



# Central Indian River County Greenways Plan

Technical Memorandum #3:

**Development of Preliminary Greenways Alternatives**

November, 2006



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and Associates, Inc.

**Scope:**

This technical memorandum outlines the **Development of Preliminary Greenways Alternatives** for the Central Indian River County Greenways Plan. The scope of services for the Central Indian River Greenways Plan describes this task as follows:

**Technical Memorandum #3 – Development of Preliminary Greenways Alternatives**

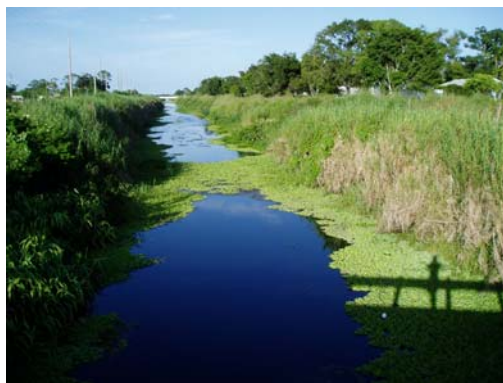
*The CONSULTANT shall prepare a Technical Memorandum summarizing the development of preliminary Greenways Alternatives. Technical Memorandum #3 shall include the maps and graphics produced as a part of Task 4, Part A.*

This task is described as follows:

**TASK 4 – DATA ANALYSIS AND DEVELOPMENT OF PRELIMINARY GREENWAYS ALTERNATIVES**

**A. Develop Preliminary Alternatives**

*The CONSULTANT shall evaluate the data collected in Task 2 and identify potential greenway alternatives based on the greenways methodology established in Task 3, Part A. Additionally, the CONSULTANT shall utilize comments from the public, the MPO, and the project steering committee to assist in the development of greenway alternatives. Based on the results of the data collection and the application of the selection criteria, the CONSULTANT shall develop a network of feasible greenways. The feasible greenway network will be depicted on county-wide maps showing potential greenways, trail connections, relationships to origins and destinations, jurisdictional boundaries, pertinent data obtained in Task 2, and potential trailhead locations. The scale of the map should be sufficient to determine potential neighborhood conflict points or other areas of community impact. The map will be GIS-based and indicate the general characteristics and anticipated user groups of each trail element (bicycle, multi-use, wildlife, etc.).*



## Opportunities and Constraints:

Based on field observations, baseline data, and meetings with the Project Steering Committee (PSC), the consulting team has identified a preliminary greenway network. This network is based on the following information:

1. Corridors were identified using the selection criteria developed in cooperation with the PSC. A copy of the ratings assigned to the potential corridors is provided in the appendix of this report. Draft 'project description sheets' were created for field evaluation of the potential corridors. The project description sheets will be refined and included in the draft greenways plan, pending review of this Technical Memorandum.

2. The most significant issue is the lack of conventional rights-of-way for greenways in the project area. There are no abandoned railroads, accessible utility corridors, dedicated linear public rights-of-way or existing shared use paths in central Indian River County. In addition, greenways and trails are not included as corridors in the current County land use plan. Walking and bicycling are currently limited to existing sidewalks and roadways. These facilities are often limited and discontinuous.



3. Potential corridors may exist on lands controlled by the Indian River Farms Water Control District (IRFWCD), but only with the District's approval. The District has not allowed public access to these corridors in the past. IRFWCD lands can only be considered as potential trail corridors under the following conditions:

- a) The primary function for IRFWCD lands must be for drainage. Indian River County was once 50% wetlands, and the drainage district is responsible for keeping the land from flooding.
- b) IRFWCD must retain decision making authority over lands in its jurisdiction. This means that if new uses are granted, they will need to be under leases or permits that retain ownership and control by IRFWCD.
- c) Maintenance of IRFWCD canals must take precedence over permitted trail uses. This means that if IRFWCD needs to conduct a maintenance operation, it must be able to temporarily close a trail facility if necessary to maintain safety for its employees and the public.
- d) Liability must be addressed so that IRFWCD, (which has been recently granted sovereign immunity by state law) is protected from potential lawsuits to the maximum extent possible.
- e) Where sufficient right-of-way and other safety/security measures cannot be provided, trail use will not be possible on IRFWCD lands.

