

Sarasota/Manatee Barrier Islands Traffic Study – PHASE I

Tech Memorandum Review of Previous Studies

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File: **Sarasota/Manatee Barrier Islands
Traffic Study – PHASE I**

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The purpose of this technical memorandum is to summarize applicable state, regional, and local studies and/or reports that identify the need for continued improvements to, and management of, the various modes of transportation within the Barrier Islands and supporting transportation network through Sarasota and Manatee counties. The intent of each summary is to present highlights of each study and how it supports roadway and multimodal transportation improvements along and/or adjacent to the Barrier Islands study area.

Applicable Studies:

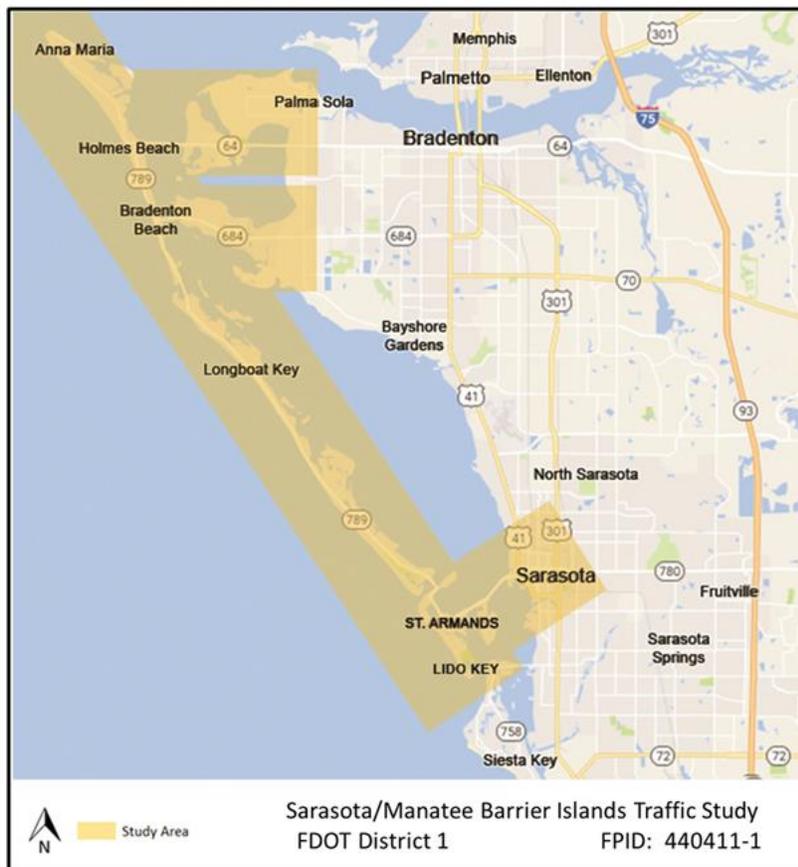
1. Development of Effective Strategies to Alleviate Traffic Congestion for Barrier Islands
2. Regional Park-And-Ride Strategic Implementation Plan
3. SR 64 (Anna Maria Bridge) PD&E Final Traffic Report
4. SR 684 (Cortez Road) and SR 789 (Gulf Drive) - Intersection Analysis
5. US 41 from Ringling Boulevard to Fruitville Road Project Traffic Report
6. SR 684 (Cortez Road) Project Traffic Report
7. SR 684 (Cortez Road) VISSIM Operational Analysis for New 3-Lane Alternatives
8. St. Armands Circle Traffic Program Study
9. Bradenton Beach Parking Master Plan
10. City of Sarasota – Citywide Strategy for Parking Management
11. City of Sarasota – St. Armand's Parking Feasibility Study
12. Sarasota-Manatee MPO Water Taxi Feasibility Study
13. Sarasota/Manatee MPO 2040 Long Range Transportation Plan (LRTP)
14. MCAT- Transit Development Plan
15. SCAT- Transit Development Plan (TDP)

16. Gulfstream Sarasota Transportation Impact Analysis-
17. Sarasota Bayside Transportation Impact Analysis
18. Sarasota/Manatee MPO Bicycle, Pedestrian, and Trails Master Plan
19. Tampa Bay Passenger Ferry Presentation

Some of the applicable studies listed above are ongoing and our team will continue to coordinate as needed throughout this study. A sample of these projects are listed below:

- SR 64 (Anna Maria Bridge) PD&E
- SR 684 (Cortez Road) Bridge PD&E
- 119th St Concept
- Gulfstream Roundabout
- US 41 from Ringling Boulevard to Fruitville Road Project Traffic Report
- City of Sarasota – St. Armand's Parking Feasibility Study

Project Location Map



1. Development of Effective Strategies to Alleviate Traffic Congestion for Barrier Islands

Center for Urban Transportation Research, University of South Florida

Date: June 2007

Background Information

This study focused on the development of strategies to alleviate traffic congestion for residents and tourists of barrier islands who encounter significant delays when traveling throughout the barrier islands and the mainland.

Recommendation/Conclusion

The recommendations from the study were:

- Alleviate traffic congestion at St. Armands Circle by establishing North Adams Drive and Madison Drive as an alternate route to encourage some traffic to bypass St. Armands Circle.
- Alleviate traffic congestion in the area near the Gulf Drive and Cortez Road intersection by increasing the northbound capacity of the mini-roundabout on Gulf Drive at Bridge Street, and to reduce the frequency of the Cortez Drawbridge opening during peak hours of tourist season.
- Implement congestion management strategies including advanced traffic signal control, transportation demand management, congestion pricing, water taxi services, and effective utilization of transit buses could be considered in the future to further improve the travel quality for residents and tourists of the barrier islands.

The St. Armands Circle by-pass is no longer practical due to the construction of a new 500-space parking garage at the corner of North Adams Drive and Madison Drive. Likewise, the frequency of Cortez Drawbridge openings is no longer relevant. The United States Coast Guard has already revised the schedule for operation of the drawbridge and reduced the frequency of its operation during the tourist season. The Sarasota-Manatee Barrier Island study will not evaluate the recommendation further.

Increasing capacity at the Gulf Drive & Bridge Street intersection and implementing congestion management strategies are both relevant recommendations and will be evaluated as part of the Sarasota-Manatee Barrier Island study. Design alternatives will be evaluated along Gulf Drive at the Cortez Road and Bridge Street intersections to alleviate congestion. The overall event management plan will evaluate numerous congestion management strategies to improve travel times onto/off-of the barrier islands.

2. Regional Park-And-Ride Strategic Implementation Plan

Renaissance Planning Group
Date: December 2013

Background Information

The Sarasota/Manatee Metropolitan Planning Organization (MPO) last addressed regional park-and-ride strategies with a study in 2013 that identified potential park-and-ride locations and steps to develop lots at specific locations. The MPO was interested in assessing accomplishments from that study, updating its regional park-and-ride strategy based on evolving needs of travel patterns in the region, and including those recommendations into the next update of its Long-Range Transportation Plan (LRTP).

The objectives of this 2013 study were to update the data, analysis, and findings from the 2000 report, confirm whether the park-and-ride facility locations identified are still viable and needed; address the changing land use, commuting and transit travel plans in the region; and develop an action plan that defines priorities and strategies for local governments and FDOT to integrate viable park-and-ride strategies into the multimodal transportation system serving the needs of Manatee and Sarasota counties.

Summarized Findings

Park-And-Ride Facility Types

As described in this study, park-and-ride facilities can serve several purposes. First, they provide a location for commuters to park and join others in a carpool or vanpool to travel to their destination. Second, a park-and-ride lot may serve as a transfer point for commuters to switch to transit. Third, a park-and-ride lot may provide a central location where travelers can walk or ride the remaining distance to their destination due to parking limitations, cost, or congestion¹. Examples of park-and-ride facility types discussed in this study are listed as follows:

- Remote or rural facilities
- Suburban facilities
- Peripheral facilities
- Urban corridor facilities
- Special event facilities

¹ University of Florida Campus Master Plan 2010-2020: Year 2020 Transit System Analysis, 2011 page 46

Using an analysis based on national and state park-and-ride research as well as prior park-and-ride plans for the Sarasota/Manatee region, 29 locations were identified as possible areas for location of park-and-ride lots. These locations included those identified in the MPO's previous park-and-ride study from 2000, ad hoc sites used as such today, and additional sites based on present research data.

Within this study, the following items were considered during the process of selecting these general area locations:

- Served by transit
- Current and future levels of traffic congestion
- Location and density of residential areas
- Location and density of employment areas
- Security and perceived safety
- Site visibility
- Proximity to major corridors and accessibility
- Distance between residential areas and employment centers

Existing and Previously Proposed Park-And-Ride Lots

As identified in the 2013 study, the existing park-and-ride lots consist of one lot in Sarasota County and two lots in Manatee County. The two lots in Manatee County are combined with bus transfer stations, while the lot in Sarasota County is solely a park-and-ride lot. The park-and-ride lot in Sarasota County is located at the North Port City Hall complex and was opened in March 2013. Funded by FDOT grants and Sarasota County funds, the land use was granted through an easement provided by the City of North Port.

Commute-Oriented Park-And-Ride Lot Locations

Of the 29 identified areas, the top-ranking tier contained 18 park-and-ride general area locations. The selection of these sites was based on a multipoint test of whether there was public land, sites with potential projects that will come through development review, shared space opportunities, or vacant land available within each general area. Of the 18 top tier locations, a total of 50 specific sites was selected. An analysis of the 50 sites resulted in 11 sites being selected as priority sites.

