

	St. Lucie Transportation Planning Organization	Coco Vista Centre 466 SW Port St. Lucie Blvd, Suite 111 Port St. Lucie, Florida 34953 772-462-1593 www.stlucietpo.org
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BICYCLE-PEDESTRIAN ADVISORY COMMITTEE (BPAC)

Regular Meeting

Thursday, July 23, 2026
3:00 pm

Public Participation / Accessibility

Participation in Person: Comments may be provided in person at the meeting. Persons who require special accommodations under the Americans with Disabilities Act (ADA) or persons who require translation services (free of charge) should contact the St. Lucie TPO at 772-462-1593 at least five days prior to the meeting. Persons who are hearing or speech impaired may use the Florida Relay System by dialing 711.

Participation by Webconference (not intended for Committee Members): Using a computer or smartphone, register at <https://attendee.gotowebinar.com/register/128270582590532697>. After the registration is completed, a confirmation will be emailed containing instructions for joining the webconference. Comments may be provided through the webconference chatbox during the meeting.

Written and Telephone Comments: Comment by email to TPOAdmin@stlucieco.org; by regular mail to the St. Lucie TPO, 466 SW Port St. Lucie Boulevard, Suite 111, Port St. Lucie, Florida 34953; or call 772-462-1593 until 2:30 pm on July 23, 2026.

AGENDA

1. **Call to Order**
2. **Roll Call**
3. **Comments from the Public**
4. **Approval of Agenda**
5. **Approval of Meeting Summary**
 - *May 21, 2026 Regular Meeting*
6. **Action Items**

6a. **Vehicle Sharing Study:** Review of the draft Vehicle Sharing Study.

Action: *Recommend acceptance of the Vehicle Sharing Study, recommend acceptance with conditions, or do not recommend acceptance.*

- 6b. Transportation Hubs Study Scope of Services:** Review of the draft Scope of Services for the Transportation Hubs Study.

Action: *Recommend approval of the Transportation Hubs Study Scope of Services, recommend approval with conditions, or do not recommend approval.*

7. Discussion Items

- 7a. Transportation Asset/Service Vulnerability Assessment Update:** A presentation by St. Lucie County on the Transportation Asset/Service Vulnerability Assessment.

Action: *Discuss and provide comments.*

8. Recommendations/Comments by Members

9. Staff Comments

- 10. Next Meeting:** The next St. Lucie TPO BPAC meeting is a regular meeting scheduled for 3:00 pm on Thursday, September 17, 2026.

11. Adjourn

NOTICES

The St. Lucie TPO satisfies the requirements of various nondiscrimination laws and regulations including Title VI of the Civil Rights Act of 1964. Public participation is welcome without regard to race, color, national origin, age, sex, religion, disability, income, or family status. Persons wishing to express their concerns about nondiscrimination should contact Marceia Lathou, the Title VI/ADA Coordinator of the St. Lucie TPO, at 772-462-1593 or via email at lathoum@stlucieco.org.

Items not included on the agenda may also be heard in consideration of the best interests of the public's health, safety, welfare, and as necessary to protect every person's right of access. If any person decides to appeal any decision made by the St. Lucie TPO Advisory Committees with respect to any matter considered at a meeting, that person shall need a record of the proceedings, and for such a purpose, that person may need to ensure that a verbatim record of the proceedings is made which includes the testimony and evidence upon which the appeal is to be based.

Kreyol Ayisyen: Si ou ta renmen resevwa enfòmasyon sa a nan lang Kreyòl Aysiyen, tanpri rele nimewo 772-462-1593.

Español: Si usted desea recibir esta información en español, por favor llame al 772-462-1593.



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BICYCLE-PEDESTRIAN ADVISORY COMMITTEE (BPAC)

REGULAR MEETING

DATE: Thursday, May 21, 2026

TIME: 3:00 pm

MEETING SUMMARY

1. **Call to Order**

The meeting was called to order at 3:03 pm.

2. **Roll Call**

The roll call was conducted via sign-in sheet, and a quorum was confirmed with the following members present:

Members Present

Jennifer McGee, Chairwoman

Terry Davis, Vice Chairman
Pamela Govan

Anna Santacroce
Yolanda Carr
Calvin King Jr.

Others Present

Kyle Bowman
Peter Buchwald
Yi Ding
Marceia Lathou
Stephanie Torres
Teresa Lane
Yue Liu
Christina Fermin
Martha Morales

Representing

St. Lucie County Environmental
Resources Department (ERD)
Resident Bicycling
St. Lucie County Parks and
Recreation
Disability Representative
Resident Bicycling
Port St. Lucie Parks and Recreation

Representing

St. Lucie TPO
St. Lucie TPO
St. Lucie TPO
St. Lucie TPO
St. Lucie TPO
Recording Specialist
Kimley-Horn
Marlin Engineering
FDOT

3. **Comments from the Public** – None.

4. **Approval of Agenda**

* **MOTION** by Vice Chairman Davis to approve the agenda.

** **SECONDED** by Ms. Santacroce Carried **UNANIMOUSLY**

5. **Approval of Meeting Summary**

· March 19, 2026 Regular Meeting

* **MOTION** by Vice Chairman Davis to approve the meeting summary.

** **SECONDED** by Ms. Govan Carried **UNANIMOUSLY**

6. **Action Items**

6a. Draft FY 2026/27 – FY 2030/31 Transportation Improvement Program (TIP): Review of the draft FY 2026/27–FY 2030/31 TIP.

Mr. Buchwald introduced Mr. Ding who explained that the TIP identifies transportation improvement projects that have been prioritized and are receiving State and Federal funding over the next five years. Development of the TIP is a year-long process that began in May 2025 with development of the List of Priority Projects (LOPP), he further explained. Mr. Ding then outlined highlights of the TIP, including the widening of Kings Highway from Angle Road to Commercial Circle, the resurfacing of segments of St. Lucie Boulevard and Orange Avenue, and several congestion management and safety projects such as traffic calming on 29th Street, new turn lanes on Oleander Avenue, and traffic signal improvements on Bayshore Boulevard.

Other notable projects identified by Mr. Ding include the design and construction of a maintenance and operations building at the Treasure Coast International Airport, resurfacing the Green River Parkway Trail, and the design for the resurfacing of I-95 from Crosstown Parkway to Glades Cut Off Road. Mr. Ding reported that the total amount of funding in the draft TIP is more than \$584 million, which exceeds the previous TIP by almost \$50 million. Because the projects appear to be consistent with the Reimagine Mobility 2050 Long Range Transportation Plan (LRTP) and demonstrate progress in achieving the TPO's performance

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targets, Mr. Ding advised the CAC to recommend the draft TIP for adoption by the TPO Board.

- * **MOTION** by Vice Chairman Davis to recommend adoption of the draft FY 2026/27 – FY 2030/31 TIP.

* * **SECONDED** by Mr. King Carried **UNANIMOUSLY**

6b. Oxbow Eco-Center Pedestrian/Bicycle Link Connector Feasibility Study: Review of the draft Feasibility Study of a pedestrian/bicycle link across the North Fork of the St. Lucie River connecting the Oxbow Eco-Center to the Citrus Hammock Preserve.

Mr. Buchwald remarked that this item was recommended by the BPAC to be studied, and he introduced Ms. Torres, who invited Ms. Fermin to present the Study. Ms. Fermin explained that the Feasibility Study was designed to identify alternatives for a proposed pedestrian/bicycle link across the North Fork of the St. Lucie River connecting the Oxbow Eco-Center to the Citrus Hammock Preserve. She noted that the preferred location is intended to result in the least amount of impacts to natural resources, wetlands, and the community and will include a pedestrian bridge to enhance access and connectivity to future greenways and trails of the North Fork St. Lucie River Trail and East Coast Greenway/SUN Trail. She added that the study activities included identifying the preferred location for the connection, evaluating permitting and regulatory considerations, and identifying potential mitigation needs associated with any environmental impacts.

She summarized the outreach to local, State and Federal stakeholders to gather information for the study and the three possible alignments that were explored. She also identified how Oxbow Eco-Center visitors were polled on Earth Day in April 2026 and that they supported the link and listed their top priorities as shade, water fountains and restrooms. She indicated that based on the results of the study, Alternative 1 is recommended at a construction cost of \$5 million to \$8 million and includes a 12-foot-wide shared-use path, 16-foot-wide pedestrian bridge, and a boardwalk east of the river with bicycle racks at the entrance to the Oxbow Eco-Center since bicycles are not allowed within the facility.

Vice Chairman Davis commented that there is no shade south of the canal with Ms. Fermin proposing that shade trees be planted to make the paths more inviting. Vice Chairman Davis then opined that regulating electric motorcycles and electric bikes will be a challenge as

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some cities have installed bollards at trailheads to block electric bikes but ended up blocking his three-wheeled recumbent bicycle as well. Ms. Fermin noted that all communities are facing a similar challenge and that the Florida Legislature dealt with some issues by passing new legislation recently to regulate electric bicycles. She suggested that trail officials use cameras and artificial intelligence technology to alert employees when unauthorized users enter the trails so the issues may be addressed in real time.

When Vice Chairman Davis inquired if the trail would end at Citrus Hammock Preserve, Chairwoman McGee replies that it will but may eventually connect to the North Fork Greenway. Ms. Santacrose questioned whether the path will connect to the Florida Shared-Use Nonmotorized (SUN) Trail and Indian Hills Recreation Area in Fort Pierce, with Chairwoman McGee confirming it will. Chairwoman McGee added that a pedestrian crossing over the Florida East Coast railroad tracks is being designed as part of the connection.

Ms. Govan asked Ms. Fermin to elaborate on neighbors' concerns about the proposed link, with Ms. Fermin replying that one woman was worried about excessive e-bike usage while another stated she was a police officer who has received calls about electric motorcycles and ATVs using the nearby SUN Trail. Chairwoman McGee stated her office has received several calls about ATVs, e-bikes, and golf carts entering the Kitterman Road entrance of the SUN Trail and disturbing the peace. Police have patrolled the area, and County employees plan to frequent the trail also to educate the public about proper usage, she further noted.

* **MOTION** by Vice Chairman Davis to recommend acceptance of the Feasibility Study.

** **SECONDED** by Mr. King Carried **UNANIMOUSLY**

6c. St. Lucie Advanced Transportation Management System (ATMS) Mater Plan Update: Review of the draft St. Lucie ATMS Master Plan Update.

Mr. Buchwald explained that the ATMS Master Plan recommends improvements to the existing traffic control system to increase efficiency, mobility, and safety through the installation of the latest technology and infrastructure. He then introduced Ms. Liu who compared the ATMS to a central nerve system that can remotely manage traffic control operations across the TPO area in real time. She reported that the Florida Department of Transportation District 4 (FDOT) jump-started the improvements on the Treasure Coast with a \$2 million

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grant with the goal of having all three traffic signal maintaining agencies in the St. Lucie TPO area on the same traffic control platform so that the equipment can communicate with one another.

Ms. Liu then summarized the improvements recommended in the update including regional signal connectivity, uninterruptible power supply (UPS), detection and monitoring cameras at traffic signal locations, travel time detectors, speed feedback warning signs, midblock pedestrian crossings on US-1, and a flood detection system. She concluded by recommending a project to be the highest priority that includes connecting 17 traffic signals to cellular service, integrating 114 traffic signals onto the regional mobility platform, and deploying ATMS functionality at 187 traffic signals.