4. Additional potential corridors were identified that have unique characteristics, including lands around the perimeter of Vero Beach Airport, and ‘rail-with-trail’ opportunities in the Florida East Coast (FEC) Railway corridor. Each of these cases requires specific responses tailored to the adjacent land uses, along with significant safety and security issues that must be addressed. The FEC is developing its first “Rail-with-Trail” project in St. Johns’ County. Their existing right-of-way in the project is 80-100 feet wide, which is consistent with the potential requirements for a shared rail and trail corridor. The Vero Beach Airport has expressed interest in the potential for trail use of its perimeter lands, pending further analysis.

5. Significant use by pedestrians and bicyclists is visible on the loop connecting the Merrill Barber and 17<sup>th</sup> Street Bridges. The bridges have existing sidewalks and wide paved shoulders. These bridges could be linked by enhanced bicycle lanes and sidewalks on IR Boulevard and A1A.

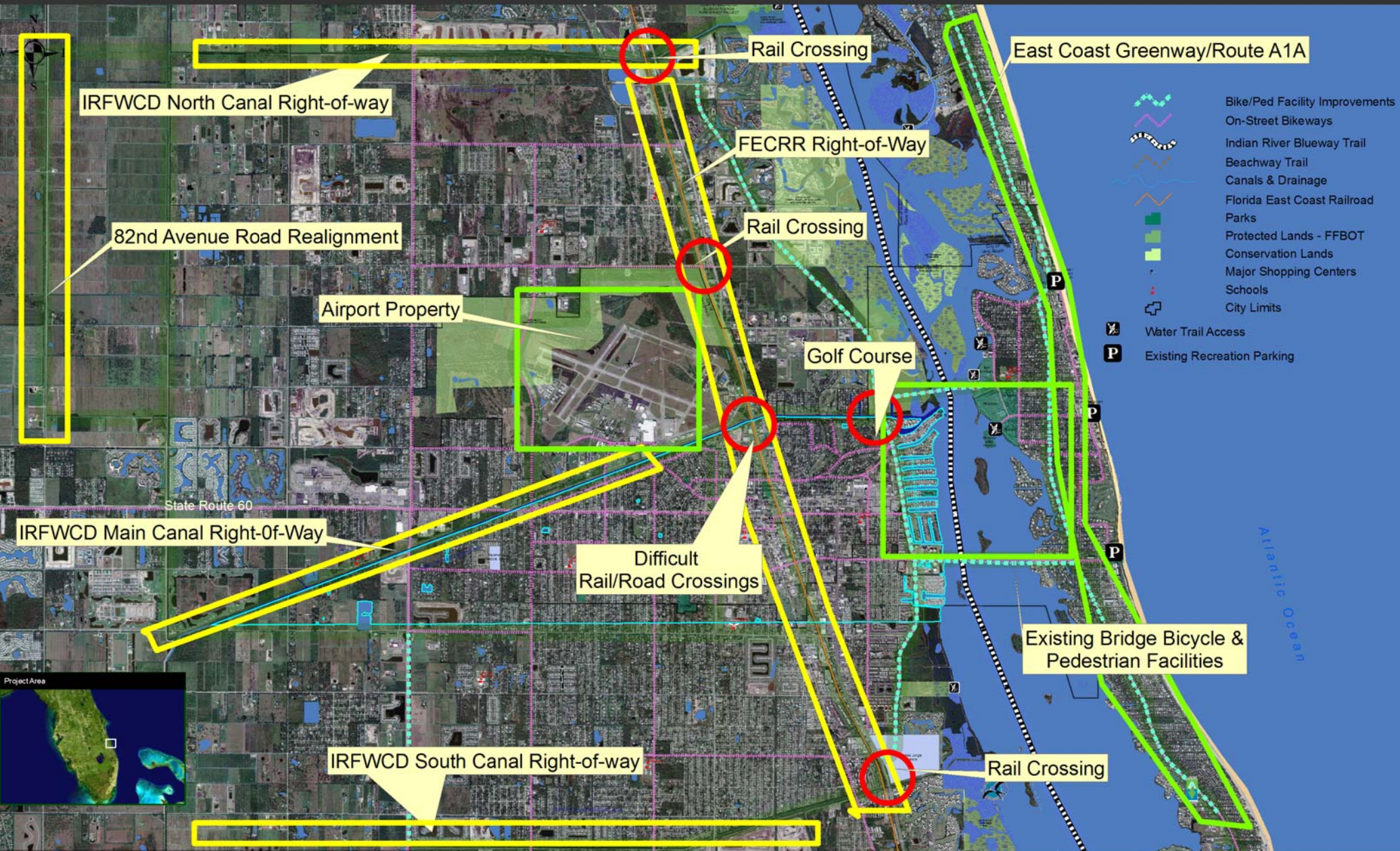
6. Additional constraints identified in the project area include:

\* Crossing the FEC Railroad: a significant bridge or tunnel structure would be required to cross the railroad and Old Dixie Highway at the North, Main, and South Relief Canal Corridors. This barrier can be circumvented by utilizing existing roadway and railroad grade crossings, but will this will require adjustments to the alignment of the current corridors.



