

APPENDIX D: SCENARIOS AND PROJECTIONS FOR SHOCKS AND STRESSORS TECHNICAL MEMORANDUM





**RIDE** the **WAVE**  
T O R E S I L I E N C Y

**Transportation Resiliency Master Plan**

**Scenarios and Projections for Shocks and Stressors**

**Technical Memorandum**

MARCH 2022

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March 2022

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# ACRONYMS AND DEFINITIONS

ACS	American Community Survey	LMS	Local Mitigation Strategy
CAV	Connected and Autonomous Vehicles	NOAA	National Oceanic and Atmospheric Administration
CoC	Communities of Color	ROW	Right-of-way
EEL	Environmentally Endangered Lands	SCAT	Space Coast Area Transit
EV	Electric Vehicles	SJRWMD	St. Johns River Water Management District
FAST	Fixing America's Surface Transportation Act	SLR	Sea Level Rise
FDEM	Florida Division of Emergency Management	SLR VA	Sea Level Rise Vulnerability Assessment
FDOT	Florida Department of Transportation	SLOSH	Sea, Lake and Overland Surges from Hurricanes
FEMA	Federal Emergency Management Agency	Space Coast TPO	Space Coast Transportation Planning Organization
FHWA	Federal Highway Administration	TD	Transportation Disadvantaged
FIRM	Flood Insurance Rate Map	Transportation RMP	Transportation Resiliency Master Plan
IRL	Indian River Lagoon	TSM&O	Transportation Systems Management and Operations
ITS	Intelligent Transportation System	WHP	Wildfire Hazard Potential

# 1.0 INTRODUCTION

Brevard County is a coastal community, and the population is subject to environmental, social, and economic vulnerabilities. The Space Coast Transportation Planning Organization (Space Coast TPO) is developing a Transportation Resiliency Master Plan (Transportation RMP) to understand the vulnerabilities of the region's transportation system and to develop strategies and actions that can increase the resiliency of the transportation system. Increasing the resiliency of the transportation system means decreasing the time needed to recover and regain functionality after a major disruption or disaster. Metropolitan/Transportation Planning Organizations are federally required to consider and strive for resiliency of the transportation system through their planning activities and implementation of projects. The requirements are outlined through the Fixing America's Surface Transportation (FAST) Act and the Federal Highway Administration (FHWA) planning factors. The Transportation RMP aligns with the federal requirement and builds on the Space Coast TPO's previous resiliency efforts. The Transportation RMP also seeks to get ahead of the changes outlined in the Bipartisan Infrastructure Law which prioritizes investment in our nation's infrastructure, competitiveness, and communities. Infrastructure resilience is a large portion of the investments provided by the Bipartisan Infrastructure Law, with over \$50 billion set aside to protect against droughts, heat, floods, wildfires, and cybersecurity<sup>1</sup>.

The Transportation RMP will build on past work to define potential transportation-specific stressors, identify vulnerable corridors in Brevard County, and recommend strategies to improve the adaptability/recoverability of the system. Resiliency focuses on the ability to bounce back from events and forces that negatively impact natural and man-made resources. For purposes of the Transportation RMP, these impacts are known as shocks and stressors. For the Transportation RMP, shocks are single, sometime sudden, events that threaten the transportation network, and stressors are continuous or re-occurring issues or events that impact or weaken the mobility of a community on a day to day or cyclical basis. For every community, understanding it's infrastructure and socioeconomic vulnerabilities to shocks/stressors is critical to building resilience.

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<sup>1</sup> Bipartisan Infrastructure Law Guidebook for State, Local, Tribal and Territorial Governments, and Other Partners (pdf) (January 2022). [https://www.whitehouse.gov/wp-content/uploads/2022/01/BUILDING-A-BETTER-AMERICA\\_FINAL.pdf](https://www.whitehouse.gov/wp-content/uploads/2022/01/BUILDING-A-BETTER-AMERICA_FINAL.pdf)

The purpose of this Shocks and Stressors Scenarios and Projections Technical Memorandum (Memo) is to document the insights gathered from discussions with the Task Force, Focus Group work sessions, and interviews with experts related to the shocks/stressors, which are used for analyses. The process for determining the shocks/stressors analyzed, the methodologies used, and the results of the analysis are detailed in this Memo. This memo builds on past work from the Transportation RMP Data Collection and Analysis Technical Memorandum, which summarized the current and potential future conditions for Brevard County. It detailed existing transportation elements, infrastructure, natural areas, and data for planned future transportation assets from other efforts completed by the Space Coast TPO. The key takeaways from meetings and work sessions with Task Force members and Stakeholders supplemented data collection efforts to confirm the important assets and areas in Brevard County for the focus of the Transportation RMP.

## 2.0 DEFINING SHOCKS/STRESSORS

Based on information collected and analyzed for this Transportation RMP, an initial list of shocks and stressors that could potentially impact the transportation system in Brevard County was developed. Some of the most relevant information was gleaned from the following plans:

- ◆ **Brevard County Plans:**
  - Save Our Lagoon Plan;
  - 2020 Local Mitigation Strategy (LMS);
  - Environmentally Endangered Lands (EEL) Program Land Acquisition Manual;
- ◆ **East Central Florida Regional Planning Council Plans:**
  - Regional Resiliency Action Plan;
  - Sea Level Rise Vulnerability Assessments (SLR VA) for Brevard County and several municipalities;
- ◆ **Indian River Lagoon (IRL) National Estuary Program:**
  - Comprehensive Conservation and Management Plan;
- ◆ **St. Johns River Water Management District (SJRWMD) Plans:**
  - Surface Water Improvement and Management Plans;
  - Land Management Plans; and
- ◆ **Florida Department of Transportation (FDOT) Mitigation Plan.**

One of the most informative plans was the 2020 Brevard County LMS. The LMS listed hazards and potential effects to Brevard County and identified critical facilities. The universe of hazards presented in the LMS and other relevant plans were considered for the initial/long list of potential



shocks/stressors for analysis in the Transportation RMP. These hazards were presented to the Task Force to determine the shortlist of shocks/stressors for focus in this Transportation RMP.

## 2.1 Potential Long List of Shocks/Stressors

Discussions with the Task Force and other experts confirmed the long list of potential shocks/stressors and identified the shortlist for analysis in this Transportation RMP. The shocks/stressors long list presented to the Task Force included the following:

- ◆ Aging Infrastructure;
- ◆ Flooding;
- ◆ Funding;
- ◆ Sea Level Rise;
- ◆ Community Connections/Affordability;
- ◆ Hurricane/Storm Surge;
- ◆ Public Events/Congestion;
- ◆ Catastrophic Events;
- ◆ Shoreline Erosion;
- ◆ Extreme Heat/Drought;
- ◆ Security (e.g., cyber-attacks);
- ◆ Connected and Autonomous Vehicles (CAV)/Electric Vehicles (EV)/Intelligent Transportation System (ITS);
- ◆ Pandemic;
- ◆ Safety;
- ◆ Bike/Pedestrian/Transit; and
- ◆ Daily Congestion.

The following key questions were used to identify the shortlist of shocks/stressors to focus on in this Transportation RMP:

- ◆ Is it imminent or currently occurring?
- ◆ Does it directly impact transportation?
- ◆ What is the magnitude of potential impact to transportation system?
- ◆ Is data readily available to analyze the shock's/stressor's impact on the transportation system?

These questions were organized in a matrix presented to the Task Force for an interactive discussion to identify the shocks/stressors shortlist. The shortlisted shocks/stressors are shown in **Figure 1**. The Task Force also assisted with identifying Focus Group participants to further define the scenarios and projections for each shock/stressor on the short list, which was

supplemented in subsequent experts interviews for each shortlisted shock/stressor. The shortlist was further refined through the availability of data for quantitative analysis. Full meeting notes from the Task Force Meetings and Focus Group Work Sessions are in **Appendix A: Outreach and Education**.

Shock/Stressor	Is it imminent or currently occurring?	Does it directly impact transportation?	Potential impact to transportation system	Is data readily available?
Flooding	Green	Green	Green	Green
Sea Level Rise	Green	Green	Green	Green
Hurricane/Wind Damage	Yellow	Green	Green	Green
Public Events/Non-Reoccurring Congestion	Yellow	Green	Green	Yellow
Catastrophic Events	Gray	Yellow	Yellow	Gray
Storm Surge/Shoreline Erosion	Green	Green	Green	Green
Extreme Heat/Drought/Wildfires	Green	Yellow	Yellow	Green
Security	Green	Green	Green	Gray

Yes/High = Green    Maybe/Medium = Yellow    No/Low = Gray

FIGURE 1: SHOCKS/STRESSORS DISCUSSION MATRIX

## 2.2 Shortlist of Shocks/Stressors

The Focus Group Work Sessions were centered on breakout groups made up of participants with knowledge of and prior experience dealing with the effects of the shock/stressor. Breakout group one was made up of SLR and flooding-focused participants and breakout group two was for hurricane/winds and storm surge/shoreline erosion. The Expert Interviews held after the Focus Group Work Sessions tackled the remaining shocks/stressors of fire/heat/drought and ITS. The experts interviewed and their roles are listed in **Table 1**.

TABLE 1: TOPIC-SPECIFIC EXPERT INTERVIEWS

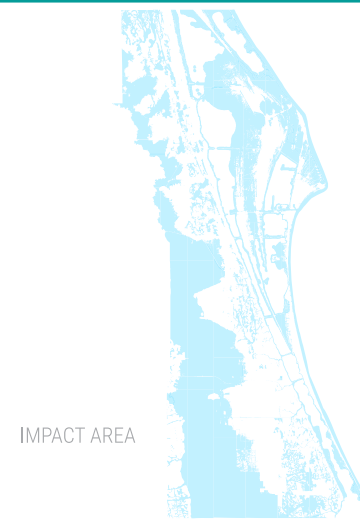
Name	Agency/Organization	Shock/Stressors Expertise	Interview Date
Jeremy Dilmore	FDOT District Five Transportation Systems Management and Operations (TSM&O) Program Engineer	ITS	7/16/21
Andrew Sussman	Hurricane Program Manager at Florida Division of Emergency Management (FDEM)	Hurricanes	7/19/21
Evan Hall	Environmentally Endangered Lands (EEL) Program Land Management Specialist	Heat/drought/fire	7/22/21
Doug Shockley	FDOT District Five Maintenance	High Winds/Storm Surge/Erosion	9/17/21
Hector Matos	FDOT District Five Maintenance	High Winds/Storm Surge/Erosion	9/17/21
Rich Ataman	Intelligent Transportation System Operator at Brevard County	ITS	9/20/21
Jared Francis	City Engineer, City of Cocoa Beach	ITS	9/20/21
Sheryl Bradley	FDOT District Five TSM&O Manager	ITS	9/20/21
Patrick Voltaire	Assistant Chief of Fire Operations at Brevard County	Heat/drought/fire	10/06/21
Mark Schollmeyer	Fire Chief at Brevard County	Heat/drought/fire	10/13/21
Sheryl Bradley	FDOT District Five TSM&O Manager	Heat/drought/fire	10/14/21
Nathan Mozeleski	FDOT District Five ITS/Traffic Project Engineer	Heat/drought/fire	10/14/21
Dylan Gavagni	Park Manager at Florida Park Service –St. Sebastian	Heat/drought/fire	10/14/21

The definitions for each shock/stressor were developed from the Focus Group Discussions and Expert Interviews. Based on discussions and interviews, it was determined that cyber and physical security are being managed by ITS managers and were not analyzed as part of the Transportation RMP network analysis. The definitions in **Figure 2** were used to apply the network analysis methodology described in this Memo.

## FLOODING

**Data Source:** FEMA 100-Year flood inundation

**Definition:** The FEMA 100-year floodplain dataset represents areas with a **1 percent annual chance of flooding based on historic occurrences**. The area covered parts of Brevard experiencing flooding during regular rainfall events and those flooded as the result of severe storms.



## SEA LEVEL RISE

**Data Source:** 2100 NOAA High Curve

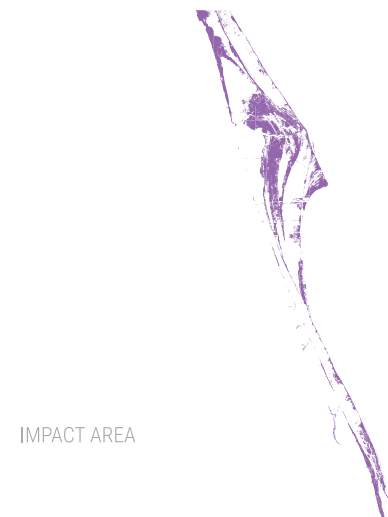
**Definition:** The NOAA 2100 High Curve **reflected the transportation impacts** depicted by the Space Coast TPO SLR VA and related work completed by Space Coast TPO local partners.



## STORM SURGE/WIND

**Data Source:** Hurricane Category 3

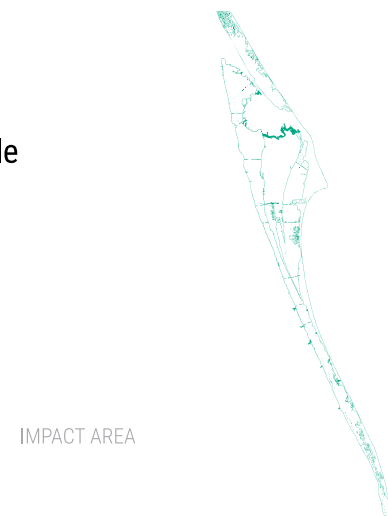
**Definition:** It was determined that **category 3 hurricane storm surge/winds reflected a reasonable impact** on transportation infrastructure in Brevard County.



## SHORELINE EROSION

**Data Source:** Corridors 50 feet from water bodies based on spatial data available

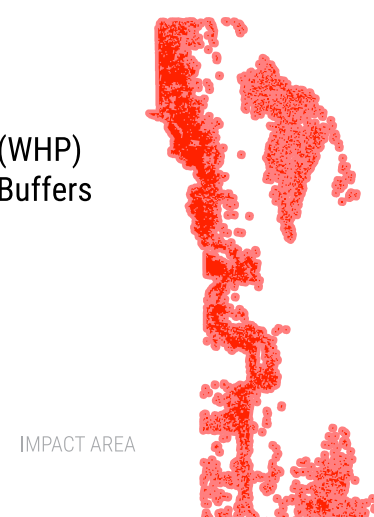
**Definition:** A **50 foot buffer** from the Indian River Lagoon, Banana River, and Atlantic Ocean **aligned with the impact historical cases of roadway being washed away** and the future outlook of erosion impacts.



## FIRE

**Data Source:** Use the top class "Very High" from 2020 Wildfire Hazard Potential (WHP) dataset, and a half-mile buffer based on Florida Forest Service Smoke Sensitive Buffers

**Definition:** The dataset is built upon spatial datasets of **wildfire likelihood and intensity, spatial fuels and vegetation data, and point locations of past fire occurrence**. Smoke management is critical to preserving visibility on roadways. A half-mile buffer around wildfire hazard potential areas was used.



Using the shock/stressor definitions described above, the methodology for the two major components of the network analysis, the **vulnerability analysis** and **criticality analysis**, were presented to the Task Force for feedback. **Vulnerability** is defined as the magnitude of impacts the shocks/stressors may have on transportation corridors. Transportation Disadvantaged (TD) populations were identified for the Transportation RMP, and they were included as part of the vulnerability analysis. The TD population index represents populations most likely to rely on walking, biking, and transit as primary or sole modes of transportation. Specific TD populations, such as population with a disability or the elderly, have unique mobility challenges that make them especially vulnerable to the impacts of shocks/stressors. Population groups in the TD index included the following:

- ◆ Overburdened renters, or people that pay 40% or more of their household income on rent;
- ◆ Population under age 18 in a single-parent household;
- ◆ Population with a disability;
- ◆ Population under age 10;
- ◆ Population over age 75;
- ◆ Workers without vehicle access;
- ◆ Population with limited English proficiency;
- ◆ Low-income population, or residents whose income is less than 200% of the Federal Poverty Guidelines<sup>2</sup>; and
- ◆ Communities of Color<sup>3</sup> (CoC) (all races and ethnicities other than White, non-Hispanic).

This analysis used Census Bureau American Community Survey (ACS) data at the census tract level. To calculate the TD index, the family- or household-level variables were converted to person-units using the average family or household size for each census tract. The nine population values were summed and divided by the total population of the census tract to generate the preliminary index value. An individual can meet more than one of the qualifying

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<sup>2</sup> Federal poverty guidelines are based on the number of people in a household or family. For example, \$12,760 is the federal poverty guideline for a single individual, while \$26,200 is the federal poverty guideline for a family of four. The U.S. Department of Housing and Urban Development (HUD) defines low-income as 80% of median family income, which in Florida ranges from 163% of the federal poverty guideline to 299% of the federal poverty guideline based on family/household size, averaging at 211%. Therefore, 200% of the federal poverty guideline was used to identify low-income populations.

<sup>3</sup> While some jurisdictions use the abbreviation “CoC” for “Communities of Concern”, this analysis uses the abbreviation for “Communities of Color”, or people of all races and ethnicities other than White, non-Hispanic. These are Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian or other Pacific Islander, Hispanic or Latino, other races, and two or more races.

attributes (e.g., a person could be living in poverty and be in a single-parent household), and for this reason the index intentionally counts individuals multiple times to generate an index that evaluates the relative equity disadvantage of the census tract. Thus, the highest theoretical score for an index census tract would be eight if every person and household met every criterion (elderly and youth are mutually exclusive and thus these two variables cannot be met at the same time).