Vice Chairman Davis inquired if mid-block pedestrian crossings are envisioned as full traffic signals or flashing beacons, prompting Ms. Liu to explain that FDOT will study each crossing and recommend the preferred type. While full traffic signals are preferred on US-1, she noted, engineers will also consider the distance to the nearest existing signal when recommending a configuration. Mr. Buchwald added that FDOT is planning to install a full traffic signal at a planned US-1 pedestrian crossing just south of Edwards Road in Fort Pierce where several pedestrians and cyclists have been injured or killed.

Ms. Santacroce inquired whether the ATMS system is like AI and is susceptible to being hacked, with Ms. Liu relating that cyber security is extremely important to all three agencies and will be a top priority in the upgrades. Mr. Buchwald commented that agencies used to connect traffic signals with fiber optic cables but now do it through the internet, coordinating signals and cycles to maximize safety and congestion in real time.

Ms. Carr asked if motorists would be able to clearly see the proposed midblock crossings on US-1, with Mr. Buchwald responding that they will resemble traffic signals and suggesting that flashing yellow lights could be overlooked by fast-paced traffic on US-1. Chairwoman McGee observed that drivers need more education on how to navigate through pedestrian crossings, with some motorists panicking and stopping even if no pedestrians are present. Vice Chairman Davis commented that he is excited about the midblock crossings because one or two miles between traffic signals on US-1 is a long way to walk on foot, tempting many pedestrians to cross illegally with no signal despite the risk of serious injury.

Vice Chairman Davis added that he supports battery backups for all traffic signals, recalling that police officers had to direct traffic across the region for many hours in 2004 after two hurricanes left some areas without power. Ms. Liu identified that the UPS backups will last for at least four hours, after which time FDOT can employ emergency generators for power.

- * **MOTION** by Vice Chairman Davis to recommend adoption of the draft St. Lucie ATMS Master Plan Update.

** **SECONDED** by Ms. Govan Carried **UNANIMOUSLY**

6d. 2026 / 27 List of Priority Projects (LOPP): Review of the draft LOPP for 2026/27 for the St. Lucie TPO.

Mr. Buchwald reported that the LOPP was revised to reflect the Cost Feasible Plan strategies and projects from the 2050 LRTP. He then summarized the revisions which include removing the Treasure Coast Airport Connector Project and adding the widening of Edwards Road from Jenkins Road to Selvitz Road to the Master List. He also identified the addition of the highest priority project from the ATMS Master Plan Update to the Congestion Management Process (CMP) List and updates to the Transit and Transportation Alternatives (TA) Lists. He related that the BPAC's recommendation to prioritize construction of a sidewalk on Easy Street resulted in the project being funded, and the sidewalk will ultimately connect to the SUN Trail. Mr. Buchwald concluded by advising that the LOPP be recommended for adoption because it is consistent with the 2050 LRTP.

- * **MOTION** by Vice Chairman Davis to recommend adoption of the draft 2026/27 LOPP.

** **SECONDED** by Ms. Santacroce Carried **UNANIMOUSLY**

7. Recommendations / Comments by Members – None.

8. Staff Comments – Mr. Buchwald thanked the members for their participation.

9. Next Meeting: The next St. Lucie TPO BPAC meeting is a regular meeting scheduled for 3:00 pm on Thursday, July 23, 2026.

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10. Adjourn – The meeting was adjourned at 4:25 pm.

Respectfully submitted:

Approved by:

Teresa Lane
Recording Specialist

Jennifer McGee
Chairperson

DRAFT



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AGENDA ITEM SUMMARY

Board / Committee:	Bicycle-Pedestrian Advisory Committee (BPAC)
Meeting Date:	July 23, 2026
Item Number:	6a
Item Title:	Vehicle Sharing Study
Item Origination:	Unified Planning Work Program (UPWP)
UPWP Reference:	Task 3.10 – Advanced Vehicle Planning
Requested Action:	Recommend acceptance of the Vehicle Sharing Study, recommend acceptance with conditions, or do not recommend acceptance.
Staff Recommendation:	Because a vehicle sharing program would benefit persons who cannot afford car ownership or who do not wish for car ownership, it is recommended that the TPO Advisory Committees recommend acceptance of the Vehicle Sharing Study.

Attachments

- Staff Report
- Vehicle Sharing Study



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MEMORANDUM

TO: Bicycle-Pedestrian Advisory Committee (BPAC)

THROUGH: Peter Buchwald
Executive Director

FROM: Marceia Lathou
Transit Program Manager

DATE: July 10, 2026

SUBJECT: **Vehicle Sharing Study**

BACKGROUND

Vehicle sharing, also known as car share, provides on-demand, short-term access to automobiles through cellphone apps. Users independently locate and unlock vehicles 24/7 parked at designated locations rather than at rental counters. Car share rentals can be brief, lasting an hour or less.

Car sharing offers a pay-as-you-go model which can supplement or be a substitute for car ownership. Leading companies like Zipcar and Enterprise Mobility include fuel and repairs in their rates. Users pay a flat fee for time driven.

A car share program could bridge public transit gaps since the cars are often used for regional trips that extend beyond local bus routes. Area Regional Transit (ART) fixed-route buses and On Demand vans could provide first/last mile access to car share vehicles.

ANALYSIS

Both Zipcar and Enterprise Mobility have proposed car share programs within St. Lucie County. The providers would manage vehicle placement, maintenance, repairs, and cleaning in exchange for monthly revenue guarantees. The monthly fees, paid by a host agency, would be offset by revenue generated from member usage. If driving revenue met or exceeded

the guarantees, no fee would be charged. Otherwise, the host agency would pay the remaining balance. High ridership could potentially offset the revenue guarantees, resulting in a net-zero financial impact for the host agency.

Due to the budget uncertainty of property tax revenue of the November 2026 ballot initiative, non-governmental funding to launch a car share program should be considered. Examples are nonprofit organization grants, Florida Department of Transportation (FDOT) funding, private foundation grants, or corporate sponsors. Candidate sponsorships include healthcare networks, local colleges, area credit unions, real estate developers, utility companies, car dealerships, homeowners' associations or law firms.

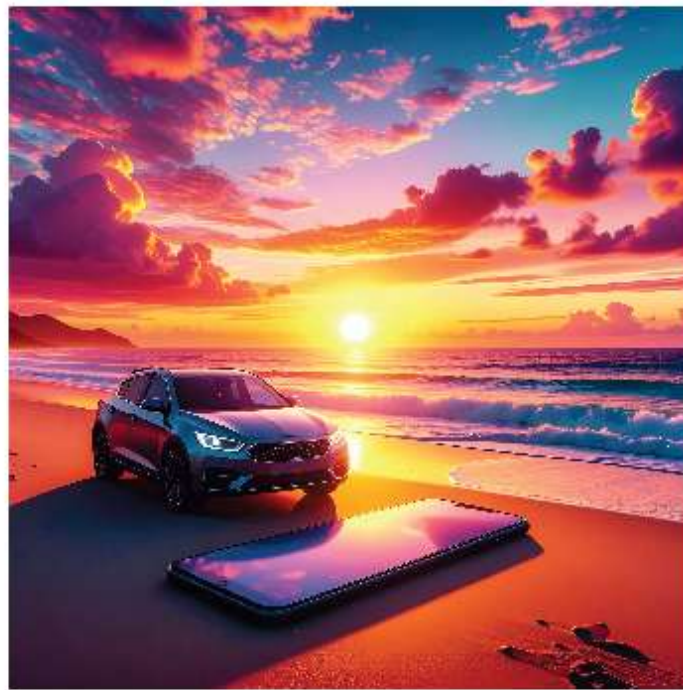
Strategic placement of car share vehicles would be critical to program success. Placement sites must be high-profile, accessible, well-lit, and located in densely populated or high-traffic areas. Downtown Fort Pierce is a potential location. Downtown Fort Pierce is served by fixed-route buses and microtransit for "first/last mile" connectivity. Another option is the Walton & One redevelopment area east of U.S. 1, which is near the U.S. 1 bus route but not served by microtransit. Another possibility would be the Gatlin/Jobs Express Park and Ride. If a car share program is implemented, TPO Staff would collaborate with the car share provider(s), local partners, and the public in the selection of optimal sites and other efforts.

RECOMMENDATION

Because a vehicle sharing program would benefit persons who cannot afford car ownership or who do not wish to own vehicles, it is recommended that the TPO Advisory Committees recommend acceptance of the Vehicle Sharing Study.

Vehicle Sharing Study

July 2026



St. Lucie Transportation
Planning
Organization

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INTRODUCTION

A car share program is characterized by self-service, short-term rentals. Instead of picking up and dropping off cars at retail outlets, car share users locate the vehicles at designated parking spots using cellphone apps to check availability and unlock the vehicles. Rentals can be very brief, lasting an hour or less. Car sharing can supplement car ownership, fill public transportation gaps, and reduce traffic congestion.

The basic car share formats are round-trip, station-based or one-way, station-based, where the “stations” are dedicated parking spaces. In round-trip sharing, the user picks up and returns the vehicle to the same location. One-way sharing permits users to return vehicles to assorted sites. In either format, users book cars independently, with the vehicles accessible for use throughout the day, subject to demand by other users.

Establishing a car share program with two vehicles each in Port St. Lucie and Fort Pierce suggests a strong possibility of positive impacts. Both cities have high rates of car ownership, but gaps in public transportation point to a demand for shared vehicles. Program success would hinge upon targeted community outreach, strategic placement of the vehicles, and price. Both Zipcar and Enterprise Mobility have expressed interest in establishing round trip, station-based car share programs within St. Lucie County.



CAR SHARE VS TRADITIONAL RENTAL

Car share has several advantages over traditional rentals. Car share vehicles are available 24/7 versus the limited hours at most rental counters. Except for airport locations, few rental companies are open in the evenings, and extended weekend hours are rare. Car rental companies are generally based along commercial corridors versus flexible locations for car share.

Car share rentals can be short-term whereas traditional rentals are generally a minimum of one day. Car shares can be rented hourly, which facilitates quick, multi-stop errands.

Traditional rentals hold an advantage over car share in that traditional rentals offer unlimited mileage, making them better suited for long term use and long-distance travel. The wider range of vehicles offered by traditional rental companies further supports long-distance trips.



CAR SHARE MODEL OVERVIEW

- **Self-service:** Real-time booking, keyless entry, and 24/7 access. Members reserve and unlock cars via phone apps.
- **Usage:** Short-term, occasional, as-needed
- **Congestion Reduction:** A car share vehicle typically replaces up to 15 private cars annually
- **Benefits:** Pollution and congestion reduction, increased mobility, cost savings for users
- **Pricing:** Approximately \$15 per hour with discounts for longer rentals, frequent users, and targeted groups such as students or elderly persons
- **Upkeep:** One hundred percent of the operational burden, e.g., fleet maintenance, safety checks, and cleaning performed by the car share company
- **Marketing and Community Engagement:** Promotions, incentives and user surveys for feedback

CAR SHARING BENEFITS

Economic

There are numerous fixed costs associated with car ownership. These costs include car payments, insurance and maintenance. Car sharing relieves this economic burden, particularly for households struggling with housing affordability. Car sharing enhances job search, social interaction, educational pursuits, and employment for those who cannot afford cars or wish not to own cars.