The 11 priority sites are listed below:

- Right-of-way at US 301 and SR 70
- Benderson Development Land (US 41 and Stickney Point Road) [Shared Beach Site](#)
- University Town Center West (University Parkway and North Cattlemen Road)
- L3 Communications Development (Cattlemen Road and Sawgrass Road)
- Southgate Mall (US 41 and Siesta Drive) [Shared Beach Site](#)

- Right-of-way along I-75 at North River Road Interchange (North River Road and I-75)
- Kmart Shopping Center (US 301 and 60th Avenue East)
- 10th Avenue West and Riverside Drive
- General Spatz Boulevard Parking Lot (US 41 and General Spatz Boulevard)
Shared Beach Site
- Vacant Lot B (Airport Circle and Rental Car Road)
- Sarasota Square Mall (US 41 and South Beneva Road)

Beach-Oriented Park-And-Ride Locations

Several sites were proposed in this 2013 study to facilitate the use of park-and-ride locations to attract those traveling to barrier island beach destinations before they reached the bridges and causeways connecting the mainland to the barrier islands. The existing beach trolley routes could be adjusted to provide service to these park-and-ride locations during peak periods to complete the final segment of the trip.

In addition to the Southgate Mall, Benderson Development Land, and General Spatz Boulevard potential sites, the following five specific sites are well suited specifically as park-and-ride locations serving the barrier island beaches:

- Van Wezel Performing Arts Hall (Van Wezel Way/Downtown Sarasota)
- Bayshore High School (34th Street West and 53rd Avenue West)
- Riverview High School (Proctor Road and Swift Road)
- Beachway Plaza (Manatee Avenue and 75th Street West)
- Paradise Bay Plaza (Cortez Road and 75th Street West)

The summarized findings focus on the research indicating that park-and-ride lots will generally be more successful if the lot is located less than 50 percent of the total journey time from the patron's home to the destination.

Key Activity Centers and Destinations

To prepare for a more detailed analysis and prioritization of the park-and-ride general locations, a selection of employment centers and destinations were identified. The process of identifying the Key Activity Centers began with reviewing the MPO's 2035 LRTP, including the identified activity centers from that document. Additional locations were selected to ensure a broad range of uses, including regional employment destinations, education centers and medical centers. Some businesses and regional shopping centers, including Ellenton Outlets, were not included as key activity centers because they did not include a broad employment base.

In Sarasota and Manatee counties, the barrier island beaches are an important recreational destination and economic generator. However, these beaches were not included as key activity centers since the potential success for park-and-ride lots serving such destinations would be driven more by perceived congestion and the availability of parking rather than the percent of drive-time criteria of the capture area and travel shed analysis. Additionally, the data used to compute the travel times for this analysis did not correspond to peak conditions for barrier island activities, which is also seasonal. One of the factors used in the scoring of potential park-and-ride specific sites denotes whether or not a site is suitable to serve the barrier islands due to its location proximate to the bridges providing access to the islands.

Site Selection Factors

Several factors were identified to use in scoring the specific sites. While some are identical to the criteria used in the analysis and categorization of the larger park-and-ride general areas, they are applied at a more detailed level for the scoring of specific sites.

The following lists the scoring criteria:

- Access
- Demand and Lot Size
- Cost
- Barrier Island Beaches

Park-and-ride facilities serving the barrier islands could be beneficial during periods of peak beach use by simultaneously helping to relieve traffic congestion over the bridges while making more parking available for beach use. Park-and-ride specific sites located within the following general area locations have been identified as meeting the barrier island beach criteria:

- Beachway Plaza
- Paradise Bay Plaza
- Downtown Sarasota
- Southgate Mall
- US 41 and Stickney Point Road
- Bayshore High School
- Riverview High School

Recommendations and Improvements

Following the approval of the 2013 study analysis and the recommended priority park-and-ride sites by the Sarasota/Manatee MPO, the recommendations will be incorporated into the MPO's 2040 Long Range Transportation Plan (LRTP) and

coordinated with both Manatee County and Sarasota County transit agencies for inclusion in their respective Transit Development Plans, and with local governments for consideration in their Capital Improvement Programs.

In addition, the FDOT District Park-and-Ride Coordinator must be involved with the selection and design of the actual location for a new park-and-ride facility². Sites must also be discussed with the FDOT offices to check for possible environmental contamination, and assess sociocultural effects, natural lands, and wetlands impacts. Additionally, proposed projects should be checked by the Environmental Management Office (EMO) for other environmental concerns³. The FDOT State Park-and-Ride Guide provides more information on the design of facilities. We will use the guidelines to approximate the size of the lots. It is used for construction, but helps with the appropriate sizing.

As defined in the study “next steps” section, it will ultimately be up to the MPO and/or local government partners to decide upon which sites to pursue through discussions with property owners about the viability of the recommended sites and whether other sites may be more viable in the immediate vicinity of the target areas.

Potential Funding Opportunities

As detailed in this section of the study, an analysis into current funding sources, restrictions, and regulations regarding park-and-ride facilities is provided as a guide to possible funding strategies.

The FDOT State Park-and-Ride Guide established funding criteria which are summarized below:

- Federal-Aid Highway Administration (FHWA).
- Federal Transit Administration (FTA).
- Department of Energy – State Energy Plan.
- Federal Highway Funds in conjunction with congestion mitigation strategies.
- Federal Funds require Federal Match Guidelines in compliance with Environmental Justice requirements.
- Surface Lot credits from vehicle miles traveled (VMT) reduction, congestion reduction, or occupancy rate greater than 60 percent.
- Florida's Strategic Intermodal System (SIS) – Interstate 75 and University Parkway.
- FDOT – implemented and maintained by the Agency.

² FDOT State Park-and-Ride Guide, page 8

³ FDOT State Park-and-Ride Guide, page 12

Alternative Funding Sources

- Private sector funding – advertising, joint development, concession agreement, park-and-ride agreements, grant application notes, revenue anticipation notes, and infrastructure banking.
- Off-site parking fees, mobility fees, or fair-share formulas.

Are the Recommendations Still Relevant?

With the recent completion of this regional park-and-ride study, the recommendations are still relevant for the barrier island traffic and parking study except for locations in direct support of commute-oriented park-and-ride locations. These locations may not be ideal for proximity to the barrier island destinations. Despite several of the commute-oriented park-and-ride sites offering a shared use with potential beach-oriented park-and-ride sites, two of the three of these shared parking sites support the Siesta Key barrier island located outside of the Sarasota/Manatee study area.

Will This 2017 Study Evaluate the Recommendations Further?

This 2017 study will continue to evaluate the recommendations as it relates to the management of traffic and parking supporting the adjacent barrier islands. An evaluation of the beach-oriented park-and-ride sites is associated with the following locations:

- Van Wezel Performing Arts Hall (Van Wezel Way/Downtown Sarasota)
- Bayshore High School (34th Street West and 53rd Avenue West)
- Beachway Plaza (Manatee Avenue and 75th Street West)
- Paradise Bay Plaza (Cortez Road and 75th Street West)

We will evaluate for practical location (proximity), potential public-private opportunity, potential sizing, shuttle frequency needs, and water taxi feasibility (Van Wezel). We will also suggest other potential sites (Quay and Palm Avenue downtown garage.)

To What Degree Will We Evaluate?

An evaluation of the beach-oriented sites as part of the 2017 study recommendations. We believe their inventory and proximity to the barrier islands and primary travel corridors are critical toward their consideration. Further evaluation should determine their true availability for shared use during peak-season activity. Due to the limited options listed in this study, an exploration of land development opportunities may most likely be required to support significant volumes of vehicular activity.

3. SR 64 (Anna Maria Bridge) PD&E Final Traffic Report

PBS&J

Date: May 2009

Purpose and Methodology

To analyze the existing and future operational performance of the Anna Maria Island Bridge and to provide information on how different bridge alternatives compare against one another. The study performed the following three main analyses:

- Low-level bascule bridge opening every 20 minutes.
- Mid-level bascule bridge opening every 30 minutes.
- High-level Fixed-bridge.

Recommendation

The high-level bridge was the preferred alternative based on lower delays, travel times, and queue lengths evaluated during the study.

Status

The Anna Maria Bridge PD&E preferred alternative is a high-level fixed bridge and is currently in the design phase of the project.

4. SR 684 (Cortez Road) and SR 789 (Gulf Drive) - Intersection Analysis

Vanasse Hangen Brustlin, Inc. Date: June 2016

Purpose and Methodology

A Concept Analysis Report analyzed five intersection alternatives at SR 684 (Cortez Rd) and SR 789 (Gulf Dr) using existing (2014) and future (2040) traffic volumes taken from the 2013 Project Traffic Report (PTR). The alternatives analyzed were:

- No-Build.
- PD&E Alternative
 - Similar to no-build with alignment adjustments within the study corridor, but no significant alterations to the intersection's operational functionality.
- Green-T / Turbo T
 - Includes a southbound continuous green signal with all other movements subject to phased signalization.
- Roundabout
 - A roundabout alternative with two lane approaches was developed. Each approach was separated into two lanes for a two-lane roundabout.

- Roundabout with Northbound by-pass Lane
 - Initial results from the roundabout alternative resulted in the development of a roundabout with a northbound by-pass lane to handle the significant volume of northbound-to-eastbound traffic volumes.

Recommendation

The study recommended Alternative 5, a Roundabout with a northbound-to-eastbound by-pass lane.