**Criticality** determines which impacted corridors serve a critical function and serve local and regional assets. The intent of the analysis was to identify which corridors serve a critical role and are the most vulnerable to develop mitigation strategies for. Another part of determining the criticality was identifying which corridors provide access to critical regional assets. All causeways were determined to be critical. A step-by-step breakdown of the methodology for each component of the network analysis was illustrated to the Task Force, and key feedback gathered from the meeting is included in **Appendix A: Outreach and Education**.

## 3.0 NETWORK ANALYSIS

This section describes the methodology and outcomes of analyzing the transportation network in Brevard County. The analysis used Brevard County's functionally classified roadways, plus important corridors to the region as identified by the Task Force and Space Coast TPO representatives. Indian River Drive, Ellis Road from US 192 to the I-95 interchange, Rocky Point Road, St. Johns Heritage Parkway/Micco Road interchange, and the Old Dixie Highway were included in the analysis. The information gathered from data collection and outreach activities was used to set the framework for the network analysis, as shown in **Figure 3**.

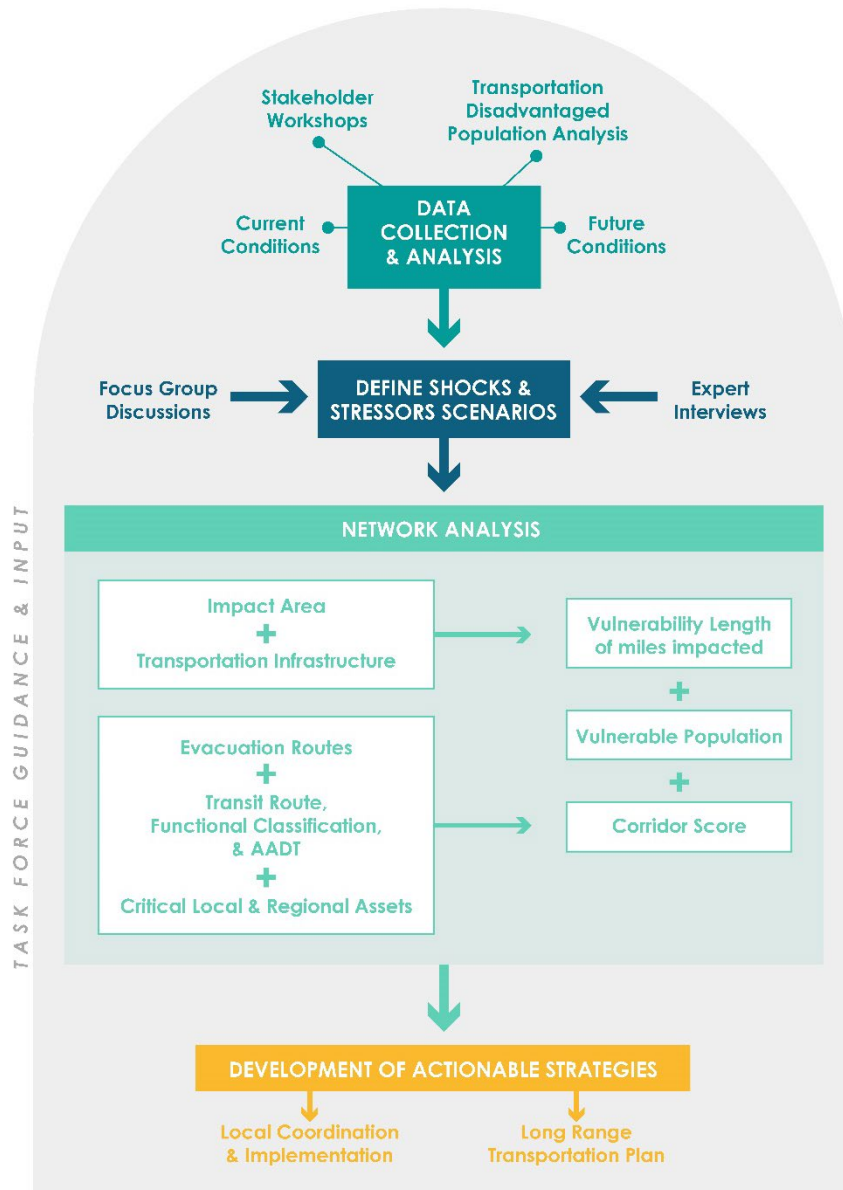


FIGURE 3: TRANSPORTATION RMP PROCESS

The network analysis determined the vulnerability of the transportation network based on the corridors impacted by SLR, flooding, and the combined effects of storm surge/wind, shoreline erosion, and fire. Corridors serving the greatest concentration of TD populations were also identified as vulnerable. The criticality of the network was assessed using subsets of data that determined critical functions and critical assets in Brevard County.



Points were assigned to vulnerable and critical corridors based on their relative vulnerability to shocks/stressors and criticality to one another. The point system is tiered so that the “Most Vulnerable” and “Most Critical” corridors receive more points than “Vulnerable” and “Critical” corridors, respectively. For the top ranking corridors, categories of actionable mitigation strategies will be developed in partnership with the Space Coast TPO, Task Force and Focus Groups, as appropriate. Potential funding sources will also be identified in a later phase of the Transportation RMP.

### 3.1 Vulnerability Analysis Methodology

The vulnerability analysis determined the length in miles of corridors in the Space Coast TPO functionally classified network impacted by a shock/stressor, as illustrated in **Figure 4**. Corridors that have more than zero and up to ¼-mile impacted by a shocks/stressor were identified as “Vulnerable” and received one point. Corridors with more than ¼-mile impacted were “Most Vulnerable” and received two points.

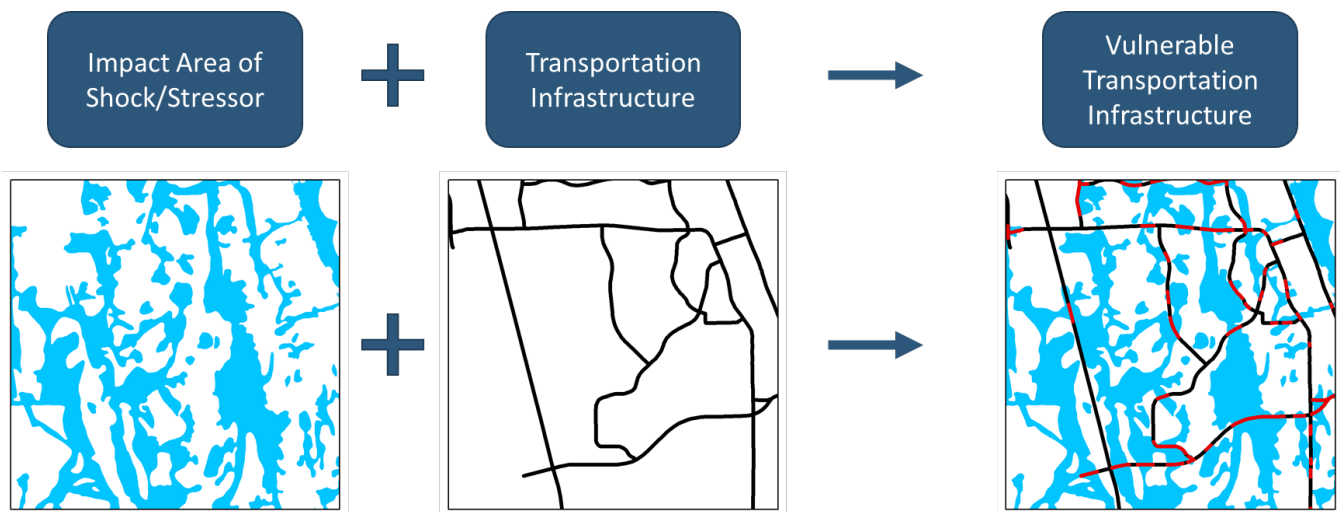


FIGURE 4: PROCESS TO DETERMINE VULNERABILITY

The criteria listed in **Table 2** were applied to SLR, flooding, and the combined effects of storm surge/wind, and shoreline erosion.

TABLE 2: VULNERABILITY CRITERIA

Not Vulnerable	Vulnerable	Most Vulnerable
None of the corridor is within the impact area of the shock/stressor	> 0 & ≤ 1/4 mile of the corridor is within the impact area of the shock/stressor	> 1/4 mile of the corridor is within the impact area of the shock/stressor

For fire, a modified methodology was used to assign “Most Vulnerable” to corridors with more than ¼ mile length in the Very High wildfire hazard potential areas. Otherwise, corridors were deemed “Vulnerable” if more than ¼ mile length was in the wildfire hazard potential half-mile smoke buffer, as described in Table 3.

TABLE 3: FIRE VULNERABILITY CRITERIA

Not Vulnerable	Vulnerable	Most Vulnerable
≤ 1/4 mile of the corridor is within the impact area of the shock/stressor	> 1/4 mile of the corridor is within the smoke impact area	> 1/4 mile of the corridor is within the Very High impact area of fire

Figures of each shock/stressor impact area are illustrated in the next section. Fire and flooding produce the most vulnerable corridors in Brevard County, followed by SLR and storm surge. Shoreline erosion had the smallest share of vulnerable corridors. The number of corridors impacted by each shock/stressor is summarized in Figure 5.

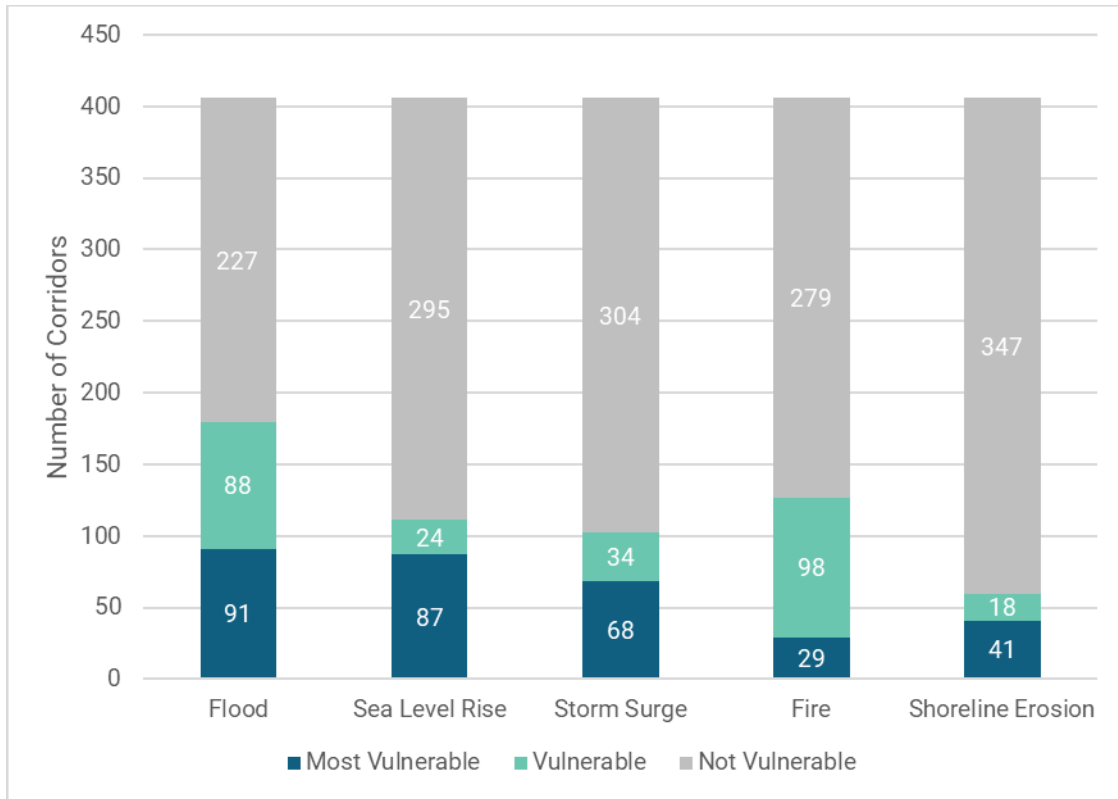


FIGURE 5: CORRIDORS BY SHOCK/STRESSOR VULNERABILITY

The other part of vulnerability scoring was determining the corridors serving concentrations of vulnerable populations. Based on the TD Population Index used for the Transportation RMP, corridors that serve areas with the most Transportation Disadvantaged Populations (top 20% of index scores) were “Vulnerable” and received one point. If this criterion were not met, corridors could still be considered “Vulnerable” if they served census block groups with the top 20% of one of the following five population characteristics:

- ◆ Poor and Struggling;
- ◆ Zero Car Households;
- ◆ Persons of Color;
- ◆ Households Including a Person with a Disability; and
- ◆ Persons Over 65.

Approximately 20% of all corridors are identified as “Vulnerable.” If a corridor served the top 20 percent of two or more of the five populations listed above, it was “Most Vulnerable” and received two points. Approximately 29% of all corridors are “Most Vulnerable”, as shown in **Figure 6**.

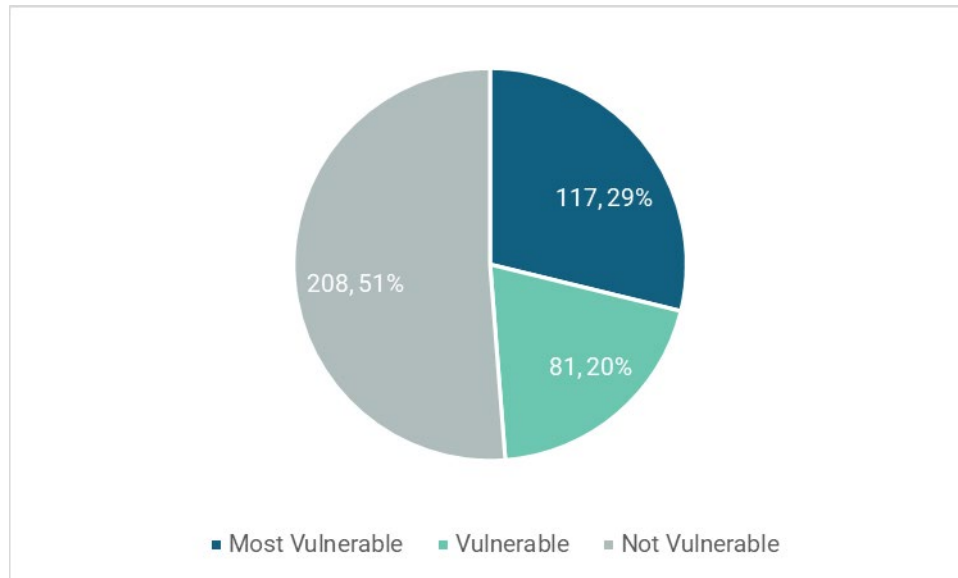


FIGURE 6: CORRIDORS SERVING VULNERABLE POPULATIONS

### 3.2 Criticality Analysis Methodology

The criticality analysis determined the length in miles of corridors in the Space Coast TPO functionally classified network serving a critical function or providing critical access to local assets in Brevard County. Like the vulnerability analysis component, critical roadways were scored by which a specific roadway function or access criterion garnered more points than others. Corridors that provided access to critical regional assets and causeways were given one point and added to the overall criticality score.

A critical function is defined as shown in **Table 4**. These criteria encompass major roadways in Brevard County that facilitate a large movement of people and goods. Corridors identified as “Most Critical” received two points. Corridors received one point if they were “Critical.” Approximately 23% all corridors serve a “Critical” function, and approximately 31% are “Most Critical”, as shown in **Figure 7**.

TABLE 4: CRITICAL FUNCTION CRITERIA

Not Critical	Critical	Most Critical
All <b>other</b> corridors not meeting Critical or Most Critical criteria	Corridors with a <b>Space Coast Regional Area Transit (SCAT) route</b> OR Corridors with a functional classification of a <b>Principal Arterial or larger</b> OR Corridors with an <b>annual average daily traffic (AADT) &gt; 40,000</b>	Corridors that are an <b>evacuation route</b>

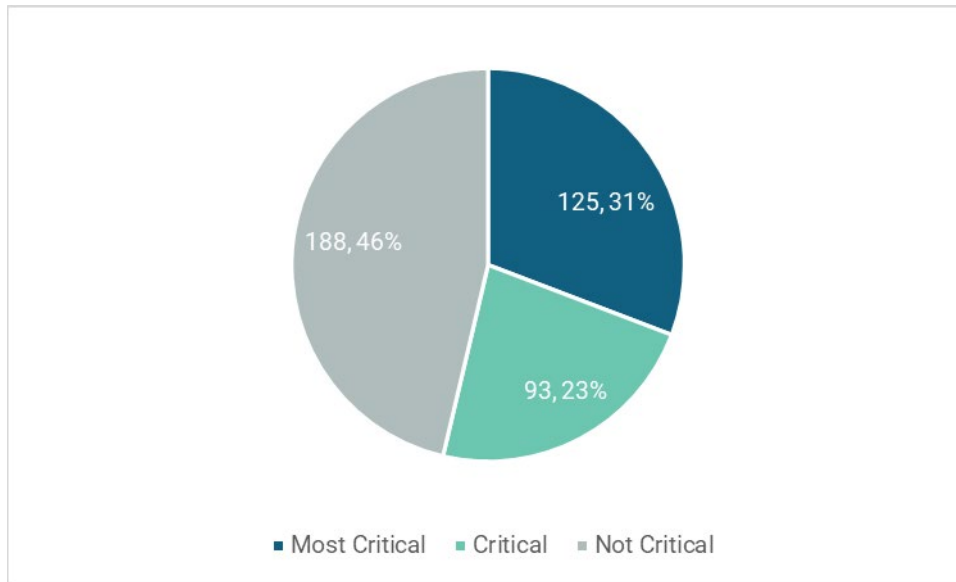


FIGURE 7: CORRIDORS SERVING A CRITICAL FUNCTION

Critical local assets in Brevard County included community centers, hospitals, government centers, downtown areas, goods and services (suburban commercial and residential centers), fire stations, and police stations. **Table 5** details the scoring criteria for critical local assets, where a "Critical" corridor received one point, and "Most Critical" corridors received two points. Approximately 45% of all corridors are "Most Critical", serving more than one local critical asset within a half-mile, as shown in **Figure 8**. Approximately a quarter of all corridors are "Critical," serving one critical local asset within a half-mile.