According to a study by the Victoria Transport Policy Institute, by not owning a car, households can save between \$500 to \$1,500 annually on vehicle-related expenses. If a car share program allowed a multi-car household to downsize by one vehicle, the monthly savings could be a massive buffer against housing costs.

The U.S. Environmental Protection Agency (EPA) further analyzed the cost of car ownership by delving into intangible costs such as time spent looking for parking spaces and depreciation. Having a car at one's disposal is convenient but most vehicles sit parked for hours while the car owner works, attends school, or relaxes at home.

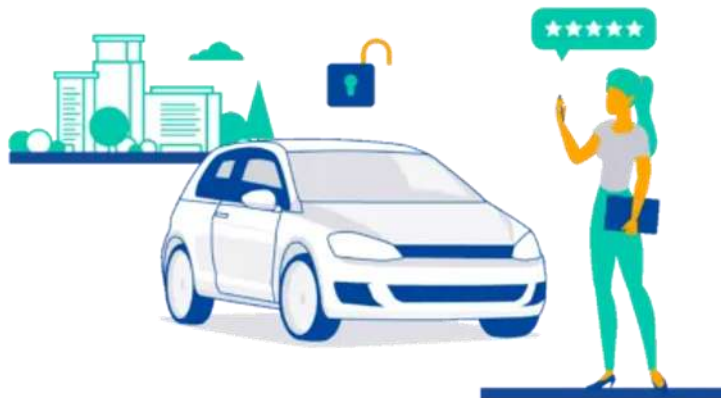
Congestion Management

Car share programs promote shared mobility and optimize the use of existing vehicles. These outcomes align with broader goals in transportation planning.

Universities have conducted research on various aspects of car sharing. A study by University of California, Berkely revealed a reduction of 15 personal vehicles for every sharing vehicle. Because car sharing is less convenient than car ownership, a car share user is more likely to consolidate trips, eliminate some trips altogether, or use human-powered means of transport, thus reducing traffic congestion.

Social

By expanding access to flexible means of transportation, car sharing supports increased mobility for drivers. Unlike owning a single vehicle that must serve a variety of purposes, car share programs allow users to choose the vehicles that fit their needs. Car sharing enhances job search, social interaction, and educational and employment opportunities for those who cannot afford car ownership, especially when the vehicles are based in neighborhood locations.



CAR SHARING DISADVANTAGES

One of the disadvantages of car sharing is the limited availability of the programs themselves. Car sharing is most effective in densely populated areas where transit options are plentiful, parking is expensive or unavailable, and people need vehicles only occasionally. Examples are central cities and large universities. Less populated areas are often not a good fit for car share despite limited mobility options.

Car share programs have a fixed number of vehicles available, which can lead to shortages during periods of peak demand. This has led to a practice known as “car hoarding,” where users book vehicles for long periods just to have a vehicle available for personal use when needed.

Another concern with car sharing is hygiene. Although users are expected to clean vehicles after use, users don’t treat the vehicles with the same care they would their own, leading to cleanliness issues such as littered or poorly maintained interiors. This leads to potential health concerns related to exposure to germs or allergens. Car share companies have policies against smoking, but this policy, if violated, places the burden on the next user to report. In cases of serious soiling, users are asked to contact the company, and the company comes out to clean the cars and charge the costs to the person responsible.

During the COVID-19 Pandemic, car sharing usage plunged due to potential risks associated with shared surfaces and enclosed spaces. Although car share vehicles are rigorously cleaned and disinfected as part of the car share company’s regular cleaning cycle, users cannot be relied upon to disinfect between uses. Nor can the vehicles be properly aired out between uses.

Liability is another concern. Car share companies manage risk and limit their liability by limiting usage to safe drivers, having users sign waivers, keeping equipment well maintained, requiring users to complete orientations prior to use, and educating users about road safety.

DEMAND ASSESSMENT

St. Lucie County is experiencing explosive population growth. Populations of senior citizens, students, tourists, transit users, and people who need occasional car access are also growing. Large families who may not have sufficient automobiles for all household adults are another potential sharing population.

Based on best practices and current car share trends, once a car share vendor is chosen, a market assessment would be the first step in implementing a program. The assessment would include a general analysis of population and employment densities, car ownership rates, gaps in existing transportation options, and public transit use. Assessments would include performance at similar sites, also known as peer analyses. The goal is to identify specific locations with strong potential demand and set realistic expectations for implementation. After launch, multiple use factors would be monitored to estimate ongoing demand.



INTEGRATION WITH PUBLIC TRANSIT

Car sharing competes with public transportation to some degree. However, in some instances, car sharing fills gaps in public transit service rather than directly replacing it. Car sharing is often seen as an extension of public transportation, particularly in areas where the only transit available is fixed route bus service.

Car sharing offers flexible routes, 24/7 availability, efficiency, and privacy, all of which attract so-called choice riders -- those who are not dependent on public transportation. On the other hand, car sharing eligibility can be a barrier due to the necessity of possessing a driver's license and a clean driving record. St. Lucie County's public transportation, both fixed route and door-to-door On-Demand, are fare-free, with no eligibility requirements, which is a distinct advantage over car sharing barriers. On the other hand, gaps in public transportation exist as shown in the following Area Regional Transit (ART) system map.

Co-locating shared ways of travel at or near public transportation hubs is a common practice that supports increased transit usage. Studies suggest that people who use shared mobility services (including car sharing) are less likely to own a car and thus more likely to use public transit. The TPO's *Reimagine Mobility 2050 Long Range Transportation Plan (LRTP)* supports the development of transportation hubs which co-locate transportation options, allowing for seamless transfers among transportation modes. Car sharing, when positioned near transit hubs, can fill first-last mile gaps; first/last mile refers to how riders arrive at transit stops.



Area Regional Transit (ART) System



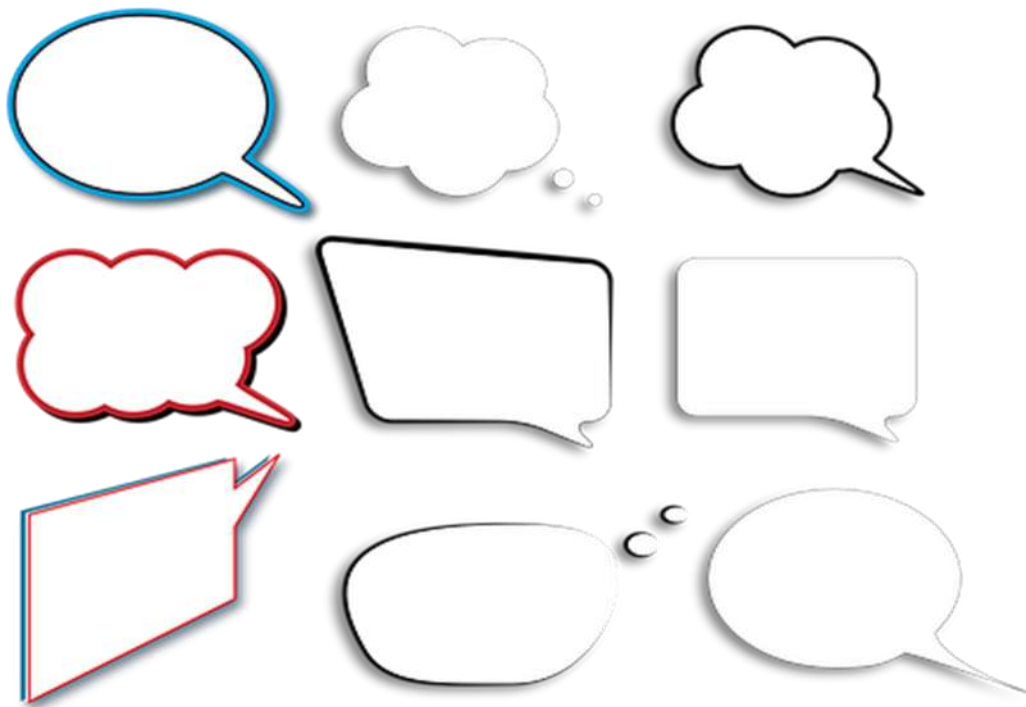
CAR SHARE COMPARISON

The table below compares four different modes of transportation if used for multi-stop trips over a two-hour period: Uber Hourly, car share, traditional car rental, and ART On-Demand microtransit. Uber Hourly, which allows for a block of time with a dedicated driver, is not yet available within St. Lucie County but is being used here for illustrative purposes.

Feature	Uber Hourly	Zipcar	Traditional Car Rental	ART On-Demand
Who Drives?	Uber driver	User driven	User driven	Professional transit driver
Multiple Stops?	Yes (same vehicle)	Yes (same vehicle)	Yes (same vehicle)	Under certain conditions
Estimated Base Cost	\$100 (\$50/hr minimum)	\$30 (\$15/hr)	\$50 daily, deposit required	Free (Fare-free public microtransit)
Gas & Insurance	Included	Included	User pays gas & insurance	Included
Mileage Limits	Varies by city; overage fees apply	Varies by membership plan	Unlimited (for most standard rentals)	Restricted to designated microtransit zones
Pickup / Return	Curb-to-curb	Designated parking spot	Retail outlet	Curb-to-curb
Hours of Operation	24/7	24/7	Limited	Limited
Entry Barrier	Minimum Age	Driver's license/clean record	Driver's license/clean record	Minimum Age
Best For	Multi-stop trips without parking hassle	Multi-stop trips	All-day trips or multi-day use out of town	Local trips inside microtransit zones