Lands of the FEC Railroad and IR Farms are potential corridors, but there are significant challenges to creating greenways and trails on these lands.

An opportunities and constraints map summarizing these conditions and issues is shown on the following page.



## Preliminary Alternatives:

Based on the opportunities and constraints, a range of alternatives are possible for greenways and trails in central Indian River County. These alternatives are intended as a starting point for discussions with involved agencies and the public, not as detailed plans that are ready for implementation. The approach to these alternatives is intended to be flexible, so that solutions could be phased in over time, as funding becomes available, and as support for potential projects becomes available. The preliminary network alternatives are described as follows:

### **Concept 1: Minimal Impact Network**

This alternative represents the minimal approach to developing greenways without impacts to existing land uses. This basic network is developed using existing facilities adjacent to roadways and bridges (the “two bridges” loop, the County’s beaches along the coast, and a proposed Water Trail along the Intracoastal Waterway). This alternative would connect only a minimal number of destinations, and would be expected to have little long-term effect on encouraging more people to use alternative transportation.

### **Concept 2: Limited Greenway Network**

This alternative is based on creating a new greenway loop in the core of the county, utilizing a combination of airport, railroad, and water control district lands. Cooperative agreements and detailed feasibility studies would be required to make these properties available to the public. Each section of this loop would provide a ‘proof of concept’ project for developing greenways with the respective land managers. This system would provide for bicyclist and pedestrian mobility within the county’s developed core, but would not provide connections throughout the project area.

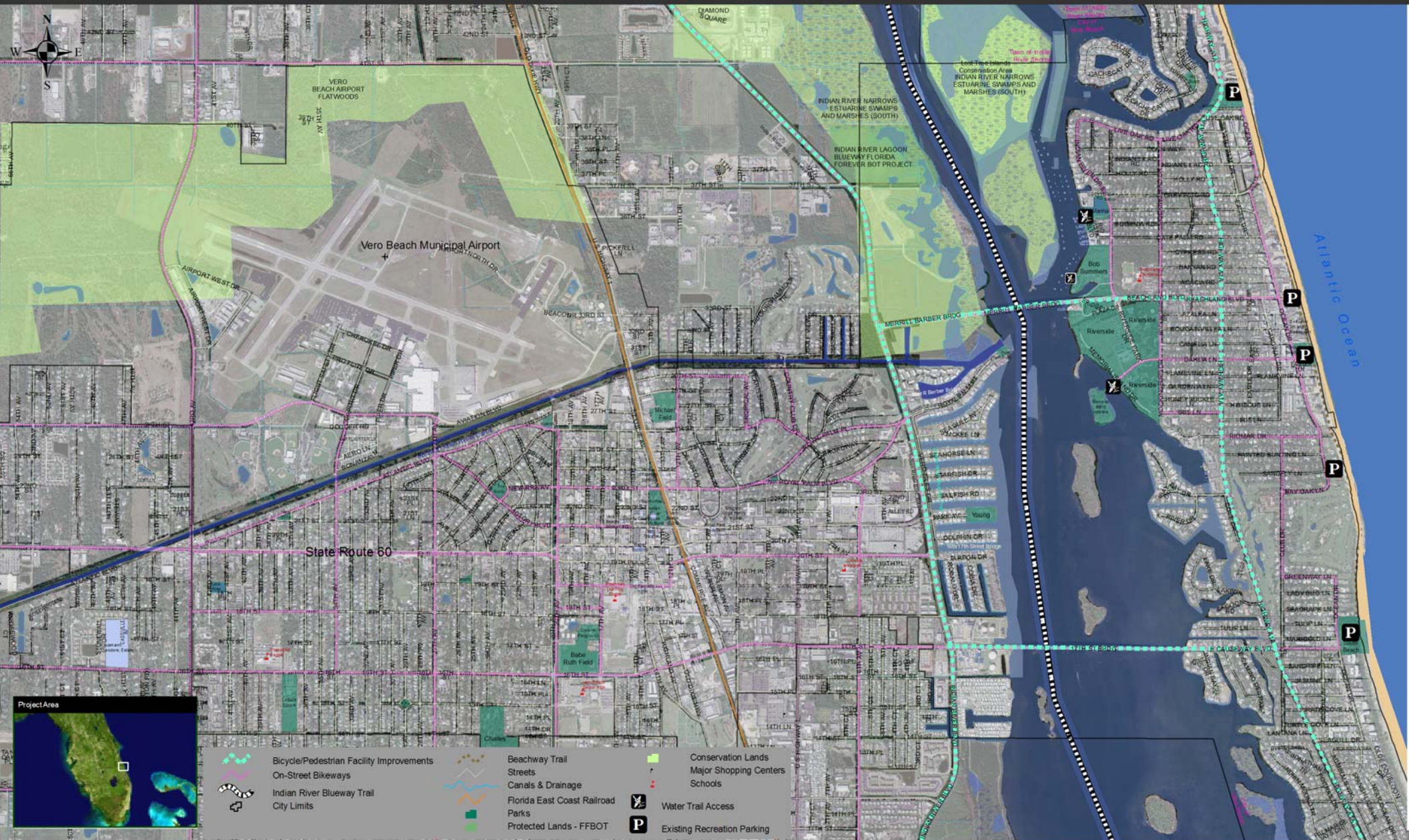
### **Concept 3: Connected Greenway Network**