Status

The Cortez Bridge PD&E remains ongoing and the design contract was recently awarded in March 2017. In discussions with FDOT PD&E staff, the roundabout will not be installed at the Cortez Road and Gulf Drive intersection due to high right-of-way costs.

5. US 41 from Ringling Boulevard to Fruitville Road Project Traffic Report

Kittelson & Associates, Inc.
Date: December 2016

Background Information

The project traffic report (PTR) summarizes design traffic volume projections, operational analyses, and safety analyses at the following intersections where FDOT has ongoing PD&E studies. Traffic operations were evaluated for No-Build and Build alternatives for the intersections of US 41 at Fruitville Road, Gulfstream Avenue, Main Street, and Ringling Boulevard. The operational analyses completed as part of this PTR indicate the need for future intersection improvements at selected locations to accommodate volume growth through Year 2040.

Build alternatives included roundabouts and improved signalized intersections that were based upon previous configurations analyzed by the City of Sarasota. The PTR did not provide recommendations of preferred alternatives. Preferred build alternatives will be developed as part of the ongoing PD&E studies.

Recommendation/Conclusion

The information presented in the PTR is relevant, but it is not within the scope of the Sarasota-Manatee Barrier Island study to reevaluate intersection alternatives along US 41 as part of the project.

6. SR 684 (Cortez Road) Project Traffic Report

GMB Engineers & Planners, Inc.
Date: May 2013

Purpose and Methodology

The SR 684 Project Traffic Report (PTR) was prepared for use in the SR 684 Bridge Replacement PD&E study. The study performed the following three main analyses:

- Determine the impacts and assess the need for future capacity improvements on the SR 684 study corridor.
 - Recommendation: Maintain the existing two-lane typical section and provide a dedicated bike lane or paved shoulder.
- Address the traffic signal operation at the SR 684 and SR 789 intersection due to bridge preemption.
 - Recommendation: Keep existing intersection configuration but add a westbound right turn overlap phase to operate during the southbound left turn phase.
- Determine the signal operation at the drawbridge along SR 684.
 - Recommendation: No changes. The Traffic Report noted that the drawbridge delays were acceptable and should improve with any improvements made to the bridge.

Status

The Cortez Bridge PD&E remains ongoing and the design contract was recently awarded in March 2017. In discussions with FDOT PD&E staff, the preferred option is a two-lane 65-ft (high-level) fixed bridge with wide paved shoulders and separated pedestrian walkways on both sides of the bridge.

7. SR 684 (Cortez Road) VISSIM Operational Analysis for New 3-Lane Alternatives

GMB Engineers & Planners, Inc.
Date: November 2015

Purpose and Methodology

The study performed an operational analysis for the center lane alternatives listed below for both the 35-ft bascule bridge (mid-level) and 65-ft fixed (high-level) bridge replacement alternatives on the northern alignment. The reversible center lane would operate westbound and eastbound during the AM and PM peak periods, respectively.

- A bus-only center reversible lane
 - Included a 5% reduction to general-use traffic traveling westbound to southbound in the AM and northbound to eastbound in the PM.
- A general-use center reversible lane

Recommendation / Conclusion

The study showed greater reduction in delays and travel time with a general-use rather than a bus-only center reversible lane and the high-level fixed bridge performed better overall than the mid-level bascule bridge.

Status

The Cortez Bridge PD&E remains ongoing and the design contract was recently awarded in March 2017. In discussions with FDOT PD&E staff, the center reversible lane will not be installed with the initial bridge design and construction, but could be retrofitted at a later date by narrowing the proposed travel lanes and wide shoulders.

8. St. Armands Circle Traffic Program Study

Sam Schwartz Engineering D.P.C.
Date: July 2016

Background Information

The memorandum was a post-program evaluation of the effectiveness of the Pedestrian Traffic Management (PTM) program at St. Armands Circle. The goal of the program was to improve traffic circulation within St. Armands Circle.

Recommendation/Conclusion

Recommendations from the memorandum include:

- Explore alternative valet parking areas outside the circle.
- Consider removal of the parallel parking on the north side of the Lido Key exit and placement of a bypass lane to improve vehicular circulation.
- Consider removing interior circle parking when the planned parking garage is built and in operation.
- Consider flashing signs and flashing LED lights in the crosswalk.

Recommendations from the memorandum are still relevant and will be evaluated as part of the operational analysis of the St. Armands Circle area to improve travel times onto/off-of the barrier islands.

An outcome of this Traffic Program Study, temporary speed humps before pedestrian crosswalks will be installed by FDOT or City of Sarasota to reduce motorists' speeds. There is also potential to pursue PTMs again in the future depending on funding.

9. Bradenton Beach Parking Master Plan

Renaissance Planning Group
Date: August 2007

Background Information

The purpose of this report was to address the concerns of residents and business owners regarding parking within the City's Community Redevelopment Area and designated Waterfronts Florida area. Included in the report are summaries of public comments received at stakeholder meetings, the sign-in sheets of those who attended, an inventory of the number and locations of existing spaces, recommended actions to maximize the use of existing space, and opportunities and recommendations for additional on-street and surface parking.

Summarized Findings

An inventory of existing public parking was conducted on July 17, 2007. It was noted in the Master Plan that the following spaces were available for public use, some with restrictions on time:

PARKING INVENTORY		
Location	Number of Spaces	Time Restriction
Church Ave (Public Works)	3	Available 4-10 pm
First Street North Lot	20 (one handicap)	Available 7 am – midnight
Bridge Street (on-street)	26 (one handicap)	2 hour maximum 8 am – 6 pm
Bay Drive	4	2 hour maximum 8 am – 6 pm
City Hall/Library Lot	25 total, 6 reserved for public during normal business hours	Available on weekends and evenings, except when there is a night meeting
Cortez beach, between 5 th and 13 th Streets	Roughly 190 unmarked spaces	
Total		Daytime: 248 Evening:267

Additionally, it was shared there would be 22 spaces allocated for the City-owned Pier Restaurant.

Windshield surveys were also conducted to determine how many spaces were being used on a typical weekday and weekend. The surveys were conducted on Tuesday July 17th from 2-3pm and on Saturday August 4th from 1-2pm.

The results were as follows:

PARKING OCCUPANCY								
	City Hall		1 st St. N		Bridge St.		Bay Dr.	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Weekday	7	28%	12	60%	17	68%	3	75%
Weekend	10	40%	17	85%	13	53%	3	75%

Upon a review of the data, it was speculated that low parking utilization may be attributable to the fact that peak tourist season occurs in the winter months and not during a July weekday and August weekend. It was recommended that the City conduct an additional windshield survey in January and February to capture the peak tourist season utilization.

On August 6, 2007, the results of the inventory and analysis, and a draft of the masterplan recommendations, were presented to the public in an open-house forum. Four maps were presented on tables showing existing conditions, parking opportunities, and two parking scenarios. Attendees were asked to write their comments on the maps. Comments included:

- Parking on Bridge Street near the Pier Restaurant should be reflected on the maps.
- The City should operate an additional tram service "like Disney World" on the multiuse path on Gulf Drive.
- The beachfront lot south of the Beach House should be shown on the map as a parking opportunity.
- City Hall and the library should be elevated to accommodate more parking underneath as well as for hazard mitigation purposes.
- Residential streets should have signage that states "no parking.;"
- Bicycle parking should be added to all parking lots.
- Proposed lot on 1st Street North should be redesigned to show use of both parcels (for sale).
- The proposed lots on Bridge Street and 3rd Street South should have a pedestrian connection.
- One-way street should be considered for Bridge Street to accommodate more on-street parking.
- A crosswalk should be placed on Gulf Drive at 5th Street South.

Recommendation and Improvements

Short-Term Strategies

- Use of Existing Rights of Way for On-Street Parking
 - Convert 1st Street North and 3rd Street South from two-way to one-way traffic:
 - 1st Street North can accommodate twenty angled spaces.
 - 3rd Street South can accommodate fifteen parallel spaces.
- Clarify and Consolidate Signage
 - Signs that clearly indicate the locations of public parking should be located at the gateways to the city:
 - Intersection of Cortez Road and Gulf Drive.
 - Intersection of 4th Street South and Gulf Drive.
 - The City should consolidate sign information into one new sign at the City Hall/Library lot location that reads, "public parking is available after 6:00pm on Monday through Friday and anytime on Saturday and Sunday."

Long-Term Strategies

- Acquire Land
 - City should acquire land within the Bridge Street Mixed-Use District:
 - Currently four parcels for sale within the district.
 - Parcels located on 1st Street North and 3rd Street South are better situated for public surface lot parking versus parcels located on surrounding residential streets.
- Encourage Parking Turnover on Bridge Street
 - To deter employees and beach-goers from long-term parking, the City should consider metered parking with a two-hour limit from 8:00a to 5:00p.
- Make Cortez Beach More Accessible Via Transit
 - To better serve Bridge Street retail, the City should coordinate with Manatee County Area Transit (MCAT) to install a northbound trolley stop near the intersection of 5th Street South and Gulf Drive.
 - The City should also coordinate with MCAT and FDOT to install a crosswalk at this same location to connect the parking area with the trolley stop and provide a connection from the multiuse trail to the signed bicycle route on 5th Street South.

If the City adds parking on 1st Street North and 3rd Street South in the short term, 35 additional parking spaces will be gained. As for the long term, if the City acquires the parcels located at 107 and 111 Bridge Street, and 103 Street North, an additional 50 spaces may be gained for a total of 85 spaces. Additionally, the City has the

opportunity to use existing beach parking if a northbound trolley stop and crosswalk are added to Gulf Drive near the intersection of 5th Street South

Are the Recommendations Still Relevant?