PROMOTION

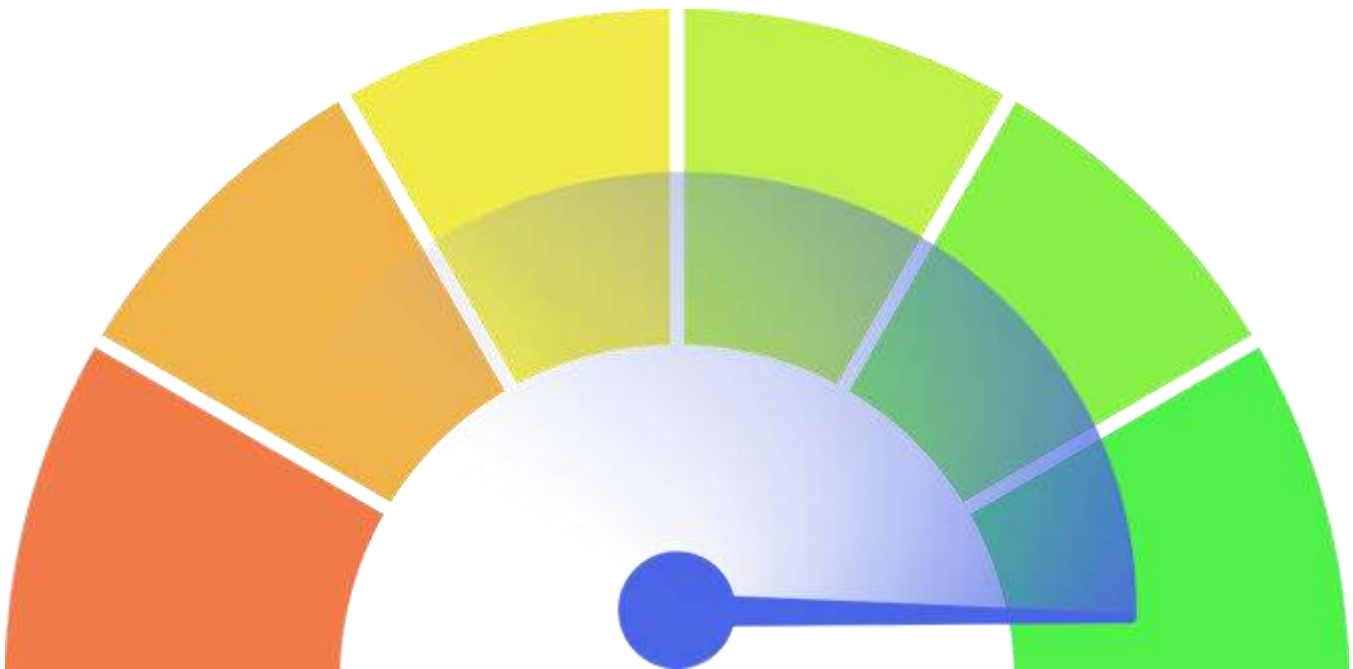
Lack of local awareness of a car share program could lead to under-use, which would be a barrier to the program's success. To ensure success, an outreach strategy must be comprehensive, ongoing, and focused on community trust-building. One method could be participating in community-sponsored events to run interactive, on-site demonstrations where residents could physically see the car share vehicles, download the mobile app, and receive sign-up assistance. Another strategy is collaboration with local employers, colleges, and non-profits to distribute subsidized or sponsored driving credits directly to eligible families, workers, students, and transit-dependent persons. Informational materials could be distributed through local food banks, community centers, and neighborhood association meetings.



MEASUREMENTS OF SUCCESS

Achievement of a breakeven threshold of revenue depends heavily on local demand and site conditions. For car share to be successful, it needs to be in the right location and with easy access to public transportation. The key is selection of strong locations, promoting them effectively, and making periodic adjustments to sustain the program.

Success metrics include usage rate by both car and location, number of active members, hours used and miles driven. Experience has shown that with strong placement, each vehicle may reach a sustainable usage of 6-8 reservations/week and that a successful program is used 35-40% in a 24-hour period on average. This would provide openings for consistent booking and availability since if the vehicle is always on rent then the availability in the app decreases, which could in turn discourage usage.



OPERATIONAL CHARACTERISTICS

Vehicle Placement: High-visibility, secure locations near transit, city centers, or college campuses are proven areas of success for car share programs. In Port St. Lucie, the car share vehicles could reside at the Gatlin/Jobs Express Park and Ride, a regional transportation hub. In Fort Pierce, the vehicles could reside on City property in downtown Fort Pierce. Another possibility, since the area east of U.S. 1 is not served by ART On-Demand microtransit, is the Walton & One redevelopment area.

Technology: All car share reservations and reporting would be conducted using mobile apps or the Internet. Enterprise Mobility support is provided during business hours from a local branch; roadside needs would be 24/7 from an authorized vendor. Zipcar members have 24/7 phone support throughout their reservation periods. Both Enterprise and Zipcar have dedicated car share teams.

Local Staff Resources: Minimal staff time for a host agency would be required to establish or maintain a car share program. Once established, Zipcar or Enterprise Mobility would be responsible for cleaning and maintaining the vehicles, insurance, fuel, administration and general operations. Local partners would assist with parking arrangements. The host agency would maintain a dedicated point of contact to which the car share company would provide program reporting. The host agency could introduce the car share program to community partners and assist with marketing to help make the program a success.



Costs

Zipcar or Enterprise Mobility would seek minimum one-year contracts but could eventually enter multi-year contracts. Zipcar's estimated cost is approximately \$72,000 annually, divided into monthly payments. Enterprise Mobility's estimated cost is approximately \$82,000 annually, divided into monthly payments. These costs are based on four standard sedans; specialty vehicles such as minivans or trucks would incur additional expenses.

Zipcar or Enterprise Mobility would manage vehicle placement, maintenance, repairs, and cleaning in exchange for monthly minimum revenue guarantees. These monthly fees, paid by the host agency, would be offset by revenue generated from member usage. If driving revenue met or exceeded the guarantee, no fee would be charged; otherwise, the host agency would pay the remaining balance. High rider participation has the potential to fully offset the revenue guarantees, which could result in a net-zero financial impact for the host agency.

Existing Programs: Currently within Florida, Enterprise Mobility has a successful private program in Naples; other programs can be found throughout California and the North East. Zipcar operates in Miami, Miami Beach, Coral Gables, Miami-Dade County, Aventura, Fort Lauderdale, Orange County, Orlando, Gainesville, Tampa and at university campuses throughout Florida. Zipcar is the largest car share provider in the United States.

FUNDING

In the past, car share programs nationwide were funded with a combination of state and federal funds. Programs with electric vehicles (EVs), for instance, were funded through federal EV grant initiatives. However, this type of federal funding is no longer available. Therefore, the best remaining sources of funding are state and local governments, non-profit agencies, and public-private partnerships. This section describes the various types of funding that could be available for car share programs.

Government

To qualify for certain types of state funding, a car share program should be included in St. Lucie County's Transit Development Plan (TDP). The TDP, branded Reimagine Transit, is the strategic guide for public transportation over the next 10 years and covers fixed-route bus service and On-Demand microtransit. Because there is no fixed-route bus or microtransit service east of U.S. 1 in Port St. Lucie or in Indian River Estates, two car share vehicles could be installed in a central location to bridge this public transit gap.

Car sharing supports congestion reduction. Therefore, a potential source of funding could be the TPO's Congestion Management Process (CMP). A drawback of CMP funding is that existing projects receive priority, meaning a car share program could receive funding but the allocation could be several years away.

Because car sharing would facilitate out-of-county trips, Transportation Regional Incentive Program (TRIP) funds could be a funding source. The TRIP program supports regional planning, economic growth, and public-private partnerships. TRIP funds target corridors, transit networks, and facilities that cross county lines or heavily impact regional travel, trade, and commerce. TRIP provides up to a 50% state match for project costs. The remaining 50% must come from other sources.

Public-Private Partnerships

Public-private partnerships (PPPs) could be used to fund car share programs. These partnerships create opportunities for shared investment and shared risk. PPPs support service development and cost-effective operations while maintaining public oversight and accountability throughout a program's lifecycle.

Local law firms, for instance, often invest in billboard space or full bus wraps as part of their advertising strategy. Placing a decal, car topper, or partial wrap on car share vehicles could offer a cost-effective alternative with organic, community-wide reach.

Community-based Foundations

Partnerships with local nonprofits could significantly increase the accessibility and usage rates of car share programs, especially where projects serve elderly, medically vulnerable, or economically disadvantaged residents. Key charitable organizations in St. Lucie County include the Community Foundation of Martin-St. Lucie Counties, United Way of St. Lucie & Okeechobee, and United Against Poverty. The Community Foundation provides funding for community impact projects, including transportation initiatives, especially when tied to broader social and economic needs. United Way, through its Ride United program, subsidizes rideshare trips by partnering with Lyft. United Against Poverty's purpose is to empower families and individuals to lift themselves to up to economic self-sufficiency.

Mobility Fees

Impact fees, also known as mobility fees, are a one-time fee assessed to new construction, both residential and commercial, to cover the cost of increased infrastructure and services, such as roads, schools, and parks, needed due to the new construction. These fees are paid by developers, not current residents or property owners.

Mobility or road impact fees could potentially be used to support a car share program, if the car share program were formally incorporated into an official mobility plan and tied directly to transportation impact mitigation policies.

CONSIDERATIONS

A Zipcar or Enterprise Mobility car share program with vehicles located in Port St. Lucie and Fort Pierce is feasible and strongly aligned with the St. Lucie TPO's goal of improving transportation flexibility. Successful deployment would depend on participation by a local partner, strategic vehicle placement and robust community awareness efforts. If a car share program is implemented, the TPO would collaborate with the selected car share provider(s), local partners, and the public in the selection of optimal sites. In addition, the TPO could assist with the following efforts:

- **Pilot Program:** Deploy two vehicles each in Port St. Lucie and in Fort Pierce; monitor quarterly to ensure performance measures are met.
- **Performance Measurement:** Establish performance metrics. Track usage, member growth, and financials closely.
- **Community Engagement:** Partner with local stakeholders to ensure awareness of the program.
- **Transit Development Plan (TDP):** Include the car share program in the next Annual TDP Update to enhance program eligibility for certain types of funding.
- **Mobility Plan:** Incorporate car share programs into mobility and impact fee plans currently under development.



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AGENDA ITEM SUMMARY

Board / Committee:	Bicycle-Pedestrian Advisory Committee (BPAC)
Meeting Date:	July 23, 2026
Item Number:	6b
Item Title:	Transportation Hubs Study
Item Origination:	Unified Planning Work Program (UPWP)
UPWP Reference:	Task 3.2 – Transit Planning
Requested Action:	Recommend approval of the Transportation Hubs Study Scope of Services, recommend approval with conditions, or do not recommend approval.
Staff Recommendation:	Because the tasks, activities, schedule, and cost of the Transportation Hubs Study are consistent with Task 3.2 of the UPWP, it is recommended that the Transportation Hubs Study Scope of Services be recommended for approval.

Attachments

- Staff Report
- Transportation Hubs Study Scope of Services



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MEMORANDUM

TO: Bicycle-Pedestrian Advisory Committee (BPAC)

THROUGH: Peter Buchwald
Executive Director

FROM: Marceia Lathou
Transit Program Manager

DATE: July 14, 2026

SUBJECT: **Transportation Hubs Study**

BACKGROUND

A Transportation Hubs Study is programmed in Task 3.2 Transit Planning of the FY 2026/27 – 2027/28 Unified Planning Work Program (UPWP). The Study supports the continued development of the St. Lucie TPO's multimodal transportation network by determining the feasibility of two sites for facilities like the Gatlin/Jobs Express Park and Ride. Both site studies will be conducted concurrently, and the resulting analyses and findings will be combined into one final document.

ANALYSIS

The attached draft Scope of Services for the Transportation Hubs Study was prepared by Benesch, one of the TPO's General Planning Consultants. Three locations, two in Fort Pierce near Florida's Turnpike/Okeechobee Road and one in Port St. Lucie near Walton Road/U.S. 1 will be analyzed, resulting in two sites identified for further analysis. The properties are owned by government entities. Each feasibility study will assess the identified sites to ensure their appropriateness for use as park-and-ride lots/bus transfer locations.

