



ESTERO INFRASTRUCTURE INVENTORY

Florida Gulf Coast University
January 20, 2016

Presentation Outline

- Introduction/Background
- Objectives
- Process
- Results and Analysis
 - *Pavement*
 - *Sidewalks & Intersections*
 - *Bicycles*
 - *Landscaping*
- Recommendations

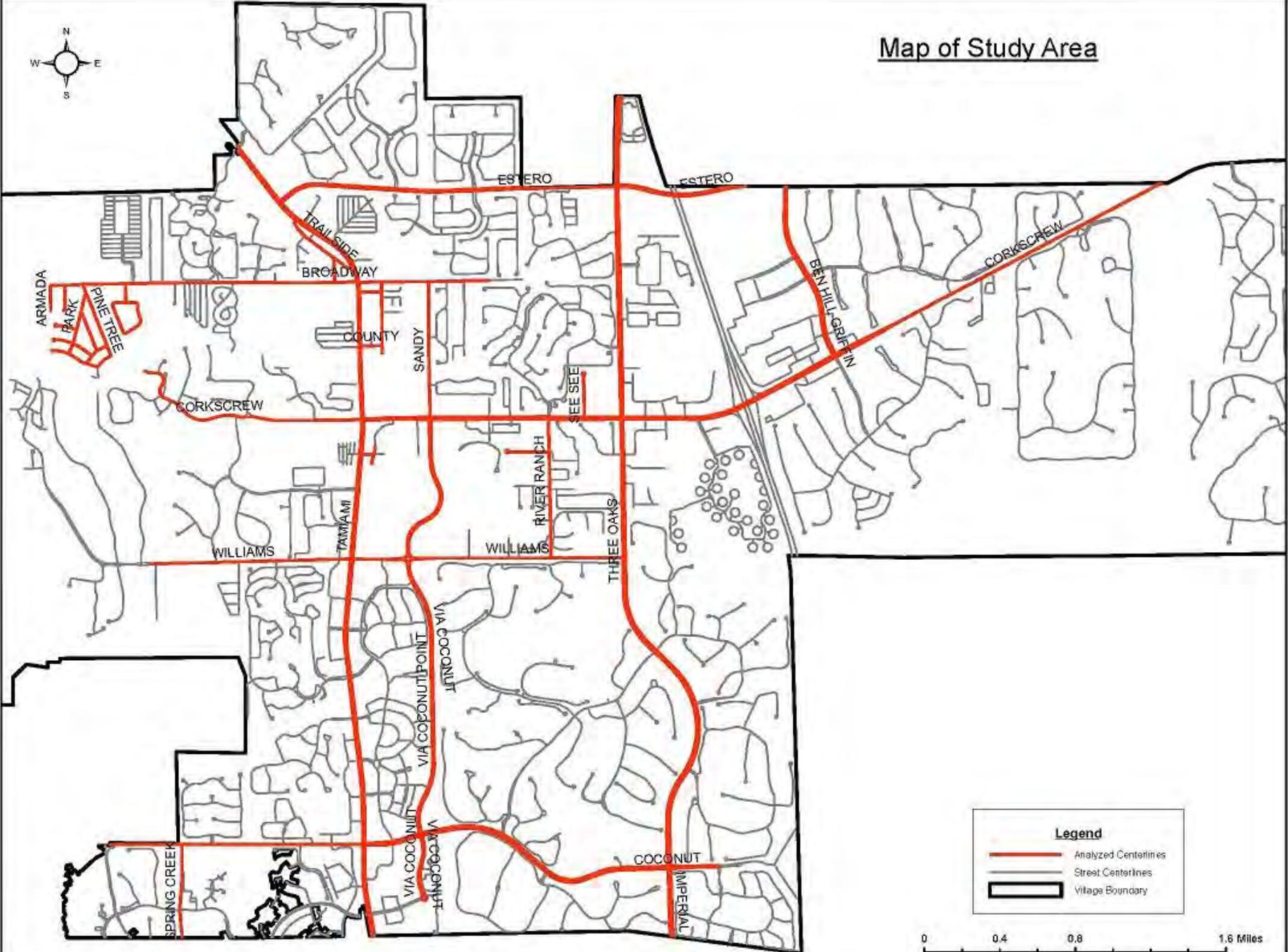
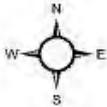


Objectives

- Evaluation of infrastructure
 - *Pavement conditions*
 - *Pedestrian facilities*
 - *Bicycle facilities*
 - *Landscaping*
- Identify existing infrastructure & gaps
- Provide a baseline of facilities
- Contribute to the development of the CIP
- Provide data for public input & prioritization



Map of Study Area



Legend

- Analyzed Centerlines
- Street Centerlines
- ▭ Village Boundary



Process

- Aerial Analysis
- Cross Training
- Drive-Through Survey
- Video Documentation
- Walk-and-Look Survey
- Independent Verification of Data
- GIS Coding
- Recommendations Conference