Short-Term Strategies

The conversion of 1st Street North and 3rd Street South to one-way traffic from two-way traffic to create additional on-street parking may serve the additional need of 35-spaces; however, eliminating two-way traffic flow in the immediate area may increase unnecessary congestion and circling throughout the residential areas.

The clarification and consolidation of signage is still relevant. Public parking locations have not been advertised on gateway signs for the City. Additionally, the City Hall and Library parking lot signs have not been amended.

Long-Term Strategies

The acquired land strategy is still relevant. The pursuit of off-street parking convenient to City of Bradenton local destinations is critical toward supporting vitality during peak season.

Encouraging parking turnover on Bridge Street is still relevant as these on-street spaces should be more accessible for short-term retail patrons and visitors, regardless of the time of day.

Cortez Beach has become more accessible via the installation of a crosswalk at the intersection of 5th Street South and Gulf Drive. Northbound trolley stops remain active at 6th Street South and 4th Street South.

Will This 2017 Study Evaluate the Recommendations Further?

The signage improvements, land acquisition, and Bridge Street turnover will be evaluated as part of this 2017 study. It is unclear of the level of effort required to convert 1st Street North and 3rd Street South to one-way traffic from two-way traffic to create additional on-street parking of 35 spaces. To further evaluate this recommendation, rights of way will need to be reevaluated with consideration for pavement and stormwater management. It will be important to understand land-use parking needs before considering this recommendation.

To What Degree Will We Evaluate?

A comprehensive parking guidance program should be included with the results of this 2017 study. Based on our completed parking inventory needs, an analysis of available land will be updated to include reasonable expectations for new recommendations. Lastly, encouraging turnover on Bridge Street should be included as part of a viable solution for managing parking and traffic congestion within the City of Bradenton. The current 3-hour parking from 9am to 6pm should be more consistent and better advertised along the Bridge Street corridor.

10. City of Sarasota – Citywide Strategy for Parking Management

Parking Division General Manager, Mark Lyons, CAPP
and the Parking Advisory Committee
Date: January 2016

Background Information

The material in this analysis was presented to the City of Sarasota City Council members in February 2016 at the City Council chambers. Presented by the City's Parking Manager, the presentation material provided a summary of why parking matters in an urban environment, the role of the City of Sarasota Parking Advisory Committee, parking utilization levels on city streets, focused city programs, and the importance of creating a paid parking environment.

Summarized Findings

The presentation addressed the following topics:

- A historical review of parking in the City of Sarasota
- The role and recommendation of the Parking Advisory Committee
- Developing a Vision, Mission, and Guiding Principals
- The results of the 2015 Walker Parking Consultants Study
- Focused parking programs – citywide
 - Employee parking
 - Residential parking permit programs – RPP
 - Alleyway management and accessibility
 - The management of public parking in surface lots and garages
 - Parking enforcement
- What is paid parking all about?
- Implementation planning
- Additional city parking
- Future development of parking standards and engagement of resources

Parking Mission

- To satisfy customers by making the system easy to use, and trouble free.
- To create safe parking environments for users through well-lighted, clean, and reliable operations.
- To promote citywide growth within the parking districts.

Five Guiding Principles

A credo and foundation for planning and decision-making

Guiding Principle 1 – Supports the development of economic vitality and vibrant street life in our commercial and mixed-use neighborhoods by addressing each category of parking customer.

Guiding Principle 2 – Supports the maintenance of public safety.

Guiding Principle 3 – Benefits residential neighborhoods by preventing spillover.

Guiding Principle 4 – Supports the sustainable use of public resources and sustainable development of the city.

Guiding Principle 5 – Applies smart decision-making.

Walker Parking Study – 2013

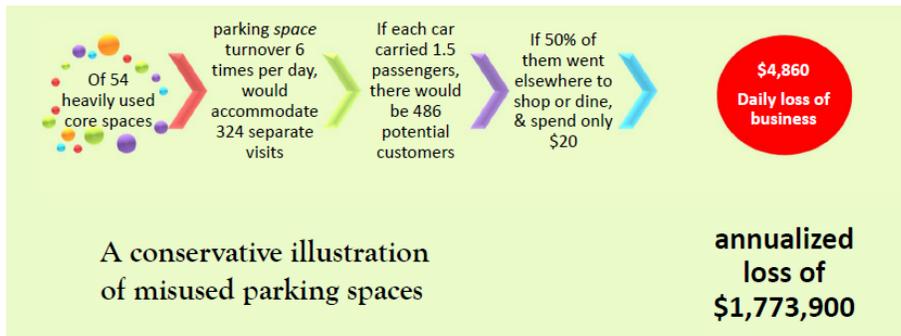
UTILIZATION AND TURNOVER OF SPACES				
Sub-Area		Supply	Demand	Percent, (%)
West of Pineapple	On-Street	348	344	99
	Off-Street	761	539	71
Pineapple to Orange	On-Street	301	281	93
	Off-Street	757	443	59
Orange Ave to Osprey Ave	On-Street	130	105	81
	Off-Street	20	3	15
Totals	On-Street	779	730	94
	Off-Street	1,538	985	84

Best use provides 10-15% open spaces for quick trips and improve accessibility

Overall, each sub-area has adequate capacity, however, note the very high demand ratio for on-street parking, which creates the perception that parking capacity is inadequate in downtown.

Robert Gibbs, renowned urban retailing expert, recommends turnover of parking spaces should be in the range of 15-18 turns per day. Main Street 1400-1500 blocks recorded 6.3 turns per day, followed by the 1300 block at 5.6 turns per day.

Financial implication on local businesses



Recommendations and Improvements

“First Level Strategy”

The Parking Advisory Committee unanimously recommended the implementation of on-street metered parking. Secondly, the committee recommended implementing off-street paid parking after the successful implementation of the on-street program.

- Keep the program simple.
- Locate it in highest demand areas, and do not expand the system without adhering to the program Guiding Principles.
- Incentivize appropriate use of resources by charging more for the highest demand areas/periods.
- Establish progressive pricing program in limited form, and condition pricing by the most desired spaces.
- Provide flexibility for patron decision-making and length of stay in the district.
- Provide financial return for the affected districts.
- Develop a plan of expansion that adequately addresses all districts, but only after establishing positive history.
- Fully test, and demonstrate, capability and community compatibility of any new technology.

The City of Sarasota parking system is set up as an Enterprise Fund and is not intended to burden the tax base and be subsidized by the city's General Fund.

- Parking Enterprise Fund estimated deficit in FY16: \$2.2 million

Focused Parking Programs

- Employee Parking – recognize the impact it has on accessible parking in commercial districts
- Residential Parking Permits – protects from parking overspill
- Alleyway Accessibility – backbone of service community

- Communications – public outreach and knowledge base
- Management of Lots and Garages – best practices
- Parking Enforcement – effective programs that protect safe parking while also educating parking consumers

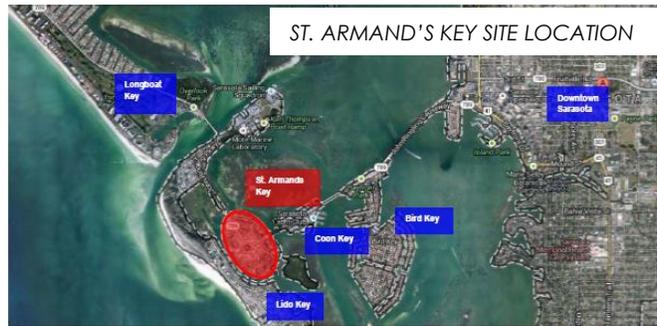
Action Plan

Phase 1 – Initial Planning	Within 4 months	<ol style="list-style-type: none"> Utilizing parking metrics, we will identify potential meter installation units, phasing implementation in small segments. <ol style="list-style-type: none"> Identify areas of highest demand, that will enhance parking accessibility the most, and develop a secondary range of highest demand Develop initial meter implementation and rollout schedule, garage paid parking, followed by subsequent rollout plans for peripheral areas. Identify best case target to include low cost garage parking option Working with PAC, develop a task force to help evaluate equipment selection and testing. <ol style="list-style-type: none"> Identify potential meter equipment and schedule public in field-testing and demonstrations. Develop proposed pricing structure for on street and off street parking locations Create criteria of success using data driven metrics, to be used prior to any expanding the program. Report to City Commission at the completion of Phase 1
Phase 2 – Logistical Plan	Within 5-9 months	<ol style="list-style-type: none"> Identify funding source for acquisition of parking equipment. Develop RFP and solicit vendor equipment, interview, test, and complete agreements. Review alternative transportation & parking strategies using public workshops and refine program objectives. Logistical planning for installations, peripheral service requirements Develop effective marketing plans to engage community Report to City Commission at the completion of Phase 2
Phase 3 – Installation	Within 10-15 months	<ol style="list-style-type: none"> Install meters in prescribed areas using the rollout plan. Begin data collection and analyze equipment effectiveness against the operating criteria. Continue refining city-wide meter rollout and garage parking plans, target dating next installation schedules. Report to City Commission at the completion of Phase 3
Phase 4 - Report	Within 15-24 months	<ol style="list-style-type: none"> Continue analyzing meter performance and effective parking supply. Post installation focus group meetings. Report to City Commission on a quarterly basis the meter parking performance metrics. Initiate additional phasing plans

Are the Recommendations Still Relevant?