The draft Scope of Services includes the following tasks/activities:

- Baseline conditions assessment and data collection including existing bus routes, stop locations, ridership data, and pedestrian connectivity

- Site inventory, including field review and observations to verify roadways, traffic signals, physical or environmental constraints, and parking
- Evaluation of site characteristics, including size, geographic layout, access to major roadways and employment centers, access points and direct road connections, legal issues, environmental issues and/or concerns, planned and potential land use, and other factors potentially affecting design and construction
- Demand and market analysis, including service area and sketch-level estimates of future parking demand
- Safety issues, travel flow and access, potential environmental impacts, and connecting bus routes
- Space requirements for parking, bus bays, bike racks, and pedestrian amenities once sites have been fully defined and determined to be available and initially feasible for transportation hubs
- ADA accessibility including ADA-compliant access and boarding
- Consideration of security measures
- Technologies to enhance customer experience, such as real-time arrival information and/or parking availability signage
- Sketch-level cost estimates for site preparation and construction
- Project presentations to the LCB, the TPO Board, and the TPO Board Advisory Committees

The Transportation Hubs Study is expected to be completed by June 2027 at a proposed cost of \$60,000 which is consistent with Task 3.2 of the UPWP.

RECOMMENDATION

Because the tasks, activities, schedule, and cost of the Transportation Hubs Study are consistent with Task 3.2 of the UPWP, it is recommended that the Transportation Hubs Study Scope of Services be recommended for approval.



**ST. LUCIE TPO
TRANSPORTATION HUBS FEASIBILITY STUDY
SCOPE OF SERVICES
Benesch (June 18, 2026)**

INTRODUCTION

The St. Lucie Transportation Planning Organization (TPO) has requested Benesch (Consultant) to prepare a Scope of Services and estimated budget to complete feasibility analyses for two potential new transportation hubs in St. Lucie County, one in Fort Pierce and the other in Port St. Lucie, with both hubs including park-and-ride and bus transfer facilities. Once added to the growing network of transit services in St. Lucie County, these hubs are expected to become crucial multimodal nodes that collect riders from suburban or low-density areas and consolidate them into high-capacity/high-frequency transit services, making daily commuting and other travel faster and more cost-effective for residents and visitors in St. Lucie County.

The scope of this study effort is summarized below. The feasibility studies for the two hubs will be conducted concurrently, and the resulting analyses and findings will be combined into one final document.

SCOPE OF SERVICES

Each feasibility analysis will start with an assessment of the potential property already identified for each site to ensure their appropriateness and feasibility for use as park-and-ride lots/bus transfer locations. The activities to be completed during this assessment are listed below and detailed in the remainder of this scope of services.

- Task 1: Coordinate & Manage Project
- Task 2: Establish Baseline Conditions
- Task 3: Conduct Site Inventory & Evaluation
- Task 4: Evaluate Catchment Area Transit Demand
- Task 5: Facility Layout & Infrastructure Recommendations
- Task 6: Reports & Presentations

Task 1: Coordinate & Manage Project

Upon Notice to Proceed, the Consultant will prepare for and facilitate a virtual kickoff meeting with TPO staff. In addition, one virtual project review meeting will be conducted during the project to focus on coordinating project activities, schedule, deliverables, and reviews. The Consultant will also provide monthly progress reports with invoices, indicating past and current activities.

Task 2: Establish Baseline Conditions

Bus transfer centers, when combined with park-and-ride facilities as hubs of transportation, may drastically improve transit connectivity and encourage usage by bridging the gap between other modes and public transit. This task establishes the baseline conditions to identify the feasibility of such facilities at identified sites, providing a foundation of understanding of the current socio-economic, demographics and other applicable characteristics pertinent to those locations in St. Lucie County.

**Task 2.1: Review Candidate Sites**

General locations for the two potential park-and-ride/bus transfer hubs, which have already been identified by TPO staff, will be reviewed and analyzed. These include three candidate sites, two of which are located near Florida's Turnpike/Okeechobee Road in Fort Pierce and another in Port St. Lucie on US 1 just south of Walton Road (Veterans Memorial Parkway), across the street from a proposed soccer stadium site, as shown in Figure 1.

Figure 1

The Consultant will use available data and input from the TPO to provide a detailed physical description and an overview of each of the three candidate sites to properly establish and define the boundaries and key characteristics of the sites, such as functional shape and size, geographic layout, access points, and direct road connections.

Task 2.2: Assess Baseline Conditions

Proximity to commuter trip origins and transit networks is an important consideration when evaluating the feasibility of a potential park-and-ride lot and bus transfer center. Ideally, a combined park-and-ride and transit facility should be located near residential trip origins while remaining far enough from major employment centers to make the use of transit faster and more cost-effective than driving. The following local conditions adjacent to the candidate sites will be examined to help further assess their potential appropriateness for locating such a facility:

- Proximate residential and employment centers/trip generators
- Area socio-demographic characteristics and trends
- Surrounding current and future land uses and densities
- Nearby existing and planned major developments/projects

The Consultant will collect relevant local data, including residential and employment information for the candidate site locations, to assess existing conditions. The documentation for the assessment will include tables, maps, and graphics that describe and illustrate the current status of the sites and their immediate surroundings.

***Task 2.3: Perform Preliminary Screening of Sites***

A high-level screening will be conducted to select the final two sites for advancing the hub study. This early screening will specifically focus on selecting one of the two candidate sites in Fort Pierce, which consist of two land parcels that are contiguous. A general review of selected criteria, including roadway access, visibility, environmental constraints, transit connectivity, and input from TPO staff will be considered for this preliminary screening.

Using these criteria, one of these two large sites (one with nearly 7 acres and the other nearly 13 acres) will be selected as the potential site in Fort Pierce for the next steps of this hub feasibility study. This site and the site that has already been selected for a transportation hub in Port St. Lucie will be analyzed further in the following tasks of this effort.

Task 3: Conduct Site Inventory & Evaluation

A site inventory and evaluation can lay the foundation for an effective park-and-ride and bus transfer center feasibility analysis by identifying and establishing the baseline physical, operational, and environmental conditions resident at the candidate sites.

Task 3.1: Site Inventory & Evaluation

The Consultant will conduct an inventory and evaluation for each of the two final locations to review and verify accessibility, connectivity, and capacity aspects for the sites that will help reveal any existing physical or environmental constraints as well as opportunities for mitigation. The following information, to the extent possible, will be reviewed and documented.

- Existing formal and informal parking supply
- Roadway geometry/design
- Signalization
- Sidewalk/pedestrian access and connections
- Existing signage and wayfinding
- Ingress and egress points
- Proximity to major arterial roads
- Proximity to major corridors and employment centers
- Existing and planned bus routes
- Transit stops/infrastructure and associated amenities
- Bus ridership data and trends

In addition to using available data and aerial mapping, information from the TPO and local agencies will also be collected and used to support the inventory and evaluation process.

Task 3.2: Conduct Field Reviews

To physically observe the ground conditions in and around the potential sites as well as validate some of the desktop data, a field review will be conducted. Such reviews may uncover hidden or previously undetected physical or other constraints (e.g., like significant topographical changes in elevation that could render portions of a site unusable) while also allowing the actual site accessibility and traffic circulation dynamics to be assessed, which may inform the feasibility determination and final site recommendations.



Task 4: Evaluate Catchment Area Transit Demand

This task includes a demand analysis, including the service or “catchment area” area delineation and an analysis of demand for parking and transit services at the selected sites. First, the task will include a review of nearby formal and informal parking demand/supply as well as any ad-hoc commuter parking clusters nearby, if there are any. Found even at small levels, such usages can indicate an already existing demand for park-and-rides in an area. Then, this task will use findings from Tasks 1 and 2 of this scope of services to conduct the following demand analyses for each transportation hub catchment area.

Task 4.1: Residential & Employment Center Connectivity Analysis

Key job hubs/trip generators as well as high density residential clusters in and adjacent to the catchment areas of the selected sites will be analyzed to review latent demand for park-and-ride and transit services and access.

Task 4.2: Travel Flow Analysis

An understanding of general travel/commuter flows is important for identifying origin and destination (OD) pairs with potential for using these transportation hubs to access transit services. The analysis of travel flows will build on the information derived from the prior assessment by identifying overall travel flows to key activity centers/hubs in and around the catchment areas.

This OD analysis for St. Lucie will be conducted using data from Replica, an activity-based travel demand model that uses information derived from road traffic, mobile phone data, and financial transactions to model mobility trends. This data analysis will provide an understanding of the magnitude and directional flows of all average daily trip patterns. The main purpose of the travel flow analysis will be to identify OD pairs with high travel demand and provide a basis for recommending the location and enhancement of transit facilities and services to help move some of those automobile trips to alternative modes like transit.

Task 5: Facility Layout & Infrastructure Recommendations

This task will bring together data and findings from all previously summarized tasks in this scope of services to develop layout, capital/infrastructure, accessibility, and technology recommendations for two transportation hubs in the cities of Fort Pierce and Port St. Lucie, with each consisting of park-and-ride and bus transfer facilities.

Task 5.1: Site Layout & Transit Infrastructure

Preliminary facility site layouts for consideration for each of the locations will be developed. The layouts will identify the bus bay/berth locations and other key facilities for the bus transfer center while also identifying associated park-and-ride facilities and the connectivity between the two modes. It is important to recognize, however, that this task will not provide detailed architectural drawings or engineering designs for any vertical infrastructure at either hub—only sketch-level renderings of what each hub could look like with the recommended layout and amenities proposed.



In addition to the layout recommendations, necessary infrastructure recommendations, including space requirements for parking (standard spaces and bus/shuttle berths), bike racks, and pedestrian amenities will also be identified. Potential integration of transit-applicable technologies to enhance customer experience, such as the use of real-time arrival information and/or parking availability signage, will also be discussed.

Task 5.2: Multimodal Integration & ADA Accessibility

Recommendations on seamless connection for the park-and-ride facility users, including pedestrian, vehicle, bicycle, or micromobility users, will be identified. In addition, ADA accessibility will also be considered, including ADA-compliant access and boarding.

Task 5.3: Facility Cost Considerations

Sketch-level order of magnitude cost estimates will be developed for each of the selected sites for the initial facility development and implementation, excluding the cost of land acquisition.

Task 5.4: Next Steps & Implementation Considerations

Key next steps and/or considerations for the St. Lucie TPO and local municipal agencies to move beyond this feasibility study effort and ultimately toward hub implementation will be identified and summarized. This will include identifying potential agency partners for coordination and collaboration, as well as some indication of a tentative timeline for establishing and incorporating these two hubs into the overall network of multimodal transportation in St. Lucie County.

Task 6: Reports & Presentations

The two hub analyses will be combined to develop the St. Lucie TPO Transportation Hubs Feasibility Study draft report to summarize the results of the two analyses. The draft report will be submitted to St. Lucie TPO staff for review and comment prior to developing the draft final report.

In addition, a PowerPoint presentation on the draft final report will be developed and four (4) presentations will be conducted to present the report to audiences, as directed by St. Lucie TPO staff. Based on the comments received at these meetings, a final report will be prepared and submitted to the TPO.

PROJECT BUDGET

A detailed project budget is provided in Table 1. This effort is expected to take 6 months from Notice to Proceed, depending on the number and duration of reviews. The professional fees to conduct the St. Lucie TPO Transportation Hubs Feasibility Study is estimated at \$60,000 for Benesch's services outlined in Tasks 1-6 and will be billed on a lump-sum percent complete basis. This lump sum budget includes all direct and indirect costs for services described in this scope. This budget includes all directly incurred project travel, printing, and other expenses, as outlined in this scope.