RESULTS



Pavement Conditions

Road / Street	Findings			Recommendation
	Cracking	Raveling	Potholes	
Estero Parkway	✓	✓		<ul style="list-style-type: none"> • Very thin pavement layer • Pavement layer not flush with curbing • Base materials exposed • Resurfacing/ Rehabilitation in 2-3 YRS
Poinciana Avenue	✓	✓	✓	<ul style="list-style-type: none"> • Base materials exposed • Resurface/ Rehabilitate in the next 1-2 YRS
Trailside Drive	✓			<ul style="list-style-type: none"> • Resurface or monitor for 1 YR
Broadway Avenue	✓			<ul style="list-style-type: none"> • Reevaluate: 2-3 YRS
Sandy Lane	✓			<ul style="list-style-type: none"> • Reevaluate: 2-3 YRS
Charing Cross Circle	✓	✓		<ul style="list-style-type: none"> • Reevaluate: 2-3 YRS

Estero Parkway

- Very thin pavement layer
- Pavement layer not flush with curbing
- Base materials exposed
- Resurfacing/ Rehabilitation in 2-3 YRS



Poinciana Avenue

- Base materials exposed
- Resurface/ Rehabilitate in the next 1-2 YRS



Trailside Drive

Resurface or monitor for 1 YR

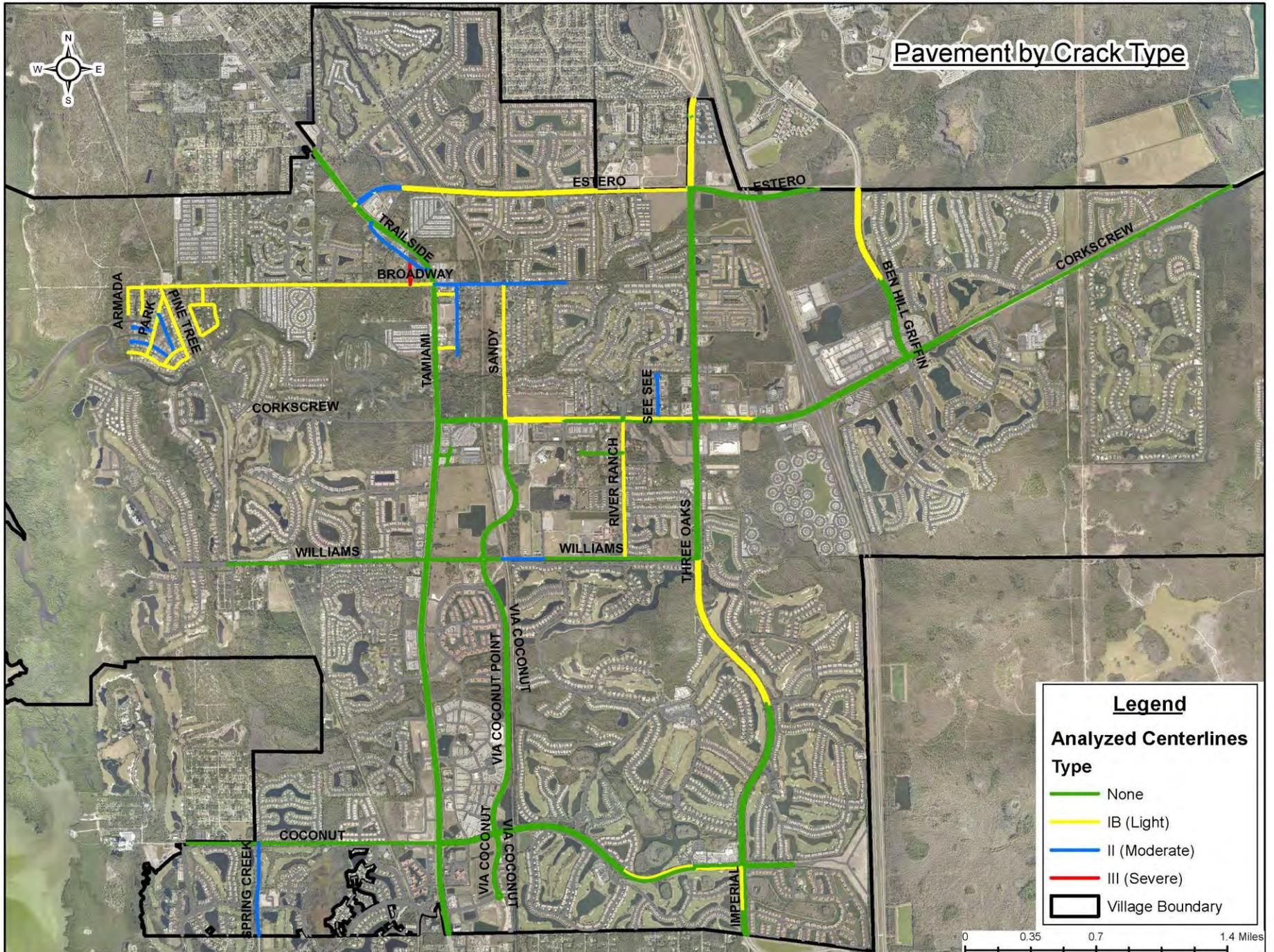




Broadway Avenue

- Light raveling West of US-41
 - Type IB and Type II longitudinal cracks along the centerline

