educational opportunities for Refuge visitors; • Supported by the public.



Figure 1. Map of Project Recommendation Elements

Table 1 shows the levels of public support for project recommendation elements from the March 29, 2012, Open House as compared to 2011 levels (as gathered in the April public meeting and August/September online survey).

Table 1. Comparing Levels of Support between 2011 and 2012

Project Recommendation Element	Do you support the element?				Total Responses	
	Yes		No		2012	2011
	2012	2011	2012	2011		
A. Wildlife Crossings	92%	77%	8%	23%	38	144
B. New Trail Connecting Tarpon Bay Explorers (Recreation Area) to Sanibel Shared-Use Path	96%	77%	4%	23%	47	162
C. Enhanced Refuge Wayfinding Plan for Existing Refuge Signage	95%	61%	5%	39%	44	144
D. Bailey Tract Trail: Wayfinding to Sanibel Shared-Use Path	95%	78%	5%	22%	44	160
E. Expanded Refuge Parking Options at Existing Satellite Overflow Parking	91%	60%	9%	40%	45	149
F. Bicycle Rentals at Refuge (contingent upon E.)	86%	67%	14%	33%	44	159
G. Enhancements to Refuge Tram and New Refuge Shuttle Service*	85%	72%	15%	28%	41	152
H. Secondary and Supportive Project Elements – Surface Treatments to Trails	92-98%	71-87%	2-8%	13-29%	37-41	153 - 163

*The description in 2011 did not include the New Refuge Shuttle Service.