Table 1
St. Lucie TPO Transportation Hubs Feasibility Study
Project Budget

Task Description		Principal	Project Manager	Senior Planner	Project Planner	Planner	Graphics	Total Task Hours	Cost per Task
		\$269.00	\$229.84	\$127.44	\$101.44	\$81.34	\$90.56		
Task 1	Coordinate & Manage Project	1	6	0	10	2	1	20	\$2,916
1.1	Kickoff Meeting		2		2			4	\$663
1.2	Project Management, Coordination, & Meetings	1	4		8	2	1	16	\$2,253
Task 2	Establish Baseline Conditions	0	14	1	28	23	5	71	\$8,509
2.1	Review Candidate Sites		2		4	1	1	8	\$1,037
2.2	Assess Baseline Conditions		4		8	10	4	26	\$2,907
2.3	Perform Preliminary Screening of Sites		8	1	16	12		37	\$4,565
Task 3	Conduct Site Inventory & Evaluation	0	10	1	32	12	10	65	\$12,954
3.1	Site Inventory & Evaluation		10	1	32	12	10	65	\$7,554
4.1	Conduct Field & Transit Connectivity Reviews	1	12		20	2	2	37	\$5,400
Task 4	Evaluate Catchment Area Demand	0	10	2	24	10	1	47	\$5,892
4.1	Residential & Employment Center Connectivity Review		4		8	2		14	\$1,894
4.2	Travel Flow Analysis		6	2	16	8	1	33	\$3,998
Task 5	Facility Layout & Infrastructure Recommendations	7	34	8	52	28	20	149	\$20,081
5.1	Facility Layout & Transit Infrastructure	4	14	4	22	12	16	72	\$9,460
5.2	Multi-modal integration & ADA Accessibility	1	10	2	10	8	2	33	\$4,669
5.3	Facility Cost Considerations	1	6	1	12	2	1	23	\$3,246
5.4	Next Steps & Implementation Considerations	1	4	1	8	6	1	21	\$2,706
Task 6	Reports & Presentations	2	12	0	32	16	2	80	\$9,648
6.1	Draft Study Report	2	8		16	10	1	37	\$4,904
6.2	Final Study Report		2		8	4	1	15	\$1,687
6.3	Presentation (4)		2		24	2		28	\$3,057
	Total Hours	10	86	12	178	91	39	432	
	Total Fee								\$60,000



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AGENDA ITEM SUMMARY

Board / Committee:	Bicycle-Pedestrian Advisory Committee (BPAC)
Meeting Date:	July 23, 2026
Item Number:	7a
Item Title:	Transportation Asset/Service Vulnerability Assessment Update
Item Origination:	Unified Planning Work Program (UPWP)
UPWP Reference:	Task 3.9 – Environmental Planning
Requested Action:	Discuss and provide comments.
Staff Recommendation:	It is recommended that the Update is discussed and comments are provided to Staff.

Attachments

- Staff Report
- Presentation



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MEMORANDUM

TO: Bicycle-Pedestrian Advisory Committee (BPAC)

THROUGH: Peter Buchwald
Executive Director

FROM: Stephanie M. Torres, CPM
Bicycle Pedestrian Program Manager

DATE: July 14, 2026

SUBJECT: **Transportation Asset / Service Vulnerability**
Assessment Update

BACKGROUND

Task 3.9, *Environmental Planning*, of the Unified Planning Work Program (UPWP) includes a periodic Transportation Asset/Service Vulnerability Assessment Update to evaluate the potential natural disaster hazard risk and climate adaptation/resiliency of the transportation network in the TPO area. As part of the development of the Update, TPO staff participated on the St. Lucie County Resilience Steering Committee, which guided the developments of the St. Lucie County Regional Vulnerability Assessment (RVA) and the Regional Resilience Plan (RRP). The RVA and RRP were funded through the State of Florida's Resilient Florida Program and a Community Development Block Grant (CDBG).

The St. Lucie County Regional Resilience Coordinator presented the RVA to the TPO Advisory Committees and Board for the last Update during the July 2024 meeting cycles. The RVA that was presented to the TPO Advisory Committees and Board evaluated current and future risks to critical infrastructure, including the transportation network, from hazards such as flooding, sea level rise, storm surge, and extreme weather events. The RVA was adopted by the St. Lucie County Board of County Commissioners on June 3, 2025.

Subsequently, the RRP was developed to identify strategies to reduce the hazard risk, improve the long-term reliability of transportation assets, and

support the integration of future hazard considerations into transportation planning. For the current Transportation Asset/Service Vulnerability Assessment Update, a presentation will be provided that includes a refresher of the RVA and a summary of the RRP with an emphasis on the transportation assets in the TPO area.

ANALYSIS

The RVA identified transportation infrastructure as one of the County's highest priority asset groups due to its importance for daily mobility, emergency response, freight movement, and disaster evacuation. The RRP outlines strategies intended to improve the long-term performance and reliability of the transportation network through infrastructure improvements, enhanced stormwater management, incorporation of future hazard considerations into transportation planning and design, and coordination of transportation investments with emergency management and capital improvement planning. The recommendations in the RRP support the TPO's ongoing efforts to incorporate hazard risk-informed planning into the Transportation Improvement Plan and the List of Priority Projects.

RECOMMENDATION

It is recommended that the Update is discussed and comments are provided to Staff.



ST. LUCIE
COUNTY
FLORIDA



St. Lucie County Regional Vulnerability Assessment and Resilience Plan

July 2026

Agenda

- Project Overview
- Regional Vulnerability Assessment
- Regional Resilience Plan
- Key Takeaways
- Questions & Answer

Project Overview

Regional Vulnerability Assessment

- Data-driven assessment of current and future risks across St. Lucie County
- Funded through Resilient Florida (flooding) and CDBG-MIT (multi-hazard)
- Evaluates future conditions (2040, 2070, 2100) including:
 - Flooding (rainfall, sea level rise, storm surge, king tides, compound flooding)
 - Coastal erosion, extreme heat, drought, wildfire, and high winds
- Integrates advanced modeling and GIS analysis, including hydrologic modeling and SLAMM
- Identifies vulnerabilities of critical assets, infrastructure, land, and populations
- Establishes the technical foundation for resilience planning and decision-making

Regional Resilience Plan

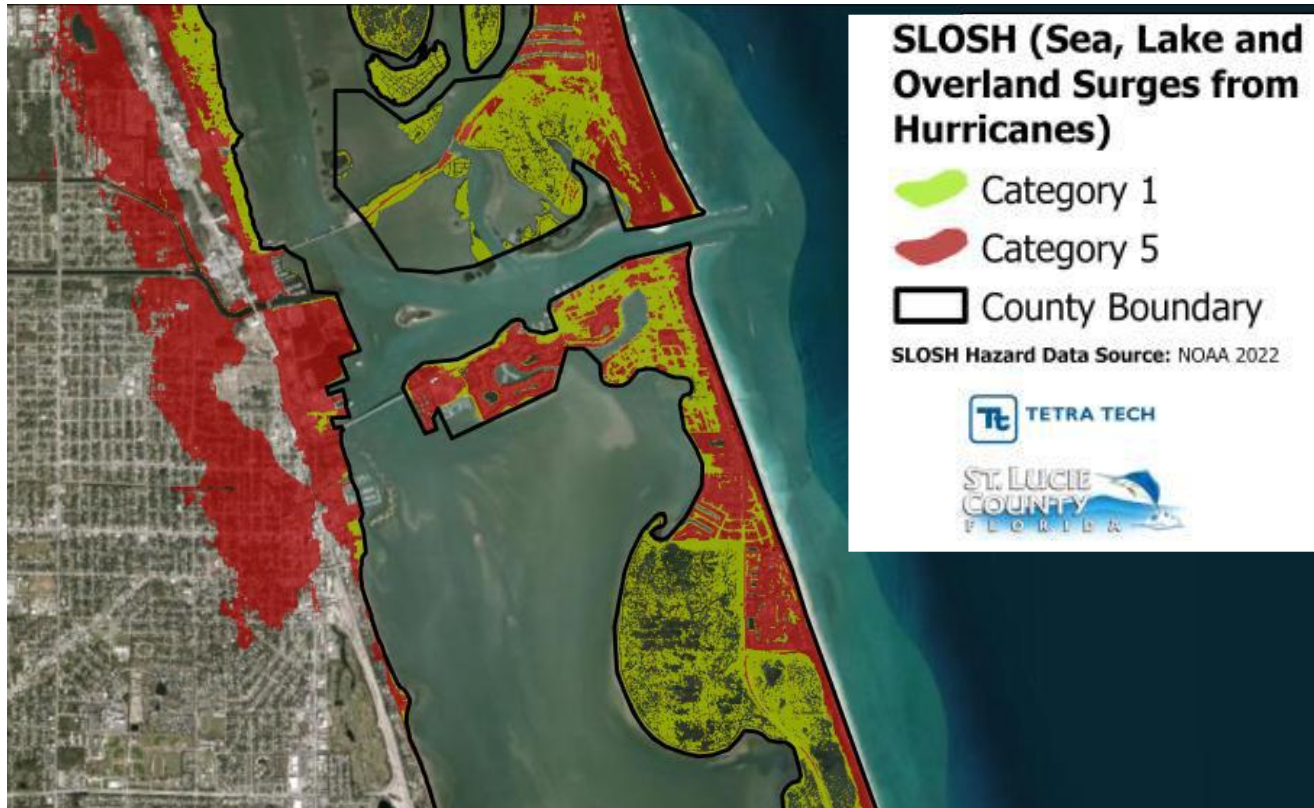
- Comprehensive roadmap to enhance resilience across St. Lucie County and its municipalities
- Funded through CDBG-MIT with support from Resilient Florida
- Translates risk into actionable adaptation strategies to:
 - Reduce current and future hazards
 - Protect public safety, infrastructure, and economic stability
- Built on a collaborative regional approach: St. Lucie County, Port St. Lucie, Fort Pierce, and St. Lucie Village
- Driven by stakeholder engagement and community input
- Promotes policy integration, coordination, and adaptive management for long-term resilience