Pavement by Crack Type



Legend

Analyzed Centerlines

Type

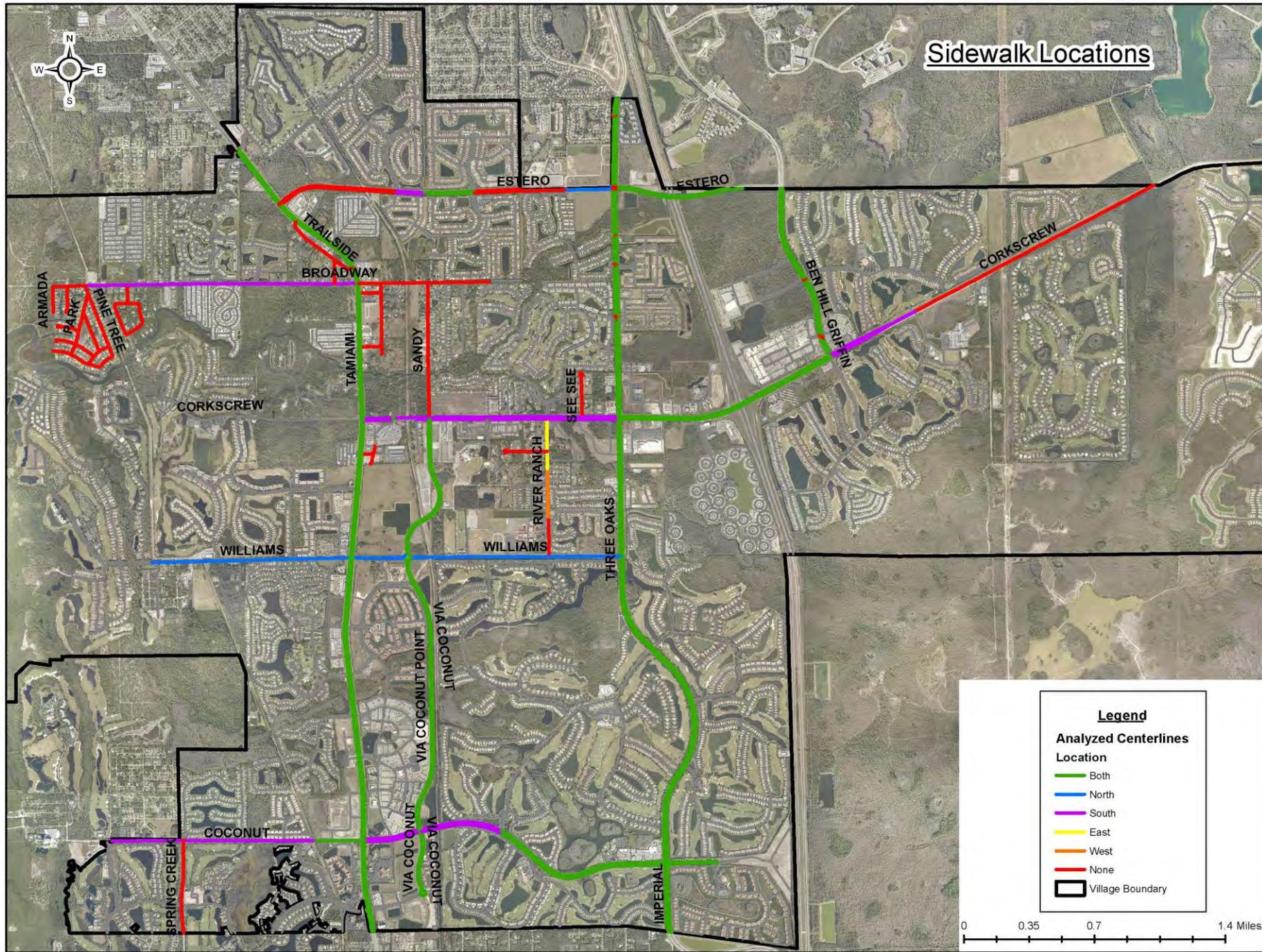
- None
- IB (Light)
- II (Moderate)
- III (Severe)
- Village Boundary

0 0.35 0.7 1.4 Miles

Pavement Summary

- Approximately 12% of lane miles of total roads need immediate attention
- Approximately 20% of lane miles of total roads are of the type IB cracks that should be reevaluated in 2-3 years
- Approximately 68% of lane miles of total roads are in good condition where no immediate action needs to be taken