TABLE 5: CRITICAL LOCAL ASSETS CRITERIA

Not Critical	Critical	Most Critical
All <b>other</b> corridors not meeting Critical or Most Critical criteria	Corridors that have <b>1 critical local asset</b> within ½ -mile	Corridors that have <b>more than 1 critical local asset</b> within ½ -mile

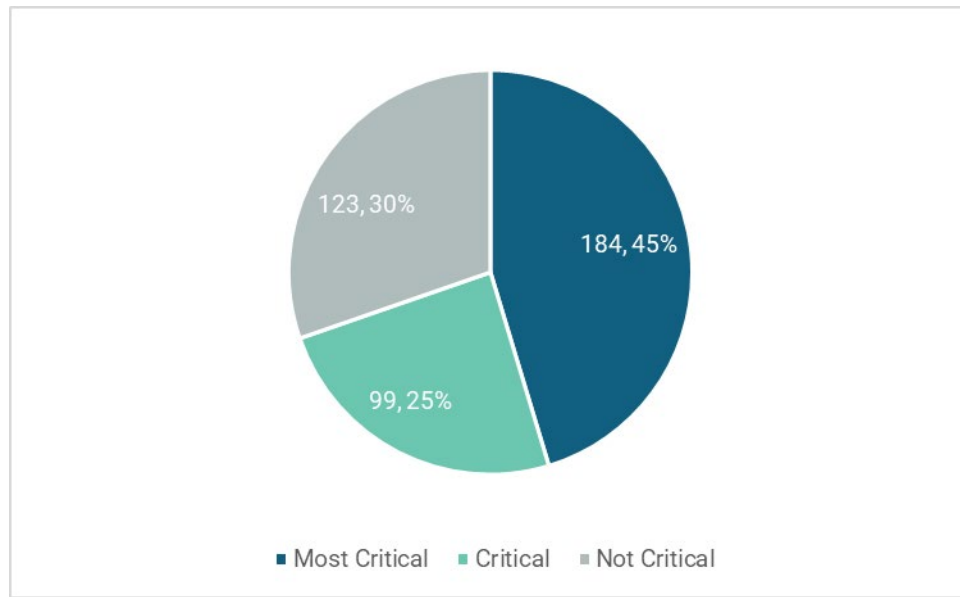
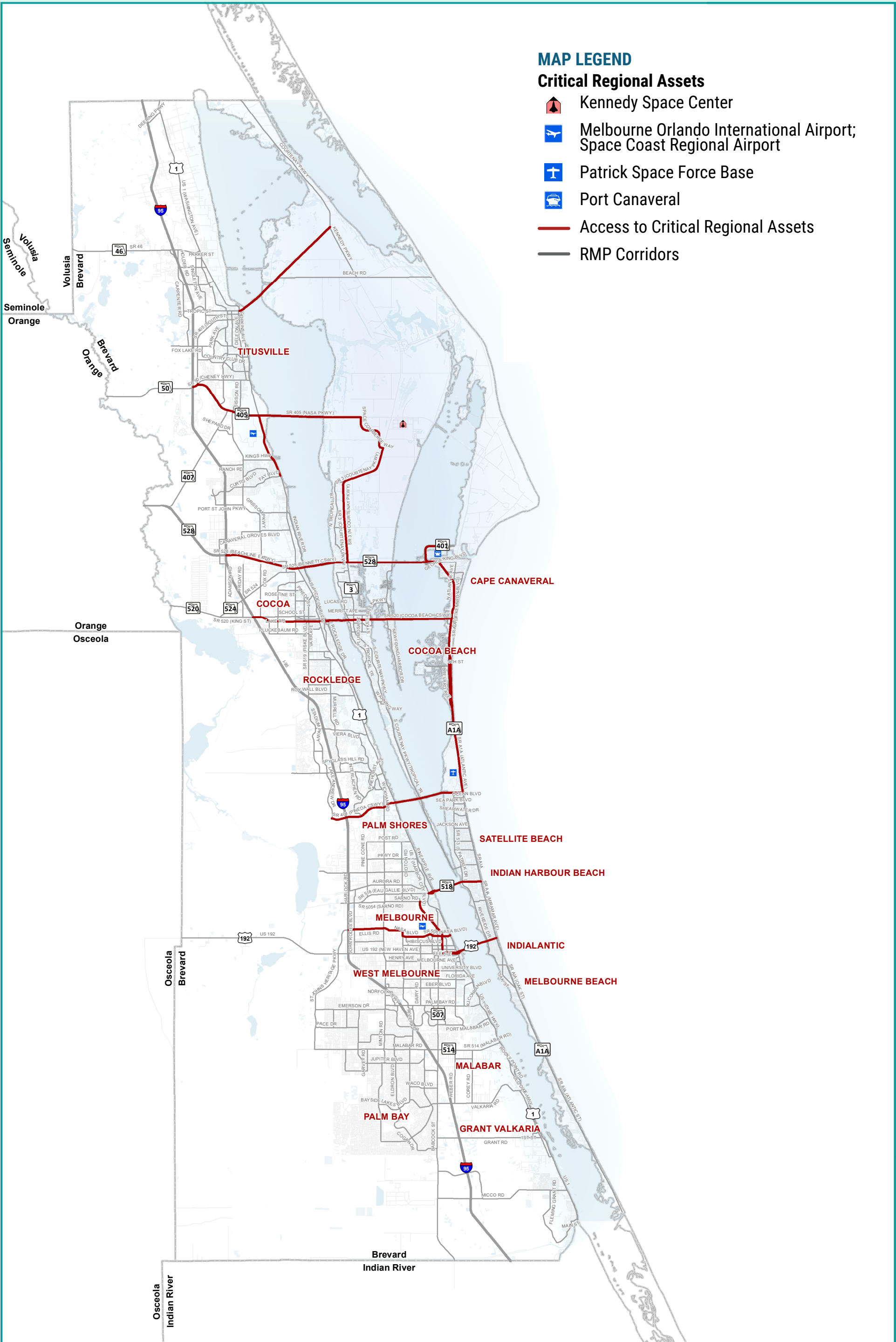


FIGURE 8: CORRIDORS SERVING A CRITICAL LOCAL ASSET

Critical regional assets are important destinations in Brevard County. Corridors that provide direct access to critical regional assets are given one point, and all causeways are also given one point to add to the overall criticality score. Critical regional assets include the Port Canaveral, the Patrick Space Force Base, the Kennedy Space Center, the Space Coast Regional Airport, and the Melbourne-Orlando International Airport, as shown in **Figure 9**.



**MAP LEGEND**

**Critical Regional Assets**

-  Kennedy Space Center
-  Melbourne Orlando International Airport; Space Coast Regional Airport
-  Patrick Space Force Base
-  Port Canaveral
-  Access to Critical Regional Assets
-  RMP Corridors

### 3.3 Scoring Results for Shocks/Stressor

The total scores are provided for each corridor based on its impact by each shock/stressor and its criticality. The total score equation is as follows:

$$\text{Vulnerable Score} + (\text{Vulnerable Population Score if Vulnerable Population Score} > 0) \times \text{Critical Score}$$

The total score for each corridor is listed in the column "Total Score" for all the summary tables. The definitions for all the other table columns are detailed in **Appendix B: Summary Table Definitions**. Each corridor analyzed and their total score are listed in **Appendix C: Vulnerability and Criticality of All Corridors Table**. The Vulnerability and Criticality of All Corridors table is sorted by Total Score in descending order, followed by Critical Score in descending order, and then by Road Name alphabetically. The Road Name sort is used to rank corridors with the same Total Score and Critical Score. The top-scoring corridor is SR 520 (Merritt Island Causeway) from the causeway to Sykes Creek Parkway. No corridor has a total score tie with it, and it has the highest possible criticality score of five. The corridor has 75% of its length within the impact area of a shock/stressor, but it is not impacted by fire.

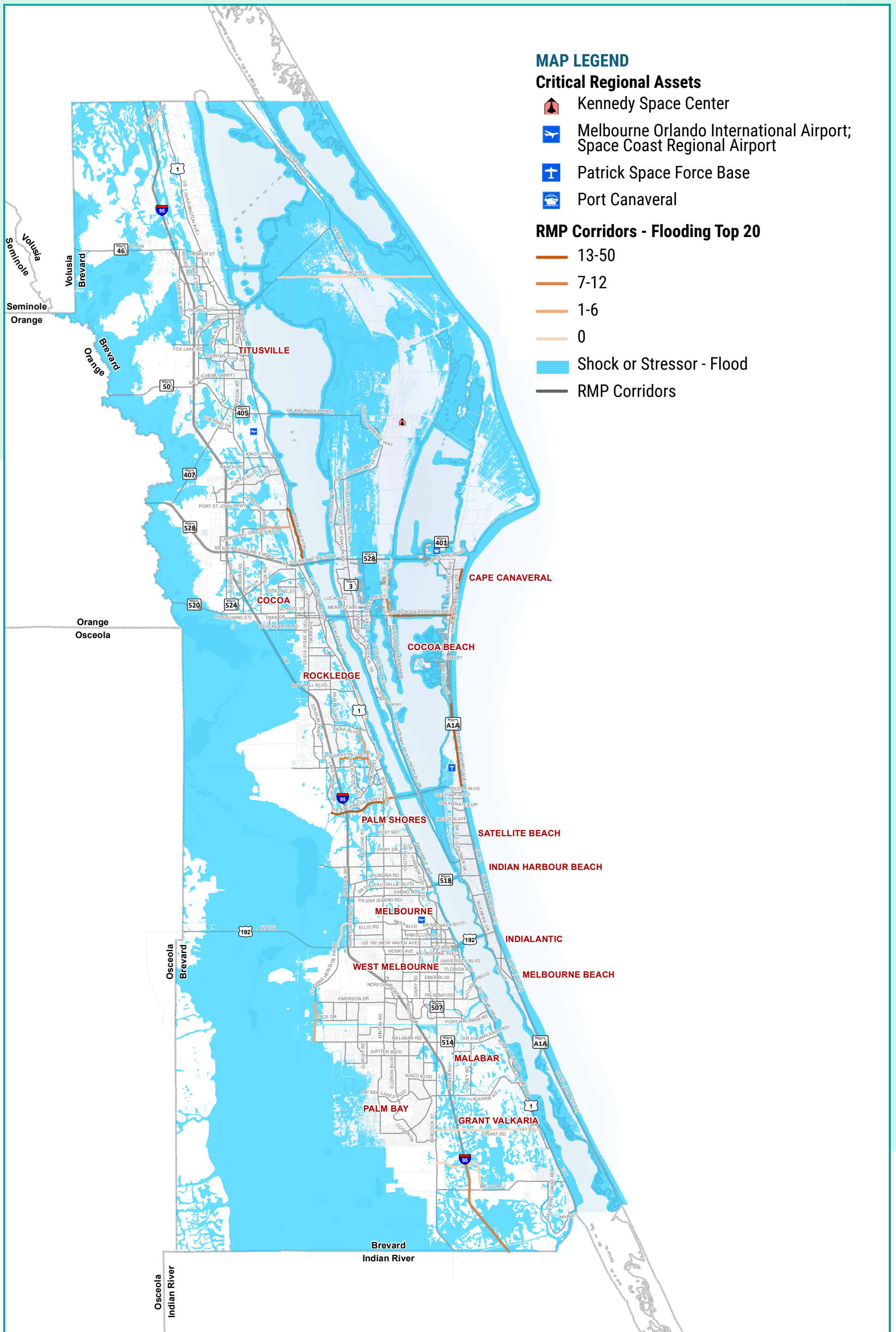
Separate tables were created for each shock and stressor. For each, corridors are sorted by their severity of impact to a specific shock/stressor, portion of the corridor length (mile) impacted by the shock/stressor, and total score. This sorting criteria is shown for the top 20 corridors for each shock/stressor in **Appendix D: Shocks/Stressors Top 20 Summary Tables**. The top 20 corridors and impact area for each shock and stressor are illustrated in **Figure 10 to Figure 14**.

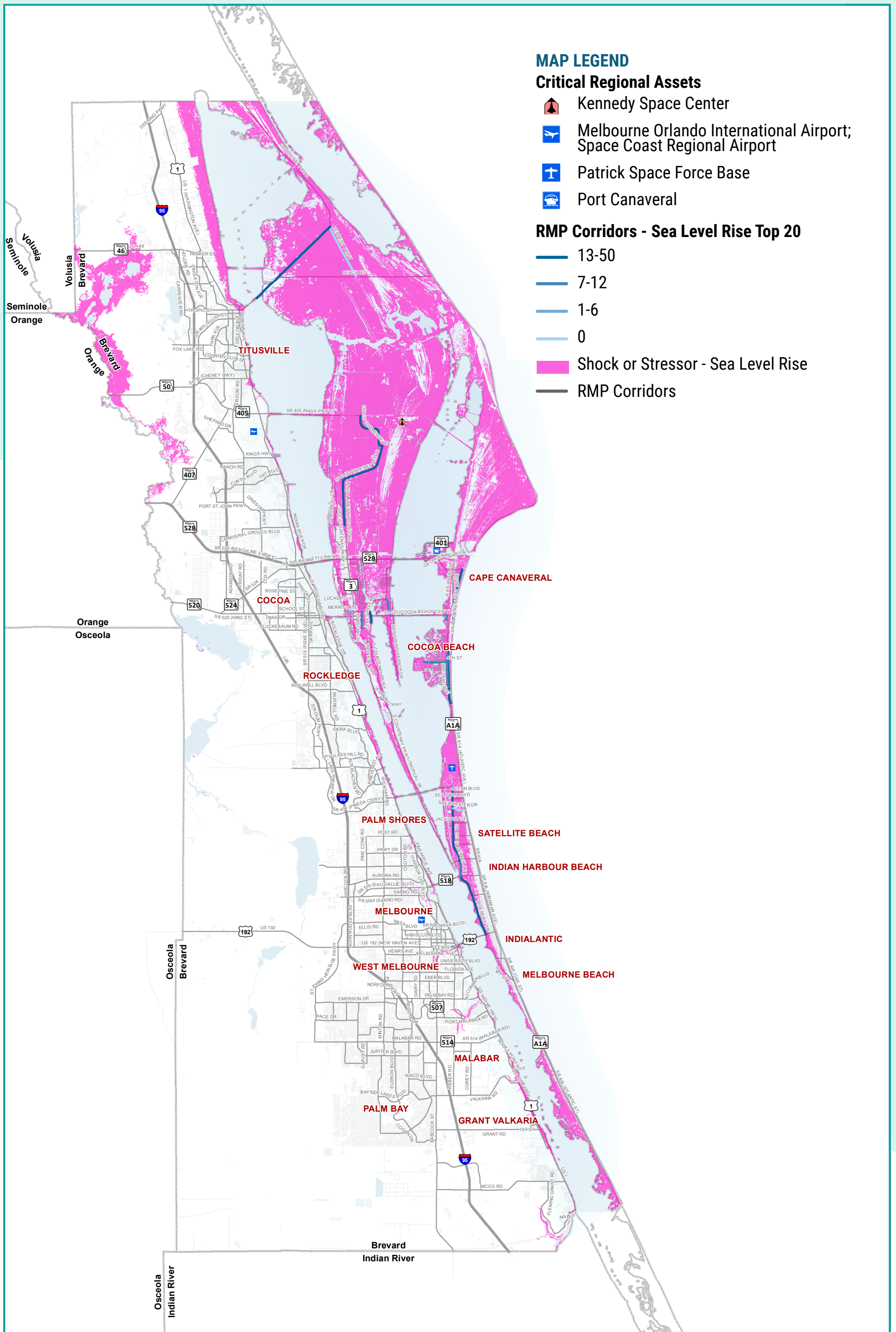
The following are key takeaways from the top 20 tables for each shock and stressor:

- ◆ For flooding, the top two corridors are the St Johns Heritage Parkway, which have a severe impact to flooding with 100% of their length in the flooding impact area.
- ◆ The top flooding corridor is St Johns Heritage Parkway from US 192 to I-95, and it serves a critical local asset but does not serve vulnerable populations or critical regional assets.
- ◆ All of the corridors in the top 20 table for SLR are severely impacted by SLR and have 99% or 100% of their entire length in the impact area.
- ◆ The top two corridors for SLR are both segments of SR 3 (Courtenay Parkway), and they are severely impacted and are 100% in the SLR impact area.
- ◆ Both top-scoring corridors for SLR also serve critical functions and provide access to local and critical regional assets.
- ◆ Riverside Drive ranks 4<sup>th</sup> in the top 20 SLR table but has the highest Total Score and serves vulnerable populations.