Regional Vulnerability Assessment



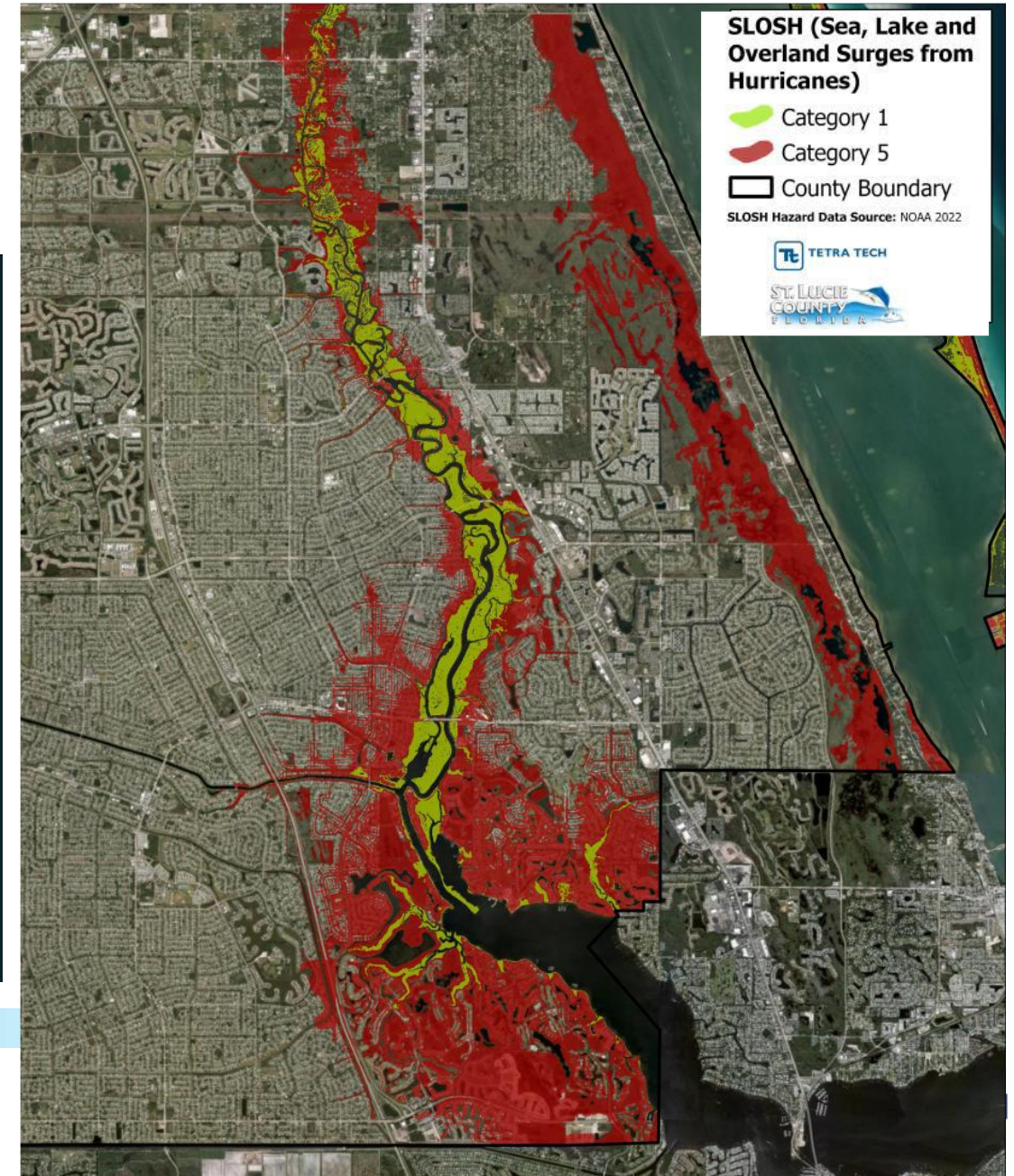
Storm Surge

Fort Pierce area



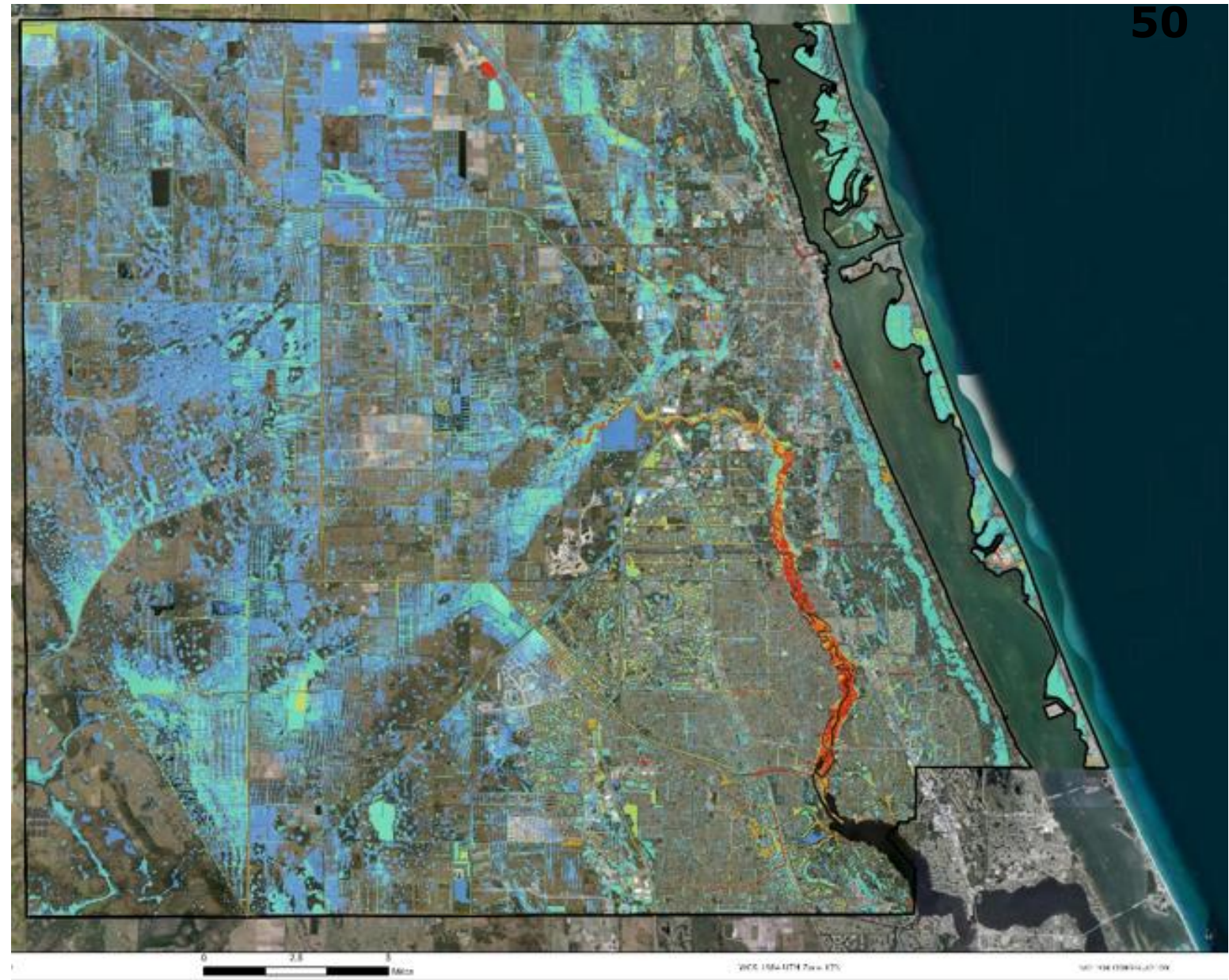
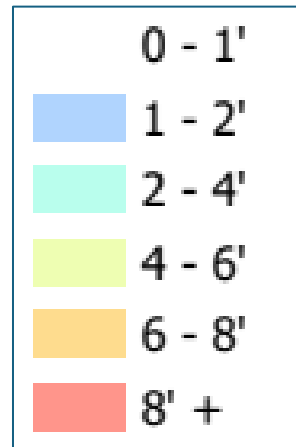
Port St. Lucie area

49



County-wide Map

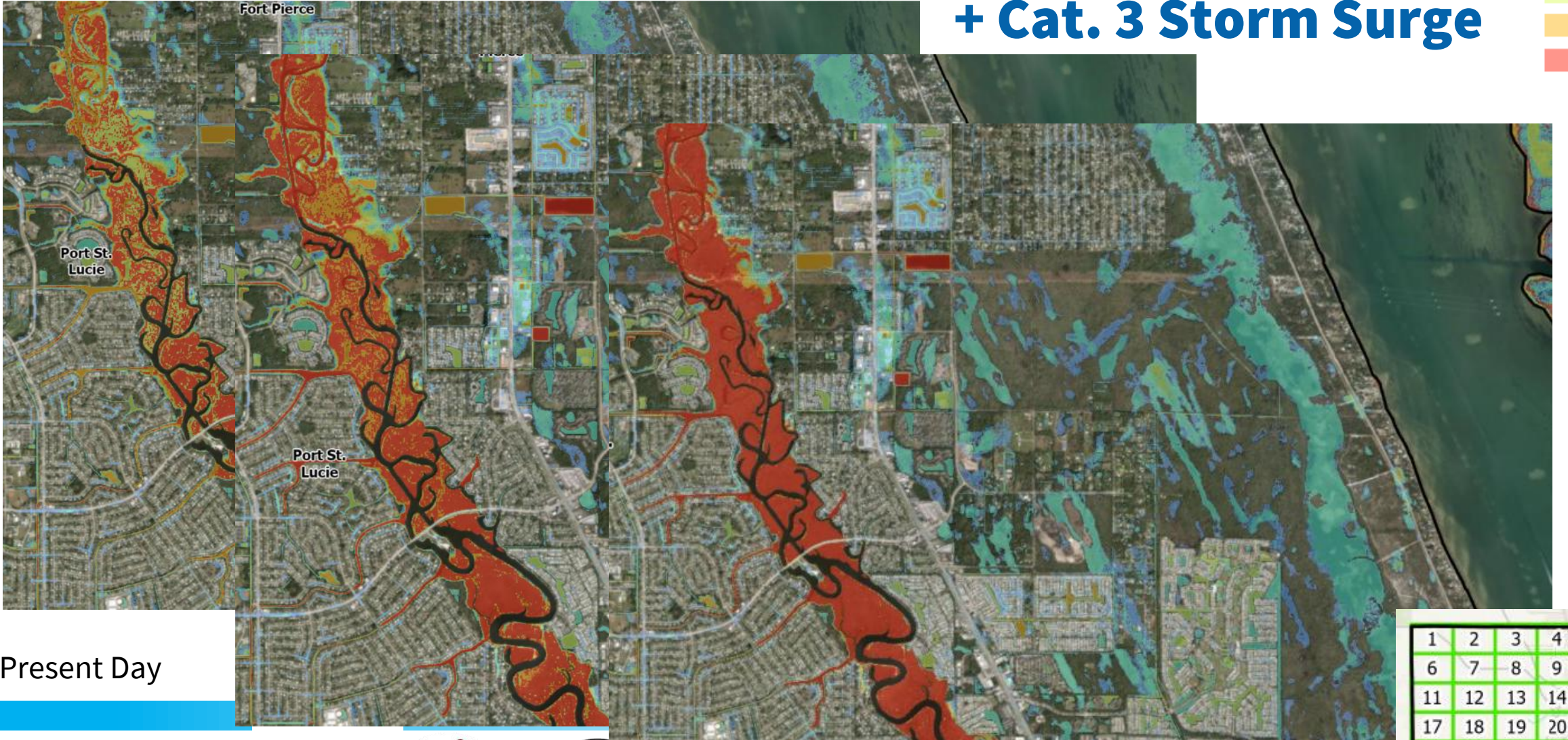
- Year 2070
- 100-Year/24-Hour Rainfall
- NOAA Intermediate High Sea Level Projections