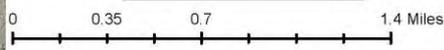
Sidewalk Locations



Legend

Analyzed Centerlines Location

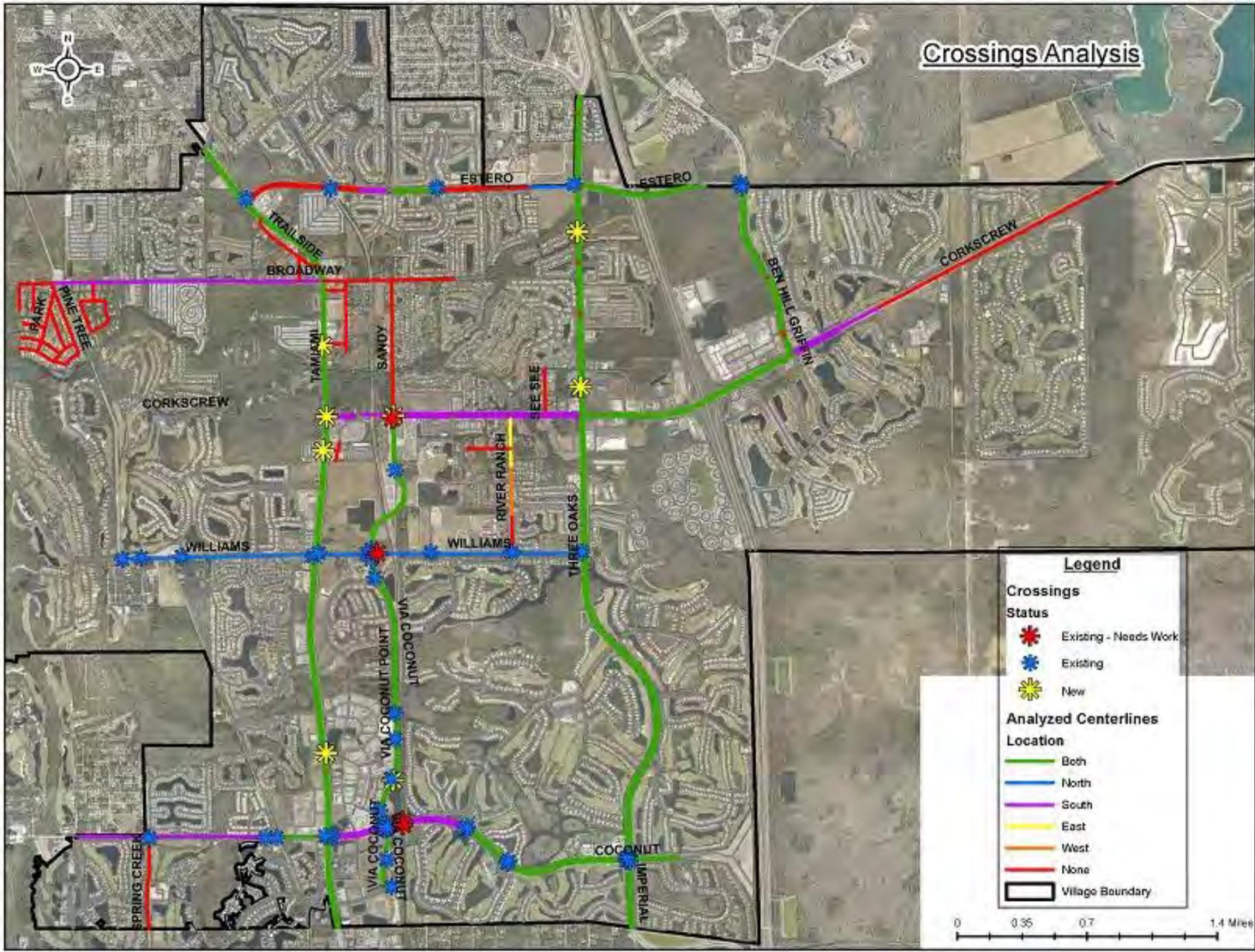
- Green line: Both
- Blue line: North
- Purple line: South
- Yellow line: East
- Orange line: West
- Red line: None
- Black outline: Village Boundary