- ◆ For storm surge, the top 10 corridors of the table are severely impacted and have 100% of their corridor length in the storm surge impact area.
- ◆ Of the top 20 corridors for storm surge, two serve vulnerable populations, but a majority do not provide access for critical regional assets.
- ◆ For fire, the top two corridors (SR 3 (Courtenay Pkwy) and Space Commerce Way) are the only corridors from the top 20 list to serve as access to a critical regional asset.
- ◆ For fire, 14 of the top 20 corridors serve a “Most Critical” function.
- ◆ For shoreline erosion, two corridors of Rockledge Drive are at the top of the table, but only the corridor from Park Avenue to Bougainvillea Drive has a criticality score (serves a critical local asset).
- ◆ The top two corridors for shoreline erosion are severely impacted and have 100% of their length in the shoreline erosion impact area.
- ◆ Neither of the top two corridors for shoreline erosion serve vulnerable populations.











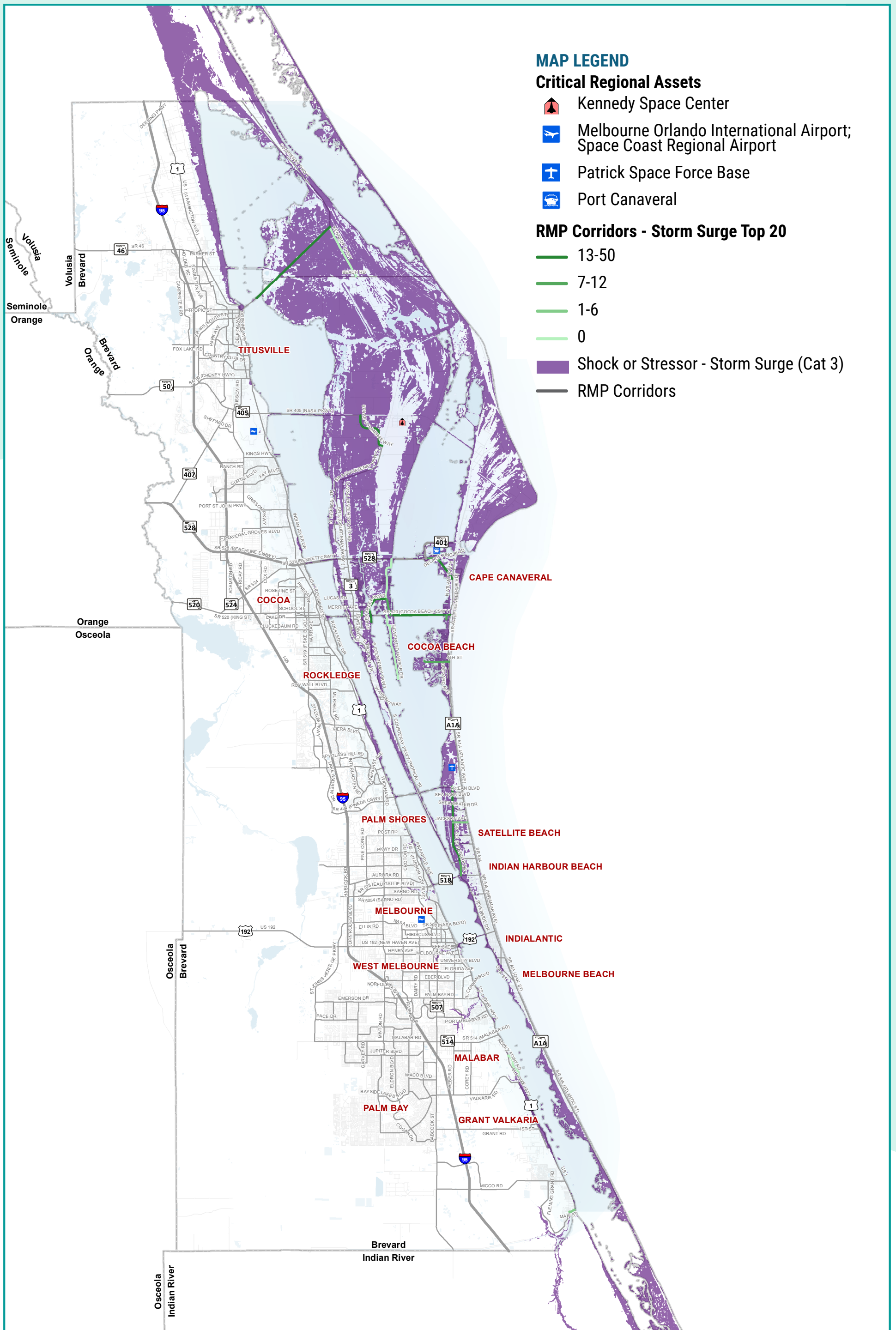
**MAP LEGEND**

**Critical Regional Assets**

-  Kennedy Space Center
-  Melbourne Orlando International Airport; Space Coast Regional Airport
-  Patrick Space Force Base
-  Port Canaveral





**RMP Corridors - Sea Level Rise Top 20**

-  13-50
-  7-12
-  1-6
-  0
-  Shock or Stressor - Sea Level Rise
-  RMP Corridors









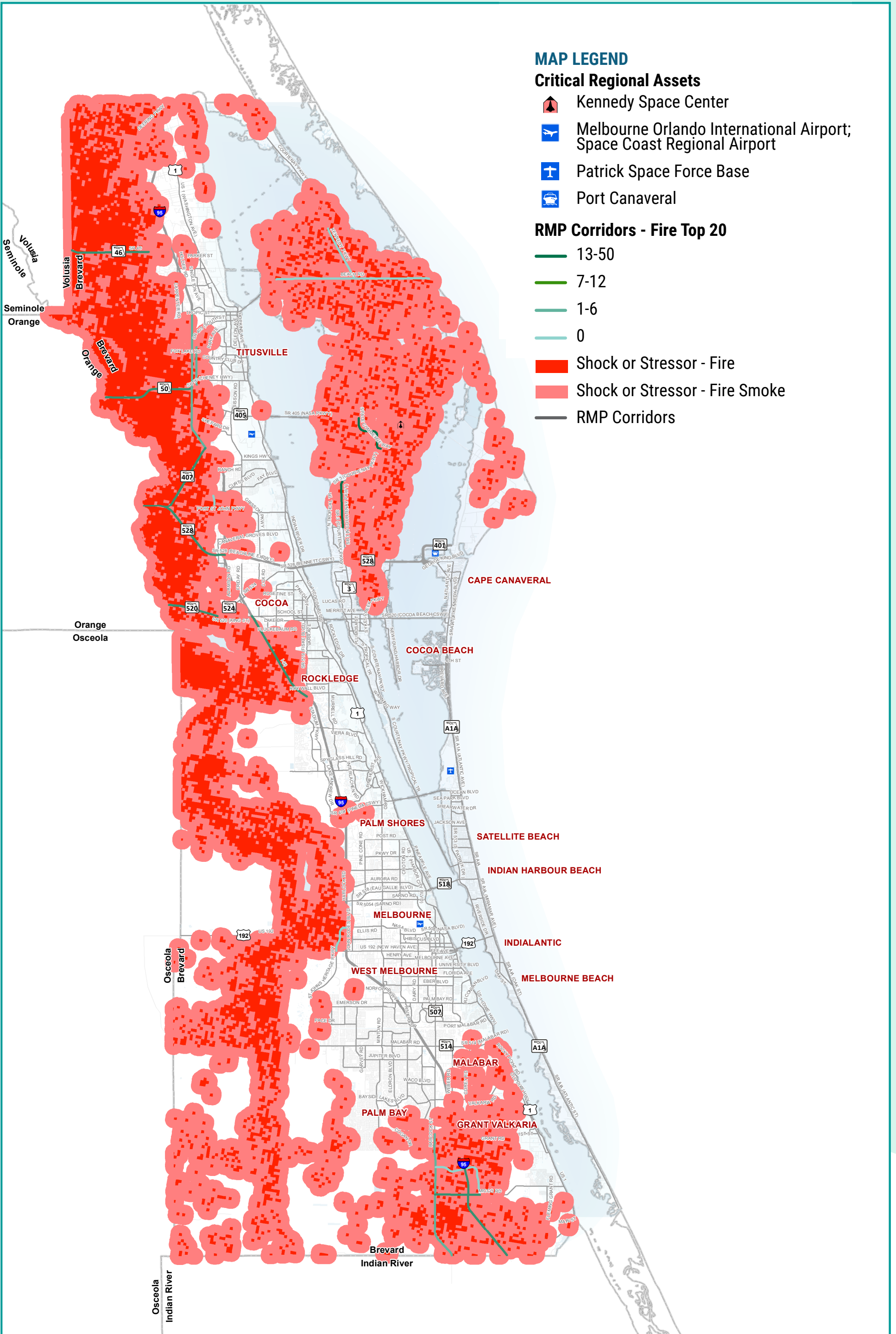
**MAP LEGEND**

**Critical Regional Assets**

-  Kennedy Space Center
-  Melbourne Orlando International Airport; Space Coast Regional Airport
-  Patrick Space Force Base
-  Port Canaveral





**RMP Corridors - Storm Surge Top 20**

-  13-50
-  7-12
-  1-6
-  0
-  Shock or Stressor - Storm Surge (Cat 3)
-  RMP Corridors










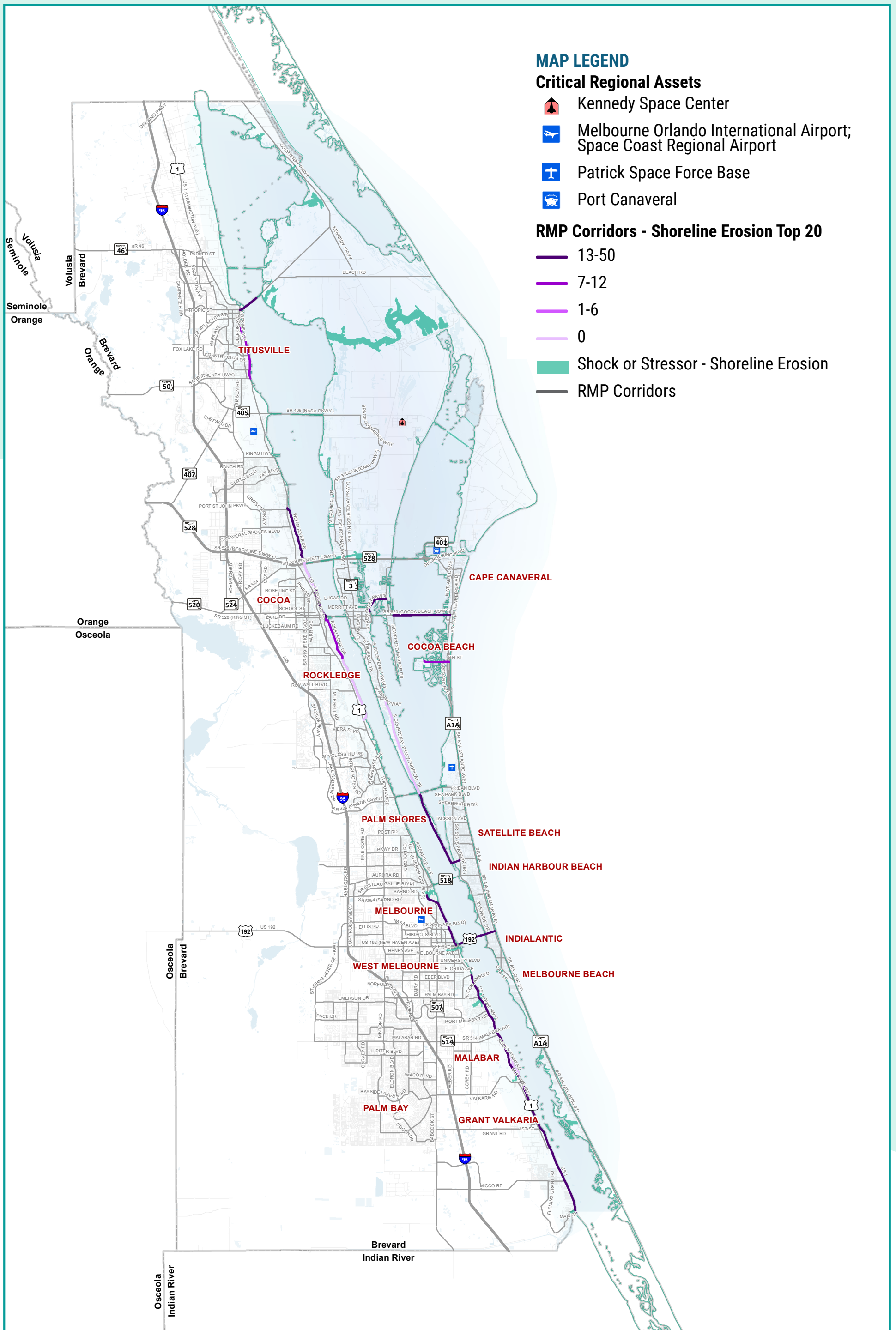
**MAP LEGEND**

**Critical Regional Assets**

-  Kennedy Space Center
-  Melbourne Orlando International Airport; Space Coast Regional Airport
-  Patrick Space Force Base
-  Port Canaveral

**RMP Corridors - Fire Top 20**

-  13-50
-  7-12
-  1-6
-  0
-  Shock or Stressor - Fire
-  Shock or Stressor - Fire Smoke
-  RMP Corridors



## 4.0 NEXT PHASES

The next steps are to review the analysis of vulnerable and critical corridors with the Transportation RMP Task Force, Focus Groups, TD community liaisons, and other key stakeholders. Following that, short-, mid-, and long-term actionable mitigation strategies will be defined based on the corridors ranking highest from the network analysis. To support the implementation of mitigation strategies, implementation guides will be developed to provide guidance on implementing actions and tracking progress over time.

# 5.0 APPENDIX

## Contents

Appendix A: Outreach and Education

Appendix B: Summary Table Definitions

Appendix C: Vulnerability and Criticality of All Corridors Table

Appendix D: Shocks/Stressors Top 20 Summary Tables





APPENDIX A: OUTREACH AND EDUCATION



# TASK FORCE MEETING 2 AGENDA AND NOTES





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## Transportation Resiliency Master Plan

Task Force Meeting #2 Agenda  
May 27, 2021; 9:00 am - 11:00 am

Virtual via GoToMeeting

Please join my meeting from your computer, tablet or smartphone.

<https://global.gotomeeting.com/join/521966341>

You can also dial in using your phone.

United States: [+1 \(872\) 240-3412](tel:+18722403412) and Access Code: 521-966-341

- 
1. Introductions and Focus of the Meeting
  
  2. What We Have Done/What We Have Learned
    - a. Study Overview and Activities
    - b. Task Force Members Share Their Activities and Communications on Resiliency
    - c. What We Heard during Stakeholder Discussions
  
  3. Interactive Shocks/Stressors Discussion
    - a. Long List of Shocks/Stressors
    - b. Identifying and Prioritizing Shorter List of Shocks/Stressors
    - c. Identify Focus Groups for Shorter List of Shocks/Stressors
  
  4. Next Steps
    - a. Identify Focus Groups
    - b. Define Influence Areas
    - c. Determine Methods for Identifying Critical Infrastructure/Areas
    - d. Develop Scenarios and Projections



## Task Force Meeting #2

**Date:** Thursday, May 27, 2021

**Time:** 9:00 AM – 11:00 AM

**Location:** Virtual via Microsoft Teams

- Georganna Gillette (Space Coast Transportation Planning Organization (SCTPO))
- Sarah Kraum (SCTPO)
- Laura Carter (SCTPO)
- Chelsea Forgenie (SCTPO)
- Abby Hemenway (SCTPO)
- Travis Hills (Kittelson & Associates, Inc. (KAI))
- Mary Raulerson (KAI)
- Sigal Carmenate (KAI)
- Chris Bame (KAI)
- Task Force invitees and attendees list attached

### Introduction:

The purpose of this meeting was to share what the Project Team has learned since Task Force Meeting #1 and identify the top shocks/stressors for Focus Group meetings and analysis. The meeting agenda included introductions, discussions about completed work, an interactive conversation about which shocks/stressors to further analyze, identification of Focus Groups members, and next steps.

### Meeting Notes:

The meeting discussion was guided by a PowerPoint presentation, and feedback was collected through open discussion throughout the presentation and a Mentimeter poll. Key discussion points from the meeting are listed below.

- The Project Team shared work that has been completed thus far including:
  - Reviewed relevant plans and programs;
  - Identified and collected data;
  - Engaged with stakeholder groups;

- Initiated public involvement and social media education campaign; and
- Developed criteria to identify transportation disadvantaged communities.
- The Task Force shared current work relevant to the Resiliency Master Plan (RMP) that their organization is conducting, or that they are otherwise aware of.
  - Darcie (Brevard County – Natural Resources) just finished public outreach for the Resilient Brevard Comprehensive Plan and is preparing a menu of options for the Board. Brevard County is seeking to select projects that enhance equity and diversity. This effort included collecting survey data, which could be shared with SCTPO, and similarly Darcie would like to have access to the SCTPO survey data.
  - Duane De Freese (IRLNEP) expects the transportation and water infrastructure to be a separate funding bill than social issues at the federal level. Duane expects the transportation funding to have a resiliency component to it.
  - Duane De Freese (IRLNEP) perceives a gap in how green infrastructure is being implemented and the outcomes we are seeking. Duane sees projects being completed in the same manner as previous, without alignment to the outcomes with permitting, design, and engineering.
  - Tara McCue (ECFRPC) – The Sea Level Impact Projection (SLIP) tool is being used on projects; however, the project impacts only need to be assessed, they do not need to be addressed.
  - Bryant Smith (City of Cocoa) – If a developer exceeds the minimum storm water requirements, then the city reduces the annual storm water fee. This program just started last year, so the effects have not been observed yet.
  - Duane De Freese (IRLNEP) – The Florida Coastal Resiliency Plan is going to be a substantial effort and formative for resiliency work. Duane perceives there to be a gap in guidance for small communities to make decisions on how to consider and act on vulnerabilities.
  - Mike McCabe (Melbourne-Tillman WCD) – There is an existing requirement for new road additions creating connection to canals meeting a specific discharge rate to mitigate the effect of water discharge from a 25 year storm.
  - Mike McCabe (Melbourne-Tillman WCD) asked if any group members had heard of using Titanium Dioxide on pavement to act as a heat sink and absorb smog. However, no group member had heard of this application.
- The long list of shocks/stressors was discussed, with several shocks/stressors being removed from the list.
  - Lexi Miller (Satellite Beach) – What does bike/ped/transit mean in terms of being a shock/stressor?
    - The lack of bike/ped transit facilities is a stressor. The SCTPO Bike/Ped Master Plan (BPMP), Space Coast Area Transit (SCAT) Transportation Disadvantaged Service Plan, and SCAT Future Plan address this stressor.
  - Duane De Freese (IRLNEP) suggested defining which items are shocks and which are stressors. Shocks and stressors are managed and responded to differently.
  - Zach Eichholz (Cape Canaveral) asked why CV/AV is removed from the shock/stressor list.