Compound Flooding : 100-year/24-hour Rain Event + Cat. 3 Storm Surge

51

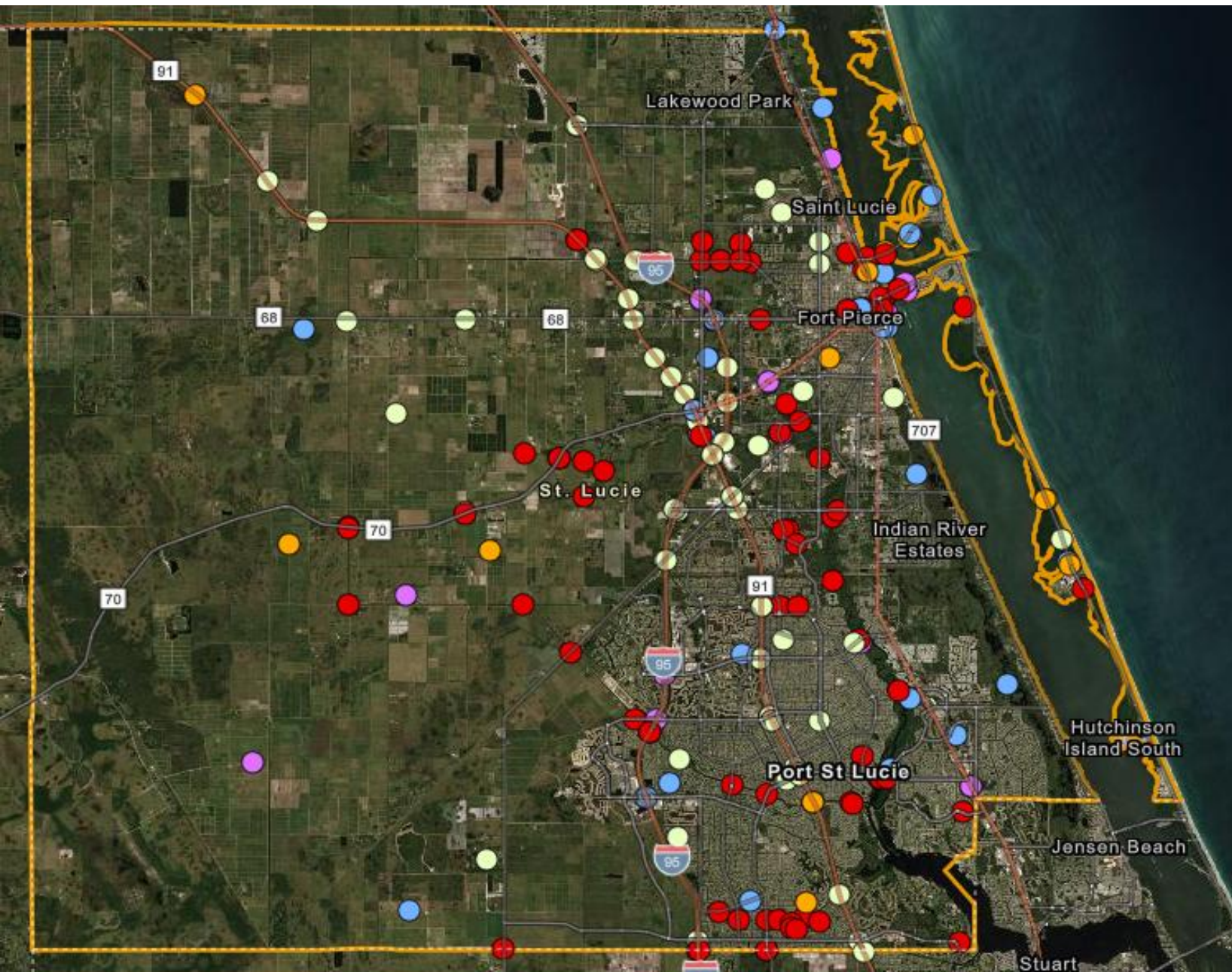
0 - 1'
1 - 2'
2 - 4'
4 - 6'
6 - 8'
8' +



Present Day

1	2	3	4	5	6
6	7	8	9	10	11
11	12	13	14	15	16
17	18	19	20	21	22
23	24	25	26	27	28
29	30	31	32	33	34
35	36	37	38	39	40

Prioritized Critical Assets: Transportation



- Priority 0
- Priority 1
- Priority 2
- Priority 3
- Priority 4

- Helicopter landing pad
- Bridge
- Boat Dock Ramp
- Marina
- Airport
- Port
- Roads & evacuation routes

Prioritized Critical Assets: Transportation

<i>Asset Type</i>	<i>Priority 0</i>	<i>Priority 1</i>	<i>Priority 2</i>	<i>Priority 4</i>	<i>Total</i>
Airports / Helo Landings	7	1	3	7	18
Boat Dock Ramps	5	6	5	16	32
Marinas	0	1	0	3	4
Ports	1	0	0	0	1
Roads	5	53	49	118	5
Evacuation Routes	19	24	35	74	14
Bridges	42	82	6	6	9
Total	79	167	98	224	82

Noteworthy Priority 1 Transportation Assets

<i>Category</i>	<i>Noteworthy Priority 1 Assets</i>
Regional Transportation Corridors	Interstate 95, Sunshine State Parkway, US Highway 1, Old Dixie Highway, Highway A1A
Major Evacuation Routes	E St. Lucie Boulevard, SE Port St. Lucie Boulevard, SE Prima Vista Boulevard, SE Crosstown Parkway, SE Veterans Memorial Parkway, Seaway Drive, Selvitz Road, Shorewinds Drive
Coastal & Barrier Island Access	N Causeway Drive, S Ocean Drive, Seaway Drive, N Indian River Drive, S Indian River Drive
Key Community Connectors	Citrus Avenue, A.E. Backus Avenue, NW Gilson Road, SE Gilson Road, W Midway Road, Southbend Boulevard, Floresta Drive, Morningside Boulevard
Maritime Infrastructure	Port of Fort Pierce, Fort Pierce Marina
Public Water Access Facilities	C-24 Canal Park Boat Ramp, White City Park Boat Ramp, River Place Park Canoe Launch, Summerland Floating Dock, Summerlin Dock, Melody Lane Fishing Pier, Wildcat Cove Preserve
Aviation Facilities	Floridian National Golf Club Heliport
Bridge Infrastructure	82 Priority 1 Bridges supporting evacuation routes, US 1, I-95, local arterials, and waterway crossings throughout the county

<i>Roadway</i>	<i>RVA Priority</i>	<i>SWMP Issue Identified</i>
W Midway Road	Priority 1	Adjacent to White City drainage improvement area and identified in SWMP conveyance improvements.
Edwards Road	Priority 1	Included within Five Mile Creek watershed flooding and wetland improvement projects.
E. Seminole Road	Priority 2	Roadway flooding and undersized culverts; proposed detention ponds to reduce flooding.
Indrio Road	Priority 2	Flooding near Holiday Pines and TVC/Indrio areas due to constrained drainage infrastructure.
Oleander Avenue	Priority 2	One of the County's most significant drainage problem areas; proposed pond storage and culvert upgrades.
Sunrise Boulevard	Priority 2	Undersized culvert creates roadway flooding; replacement proposed to reduce flood stages.
S. 7 th Street	Priority 2	Drainage improvements and wetland restoration proposed to alleviate recurring flooding.
E Midway Road	Priority 3	Located within an area targeted for stormwater conveyance and flood mitigation improvements.
Okeechobee Road	Priority 3	Flooding near Five Mile Creek and commercial areas; detention project recommended.
Savanna Club Boulevard	Priority 3	Localized roadway flooding; proposed inlet and drainage improvements.
Baysinger Avenue	Priority 3	Road flooding; proposed stormwater collection and conveyance improvements.

Regional Resilience Plan



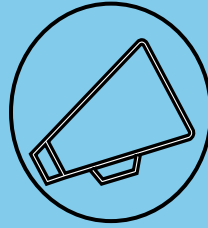
Adaptation Strategies



**Grey
Infrastructure**
(fortify, elevate,
relocate)



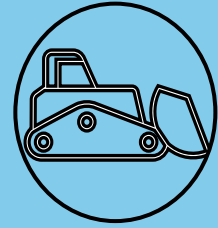
**Green
Infrastructure**
(protect, restore,
augment)



**Community
Education,
Programs, and
Readiness**



**Emergency
Management
Planning**



**Land Use and
Code
Guidelines**

Regional Resilience Plan

- Enhance county-wide resilience by offering adaptation and mitigation strategies based on identified risks
- Considerations include hazard mitigation, emergency preparedness, land use planning, code & policy development, infrastructure investment, and public health policies & programs
- Phased adaptation approach:
 - Immediately Actionable – Can be implemented now using existing staff, resources, and authority.
 - Requires Planning & Coordination – Needs additional design, permitting, funding, partnerships, or stakeholder coordination before implementation.
 - Requires Significant Research, Investment & Sequencing – Long-term actions that depend on substantial funding, technical analysis, policy support, and/or phased implementation.
- Informed by:
 - Resilience Vulnerability Assessments, existing plans & studies, stakeholders

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Adaptation Strategies for Transportation Assets

Strengthen & Protect Critical Transportation Infrastructure

- Retrofit critical transportation facilities, bridges, ports, and support infrastructure with wind-resistant, energy-efficient, and backup power features.
- Incorporate resilience considerations and vulnerability assessment findings into transportation planning, design, maintenance, and capital improvement programs.
- Establish roadway design standards that account for sea level rise, extreme rainfall, and future climate conditions.



Adaptation Strategies for Transportation Assets

Reduce Flooding & Improve System Reliability

- Upgrade stormwater infrastructure using future rainfall projections and hybrid gray-green solutions to reduce roadway flooding.
- Utilize public open space, floodplains, wetlands, and other natural systems to store floodwaters and protect transportation corridors.
- Enhance drainage infrastructure and adaptive culverts at key crossings and estuarine interfaces.
- Develop flood early warning systems and roadway flooding alert networks to improve emergency response and traveler safety.



Adaptation Strategies for Transportation Assets

Support Long-Term Transportation Resilience

- Use vulnerability assessments and asset life-cycle considerations to guide transportation investments and replacement schedules.
- Maintain and expand strategic land acquisition and conservation programs that protect critical transportation corridors and natural flood buffers.
- Conduct policy and planning reviews to strengthen resilience standards, permitting incentives, and low-impact development practices.
- Integrate resilience into emergency management planning and prioritize transportation assets for adaptation and recovery investments.



Key Takeaways

- ✓ The RRP provides a unified strategy for St. Lucie County and its municipalities to address risks collaboratively
- ✓ Built on comprehensive vulnerability assessments that evaluate both flooding and other natural hazards
- ✓ Identifies actionable adaptation strategies to protect critical infrastructure, natural resources, and residents
- ✓ Continued community engagement and stakeholder input is important for future updates to the RRP, ensuring local priorities and needs are reflected
- ✓ The RRP establishes a long-term roadmap that is adaptive and designed to evolve with changing conditions and new data

Thank You!

Discussion
and
Questions

Website:
ResilientStLucie.com

ST. LUCIE
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