The first level strategy recommendations made by the Parking Advisory Committee are certainly still relevant. Our team finds these recommendations consistent with typical strategy plans for the conversion from unregulated/free to time-limited/paid parking within an urban setting. Time-limited and paid parking programs are designed to promote parking turnover in densely populated areas with mixed-use criteria. Fees collected from paid parking programs can then be used for infrastructure improvement, maintenance, and expansion. We believe strategic consideration should be given to for retail patrons, visitors, employees, and residents when designing a sustainable parking system.

As of the date of this analysis, our understanding is that the City of Sarasota is already moving forward with an RFP to purchase a parking meter solution and implement paid parking on St Armands Key. Using St Armands as a successful model, we understand the City plans to expand the concept to other congested areas. Lastly, our team supports the need for the recommendations to be funded by parking user fees when appropriate to offset the cost to the local taxpayer.



Will This 2017 Study Evaluate the Recommendations Further?

This 2017 study will continue to evaluate those recommendations that relate to the management of traffic and parking supporting the adjacent barrier islands. Throughout this study, we intend to use several of the first level strategy recommendations as guiding principles with the barrier island recommendations and initially foresees a continuation of the Parking Advisory Committee policy and best practice recommendations.

To what degree will we evaluate?

The Stantec team plans on monitoring the progress of the prescribed recommendations and action plan. We believe the appropriate evaluation has already taken place and should provide future guidance toward implementing barrier island parking and traffic solutions.

11. City of Sarasota – St. Armand's Parking Feasibility Study

Kimley-Horn, Jonathan Parks Architect
Date: June 2014

Background Information

The purpose of this study was to provide recommendations to alleviate a shortage of parking spaces within the St. Armands Key commercial district, exploring both nonstructured parking and structured parking alternatives. The St Armands Parking Study was recognized as part of the City's 2013 Strategic Plan to assist the community in identifying future parking needs and potential funding sources for a public parking structure.

Existing parking supply adequacy on St. Armands Key was previously identified in the 2008 St. Armands Masterplan completed by Heidt and Associates as a 34-space deficit during a typical off-season weekend, and a 287-space deficit during a peak season event weekend.

At the time of this 2014 study, the site location consisted of a current supply of 1,135 spaces broken down as 484 off-street spaces and 651 on-street spaces. The off-street parking supply comprised 195 spaces at the North Adams lot behind the Gold Quadrant, 243 spaces at the South lot behind the Aqua Quadrant, and 46 spaces behind the Pink Quadrant. On-street parking spaces are provided around each quadrant facing the commercial areas, and on both sides of the travel lanes on John Ringling Boulevard and Boulevard of the Presidents.



Summarized Findings

Parking and Traffic Site Observations

Friday observations occurred on Friday November 7, 2013, between 1:00pm and 7:00pm. Event observations occurred on Saturday November 8, 2013, during the St. Armands Art Festival and Fall Sidewalk Sale between 9:30am and 12:30pm.

Parking Feasibility - Nonstructured Parking Options

Existing Parking Utilization – Friday Observations

Occupancy: (Friday observations 1:00pm – 7:00pm)

North Adams Lot – 75% at 2:00pm; 90% at 6:00pm.

South Adams Lot – 25% at 2:00pm; 50% at 6:00pm.

On-Street – 75% at 2:00pm; 100% at 6:00pm.

Circle – 50% at 2:00pm; 75% at 6:00pm.

Grass Median – None.

Parking Options

General:

- Remove three on-street parking spaces on North Adams Drive to allow southbound traffic to stay in proper lane and minimize queuing impacts on John Ringling Boulevard.
- Provide signage indicating John Ringling Boulevard and North Adams lot pedestrian access from the pedestrian access breezeway located at the Gold Quadrant near Bank of America. Consider organizing and cleaning of alley side to relocate dumpsters away from breezeway opening.

Circle:

- With on-street Circle parking to remain, stripe parallel parking spaces in accordance with City standard lengths of 22' 0" to maximize parking capacity and provide adequate parking space maneuverability.
- Consider removal of or limit areas of on-street Circle parking to minimize impacts to through traffic and increase visibility to park during events.

On-Street:

- Stripe parallel parking spaces in accordance with City standard lengths of 22' 0" to maximize parking capacity and provide adequate parking space maneuverability. Increased capacity above currently utilized supply is estimated at 30 spaces.

Valet:

Consider relocation of valet area from existing location at NE area of Circle to:

- East on John Ringling Boulevard between Washington Drive and Circle.
- Along Circle.
- North on North Boulevard of the Presidents between Circle and Madison Drive.

Increase the length of valet drop-off area to accommodate multiple vehicles and easy maneuverability at approximately 3-5 parking spaces. Provide valet signage in advance of the Circle indicating lane for valet parking. Provide updated street-placed valet signs with bold contrast colors (dark background with white letters) and minimal text. Confirm compliance with Zoning Ordinance for adequate number of attendants provided to prevent impediment to traffic flow. Review valet operator agreement to confirm compliance including: number of attendants and location of valet vehicle storage spaces.

Traffic Options

General:

- Install additional speed limit signs throughout the commercial area. Consider installation of speed limit signs with flashing lights.

- Replace Pedestrian Zone sign with larger version, operable flashing lights, nighttime illumination, message for "Reduce Speed Ahead." Relocate sign farther east on John Ringling Boulevard, after passing Coon Key.

Crosswalks:

- Incorporate two additional crosswalks from Circle to existing crosswalks at north and south ends of Circle.
- Consider implementing raised crosswalks to calm traffic and improve pedestrian visibility, lighted crosswalk, installation of rectangular rapid-flashing beacons, and addition of "state law" crosswalk signs.
- Additional raised crosswalk located west of Adams Drive along John Ringling Boulevard. Additional painted crosswalk located east of Adams Drive along John Ringling Boulevard.

Pathways:

- Replace pathways with landscaping or grass to encourage pedestrians to utilize the defined crosswalks.
- Install new sidewalk along John Ringling Boulevard with connection to a new painted crosswalk along Adams Drive.

Turning Lanes:

- Consider extending the left-hand turning lane (by removing several on-street spaces) towards the South Adams lot at intersection of John Ringling Boulevard and Adams Drive.

Wayfinding Options

General:

- Review placement signs from vehicular and pedestrian perspectives and relocate signs accordingly. Consider City sign standards for appearance and message continuity.

Parking:

- Consider including name of off-street parking lot (i.e. North Adams Lot).
- Remove free-parking text from signs to negate confusion for paid parking.
- Include entry signage at lots.
- Utilize signage similar to that installed at Palm Avenue Garage.

Existing Parking Utilization – Event Observations

Occupancy: (Event Operations 11/9/2013 – 9:30am to 12:30pm)

North Adams Lot – 100% at 10:00am

South Adams Lot – 100% at 10:00am

On-street – 100% at 10:00am

Circle 100% at 10:00am

Grass Median – Washington Drive to Causeway

Parking Options

General:

- Consider implementation of “lot full” signs at parking lot entry points and additional signs at intersections along John Ringling Boulevard and Boulevard of the Presidents surrounding the lots.
- Consider adding weekend enforcement for areas of illegal parking.

Grass Median:

- Consider implementation of event staffing to direct vehicles for “head-in” only parking on grass median.
- Place traffic cones along East John Ringling Boulevard to slow down traffic while searching for parking spaces.

Traffic Options

Crosswalks/Pedestrian Conflicts:

- Utilization of event staffing along grass median can help slow down traffic to allow pedestrians to cross John Ringling Boulevard.

Parking Feasibility Structured Parking Options

Review of City of Sarasota Codes and References – for this study, Kimley-Horn and Associates assumed a structured parking zoning classification aligned with Commercial Tourist (CT) in lieu of Residential Single Family (RSF) to align setbacks with existing commercial buildings and to maximize parking efficiencies in a larger footprint.

- The study focused on a targeted parking structure size of approximately 400-500 gross parking spaces to account for the July 2013 Parking District Study estimated peak season deficit of 320 spaces.

Parking Layout Functional Alternatives

- *North Adams Lot: two options were developed to gain 303 and 371 spaces.*
- *South Adams Lot: Three options were developed to gain 303, 316, 422 spaces.*

Financing Strategy Options

- General Obligation Bonds
- Special Assessment Bonds
- Tax-Increment Bonds
- Tax-Increment Financing Districts

- Parking Fees and Fines
- Fees in Lieu of Required Parking
- Public-Private Partnerships
- Florida Department of State Grants
- Florida Department of Transportation (FDOT) State Safety Office Grants