- CV/AV is expected to be addressed by the SCTPO ITS Masterplan and state and region wide planning efforts for connected and autonomous vehicles.
  - Jared Francis (Cocoa Beach) mentioned that security/cyber-attacks could affect ITS systems.
- The remaining list of shocks/stressors was reviewed to identify the chance of occurrence, the potential impact to the transportation system, and the readily available data for each shock/stressor.
  - Storm surge and shoreline erosion parallel each other and may have similar mitigation strategies. The Task Force recommended combining these shocks/stressors.
  - The hurricane shock/stressor may include other shocks/stressors including wind damage.
  - Non-recurring congestion is a medium concern to Cape Canaveral. On launch days, SR A1A gets congested and access to SR 520 or SR 528 is negatively impacted.
  - Catastrophic events may not have available data to utilize in an analysis.
  - The National Weather Service has available data for heat/drought.
  - The Florida Division of Emergency Management (DEM) should be included in discussions in addition to FEMA. DEM is expected to have a more local experience.
  - The security of freight may be a specific impact to the transportation system.
- The Task Force used Mentimeter to choose the Top 5 shocks/stressors that they thought should be analyzed further.
  - Top shocks/stressors were ranked as: Flooding (19 votes), Hurricane/Wind (19 votes), Sea Level Rise (16 votes), Shoreline Erosion/Storm Surge (11 votes), Catastrophic Events (8 votes), Extreme Heat/Drought (6 votes), Public Events/Congestion (6 votes), Security (5 votes).
  - Brenda Defoe-Suprenant (Cape Canaveral) – Extreme Heat/Drought should be prioritized before public events.
- Meeting Follow-up
  - The developed matrix will be provided to the Task Force.
  - The Task Force should review the list of Focus Group members and identify any additional members that should be considered.

The agenda, presentation, and the invitees/attendees lists are attached.

Invitees		
Name	Agency/Organization	Attended
Abby Johnson	SJRWMD	Y
Abigail Morgan	City of Cocoa	Y
Alexis "Lexi" Miller	Satellite Beach	Y
Alix Bernard	Cocoa - Planning	Y
Bob Musser	Port Canaveral	N
Brenda Defoe-Suprenant	Cape Canaveral	Y
Bryant Smith	Cocoa - Public Works	Y
Casey Lyon	FDOT	Y
Corrina Gumm	Brevard County - Public Works	N
Courtney Barker	Satellite Beach	N
Daniel Martoma	West Melbourne	N
Darcie Mcgee	Brevard County - Natural Resources	Y
David Wilkison	Melbourne	N
Deborah Coles	Brevard County	Y
Don Kean	Brevard County	N
Duane De Freese	Indian River Lagoon Council	Y
Eddy Galindo	Titusville	Y
Edward Fontanin	Brevard County - Utilities	N
Elizabeth Mascaro	Melbourne Beach	N
Holly Abeels	Florida Sea Grant/UF/IFAS Extension	Y
Jane Hart	Brevard County - Planning	Y
Jared Francis	Cocoa Beach	Y
Jason Mahaney	Grant-Valkaria	Y
Jeffery Ball	Brevard County - Planning	N
John Cooper	Rockledge	Y
John Scott	Brevard County - Emergency Management	N
Leo Angelero	Florida DEP	N
Lisa Morrell	Malabar	Y
Lori Cox	ECFRPC	Y
Marc Bernath	Brevard County	N
Mark Ryan	Indian Harbour Beach	N
Michael Casey	Indialantic	N
Mike McCabe	Melbourne Tillman WCD	Y
Ntale Kajumba	EPA	Y
Rose Lyons	Brevard County	N

Invitees		
Name	Agency/Organization	Attended
Roshanna White	EPA	N
Steve Shams	FDOT	Y
Suzanne Sherman	Palm Bay	N
Tara McCue	ECFRPC	Y
Tim Ford	Titusville	Y
Todd Corwin	Melbourne	Y
Tom Frick	SJRWMD	N
Zac Eichholz	Cape Canaveral	Y





**RIDE** the **WAVE**  
TO RESILIENCY

# **TRANSPORTATION RESILIENCY MASTER PLAN**

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**TASK FORCE MEETING #2**

**MAY 27, 2021**

**VIRTUAL VIA GOTOMEETING AND MENTIMETER**

**9:00 AM – 11:00 AM**

# AGENDA

- Introductions and Focus of the Meeting
- What We Have Done/What We Have Learned
- Interactive Shocks/Stressors Discussion
- Next Steps



# INTRODUCTIONS

- Name
- Agency/Organization



# MEETING FOCUS

- Share what we have learned since our last Task Force Meeting - everyone
- Identify the shocks/stressors for analysis
- Identify Focus Groups for each top shock/stressor



# WHAT WE HAVE DONE AND WHAT WE HAVE HEARD

What are our current conditions?

What future events potentially put our people/infrastructure at risk?

Which infrastructure are most important to protect?

What actions should we take to protect our high priority infrastructure?

		2020			2021									2022												
MAJOR TASK		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
Task 1: Develop an Education and Engagement Strategy																										
Task 2: Outreach and Education	Board/TAC/CAC Presentations																									
	Task Force Meetings								★																	
	Focus Group Discussions																									
	Stakeholder Work Sessions																									
	Underserved Community Meetings																									
	Community Outreach																									
Task 3: Data Collection and Analysis																										
Task 4: Define Shocks and Stressors																										
Task 5: Transportation Resiliency Master Plan Development																										

★ We are here

### Task 3: Data Collection and Analysis

*What are our current conditions?*

- Feedback on engagement strategy/help engage others
- Information/data on current conditions
- Continuity from best existing programs/work
- Information/data on future conditions
- Input on definitions of shocks/stressors



### Task 4: Define Shocks and Stressors

*What future events potentially put our people/infrastructure at risk?*

*What infrastructure are more important to protect?*

- Define goals/objectives to address shocks/stressors
- Feedback on scenarios/projections runs and critical areas/corridors/infrastructure
- Feedback/buy-in on vulnerable corridors

- Advise on identifying the top six shocks/stressors



### Task 5: Transportation Resiliency Master Plan Development

*What actions should we take to protect our high-priority infrastructure?*

- Implementing strategies
- Identify barriers to implementation

# WORK COMPLETED

- Reviewed relevant work – Brevard County, Local Municipalities, ECFRPC, FDEP, IRLNEP, and other agencies
- Identified and collected data
- Developed long list of potential shocks/stressors
- Public Involvement and Social Media Education Campaign
- Environmental Stakeholders Work Session – 3/1/21
- Economic Stakeholders Work Session – 3/26/21
- Transportation Disadvantaged (TD) Community Conversation #1 – 5/12/21






# PUBLIC INVOLVEMENT

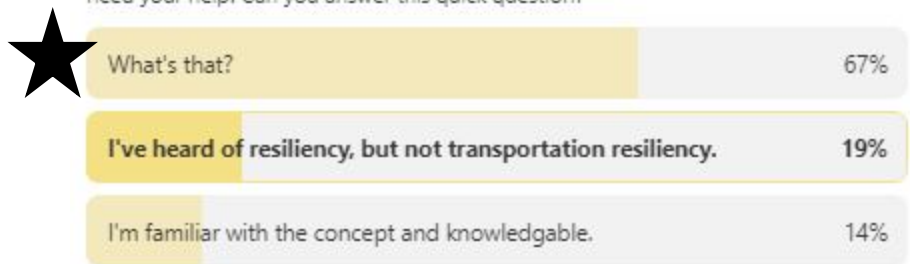
- **Developed Goals, Objectives, and Performance Measures**
  - Educate about Resiliency
  - Disseminate information about the plan
  - High-level feedback/input
- **Project Website: [www.tinyurl.com/sctpotrmp](http://www.tinyurl.com/sctpotrmp)**
- **Quarterly Social Media Campaigns**
- **Resiliency Relays**
- **Community Outreach and Presentations:**
  - Titusville Chamber of Commerce April Luncheon
  - East Central Florida Regional Resilience Collaborative Summit



 **Brevard County**  
Space Coast Transportation Planning Organization PIO Abby Hemenway •  
29 Mar



How familiar are you with the concept of transportation resiliency? The Space Coast TPO is currently developing its Transportation Resiliency Master Plan and we need your help! Can you answer this quick question?



208 votes Closed

Posted to **Subscribers of Brevard County**

 Like  9 Comments  Share

  8 · 11783 Impressions



 **Brevard County**  
Space Coast Transportation Planning Organization PIO Abby Hemenway •  
12 Apr



How concerned are you about our transportation system's resiliency? The SCTPO is currently developing its Transportation Resiliency Master Plan and we need your help! Answer this quick question: How concerned are you about our transportation system's resiliency?



231 votes Closed

Posted to **Subscribers of Brevard County**

 Like  23 Comments  Share

  6 · 13212 Impressions

# STAKEHOLDER ENGAGEMENT

## Environmental Stakeholders

- Brevard County Natural Resources
- Brevard County EEL
- Brevard County Zoo
- Indian River Lagoon Council
- Marine Resources Council
- Subject Matter Experts

## Economic Stakeholders

- Space Coast Office of Tourism
- weVENTURE Women's Center
- Cocoa Beach Chamber of Commerce
- Titusville Chamber of Commerce
- Melbourne Regional Chamber
- Florida Small Business Development Center

## TD Stakeholders

- Brevard County
- United Way of Brevard
- Space Coast Area Transit (SCAT)
- Aging Matters Brevard
- Brevard Schools
- Brevard Achievement Center
- Brevard Alzheimer's Foundation

# WHAT WE HAVE HEARD – KEY POINTS

- Roadway projects have historically focused on **flood control** instead of where water is discharging
- **Stormwater storage** and infrastructure design must consider future **sea levels** to ensure that these systems can function for their intended design life
- Transportation infrastructure issues influences **economic growth**
- **Pedestrian safety** – both as a transportation challenge in attracting new employers and negatively impacting tourism
- Overall **safety and security** of the transportation system
- **Connectivity** between the mainland and beaches is important
- **Transit** service is critical to **transportation disadvantaged** populations

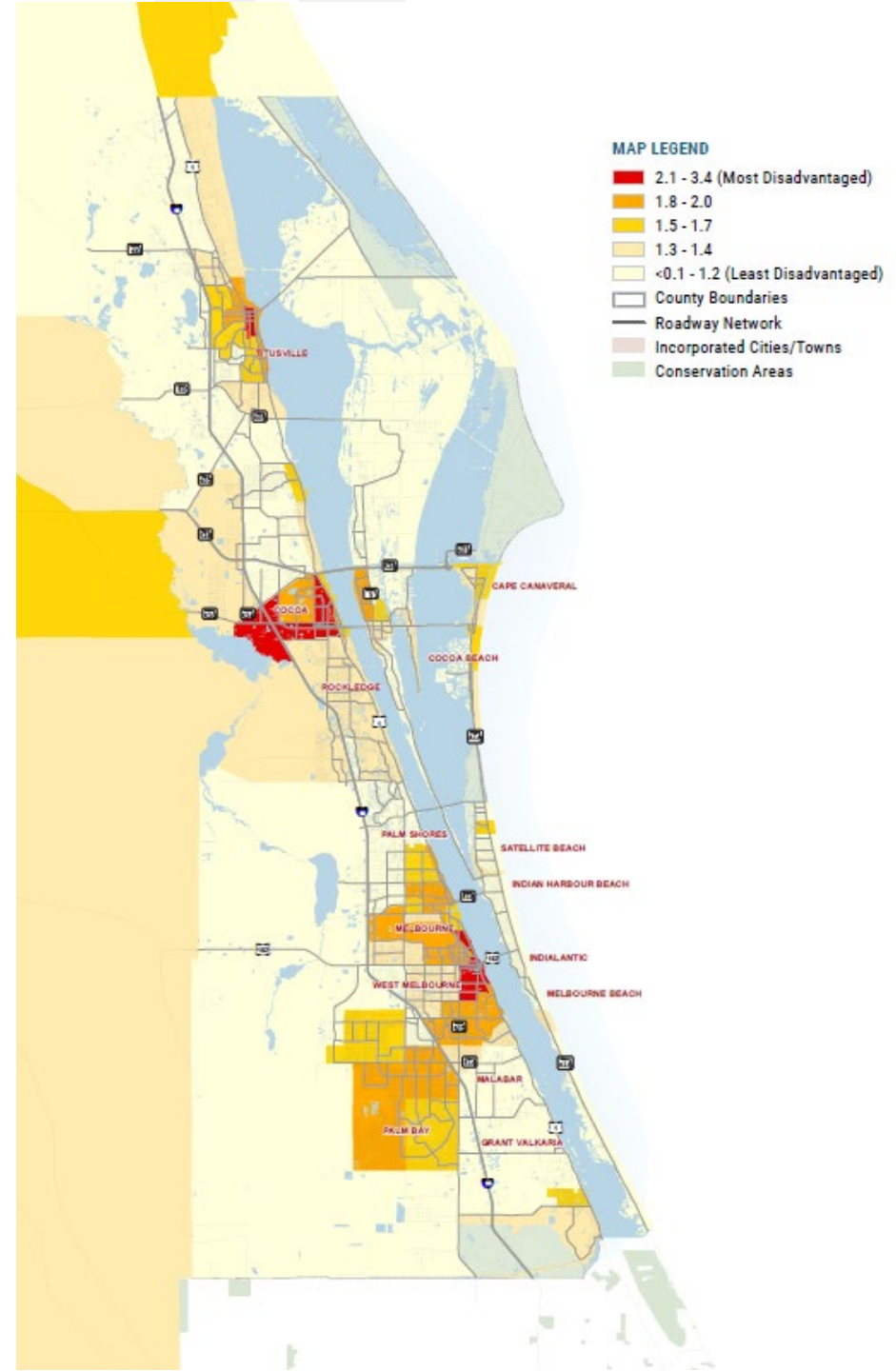
# WHAT WE HAVE HEARD – KEY POINTS

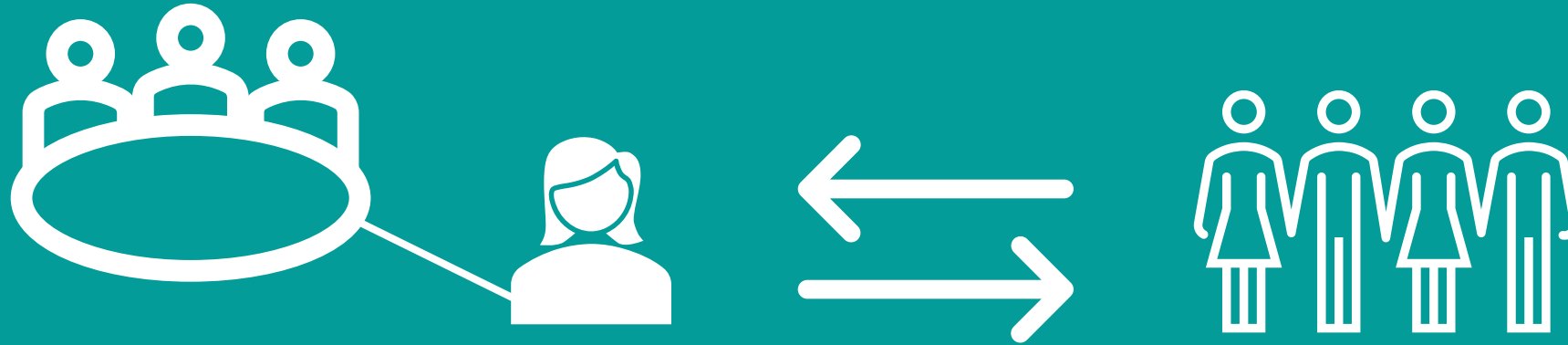
- **North Brevard:** more **conservation lands** and prominent transportation corridors connecting to Orlando
- **Central Brevard:** more **multimodal**, prominent **port and beach access**, adequate access to the west
- **South Brevard:** fewest east/west connections making **evacuation** more challenging
- **Transportation Deserts** (no transit, lack of safe ped/bike facilities) create barriers to non-car travel
- Connectivity/access for all modes to **Ports**
- **Public transit** is needed to support **economic growth**
- Access to transportation **impacts job opportunities** and attendance