This alternative combines the assets of the first two options, and extends the greenway network farther into the county by developing a series of strategic connector projects using both off-road trails and on-road connector facilities.

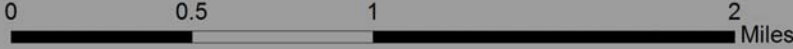
These alternatives are illustrated in the maps on the following pages.

# Central Indian River County Greenways Plan

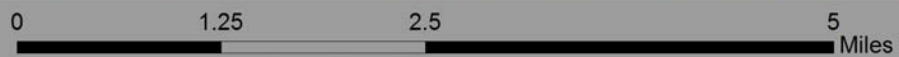
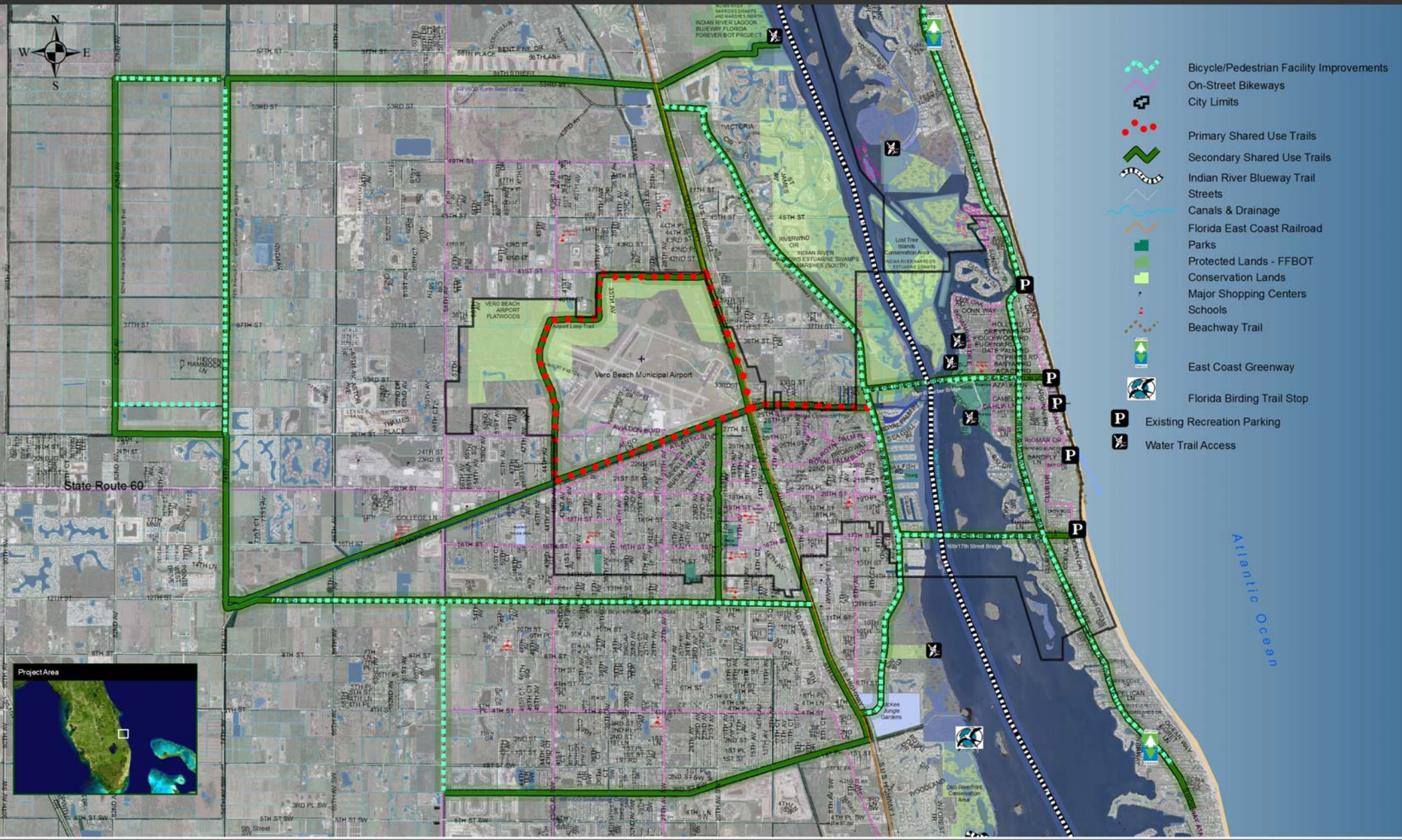
# Concept 1: Minimal Impact Network