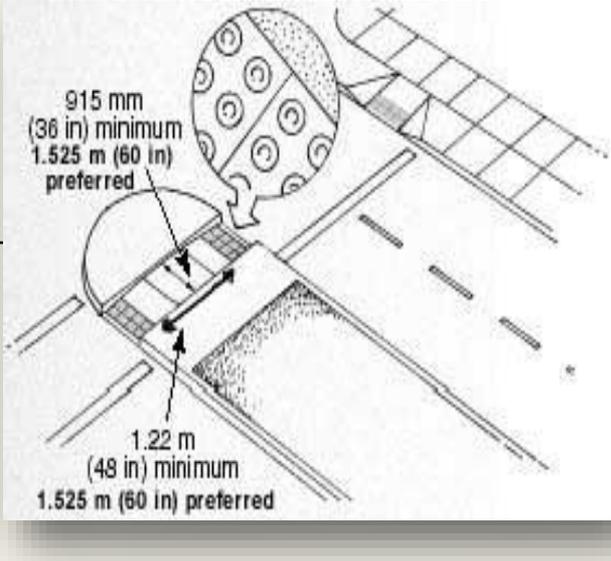
Sidewalk Recommendations

Road / Street	Criteria				Recommendation
	Connectivity	Usage	Safety	Access	
Estero Parkway (41 to 3 Oaks)	✓	✓	✓	✓	New 10' Shared Use Path
River Ranch Road (Corkscrew to Williams)	✓	✓	✓	✓	New Sidewalks to Repair Gaps
Connections to Estero Community Park <ul style="list-style-type: none"> • Via Coconut to Park • Estero Park to Block Ln • @ Corkscrew Road 	✓	✓	✓	✓	New Sidewalk New / Improved Sidewalk Wider sidewalk
Sandy Lane (Broadway to Corkscrew)	✓	✓	✓	✓	New Sidewalk Bike/Ped Bridge Over River
Corkscrew Road (41 to 3 Oaks)	✓	✓	✓	✓	New 10' Shared Use Path - Asphalt
Broadway (41 to Sandy)	✓				Sidewalk
3 Oaks Parkway (Coconut to City Boundary)			✓		Sidewalk repair due to tree roots
US 41 (East Side – Covered Wagon to Williams)		✓		✓	Sidewalk significantly under water most of rainy season