# TRANSPORTATION DISADVANTAGED COMMUNITIES

## Criteria considered:

- Overburdened renters
- Population under age 18 in a single-parent household
- Population with a disability
- Population under age 10
- Population over age 75
- Workers without vehicle access
- Population with limited English proficiency
- Low-income population
- Communities of Color (All races and ethnicities beside White Non-Hispanic)





**ONE MAJOR ROLE OF THIS TASK FORCE:  
SHARE INFORMATION WITH LOCALS  
&  
SHARE LOCAL INFORMATION WITH US**

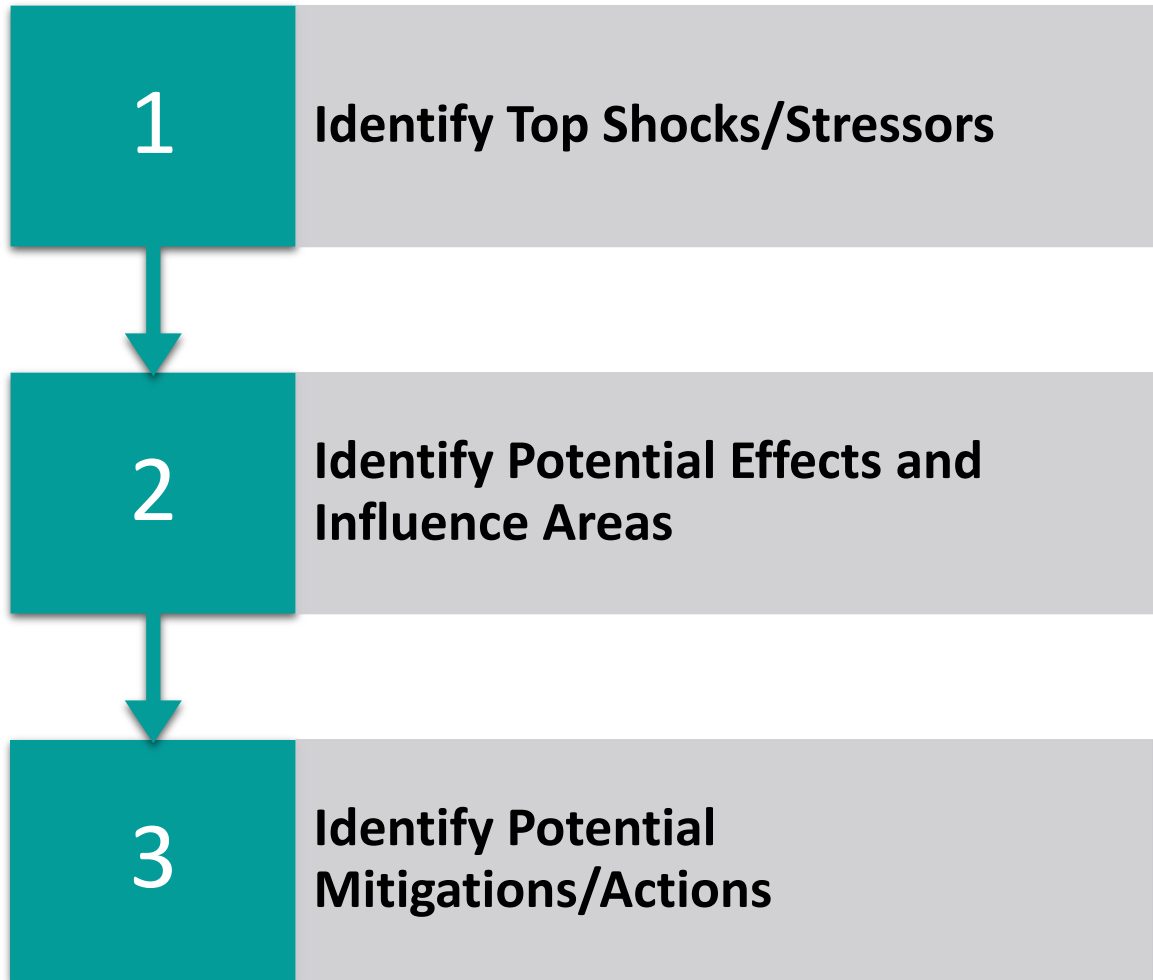
# TASK FORCE DISCUSSION

- Feedback on what we have heard
- Have you heard anything else?
- Are there any other opportunities or concerns?
- What are your current initiatives?
- Is there new/emerging legislation on resiliency?





# SHOCKS AND STRESSORS



# SHOCKS/STRESSORS LONG LIST

- Aging Infrastructure
- Flooding
- Funding
- Sea Level Rise
- Community Connections/Affordability
- Hurricane/Storm Surge
- Public Events/Congestion
- Catastrophic Events
- Shoreline Erosion
- Extreme Heat/Drought
- Security (e.g., cyber-attacks)
- Connected and Autonomous Vehicles (CAV)/Electric Vehicles (EV)/Intelligent Transportation System (ITS)
- Pandemic
- Safety
- Bike/Pedestrian/Transit
- Daily Congestion

# SHOCKS/STRESSORS – A WORK IN PROGRESS

## Suggested for more consideration:

- Flooding
- Sea Level Rise
- Hurricane/Storm Surge
- Public Events/Congestion
- Catastrophic Events
- Shoreline Erosion
- Extreme Heat/Drought
- Security (e.g., cyber-attacks)

## Proposed for Removal

- Aging Infrastructure
- Funding
- Community Connections/Affordability
- Connected and Autonomous Vehicles (CAV)/Electric Vehicles (EV)/Intelligent Transportation System (ITS)
- Pandemic
- Safety
- Bike/Pedestrian/Transit
- Daily Congestion

# INTERACTIVE SHOCKS/STRESSORS DISCUSSION

Shock/Stressor	Is it imminent or currently occurring?	Does it directly impact transportation?	Potential impact to transportation system	Is data readily available?
Flooding				
Sea Level Rise				
Hurricane/Storm Surge				
Public Events/Congestion				
Catastrophic Events				
Shoreline Erosion				
Extreme Heat/Drought				
Security				

# MENTIMETER QUESTIONS

Mentimeter will be utilized as a component of audience participation.

Go to Menti.com using a computer, tablet, or cellular device and enter code:

XX XX XX X

# PRIORITIZATION EXERCISE

- Choose 5 shocks/stressors you think should be focused on.
  - [www.menti.com](http://www.menti.com)
  - XXXXXXXX



Source: Florida Today

# LOOKING AHEAD - SHOCKS/STRESSORS ANALYSIS

- Determine the Influence Areas
- Identify critical areas/infrastructure
- Develop scenarios/projections
- Determine potential effects
- Identify mitigations/solutions
- Develop implementation plan





# WHO SHOULD BE ENGAGED IN THE FOCUS GROUPS FOR TOP SHOCKS/STRESSORS?

- Detailed discussions on individual shocks/stressors
- Relevant experts
- Data resources
- There will be Task Force member crossover



# FLOODING FOCUS GROUP IDEAS

- Natural Resources
- Drainage engineers
- FEMA
- Army Corp of Engineers
- SJRWMD
- Melbourne-Tillman
- Who else?

# SEA LEVEL RISE FOCUS GROUP IDEAS

- Natural Resources
- East Central Florida Regional Planning Council
- UF GeoPlan
- Current Sea Level Rise Researchers (ex: Jason Evans, Randy Parkinson and Thomas Ruppert)
- Army Corp of Engineers
- SJRWMD
- Who else?

# HURRICANE/STORM SURGE FOCUS GROUP IDEAS

- Emergency Operations Center
- NOAA
- FEMA
- East Central Florida Regional Planning Council
- FDOT
- Public Works
- Utilities
- Transit
- Who else?

# PUBLIC EVENTS/CONGESTION FOCUS GROUP IDEAS

- Public Works
- FDOT – ITS/TSMO
- Space Florida/NASA/KSC
- Tourism Development Council
- Port Canaveral
- Melbourne-Orlando International Airport
- Who else?

# CATASTROPHIC EVENTS FOCUS GROUP IDEAS

Scenario needs to be more developed to direct who should be involved.

- Emergency Operations Center
- FEMA
- Who else?

# SHORELINE EROSION FOCUS GROUP IDEAS

- Natural Resources
- IRLNEP
- Marine Resources Council
- Florida EPA
- Florida Fish & Wildlife
- SJRWMD
- Army Corp of Engineers
- Florida Sea Grant/UF/Agriculture Center
- Who else?

# EXTREME HEAT/DROUGHT FOCUS GROUP IDEAS

- NOAA
- East Central Florida Regional Resiliency Collaborative
- FDOT
- Natural Resources
- Utilities
- IRLNEP
- FEMA
- EEL Program/Other Forestry Managers
- Emergency Services
- Who else?



# SECURITY FOCUS GROUP IDEAS

- Public Works
- FDOT – ITS/TSMO
- Space Florida/NASA/KSC
- Port Canaveral
- Melbourne-Orlando International Airport
- Who else?

# NEXT STEPS



# NEXT STEPS

- Organize Focus Group Discussions
- Identify Influence Areas
- Determine methodology for identifying critical infrastructure/corridors
- Develop scenarios/projections





# Thank you!



Sarah Kraum, Senior Transportation Planner



(321) 350-9263



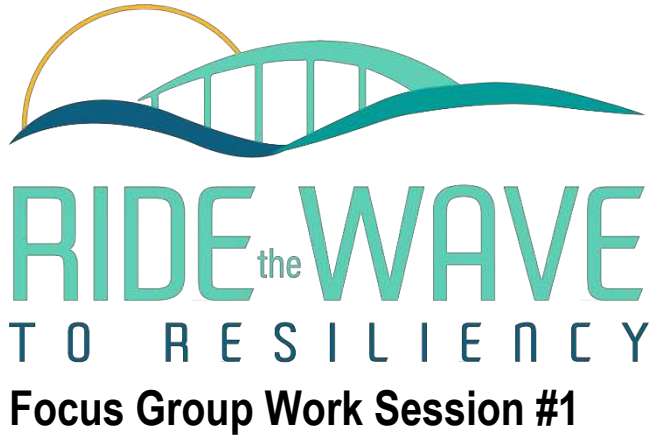
sarah.kraum@brevardfl.gov



<http://spacecoasttpo.com/>

## FOCUS GROUP WORK SESSIONS





**Date:** Tuesday, August 3, 2021

**Time:** 9:00 AM – 11:30 AM

**Location:** Center for Collaboration, 1100 Rockledge Blvd, US 1, Rockledge, FL 32955

**Attendees** (the attached sign-in sheet includes affiliated organizations):

- Bach McClure
- Brad Kroetch
- Casey Lyon
- Chelsea Forgenie
- Chris Bame
- Darcie McGee
- Dr. Randy Parkinson
- Jane Hart
- Jared Francis
- Karl Christiansen
- Laura Carter
- Mary Raulerson
- Mike McGarry
- Sarah Kraum
- Sigal Carmenate
- Tara McCue
- Tim Leech

**Introduction:**

- The purpose of the Focus Group Work Session was to develop scenarios for shocks/stressors, identify the facilities that would be impacted by shocks/stressors, develop criteria for prioritizing impacted facilities, and begin to brainstorm actionable strategies to address the shocks/stressors.
- The Focus Group Work Session started with a short overview presentation of the Transportation Resiliency Master Plan (Transportation RMP).
- The bulk of the Focus Group Work Session was spent in breakout group discussions, each exploring a different set of shocks/stressors:
  - a. Sea Level Rise/Flooding; and
  - b. Hurricanes/High Winds/Storm Surge/Shoreline Erosion.
- Focus Group Work Session participants were asked to choose which breakout group to join, and were given one hour and twenty minutes to review the map plots and answer the questions on the exercise sheet.
- The Focus Group Work Session concluded with a participant from each breakout group summarizing the key takeaways of their group’s discussion.

**Meeting Highlights:**

Key discussion points from the Sea Level Rise/Flooding breakout group are summarized below.

- **Takeaways**
  - The sea level rise scenarios do not show the growing frequencies and intensities of precipitation events that are currently occurring which cause recurring flooding issues.
  - The events following King Tides happen regularly and are the same intensities as inundation from sea level rise under the 2040 National Oceanic and Atmospheric Administration (NOAA) High Curve.
- **What scenarios should be planned for?**
  - For sea level rise the NOAA High Curve should be used. The 2040, 2070, 2100 projection years are appropriate to use.
  - For flooding, the impact of King Tides and of more frequent and heavier rainfalls should be reviewed in addition to Federal Emergency Management Agency's (FEMA) Flood Hazard Zones.
  - Can expect parts of US 1 to be flooded more than once every six months.
  - While not shown in the FEMA Flood Hazard Zones map, the City of Cocoa experiences regular flooding from precipitation events.
  - The St Johns River Flooding Model is from the 60's, which may not reflect current drainage patterns. Increasing lagoon water levels have caused drainage after storms to slow.
  - There are hydrology models of Crane Creek and the Eau Gallie River which were developed as part of an ICPR FEMA Grant.
  - The intensities and frequencies of storms have been increasing recently with more inches of rain in a storm.
- **What is the expectation for infrastructure function?**
  - To support the space industry.
  - To support the economy through the movement of people and goods.
  - To serve as evacuation routes.
- **What facilities are of the greatest concern?**
  - The causeways are critical to serve residents' everyday needs and to the economic development of Brevard County.
  - The communities in South Brevard County, like Malabar, Grant-Valkaria, and Palm Bay are vulnerable because they are more isolated than other communities in the County if roadways are shutdown.
  - The communities around SR 520 by Milford Point Drive are vulnerable to either corridor closing.
  - Specific corridors that were identified by the breakout group included the following:
    - SR 520;
    - SR 46;
    - SR 528 provides drinking water to Cape Canaveral through the corridor's waterline;
    - NASA Causeway;

- SR A1A/Sebastian Inlet Bridge;
  - I-95 between Fiske Boulevard and SR 520;
  - Pineda Causeway under US 1;
  - S Tropical Trail/S Courtenay Parkway/SR 3;
  - Max Brewer Bridge; and
  - US 1.
- **Why should a facility be prioritized?**
    - It provides access to rail.
    - Percent of roadway miles impacted by a shock/stressor
    - Serves as an economic driver.
    - Serves vulnerable communities (socioeconomic, few other access points, distrustful of the impact of sea level rise/flooding).
    - Serves transit routes.
    - Is a designated evacuation route.
    - Carrying clean water supply.
    - Providing communities with access to markets/food.
    - Can carry a high capacity of roadway users.
    - Number of residents served.
  - **What are some families of actionable strategies?**
    - Materials resistant to damage from sea level rise/salt water.
    - Alternative construction methods and new building materials are an initial investment worth making to mitigate effects of sea level rise/flooding in the future.
    - Align policies with local policies and guidance.
    - Align policies and processes that support statewide mandates requiring municipalities/organizations to maintain roadways in perpetuity.
    - Keeping the public informed on resiliency activities and educating the public.
  - **What are other considerations?**
    - Different transportation tolerance levels depend on the individuals and businesses needs and preferences.
    - Land development and maintenance policies will need to reflect growing risks from flooding and sea level rise.
    - Conduct an analysis on the proportion of a roadway segment that is impacted by sea level rise/flooding and determine if that means the entire roadway is unusable.
    - Economic Impacts – previous studies conducted to look at what the impact storms would have on the economy based on the number of days out of business.
    - Salt water has been intruding upon the Malabar drinking water.



Key discussion points from the Hurricanes/High Winds/Storm Surge/Shoreline Erosion breakout group are summarized below.

- **Takeaways**
  - It is important to distinguish between vulnerable facilities and elements that can be used to identify/prioritize those that are most critical.
  - Some primary damages of hurricanes are shoreline erosion and wind; keep this in mind when looking at static maps that just illustrate one factor.
    - Roadways that have a steep embankment and are close to water may be destroyed due to shoreline erosion. Roads within 30-50 feet with more than a 1:4 slope to the water are expected to be vulnerable to shoreline erosion.
      - Coordinate with FDOT maintenance office to determine ways to define these areas.
- **What scenarios should be planned for?**
  - Historically causeways have been designed to withstand a Category 3 hurricane.
  - Analysis should consider the impacts of Category 3 hurricanes in addition to Category 5 hurricanes.
- **What is the expectation for infrastructure function?**
  - It was generally agreed upon that facilities may be inoperable during a hurricane.
  - Temporary inundation of roadways is expected, however roadway destruction/wash out after a shock is undesirable.
  - Roadways should provide for in/out function allowing people to evacuate.
  - Quickly providing access to Air Force bases to allow staff to return.
- **What facilities are of the greatest concern?**
  - The breakout group was most concerned about US 1 and the Causeways.
    - Notably US 1 in Melbourne and other segments where there are not houses between the roadway and the lagoon.
    - US 1 in northern Brevard County is anticipated to be less vulnerable.
  - Port Canaveral supplies jet fuel to Orlando International Airport, along with other major imports and exports.
  - Rail is a major transporter of goods in the region.
  - Other facilities that were discussed include: SR 520, S Tropical Trail/S Courtenay Parkway/SR 3, and SR A1A.
- **Why should a facility be prioritized?**
  - Roadways with no parallel routes.
  - Facilities with the greatest vulnerability to shocks/stressors.
  - Roadways providing access to hospitals/grocery stores/emergency facilities.
  - Areas with vulnerable populations who may become isolated.
  - Potentially roadways with bus routes, especially in Transportation Disadvantaged Population (TDP) areas or areas with low vehicle ownership.
  - Number of people served.
  - Economic value.