-  Bicycle/Pedestrian Facility Improvements
-  On-Street Bikeways
-  Indian River Blueway Trail
-  City Limits
-  Beachway Trail
-  Streets
-  Canals & Drainage
-  Florida East Coast Railroad
-  Parks
-  Protected Lands - FFBOT
-  Conservation Lands
-  Major Shopping Centers
-  Schools
-  Water Trail Access
-  Existing Recreation Parking







Appendix: Evaluation Criteria Matrix

Central Indian River County Greenways Evaluation Matrix: Potential Projects									
Projects	Criteria								Notes
	Environmental Benefits (10)	Connectivity (20)	Regional Benefits (15)	Multiple Uses (10)	Agency Support (20)	Safety (10)	Constructability (15)	Total (/100)	
Airport / 43rd Avenue Corridor	5	20	15	10	20	10	10	90	Shared use path
AIA / East Coast Greenway	5	20	10	5	15	10	15	80	On road bike lanes
Barber Bridge / Beachland Blvd	5	20	15	10	15	10	10	85	Extend shared-use path on bridge
17th Street Bridge Corridor	5	20	15	10	15	10	10	85	Extend shared-use path on bridge
IR Boulevard	5	20	15	5	15	10	10	80	On road bike lanes
20th Avenue	5	15	10	10	15	10	15	80	Median shared-use path
12th Street Corridor	5	10	10	5	20	10	10	70	Bike lanes and sidewalks
74th Avenue	5	10	10	5	20	10	10	70	Bike lanes and sidewalks
82nd Avenue	5	10	10	5	20	10	10	70	Pending Realignment - Convert Old Road to Shared Use Path
Main Relief Canal	10	20	15	10	0	10	10	75	IR Farms approval required
North Relief Canal	10	15	15	10	0	10	10	70	IR Farms approval required
South Relief Canal	10	15	15	10	0	10	10	70	IR Farms approval required
FEC Railroad Corridor	10	20	15	10	0	10	5	70	Requires FEC approval
Beachway	10	5	15	10	20	0	15	75	Walking/Running/ Recreation
IR Water Trail	10	0	15	5	20	5	15	70	Canoe / Kayak use

0 = Strong Negative Impact/Low Benefit/High Cost -- Mid Point (5-8) = Neutral Impact/Benefit/Average Cost -- High Point (10-20) = Low Negative Impact/High Benefit/Low Cost

*This matrix provides an evaluation of new potential corridors (or enhancements to existing corridors) to be included in the proposed greenway system. The corridors were evaluated based on criteria identified in Technical Memorandum #2, combined with the issues identified in the planning process. The evaluation process indicates that if a proposed corridor scores 70-100 points, it is worth consideration as a potential future link in the system. Once a proposed system alternative has been identified, individual projects will be ranked and prioritized as projects and included in the draft greenways plan.*