Recommendations and Improvements

COMPARISON OF CHARACTERISTICS ASSOCIATED WITH STRUCTURED PARKING AT EACH LOT SHOWN		
Characteristic	North Adams Lot	South Adams Lot
Site Access	Ingress from City is accommodated with right-hand turn from John Ringling Blvd onto Adams Drive and passing of Utility building and Fire Station. Egress to City requires left-hand turn with potential for turning lane, crossing incoming travel lanes to access John Ringling Blvd. Sarasota County Fire Department has been contacted regarding potential impacts to fire truck access.	Ingress from City requires left-hand turn onto Adams Drive, crossing outgoing travel lanes on John Ringling Blvd. Additional ingress path travels around Circle to Fillmore Drive. Egress is accommodated with right-hand turn onto John Ringling Blvd. A right-turn lane on Adams may be warranted/required. Additional egress path is through Fillmore Drive and onto Circle.
Parking Structure Vehicular Access	Two (2) vehicular access points for ingress/egress. Main access point is located on Adams Drive to minimize neighborhood roadway circulation and noise impacts.	Three (3) vehicular access points for ingress/egress. Main access point is located on Adams Drive to minimize neighborhood roadway circulation and noise impacts. Secondary access is located on Fillmore Drive.
John Ringling Blvd. Lane Adjustments for Access Connections	Right-turn lane from John Ringling Blvd. onto Adams Drive may be warranted/required. Potential signalization at John Ringling Blvd. and Adams Drive.	Left-turn lane along John Ringling Blvd. towards Adams Drive may be warranted/required. Potential signalization at John Ringling Blvd. and Adams Drive.
Site Constraints	"L-shaped" surface lot is bound by fire station and utility building at SE corner.	Nearly square surface lot is bound by existing retention areas at east and south.
Parking Capacity	Lesser due to existing surface lot restricted configuration.	Increased due to existing surface lot open configuration.
Parking Efficiency	Lesser due to existing surface lot restricted configuration.	Increased due to existing surface lot open configuration.
Horizontal Expansion	One option with incorporation of structure at SW corner.	Multiple options along Adams Drive or Monroe Drive.
Future Development	No accommodations.	Multiple options along Adams Drive or Monroe Drive.
Neighborhood Impacts	Site impacts church on east side and neighboring residents on north side.	Site impacts neighboring residents on east and south sides, however, can be mitigated with potential future residential liner.
Pedestrian Access	Pedestrians access north end of commercial area at intersection of Blvd of Presidents and Madison Drive, without direct view of Circle.	Pedestrians access center of SE quadrant through Fillmore Drive, with direct view of Circle. Stair/Elevator core aligned with Fillmore Drive serves as "gateway."

Functional Alternatives – Summary Chart

QUANTITATIVE SUMMARY OF THE FUNCTIONAL ALTERNATIVES									
Option	# of Bays	# of Ramps	Levels	# of Spaces	Approx. Displaced Spaces	Net Gain Spaces	Typ. Floor Square Footage	Typ. Floor Efficiency (SF/Space)	
North Lot	1	2	1	4	403	100	303	36,360	316
	2	2+	1	4	521	150	371	49,170	344
South Lot	1	4	1	3	503	200	303	63,100	340
	2	4	1	3	516	200	316	64,600	344
	3	3	1/speed	4	597	175	422	56,700	375

Are the Recommendations Still Relevant?

Parking Feasibility Nonstructured Parking Options

Parking Occupancy: (Friday observations 1:00pm – 7:00pm)

The recommendations are still relevant for many of the on- and off-street parking improvements except for the removal of parking areas around the Circle to accommodate special events in the Circle, as well as suggesting the relocation of the valet pick-up and drop-off area along the Circle. Maintaining delineated public parking around the circle and allowing for special event reservation of Circle parking spaces by event permit request and approval by City officials. Designating valet areas around the Circle may lend itself to increased pedestrian and valet attendant traffic in areas already complicated with nontraditional vehicular and pedestrian maneuverability.

Traffic Occupancy: (Friday observations 1:00pm – 7:00pm)

Our understanding is that some additional crosswalks and speed limit signs may have been implemented since this study was completed in 2014.

Wayfinding Occupancy: (Friday observations 1:00pm – 7:00pm)

A comprehensive wayfinding and parking guidance system is still relevant.

Parking and Traffic Occupancy: (Event Operations 11/9/2013 – 9:30am to 12:30pm)

These recommendations are still relevant and encourage the use of additional event personnel to manage vehicular and pedestrian traffic on major event days.

Parking Feasibility Structured Parking Options

Our team believes these recommendations are still relevant as demonstrated by the City's effort to move forward with the design of a multilevel parking structure on the North Adams Lot now. It is understood that preliminary findings support the Option #2 design and layout.

Will this 2017 Study Evaluate the Recommendations Further?

This 2017 study will continue to evaluate the recommendations as it relates to the management of traffic and parking supporting the adjacent barrier islands. Many of the traffic-calming and pedestrian-access recommendations should be considered as an extension of the St Armand Key parking program.

To What Degree Will We Evaluate?

Our plan is to monitor the progress of the prescribed recommendations and implementation plans. We believe the appropriate evaluation has already taken place and should provide future guidance toward implementing barrier island parking and traffic solutions.

12. Sarasota-Manatee MPO Water Taxi Feasibility Study

Renaissance Planning Group in Association with Art Anderson Associates
Date: 2005

Background Information

The Water Taxi Feasibility Study was prepared under the direction of the Sarasota/Manatee Metropolitan Planning Organization (MPO), with participation from its member local governments, key community stakeholders, and members of the public. The final report is based on substantial community input including stakeholder interviews, field visits, and two well-attended public forums – a meeting to kick off the study in 2004 and a public workshop to present key findings and preliminary recommendations in late January 2005. This feasibility study provides a conceptual plan and action steps for how waterborne transportation service could most effectively and efficiently operate in Sarasota and Manatee counties. It addresses the likely costs of such a system, potential funding sources, and more detailed implementation considerations.

Summarized Findings

- Roadway congestion levels build on area roadways and bridges, and the demand continues to rise from tourism.
- Congestion is likely to worsen at Gulfstream Drive and US 41, and on the bridge to St. Armands and Longboat Key.
- Water-based modes can extend the coverage and enhance the viability of public transportation in congested and constrained corridors.
- Feasibility is based on the potential demand spurred by redevelopment activity for at least three priority service areas, willing local government and private partners, and a relatively low capital and operating cost to provide initial service.
- Feasibility is dependent on the degree to which the private sector is brought into this program as an active and equal partner.
- Public funding is needed to invest in starting up the service and keeping fares at a reasonable level.
- Achieving success with ongoing operations requires a strong public-private partnership that ties marketing, promotion, destinations, facilities, and equipment into a unified program that blends modest agency oversight with entrepreneurial energy and creativity.

Recommendations and Improvements

SARASOTA

Potential locations: Marina Jack, Sarasota Quay/Ritz-Carlton Hotel area, Marie Selby Botanical Gardens, New College/USF/Ringling area, Van Wezel/Centennial Park, Mote Marine, St. Armands, and Longboat Key (south end).

- A trolley serving the arts and cultural district in Downtown Sarasota and terminating at a ferry terminal at the Quay may be attractive to tourists staying in Sarasota and wanting to get across the water without driving.
- Prime visitor/tourist destination in Sarasota County. Mote Marine is interested in initiating service using existing docks and has been in communication with the City of Sarasota on the subject. Operates under a lease agreement with the city; proximity to Pelican Man Sanctuary and Ken Thompson Park; presence of other amenities (restaurants, fishing, etc.).

MANATEE COUNTY ISLANDS

Potential Locations: Anna Maria, Holmes Beach, Bradenton Beach, Longboat Key (north end)

- Proactive city officials, multiple tourist destinations, infrastructure in place or planned, relatively compact, walkable retail districts with nearby short- and long-term residential uses.
- Convenience to mainland (comparable travel times, particularly during peak season); intermodal connections with the successful and distinctive Manatee Island Trolley.
- Presence of marinas/docks; presence of commercial nodes, the Bridge Street Pier, and municipal infrastructure investments through a community redevelopment agency; beach parking and road capacity constraints make travel options more viable.
- Existing and potential anchorage helps support the market for water taxi service.
- Park-and-ride lot under consideration at southern edge of Bradenton Beach.
- Substantial investment through grants in nonmotorized transportation, including sidewalks, bike facilities, and multiuse trails in Bradenton Beach and along SR 789.

Are the Recommendations Still Relevant?

They are relevant, but a significant amount of time has passed since this report was completed.

Will This 2017 Study Evaluate the Recommendations Further?

This study will coordinate with other ongoing studies tied to water taxi service implementation in the area.

To What Degree Will We Evaluate?

Primarily at the coordination and reporting level.

13. Sarasota/Manatee MPO 2040 Long Range Transportation Plan (LRTP)

Sarasota/Manatee Metropolitan Planning Organization
Date: 2016

Background Information

This 2040 LRTP update builds on the solid multimodal foundation the MPO established in prior plans, including the 2002 Public Transportation System Analysis and the Long Range Plans adopted for 2030 and 2035. The key to this LRTP update is a focus on

developing a 10- and 15-year interim planning horizon to help move the MPO toward a desired 2040 vision and set of goals. Current funding is already committed to projects through 2018. This plan builds upon targeted economic development areas and residential development expectations and identifies cost-effective transportation improvements to the year 2040. The 10-year focus establishes the “what’s next” for funding for the years 2021 through 2025 to enable productive conversations about management and operations and make the most of the region’s existing and committed transportation network.

The LRTP process includes a balance of technical analysis, public engagement, and local agency coordination/decision-making to reflect a technically sound and community-supported vision of the future of Sarasota and Manatee counties.

The technical component of LRTP includes several key activities:

- Existing and committed transportation investment
- Socioeconomic estimates and forecasts
- Existing plan review
- Financial Resources forecast
- Needs Plan
- Cost Feasible Plan
- Implementation Plan

Summarized Findings

Population growth and employment growth not occurring in the same areas:

- Older, wealthier, and more ethnically diverse community but a persistent lower-income divide
- Potential for large shifts in transportation mode demands with aging population and millennials
- Stable economy and growth in white-collar professions
- Significant changes in travel demands across modes

Recommendations and Improvements

- Develop a regional transit and land-use vision.
- Assess the Transit Oriented Design (TOD) readiness of existing corridors.
- Reevaluate project prioritization process and legacy projects.
- Continue to prioritize the US 41 Multimodal Emphasis Corridor (MMEC) as a regional corridor.
- Explore a regional TOD funding program.
- Enact Transit Supportive Development Guidelines and Policies.