- Number of shocks and stressors.
- **What are other considerations?**
  - Some causeways support the water supply to the barrier islands.
  - Some hardening strategies such as vertical walls and riprap can be effective at protecting the roadway but also have a negative ecological effect. Some walls (“redeemed walls”) can maintain the ecology, but must be maintained.
  - Differentiation is needed between critical roadways and impacted roadways.

The agenda, presentation, photos of the marked up exercise worksheet, and list of the invitees/attendees are attached.

### **Next Steps:**

The next steps for the Resiliency Master Plan are:

- Finalize influence areas;
- Finalize methodology for prioritizing vulnerable corridors;
- Gather Task Force feedback – September/October 2021;
- Hold 2<sup>nd</sup> Focus Group Meeting – Late 2021;
- Document findings in Technical Memorandum – Early 2022; and
- Subsequently develop actionable mitigation strategies and continue outreach and education.

Invitees			
Name	Agency/Organization	Focus Group	Attended
Lixin Huang	Brevard County GIS	Flooding/SLR	No
Jane Hart	Brevard County Planning	Flooding/SLR	Yes
Frank Skarvelis	Brevard County Public Works	Flooding/SLR	No
Don Kean	Brevard County Utilities	Flooding/SLR	No
Bach McClure	Brevard Natural Resources	Flooding/SLR	Yes
Darcie McGee	Brevard Natural Resources	Flooding/SLR	Yes
Mike McGarry	Brevard Natural Resources	Hurricane	Yes
Corrina Gumm	Brevard Public Works	Hurricane	No
Ashley Rearden	Brevard Zoo	Hurricane	No
Jessica Bruso	Cocoa Beach Stormwater	Flooding/SLR	No
Michelle Cechowski	ECFRPC	Hurricane	No
Tara McCue	ECFRPC	Flooding/SLR	Yes
Drew Sussman	FDEM	Hurricane	No
Leo Angelero	FDEP	Hurricane	No
Jay Williams	FDOT	Hurricane	No
Ron Meade	FDOT	Hurricane	No
Steve Shams	FDOT	Flooding/SLR	No
Ferrell Hickson	FDOT	Flooding/SLR	No
Casey Lyon	FDOT	Hurricane	Yes
Suzanne Phillips	FDOT	Hurricane	No
Sheryl Bradley	FDOT	Hurricane	No
Dr. Steven Lazarus	FIT	Hurricane	No
Dr. Randy Parkinson	FIU	Flooding/SLR	Yes
Julie Mitchell	FWC	Hurricane	No
Duane DeFreese	IRL	Hurricane	No
Christopher Bame	KAI	N/A	Yes
Mary Raulerson	KAI	N/A	Yes
Sigal Carmenate	KAI	N/A	Yes
Dr. Leesa Souto	MRC	Hurricane	No
Mike McCabe	MTWCD	Flooding/SLR	No
Steven Gilmore	NASA	Flooding/SLR	No
Scott Spratt	National Weather Service	Hurricane	No
William Sweet	NOAA	Flooding/SLR	No
Bob Musser	Port Canaveral	Flooding/SLR	No
Terry Jordan	SCAT	Hurricane	No
Tom Frick	SJRWMD	Flooding/SLR	No

Invitees			
Name	Agency/Organization	Focus Group	Attended
Chelsea Forgenie	Space Coast TPO	N/A	Yes
Laura Carter	Space Coast TPO	N/A	Yes
Sarah Kraum	Space Coast TPO	N/A	Yes
Brad Kroetch	Space Force	Hurricane	Yes
Karl Christiansen	Space Force	Hurricane	Yes
Jason Evans	Stetson	Flooding/SLR	No
Crystal Goodwin	UF Geoplan	Flooding/SLR	No
Thomas Ruppert	UFL	Flooding/SLR	No
Kipp Weber	USACE	Flooding/SLR	No
Other Attendees			
Name	Agency/Organization	Focus Group	Attended
Jared Francis	Cocoa Beach	Flooding/SLR	Yes
Tim Leech	Space Force	Flooding/SLR	Yes



## Focus Group Work Sessions Schedule

**Date:** Tuesday, August 3rd, 2021

**Time:** 9:00 AM – 12:00 PM

**Location:** Center for Collaboration 1100 Rockledge Blvd, US-1, Rockledge, FL 32955

### Check-in: 8:30 – 9:00 AM

- Check-in and collect nametag

### Large Group Introduction: 9:00 – 9:30 AM

- Overview of Transportation RMP Scope and Schedule
- Focus Group Work Session Purpose and Objectives
- Breakout Group Discussions Logistics

### Networking Break: 9:30 – 9:40 AM

- Light refreshments will be served
- Make your way to your Focus Group Breakout table

### Breakout Group Discussions: 9:40 – 10:50 AM

- Breakout Group 1: Sea Level Rise & Flooding Focus Group
- Breakout Group 2: Hurricane/Wind Damage & Storm Surge/Shoreline Erosion Focus Group

### Networking Break: 10:50 – 11:00 AM

- Light refreshments will be served
- Make your way back to original seating

### Large Group Close-Out: 11:00 AM – 12:00 PM

- Breakout Group Reports
- Transportation Resiliency Master Plan Next Steps

## Breakout Group Discussions:

### I. Introductions

### II. Worksheet Exercise

1. Determine the Impact: Define the areas impacted by shock/stressor and begin identifying corridors impacted
2. Set the Transportation Tolerance: Determine the tolerances for regaining functionality of the roadways
3. Develop Prioritization Framework: Identify criteria to be used to prioritize roadways for adaptation/recovery?
4. Begin Developing the Types of Actionable Strategies: Brainstorm and document potential mitigation strategies for the Space Coast TPO to consider; outline action items for the Space Coast TPO to follow-up; select participant to do Breakout Group Report




**RIDE the WAVE**  
TO RESILIENCY  
**TRANSPORTATION  
RESILIENCY MASTER PLAN**

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FOCUS GROUP WORK SESSIONS  
AUGUST 3, 2021  
CENTER FOR COLLABORATION,  
1100 ROCKLEDGE BLVD., ROCKLEDGE, FL  
9 AM – 12 PM

1



**PROJECT TEAM INTRODUCTIONS**


2

2


## WHO WE ARE

### SCTPO

Sarah Kraum  
Project Manager




Laura Carter  
Project Advisor




### Consultant


Mary Raulerson  
Project Advisor




Chris Bame  
Analyst



Chelsea Forgenie  
Analyst




Sigal Carmenate  
Analyst



3

3

# PROJECT SCOPE AND SCHEDULE



4

4



## WHAT IS TRANSPORTATION RESILIENCY?

*.....the ability of the transportation system to recover and regain functionality after a major disruption or disaster.*



5

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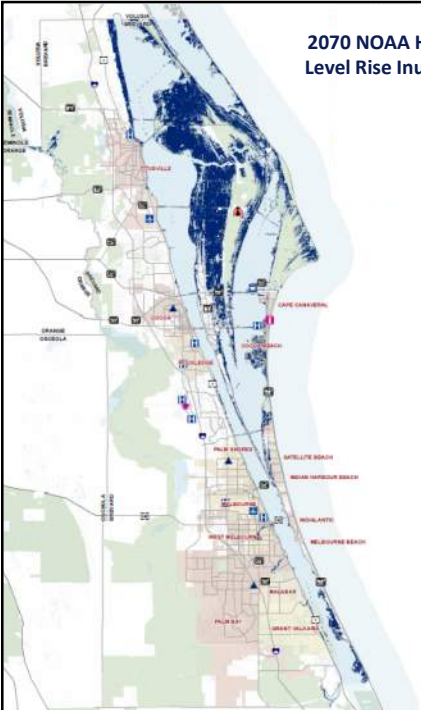
## PURPOSE OF THE TRANSPORTATION RESILIENCY MASTER PLAN

- Space Coast TPO reviews and administers policies for state and federal transportation funding
  - FAST Act – resiliency component to integrate into planning activities
  - Building on the 2017 Sea Level Rise Vulnerability Assessment, Governing Board Strategic Plan, and Project Prioritization Methodology
- Brevard County Natural and Economic Resources to protect and preserve
  - 16 cities and towns, 2 airports, one seaport, and one spaceport



6

6



**2070 NOAA High Sea Level Rise Inundation**

## TRANSPORTATION FOCUS

- What Questions We Seek to Answer
  - What shocks/stressors put people and infrastructure at risk?
  - Where are impacts likely to occur? To what extent?
  - What communities are most vulnerable?
  - Which roadways are critical for resiliency mitigation?
- Influence Areas
  - Where critical roadways and the impact areas of shocks/stressors meet
  - Key to determining the resiliency mitigation strategies

7

7

What are our current conditions?

What future events potentially put our people/infrastructure at risk?

Which infrastructure are most important to protect?

What actions should we take to protect our high priority infrastructure?

MAJOR TASK	2020			2021									2022												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
Task 1: Develop an Education and Engagement Strategy																									
Board/TAC/CAC Presentations																									
Task Force Meetings																									
Focus Group Work Sessions																									
Stakeholder Work Sessions																									
Underserved Community Meetings																									
Community Outreach																									
Task 2: Data Collection and Analysis																									
Task 4: Define Shocks and Stressors																									
Task 3: Transportation Resiliency Master Plan Development																									

★ What Phase We're In Now

8

8



Community Engagement Group	Role	Timeline
Board	<ul style="list-style-type: none"> <li>• Adopt the Transportation RMP</li> <li>• Educate their community/constituency on the Transportation RMP</li> </ul>	<ul style="list-style-type: none"> <li>• Existing Conditions</li> <li>• Define Shocks and Stressors</li> <li>• Strategies Development</li> </ul>
Committees	<ul style="list-style-type: none"> <li>• Provide feedback</li> <li>• Educate their community on the Transportation RMP</li> </ul>	
<b>Focus Group</b>	<ul style="list-style-type: none"> <li>• <b>Provide technical/detailed feedback on specifics for shocks/stressors</b></li> <li>• <b>Help determine transportation resiliency goals</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Define Shocks and Stressors</b></li> </ul>
Key Stakeholders	<ul style="list-style-type: none"> <li>• Provide specific background on conditions</li> <li>• Act as a sounding board for strategies</li> <li>• Potentially responsible for some strategies</li> </ul>	<ul style="list-style-type: none"> <li>• Targeted input Existing Conditions</li> <li>• Strategies Development</li> </ul>
Underserved Communities	<ul style="list-style-type: none"> <li>• Identify missing socioeconomic information and important community assets</li> <li>• Education/information exchange with project team</li> </ul>	<ul style="list-style-type: none"> <li>• Targeted input Existing Conditions</li> <li>• Define Shocks and Stressors</li> </ul>
General Public/Special Interest Groups	<ul style="list-style-type: none"> <li>• Educate about transportation resiliency</li> <li>• Feedback to inform Task Force and Boards/Committees</li> <li>• Share Information on other platforms</li> </ul>	<ul style="list-style-type: none"> <li>• High-level, targeted information Throughout Transportation RMP</li> </ul>



## WORK SESSIONS

- **Purpose:**
  - Gathering Technical Experts to inform us about the potential impacts of shocks/stressors to the transportation system
- **Objectives:**
  - To define the shocks/stressors in terms of their frequency, magnitude and duration (as applicable)
  - To set tolerances for recovering transportation functionality
  - To identify critical corridors
  - To begin developing types of mitigation strategies




## ANSWER KEY QUESTIONS TOGETHER: EXERCISE WORKSHEET



11

11

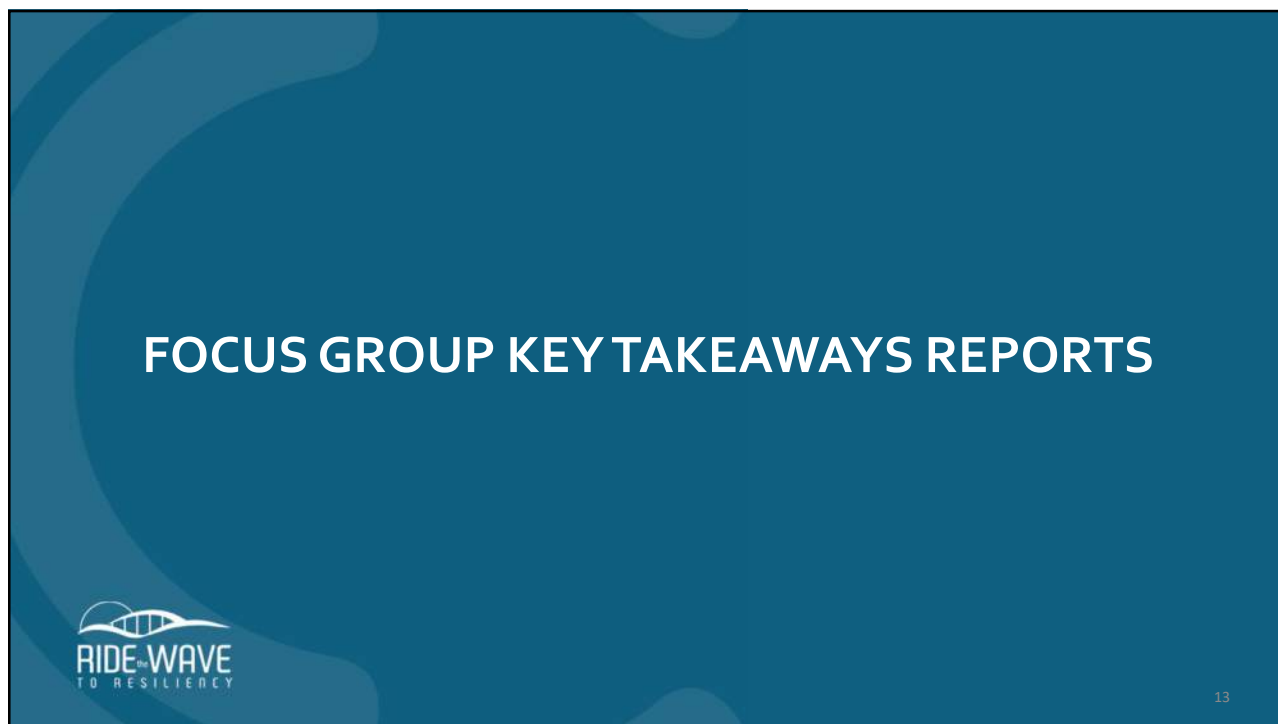
### BREAKOUT GROUP LOGISTICS

- Be sure to have your name tag and confirm your group assignment
- Grab some light refreshments and head to your table
- Follow the worksheet exercise steps
  - Discuss answers as a group before documenting them
  - Projector to show Google Earth layers and zoom in/out
  - Markers to draw on map and notepad to fill in answers
  - Wrap up starting at 10:50 AM and finish by 11 AM
- Select a Focus Group participant to report key takeaways



12

12



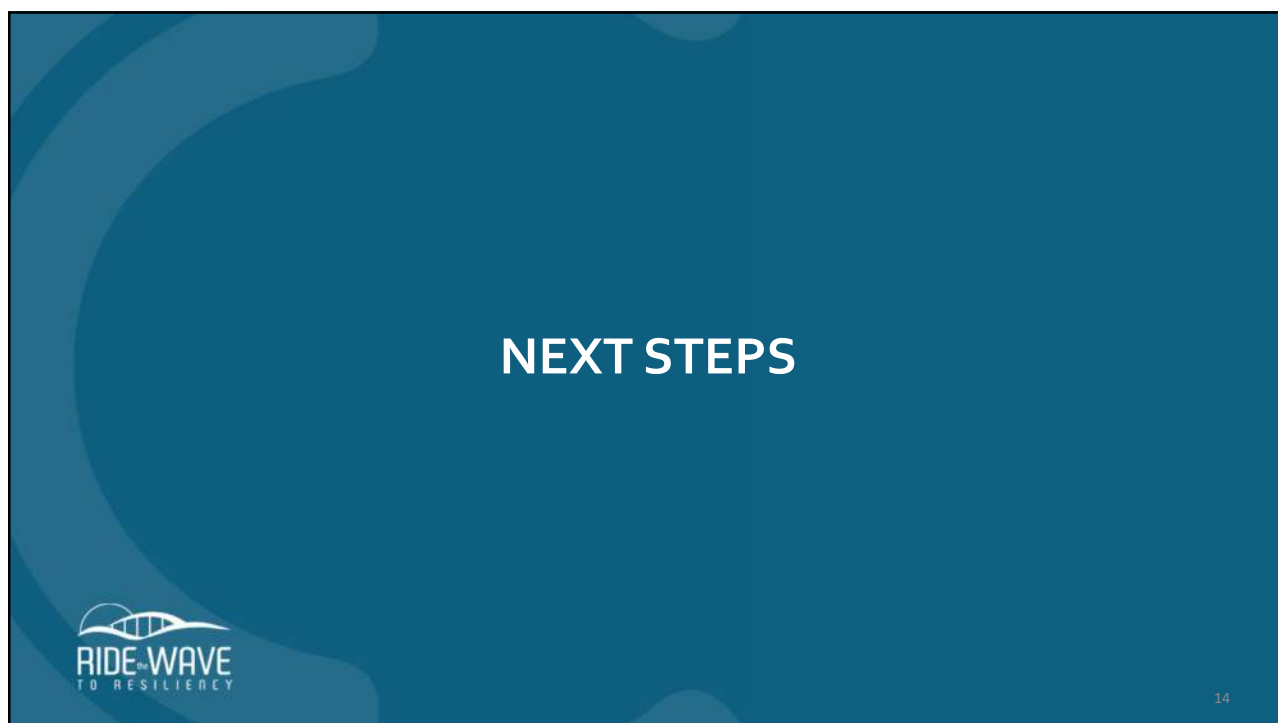
A presentation slide with a dark blue background and light blue abstract wave patterns. The text "FOCUS GROUP KEY TAKEAWAYS REPORTS" is centered in white. In the bottom left corner is the "RIDE the WAVE TO RESILIERCY" logo, and in the bottom right corner is the number "13".