Crossings Analysis



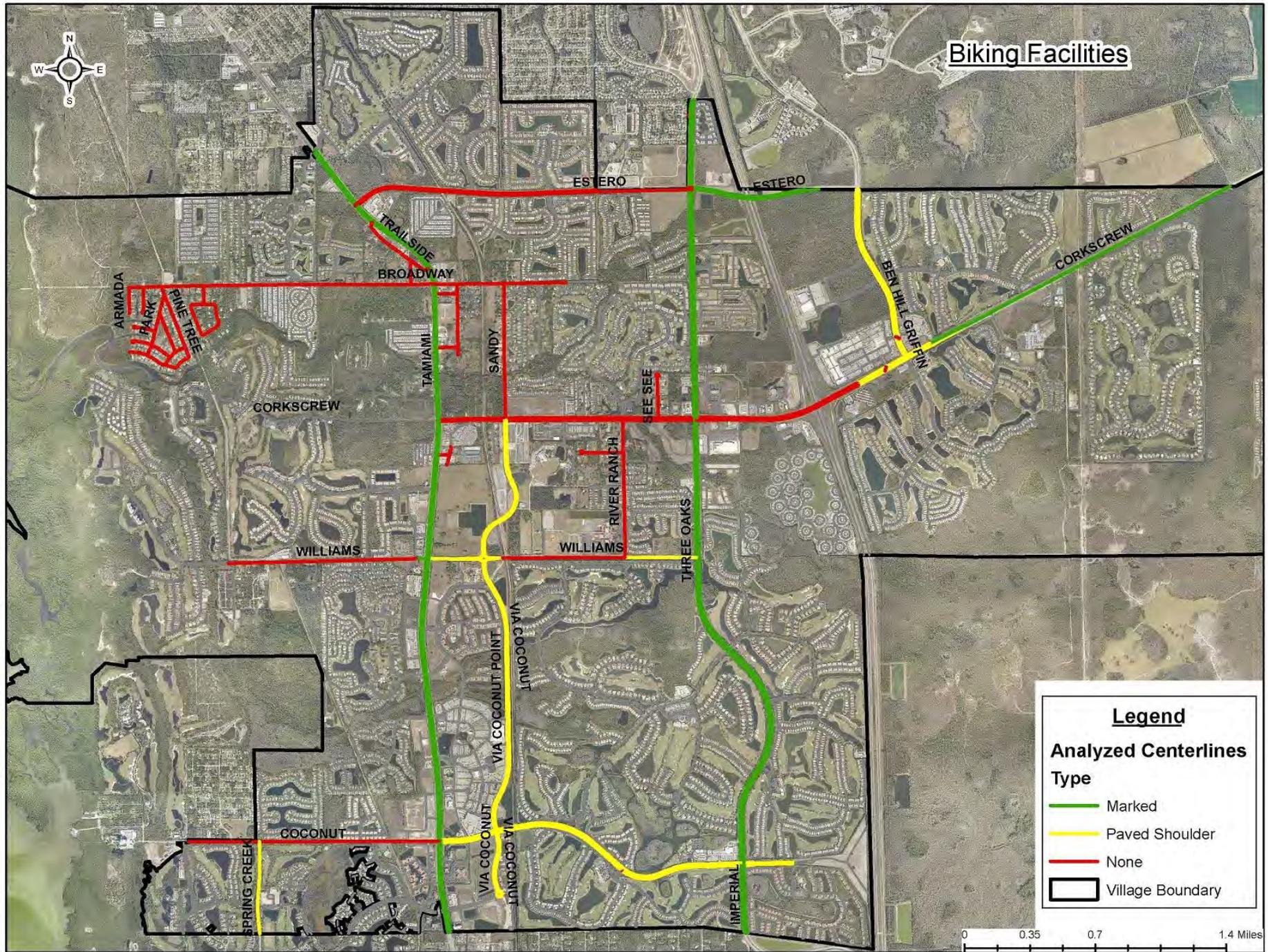
Crossings Analysis

Intersection	Issue	Recommendation
Williams Road Roundabout at Via Coconut Point	Speed of automobiles exiting roundabout places pedestrians at risk	Place crosswalks further away from the intersection to increase sight line
Crossing Via Coconut Point at Corkscrew	Speed of automobiles turning south to Via Coconut Point present safety hazard for pedestrians crossing	 <p>915 mm (36 in) minimum 1.525 m (60 in) preferred</p> <p>1.22 m (48 in) minimum 1.525 m (60 in) preferred</p>
Intersection of Via Coconut Point and Coconut Road	Speed of automobiles turning present safety hazard for pedestrians crossing	
Intersection of US 41 and Corkscrew	Speed of automobiles turning present safety hazard for pedestrians crossing	Consider installing island to reduce the turning radius and offer a pedestrian

New Crossings

- Corkscrew at Sandy Lane
- US 41 Crossing at Covered Wagon Trailer Park to Publix
- US 41 Crossing at Lychee Lane (Sunny Grove Trailer Park)
- US 41 at Coconut Point Mall
- 3 Oaks Parkway South of Estero Parkway
- 3 Oaks Parkway North of Corkscrew Road to connect the library and post office
- Via Coconut Point at Coconut Point Mall