- Promote Smart Growth.
- Recognize and promote regional activity centers as a growth management tool.
- Develop a plan for the design and funding of a multimodal, interconnected transportation system.
- Promote a regional perspective on multimodal transportation system for people, goods, and services.

Are the Recommendations Still Relevant?

They are relevant, but not specific.

Will This 2017 Study Evaluate the Recommendations Further?

This study will evaluate several of the recommendations further including regional transit, funding of multimodal solutions, and enacting transit supportive services.

To What Degree Will We Evaluate?

Multimodal funding sources will be evaluated further within the existing available sources as well as nontraditional sources. Public-private opportunities will be identified and evaluated for feasibility and implementation.

14. MCAT- Transit Development Plan

Tindale-Oliver & Associates, Inc.
Date: 2014

Background Information

The purpose of this report was a major update to the Transit Development Plan from Fiscal Year 2013/2014 through Fiscal year 2022/2023. MCAT provides public transportation services in the urban area by operating weekday and Saturday service that includes 11 fixed-route motorbus services and two fixed-route trolley services. Sunday service is offered on two trolleys along the barrier islands and an express bus along SR 64. The system serves the urbanized portion of the unincorporated area, along with the cities of Bradenton, Palmetto, Sarasota, Holmes Beach, Bradenton Beach, and Anna Maria, and the town of Longboat Key.

Summarized Findings

Major Trip Generators

Manatee County has several key attractors of trips that merit special consideration. The beaches are a key economic engine of the tourist industry, and public beach access points generate a substantial number of trips during peak leisure times. There are two primary beach access points in Manatee County—one at the end of State Road 64 in Holmes Beach and another at the south end of Anna Maria Island serving Coquina Beach. Each of these is also a transfer point for connecting MCAT routes and the Anna Maria Island Trolley.

Fixed-Route Service

Nine of the local bus routes are focused primarily on Monday through Saturday service and operate on an hourly basis. The Beach Express route operates as a fare-free route on Sundays and holidays along SR 64/Manatee Avenue (similar to Route 3) with a 90-minute frequency. The Anna Maria Island Trolley is a fare-free route running every 20 to 30 minutes that operates daily from 6:00 AM to 10:30 PM. The Longboat Key Trolley runs hourly between 6:00 AM and 8:00 PM, seven days per week, with a fare of \$1.25, connecting Anna Maria Island (Coquina Beach) with Longboat Key, Lido Key (St. Armands Circle), and downtown Sarasota. Bike racks are available on buses and trolleys for single-seat, two-wheeled bikes that are 16 inches or larger.

Route performance is dominated by a handful of the routes, three of which account for 65 percent of the total annual ridership. Two of the three are in this project's study area. The Anna Maria Trolley, running fare-free service along the length of the barrier island and connecting the cities of Anna Maria, Bradenton Beach, and Holmes Beach, accounts for more than a quarter of the annual system ridership by itself, at 26 percent. Route 3, running along SR 64 every 60 minutes, accounts for 11 percent of total annual ridership.

Recommendation and Improvements

Operations

Improve Frequency on Existing Routes – MCAT has seen record ridership levels in recent years, indicating an increased demand for transit services in the County. The majority of routes on the current system operate once every 60 minutes. Added frequencies are proposed along several key, high-performing routes for the 10-year plan.

Implement Routes to New Areas – As Manatee County continues to grow, there will be additional demand to provide service to the areas that experience increasing residential and employment density.

Later Service on Existing Routes – Current transit riders identified later service on existing routes as another key improvement area. Service in the core network should be increased to operate between the hours of roughly 5:00 AM and 9:00 PM. The 10-year plan includes extending service hours from 5:30 AM to 9:00 PM.

Improve Sunday Service on Existing Routes – Trolley services along the barrier islands, as well as the Beach Express along SR 64, are currently the only Sunday service offered. Increasing the levels of service offered on Sunday was identified as a high-priority improvement area. Adding Sunday service at 60-minute frequency on “Core Network” and high-performing routes is included in the 10-year plan.

Connectivity to Surrounding Counties – Regional connectivity was also identified as a priority for MCAT. Future express routes would provide a rapid connection during the peak period to neighboring metropolitan areas and counties. Specifically, connections to downtown Sarasota, St. Petersburg, and Tampa/Brandon were identified as needs. These routes, however, were among the least cost-effective at current development levels. New routes that serve these connections are included in the long-range vision plan and so do not occur in the time frame of the 10-year plan.

Capital and Infrastructure

Add Technology Improvements to Buses – Technology has improved dramatically since MCAT's last major upgrade, and having more modern systems in place can allow the agency to implement programs and track performance more efficiently. Specific technology upgrades include Automatic vehicle locators (AVL) systems that allow MCAT to track and target improvements in on-time performance for the bus fleet. Additionally, Automatic passenger counter (APC) systems can provide enhanced data as to fluctuations in ridership and the utilization of bus stops throughout the MCAT system. MCAT is also pursuing other technology improvements that can enhance customer experience and provide better regional connectivity, such as fareboxes capable of accommodating potential future regional fare media, Real-Time bus information, the addition of Wi-Fi on-board buses, automated stop announcements, and Interactive Voice Response (IVR) capability.

Continue Stop Amenity Improvement and Rebranding Plan – MCAT has begun to replace benches provided by a private advertising company with county-owned passenger benches that serve as a public asset. Concurrently, the agency is refreshing its brand with new shelters and benches. Each passenger amenity includes accessibility improvements and route and schedule information.

Bring Stops into Compliance with ADA – Make improvements to bus stop areas and road segments that do not comply with the latest requirements of the Americans with Disabilities Act (ADA).

Build New Transit Facilities –A park and ride study is currently being conducted through partnership with the Sarasota/Manatee MPO and SCAT. This study will help all agencies better understand ideal locations for future transit-supportive facilities based on population and trip generation.

Longboat Key Trolley

MCAT continues to coordinate with SCAT to interline bus routes along the barrier islands. Continued coordination with this service provides a mutual benefit for both SCAT and MCAT ridership along this key corridor for both counties.

Survey Results

The top express service desired by respondents was downtown Bradenton to the beach via Cortez Road.

[Are the Recommendations Still Relevant?](#)

Operations, Capital, and Infrastructure Improvements

Many of the recommended improvements are still relevant. Some of the improvements identified are specifically targeting improved service to and from the barrier islands.

[Will This 2017 Study Evaluate the Recommendations Further?](#)

This study will evaluate several of the recommendations further including park-and-ride, increased transit service to/from the barrier islands, on the barrier islands, enhanced transit stops, and enhanced operational technology.

[To What Degree Will We Evaluate?](#)

The park-and-ride lots will be evaluated for capacity, implementation opportunities (public/private and public-public), and locational feasibility. The transit services will be evaluated for additional demand tied to park-and-ride implementation. Transit stop locations and improvements will be evaluated for projected demand and accessibility. Technologies including park-and-ride/transit links will be evaluated for feasibility and incorporation to the overall transit operation.

15. SCAT- Transit Development Plan (TDP)

Sarasota County
Date: 2014

Background Information

This report was a major update to the Transit Development Plan from Fiscal Year 2015/2016 through Fiscal year 2024/2025. This study is a 5-year major update as required by FDOT. The process for completing the Sarasota County Area Transit (SCAT) TDP major update follows the FDOT guidance, including data collection, soliciting public input, coordination with other transportation agencies, and defining system goals with key stakeholders and decision-makers. The purpose of the study was to update near and mid-term recommendations for the SCAT transit system.

The Sarasota County Area Transit system is primarily located within Sarasota County in the southwestern portion of Florida. A portion of the system extends into Manatee County located just north of Sarasota County. SCAT runs a scaled-down service on Sundays. In addition to the fixed routes, SCAT provides ADA-complementary paratransit service throughout the service area.

Summarized Findings

The Town of Longboat Key is one of the few areas in Sarasota County that is served by both Sarasota County Area Transit (SCAT) and Manatee County Area Transit (MCAT). Following a brief interruption of coordinated service between the two agencies, the routes that currently serve the Town saw significant growth when 30-minute service was furnished. However, the growth was not sufficient to justify a continuation of that level of frequency. Each of the transit agencies' service enables the residents and visitors to the Town of Longboat Key to be connected throughout Manatee and Sarasota counties. At the time of the comprehensive plan development, there were no specific improvements or changes to the service to the Town of Longboat Key.

Route 4 serves from downtown Sarasota to St. Armands Circle and South Lido Beach. The route currently operates with 60-minute headways from 6:40 am to 7:05 pm.

Recommendation and Improvements

Operations

Improve Frequency on Existing Routes – SCAT recommends no changes to the Longboat Key Trolley Service. SCAT recommends improving headways on Route 4, St. Armands Circle, and South Lido to 30-minute headways in Fiscal Year 2023.

Nonservice Improvements

During the July 2014 service rollout, SCAT also introduced a mobile application for personal smart phones to access the system's route information online. Other technology utilized by the system includes:

- Automatic passenger counters (APC).
- Automatic vehicle locators (AVL).
- Next bus indicators at transfer stations.
- On-board automated stop announcements.

Transit passenger expectations have increased dramatically over the past decade, and as such, a demand for enhanced technology calls for improvements in fare collection equipment and software, including real-time information within the Web, Wayside signs, In-vehicle displays, and mobile devices, that encourage the riding public to use public transit. SCAT is evaluating options for implementing Smartcard-capable technology and collaborating with other Transit agencies in the region for fare card compatibility.

Seasonal Routes

Seasonal routes are a common transit practice to handle peak demand in areas with peak tourist seasons. Seasonal schedules are also useful to adjust to slower running times during peak traffic congestion months when achieving the off-peak schedules is difficult or impossible.

An option to handle seasonal delays and overloads is to maintain normal timetables and position "floaters" in the most congested locations, such as near St. Armands Circle and Siesta Beach, or by having floaters available to dispatch from the garage on an as-needed basis. This option introduces floaters into the mix of assignments with the goal of adhering to the published schedules as closely as possible. In Sarasota, the greatest need for floaters occurs in the afternoons.

These seasonal services add operating costs, require extra equipment, and operators who may remain idle at nonpeak seasons. There may be opportunities to seasonally adjust operator schedules for efficiencies and cost-effectiveness.

Are the Recommendations Still Relevant?

Operations, Capital, and Infrastructure Improvements

Many of the recommended improvements are still relevant. Some of the improvements identified are specifically targeting improved service to and from the barrier islands.

Will This 2017 Study Evaluate the Recommendations Further?

This study will evaluate several of the recommendations further including park-and-ride, increased transit service to/from the barrier islands, on the barrier islands, enhanced transit stops, and enhanced operational technology.

To What Degree Will We Evaluate?

The park-and-ride lots will be evaluated for capacity, implementation opportunities (public/private and public-public), and locational feasibility. The transit services will be evaluated for additional demand tied to park-and-ride implementation. Transit stop locations and improvements will be evaluated for projected demand and accessibility. Technologies including park-and-ride/transit links will be evaluated for feasibility and incorporation into the overall transit operation.

16. Gulfstream Sarasota Transportation Impact Analysis

Kimley-Horn and Associates
Date: March 2014

Background Information

The Gulfstream Sarasota Transportation Impact Analysis documents the transportation concurrency impacts for the proposed Gulfstream Sarasota development consisting of up to a 275-room hotel and 144 condominium units. The mixed-use development is located at the northwest quadrant of the Gulfstream Avenue/John Ringling Causeway & U.S. 41/North Tamiami Trail intersection in the City of Sarasota, Florida. The project is currently under construction.

Recommendation/Conclusion

The analysis made recommendations to provide better pedestrian connectivity from the project to the existing public sidewalks along US 41 and Gulfstream Avenue as well as improving bicycle and pedestrian safety conditions at the US 41/Gulfstream intersection. The bicycle and pedestrian safety recommendations are no longer relevant due to the intersection being reconstructed as a roundabout. The Sarasota-Manatee Barrier Island study will not evaluate the recommendations further.

17. Sarasota Bayside Transportation Impact Analysis

Tindale Oliver Date: July 2016

Background Information

The Sarasota Bayside Transportation Impact Analysis documents the transportation concurrency impacts for the proposed Sarasota Bayside development consisting of 695 condominium units, 175 hotel rooms, 38,972 square feet of office space, and 189,050 square feet of specialty retail. The mixed-use development is located at the northwest quadrant of the U.S. 41 & Fruitville Road intersection in the City of Sarasota, Florida.

Recommendation / Conclusion

The analysis identified both traditional intersection improvements and a two-lane roundabout improvement at the US 41 & Fruitville Road intersection needed to allow northbound-to-westbound access into the site. FDOT is currently designing the ultimate roundabout configuration at the intersection. The Sarasota-Manatee Barrier Island study will not evaluate the recommendations further.

18. Sarasota/Manatee MPO Bicycle, Pedestrian, and Trails Master Plan

Jacobs
Date: November 2013

Background Information

The study documents the Sarasota-Manatee Metropolitan Planning Organization (SM MPO) bicycle, pedestrian, and trails master plan (BPTMP) in response to community needs, a desire to improve the safety for bicycling and walking, and to integrate the networks with transit. The master plan prioritizes projects that best meet those needs that the MPO and its partner agencies can pursue. The study area for the SM MPO BPTMP consists of Sarasota and Manatee counties and the entire bicycle, pedestrian, and trails network contained within it. The study prioritized improvements to these networks based on safety and connectivity.

Thirty (30) pedestrian project priorities were identified by the SM MPO BPTMP. One of the pedestrian projects, a 0.3-mile sidewalk project in Manatee County on East Bay Drive from Sunbow Bay Drive South to Gulf Drive was ranked as the 19th priority and is located within the Sarasota-Manatee Barrier Island study limits. This project has been completed; therefore, the recommended improvement is no longer relevant to the Sarasota-Manatee Barrier Island study.

Twenty (20) bicycle project priorities were identified by the SM MPO BPTMP. Two of the bicycle projects, a 0.32-mile project in Sarasota County on John Ringling Boulevard/Coon Key Bridge from Bird Key to Coon Key was ranked as the 14th priority and a 0.5-mile project on Anna Maria Island on Pine Street from S Bay Boulevard to Gulf Drive was ranked as the 20th priority. Both are located within the Sarasota-Manatee Barrier Island study limits. Neither project has been completed, but the recommended improvements are still relevant. This study will evaluate John Ringling Boulevard as part of the multimodal connectivity from downtown Sarasota to St. Armands Circle as part of the Sarasota-Manatee Barrier Island study.

Twenty-six (26) regional multiuse trail project priorities were identified by the SM MPO BPTMP. Three short segments of the trail projects are within the Barrier Island study area:

- The 15.23-mile River Walk – Anna Maria Island Trail project in Manatee County from River Walk to Manatee Beach Park was ranked as the 2nd priority,
- The 8.12-mile El Conquistador – Cortez Trail project in Manatee County from Bayshore Gardens to Bradenton Beach was ranked as the 3rd priority, and
- The 10.33-mile Palma Sola Trail project in Manatee County from Anna Maria Island to SR 70 was ranked as the 9th priority.

Recommendation / Conclusion

None of the projects have been completed, but the recommended improvements are still relevant. Given that most of the three trail project limits are outside the Sarasota-Manatee Barrier Island study limits, they will not be evaluated any further as part of the Sarasota-Manatee Barrier Island study. Because SR 789 from Manatee Avenue to John Ringling Boulevard is designated as a regional trail priority corridor in the FDOT D1 Regional Multi-Use Trails Plan (2009), multimodal considerations will be reviewed as part of any recommended improvement.

19. Tampa Bay Passenger Ferry Presentation

HMS Global/Maritime, South Swell Development Group, Akerman,
Moffatt & Nichol, Bayshore Solutions
Date: 2015

Background Information

A public-private (Hillsborough County, HMS Ferries, Inc., and South Swell Development Group) initiated evaluation was performed to provide an overview, background, conceptual routes, and capital/operational costs primarily in the Tampa Bay Area, but extending southward to Manatee County. The purpose is to establish passenger ferry service in Tampa Bay with private sector partners to cover operating costs, lower capital costs, and speed project implementation.

Summarized Findings

Ferry Service

- Catamaran style vessels - very good stability; 149 PAX and up.
- Speeds over 25 knots.
- Shallow draft – approximately 4' – 5'.
- American-made.
- 3 x 200 PAX ferries – 1800/peak; 2400 commute period.

Highway Mode

- 1 Lane Interstate can carry 2,200 vehicles/hour.
- Adding one lane mile to major roadways = \$20 million/mile.
- One lane mile addition for urban interstate = \$50 to \$100 million/mile.
- SunRail costs \$1.2 billion plus millions in ongoing state and local operating subsidies for initial 30-mile system. Proposed system capital cost 32X less than SunRail.
- Bus option would require 61 buses, >\$3 million in operating subsidies plus buses would be stuck in traffic.

Recommendations and Improvements

Recommendations included new start-up projects at MacDill Air Force Base and several regional locations.

MacDill Air Force Base

- First phase \$23.8 million includes vessels, trams, and Redwing location – assumes three 149-200 PAX vessels.
- HMS takes first five years of operating risk – shared risk benefit; thereafter Includes Profit Sharing. 5 Year Min. with Extensions.
- Funding from private sector (operating), and combination of federal, state, and local dollars for capital size.
- Schedule.
 - NEPA completed 4Q 2015.
 - Design, Engineering, Permitting Commence 4Q 2015.
 - Construction Commence 2Q 2017.
 - Revenue Operation Could Commence Dec. 2018.

Regional

- St. Pete to Westshore/TIA. 3-4 vessels. 40-minute travel time. Service every 30 minutes peak; 60 minutes off-peak. Est. Capital Cost. \$20 - \$35 million.
- St. Pete to SouthShore. 3 vessels. Approx. 30-minute travel time. < \$20 million.
- Intercoastal, Dunedin- St. Petersburg Beach:
 - Min 4 vessels. Capital Cost dependent on terminals.
 - 30-minute headways.
 - Approximately 60-minute travel time. Congestion proof.
 - Six Stops with connecting bus/trolley routes.
 - Dunedin, Downtown CLW, CLW Harbor, Indian Rocks, John's Pass, and St. Pete Beach (on Pasadena Causeway).
 - Travel times and capital costs are for concept planning purposes only. Operational costs and subsidies subject to many variables including vessel types, operating hours, frequencies, and bridge issues.

Are the Recommendations Still Relevant?

St. Petersburg to Tampa option has been implemented.

Will This 2017 Study Evaluate the Recommendations Further?

Potentially, smaller vessels may be evaluated that provide links east-west rather than the larger catamarans depending on the facilities. The Thames Fast Ferry does provide a cross-river connection in London that may be applicable to the Barrier Islands with catamarans.

To What Degree Will We Evaluate?

Water-borne transit options will be a major consideration given the limited road space.