Biking Facilities

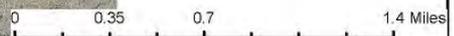


Legend

Analyzed Centerlines

Type

-  Marked
-  Paved Shoulder
-  None
-  Village Boundary



Bike Facility Recommendations

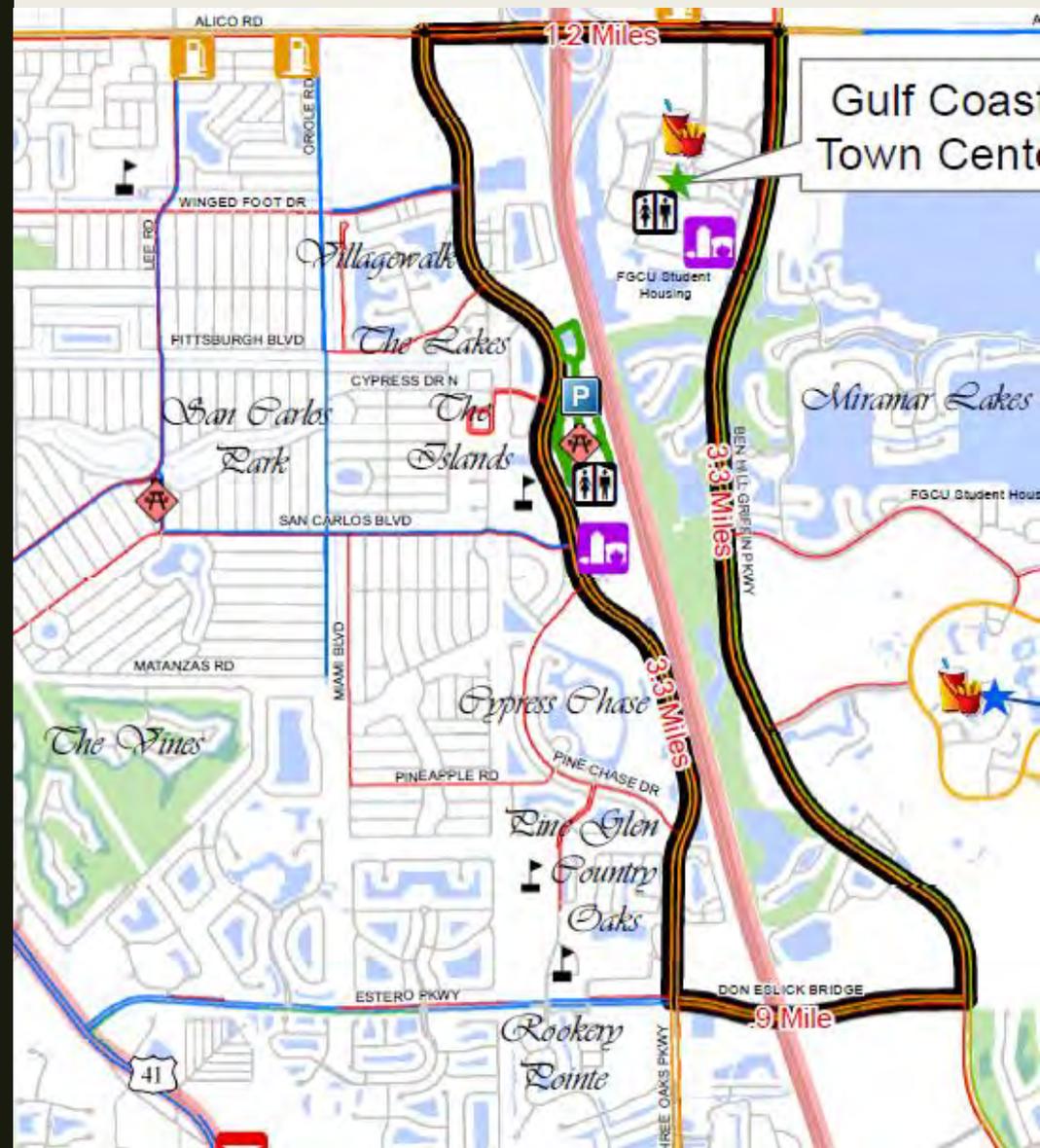
Road / Street	Criteria				Recommendation
	Connect	Usage	Safety	Access	
Estero Parkway (41 to 3 Oaks)	✓	✓	✓	✓	New 10' Shared Use Path Buffered / Marked Lanes
River Ranch Road (Corkscrew to Williams)	✓	✓	✓	✓	New Bike Lanes
Estero Community Park (Corkscrew Existing Entrance)	✓			✓	Bike Lane
Williams Road (River Ranch to Via Coconut Point)	✓	✓	✓	✓	Bike Lanes
Broadway (Estero Bay Preserve State Park to 41)	✓			✓	Paved Shoulder
Sandy Lane (Broadway to Corkscrew)	✓		✓	✓	Paved Shoulder
Corkscrew Road (41 to Miromar Mall Area)	✓	✓	✓	✓	New 10' Shared Use Path
3 Oaks Parkway (South of Estero Parkway to Village Boundary)			✓		Consider buffered bike lanes & lane diets
Village Center		✓		✓	Consider slow streets / sharrows

Opportunities for Improvement



Opportunities for Increased Connectivity

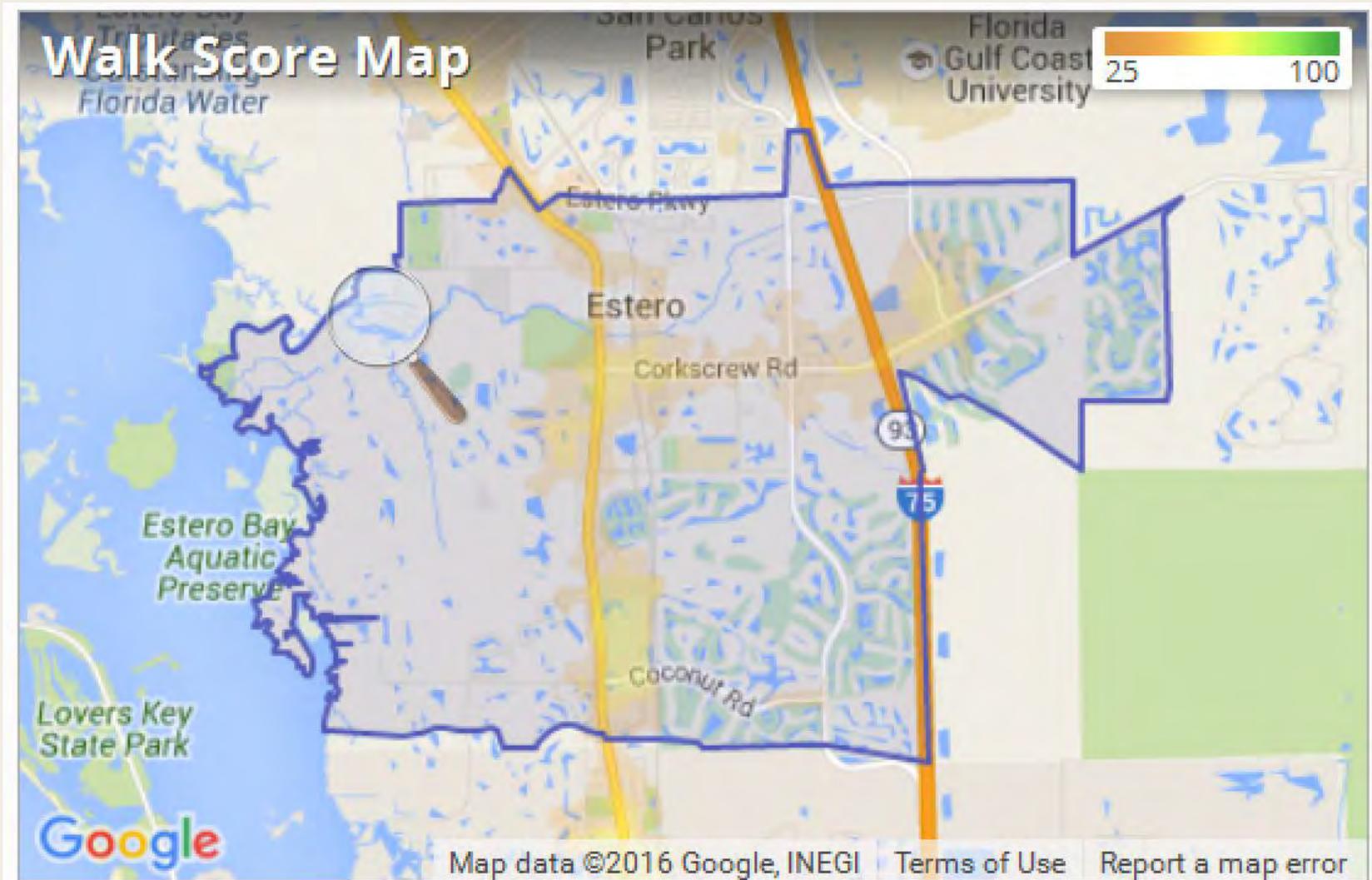
Estero Parkway & the
“University Loop”



Bike/Ped Recommendations Summary

- Increase safe conditions
- Calm traffic through intersection and lane treatments
- Increase connectivity
- Bridge gaps
- Develop a bike/ped master plan
- Recognize opportunities for improvements as new communities and the Village Center develop
 - *Add facilities*
 - *Increase safety of facilities*
- Use “heat map” to assist with prioritization process

Walk Score “Heat Map”



Landscape Priorities

Road / Street	Recommendation	Criteria			Priority
		Cost	Aesthetic	Image	
Estero Parkway at US 41	Plant median	✓	✓	✓	1
Via Coconut Point	Median planting	✓	✓	✓	2
Estero Community Park	Enhanced landscaping at entrance		✓	✓	3
Corkscrew Road	Median planting		✓	✓	3
Oakbrook	Median planting	✓	✓	✓	4
Williams Road	Planting on south side of ROW		✓	✓	5
Village Center	Consider incentives for enhanced landscaping	✓	✓	✓	
Other	Consider tree planting programs for private properties	✓	✓		

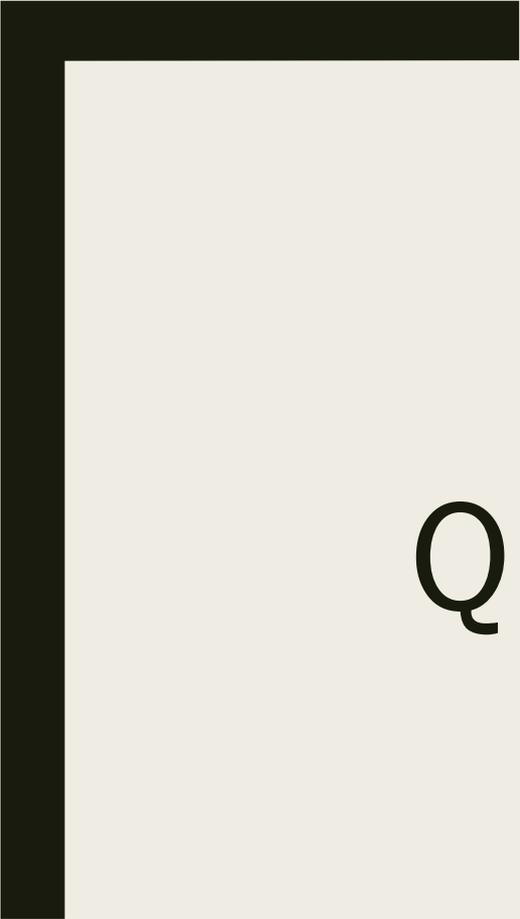
CONCLUSIONS



Conclusions & Next Steps

- Attention needed for several roads within the Village
 - *Approximately 68% are in good condition*
 - *Approximately 20% need monitoring*
 - *Approximately 12% need immediate attention*

- Connections in areas of high usage with safety issues should be priority
- Intersections and crossings will help reduce conflicts
- Connecting gaps in the bicycle network would significantly improve the opportunities to access a much larger system within and outside the Village
- Bike / Ped Master Plan recommended
- Landscaping opportunities exist where public / private partnership for water is available



QUESTIONS?