# FOCUS GROUP KEY TAKEAWAYS REPORTS

RIDE the WAVE  
TO RESILIERCY

13

13



A presentation slide with a dark blue background and light blue abstract wave patterns. The text "NEXT STEPS" is centered in white. In the bottom left corner is the "RIDE the WAVE TO RESILIERCY" logo, and in the bottom right corner is the number "14".

# NEXT STEPS

RIDE the WAVE  
TO RESILIERCY

14

14

## LOOKING AHEAD

- Individual discussions with Focus Group participants in Heat/Drought/Fire and ITS
- Finalize Influence Areas
- Finalize methodology for prioritizing vulnerable corridors
- Gather Task Force feedback – September/October 2021
- Regroup with the Focus Group – late 2021
- Document Findings in Tech Memo – early 2022
- Next Phase
  - Develop Actionable Mitigation Strategies and Timeframes
  - Continue Outreach and Education



15

15



## Thank you!

Sarah Kraum, Senior Transportation Planner

(321) 690-6890

sarah.kraum@brevardfl.gov






<http://sctpo.com/>

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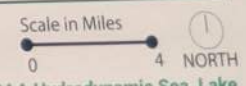
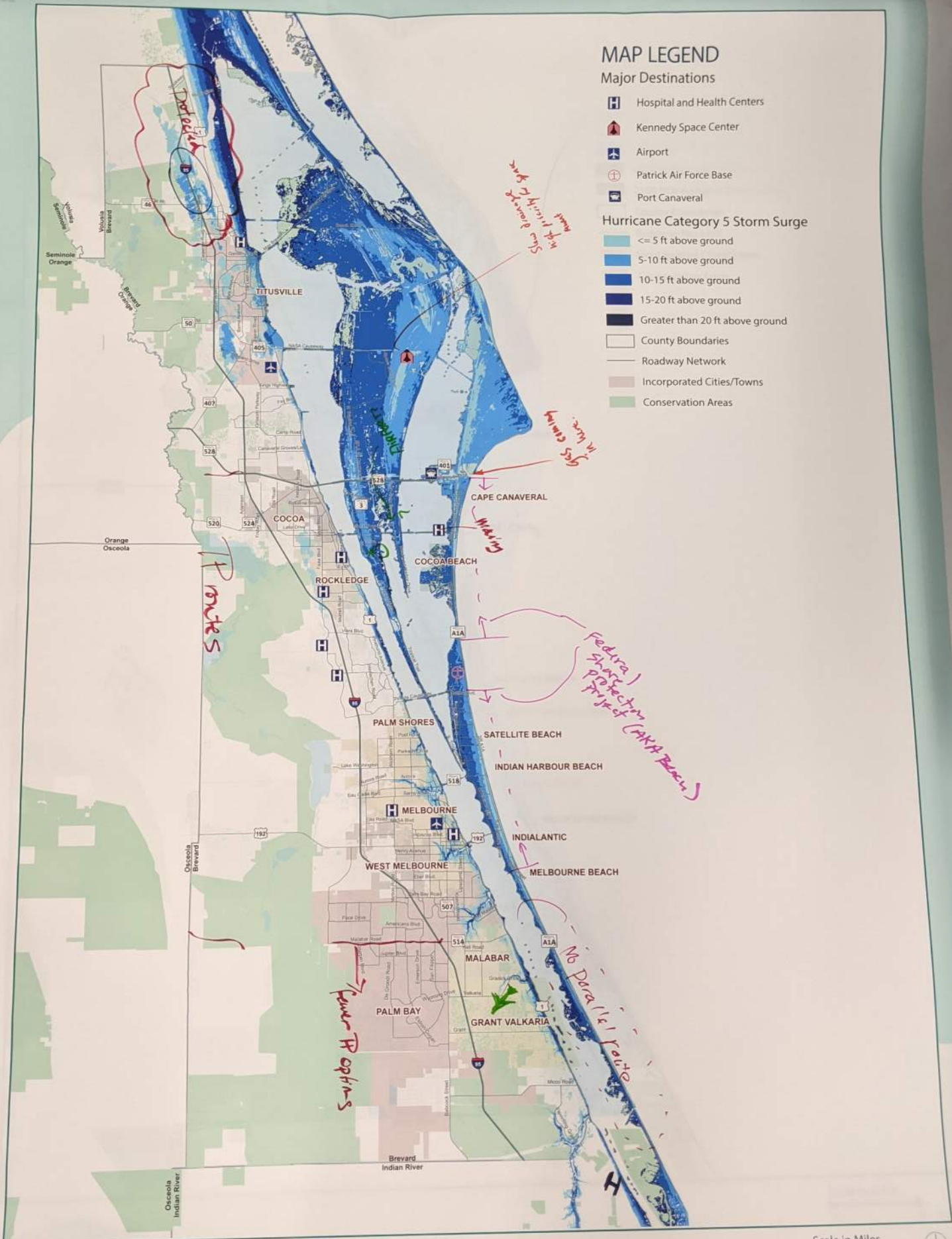
### MAP LEGEND

#### Major Destinations

-  Hospital and Health Centers
-  Kennedy Space Center
-  Airport
-  Patrick Air Force Base
-  Port Canaveral

#### Hurricane Category 5 Storm Surge

-  <= 5 ft above ground
-  5-10 ft above ground
-  10-15 ft above ground
-  15-20 ft above ground
-  Greater than 20 ft above ground
-  County Boundaries
-  Roadway Network
-  Incorporated Cities/Towns
-  Conservation Areas



# Focus Group Work Sessions Exercise Worksheet

## Instructions

Follow the numbered steps outlined in the Exercise Worksheet and write down answers that have been agreed on as a group. Your group has 1 hour and 10 minutes to answer all the questions and should reserve the last 10 minutes to identify a participant to summarize key takeaways to the larger group. There is space at the bottom of the Exercise Worksheet to include any additional comments.

## Google Earth Layers

A Google Earth file with layers to toggle on and off is projected on the screen. Please use these layers to answer the questions on this Exercise Worksheet. You can use Google Earth to zoom in/out of areas of interest and to view an area from bird's eye view or from street view.

### 1 Determine the Impact

Review the scenario/projection shown on the map at your table. Does this match what you would expect? Explain your answer in the space below.

*- assume CAT 3 Hurricanes / Shore line erosion - ATIS map as basis?*

#### MARK ON THE MAP

Adjust the boundaries of the impact areas if they are different from what is on the map. Use different colors for different scenarios/projections and label each impact area as necessary.

For the roadways in the impact area, what functions do they serve? (Consider functions during normal conditions and emergency conditions, like regional connection, local access for day-to-day needs, access to hospitals, distribution of supplies, evacuation route, etc.)

US 1 = *SR 500* Roadway TD populations

AIA

Tropical Trail

SR 3

*Carriways SR 500*

Normal Function

Emergency Function

*access hospitals  
evacuation route  
local access - AIA  
to causeways  
SR 500 = I/A or not*

### 2 Set the Transportation Tolerance

2A. For the roadways listed above, list any parallel routes that serve its function.

2B. Circle how well the parallel routes serve the same function.

2C. Determine acceptable time frames for the parallel routes to serve the roadways' normal operational functions and perform emergency operational functions.

2A. Roadways

*US 1  
AIA*

Parallel Routes

*I-95  
Route 3*

2B. Parallel Route's Level of Functionality

Poorly	Moderately	Well
Poorly	Moderately	Well
Poorly	Moderately	Well
Poorly	Moderately	Well
Poorly	Moderately	Well
Poorly	Moderately	Well
Poorly	Moderately	Well
Poorly	Moderately	Well
Poorly	Moderately	Well
Poorly	Moderately	Well
Poorly	Moderately	Well

2C. Acceptable Time Frame Tolerance (E.g., 1-2 days, 1 week)

### 3 Develop Prioritization Framework

Identify criteria by which to define the most critical roadways to plan adaptation, mitigation, and recovery efforts for. Example criteria could be economic drivers, health and safety, replacement costs, or other. Use the space below to list the criteria, and circle the ranking.

*all ports* *airfare base*

*economic generators*

*US 1 - more important than AIA*

Criteria

*Within a quarter-mile of a hospital*

*hospitals*

*grocery stores*

*water & sewer facilities*

*TD populations - Base for By*

*large popas of isolated people*

*proximity to water edge*

*Bus routes*

*pop w/o access to vendors*

*volume*

*length of inundation*

Ranking

Low	Medium	<u>High</u>
Low	Medium	High
Low	Medium	High
Low	Medium	High
Low	Medium	High
Low	Medium	High
Low	Medium	High
Low	Medium	High
Low	Medium	High
Low	Medium	High
Low	Medium	High

### 4 Brainstorm Types of Actionable Strategies

To help us prepare for the next steps of the Resiliency Master Plan, brainstorm the types or groups of potential strategies to make the roadways listed above more resilient. Write the types you come up with in the space below.

*Strengthen/physical*






### Additional Comments

Please use the space below to write any additional comments.






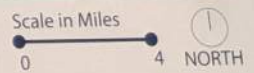
# MAP LEGEND

## Major Destinations

-  Hospital and Health Centers
-  Kennedy Space Center
-  Airport
-  Patrick Air Force Base
-  Port Canaveral

## Flood Hazard Areas

-  Flood Zones
-  County Boundaries
-  Roadway Network
-  Incorporated Cities/Towns
-  Conservation Areas



# MAP LEGEND

## Major Destinations

-  Hospital and Health Centers
-  Kennedy Space Center
-  Airport
-  Patrick Air Force Base
-  Port Canaveral
-  2040 NOAA High SLR Inundation
-  2070 NOAA High SLR Inundation
-  2100 NOAA High SLR Inundation
-  County Boundaries
-  Roadway Network
-  Incorporated Cities/Towns
-  Conservation Areas



# Focus Group Work Sessions Exercise Worksheet

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Follow the numbered steps outlined in the Exercise Worksheet and write down answers that have been agreed on as a group. Your group has 1 hour and 10 minutes to answer all the questions and should reserve the last 10 minutes to identify a participant to summarize key takeaways to the larger group. There is space at the bottom of the Exercise Worksheet to include any additional comments.

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Review the scenario/projection shown on the map at your table. Does this match what you would expect? Explain your answer in the space below.

#### MARK ON THE MAP

Adjust the boundaries of the impact areas if they are different from what is on the map. Use different colors for different scenarios/projections and label each impact area as necessary.

For the roadways in the impact area, what functions do they serve? (Consider functions during normal conditions and emergency conditions, like regional connection, local access for day-to-day needs, access to hospitals, distribution of supplies, evacuation route, etc.)

- SR 520
- mmuteman
- SR 46

- Roadway
- SR 520
  - Nasa Causeway
  - A1A/Sebastian Inlet Bridge
  - I-95/between Fiske & 520
  - 404/under US 1
  - Tropical Trail
  - SR 3
  - Max Brewer Bridge-sides
  - US 1

Normal Function

- Gas/major goods
- Space Industry/economy
- employees
- Residents

Emergency Function

- evacuation route
- evacuation route

### 2 Set the Transportation Tolerance

- For the roadways listed above, list any parallel routes that serve its function.
- Circle how well the parallel routes serve the same function.
- Determine acceptable time frames for the parallel routes to serve the roadways' normal operational functions and perform emergency operational functions.

2A. Roadways	Parallel Routes	2B. Parallel Route's Level of Functionality	2C. Acceptable Time Frame Tolerance (E.g., 1-2 days, 1 week)
		Poorly Moderately Well	
		Poorly Moderately Well	
		Poorly Moderately Well	
		Poorly Moderately Well	
		Poorly Moderately Well	
		Poorly Moderately Well	
		Poorly Moderately Well	
		Poorly Moderately Well	
		Poorly Moderately Well	
		Poorly Moderately Well	

### 3 Develop Prioritization Framework

Identify criteria by which to define the most critical roadways to plan adaptation, mitigation, and recovery efforts for. Example criteria could be economic drivers, health and safety, replacement costs, or other. Use the space below to list the criteria, and circle the ranking.

Criteria	Ranking
Within a quarter-mile of a hospital	Low Medium <u>High</u>
% of roadway conflict points	Low Medium High
Economic drivers	Low Medium High
Vulnerable Communities (socioeconomic, access lacking)	Low Medium High
Transit Routes	Low Medium High
Evacuation Routes (high)	Low Medium High
Roads carrying clean water supply	Low Medium High
Distance to food/store	Low Medium High
Higher Capacity Road	Low Medium High
% Access to rail	Low Medium High
PdL resistance to sealant use	Low Medium High

### 4 Brainstorm Types of Actionable Strategies

To help us prepare for the next steps of the Resiliency Master Plan, brainstorm the types or groups of potential strategies to make the roadways listed above more resilient. Write the types you come up with in the space below.

- State statute on maintaining road forever
- Buy property out
- Well informed public

#### Additional Comments

Please use the space below to write any additional comments.

- Different tolerance levels depend on individual or business
- Alternative Construction Methods. ex: new building materials / upfront investment
- take consideration Bridge being inundated for longer periods of time.

# TASK FORCE MEETING #3 AGENDA AND NOTES





## Task Force Meeting #3

**Date:** Tuesday, October 19, 2021

**Time:** 9:00 AM – 11:00 AM

**Location:** Virtual via GoToMeeting

- Georganna Gillette (Space Coast Transportation Planning Organization (Space Coast TPO))
- Sarah Kraum (SCTPO)
- Laura Carter (SCTPO)
- Steven Bostel (SCTPO)
- Mary Raulerson (Kittelsohn & Associates, Inc. (KAI))
- Sigal Carmenate (KAI)
- Chris Bame (KAI)
- Task Force invitees and attendees list attached

### Introduction:

The purpose of this meeting was to share what the Project Team has learned since Task Force Meeting #2 through Focus Group Discussions, and to share and get feedback on the methodology for the network analysis for vulnerability and criticality of roadways. The meeting agenda included introductions, key takeaways from Focus Group Discussions, an interactive conversation about the network vulnerability and criticality analysis, community resiliency updates, and next steps.

### Meeting Notes:

The meeting discussion was guided by a PowerPoint presentation, and feedback was via the Chat Box on GoToMeeting and by Task Force participants unmuting themselves and voicing their comments. Key discussion points from the meeting are listed below.

- As a point of clarification, the Florida Highway Patrol (FHP) does not close causeways at 40 mile per hour (MPH) wind speeds. The FHP closes causeways after a storm for post storm damage assessment.

- The Space Coast TPO will be using the 2100 National Oceanic and Atmospheric Administration (NOAA) high sea level rise curve as part of the Transportation Resiliency Master Plan (RMP) and moving forward.
- There are some roadways off the Brevard County functionally classified network that experience inundation and other impacts of shocks/stressors. In response to this comment, we will share the method and outcome of the network analysis with the Task Force to inform us of any vulnerable and critical roadways not being prioritized. The Space Coast TPO has discretion to decide what roadways to include for prioritization.
- In addition to the 100-year flood Federal Emergency Management Agency (FEMA) flood inundation layer being used for the vulnerability analysis, the 500-year flood dataset will be reviewed.
- The US Army Corp of Engineers released a draft of their Atlantic Coastal Study (SACS) for comment through mid-November. The Space Coast TPO will review the study and determine if it contains any information to use for the network analysis.
- Brevard County is specifically modelling stormwater flooding in some locations. A Task Force member proposed including this data in the analysis and being nimble to updated data in the future.
- Brevard County has a surface water protection ordinance that applies to within 50 feet of the Indian River Lagoon and manmade canals and within 200 feet of Lake Washington. This historic threshold aligns with the proposed 50 foot threshold for vulnerability to shoreline erosion.
- Florida Department of Transportation (FDOT) would like to protect the area within the clear zone from shoreline erosion, however they are limited by their ROW. Clear zone requirements will be reviewed considering the existing clear zones on segments of US 1 and SR A1A.
- In addition to shoreline erosion, overtopping of roadways at outfalls may also cause erosion or damage to the roadway. US 1 south of Malabar Road was specifically noted as a location where this may occur. US 1 will be included as part of the network analysis.
- It was shared that the Hazard Mitigation Grant Program (HMGP), including the Building Resilient Infrastructure and Communities (BRIC), is accepting applications to receive this funding. These funding sources provide aid for sustainable and resilient projects.
- Meeting Follow-up
  - The vulnerability and criticality analysis methodologies will be applied, and the results will be shared with the Task Force in early 2022 for comment.
  - The Space Coast TPO will meet with the Transportation Disadvantaged Groups after the Task Force has reviewed the network analysis to provide input on the methodology and the prioritized corridors.

The agenda, presentation, and the invitees/attendees lists are attached.

Invitees		
Name	Agency/Organization	Attended
Abby Johnson	St. Johns River Water Management District (SJRWMD)	N
Abigail Morgan	City of Cocoa	Y
Alexis "Lexi" Miller	Satellite Beach	Y
Alix Bernard	Cocoa - Planning	N
Amanetta Sommerville	Environmental Protection Agency (EPA)	Y
Bob Musser	Port Canaveral	Y
Brenda Defoe-Suprenant	Cape Canaveral	Y
Bryant Smith	Cocoa - Public Works	Y
Casey Lyon	FDOT	Y
Corrina Gumm	Brevard County - Public Works	Y
Courtney Barker	Satellite Beach	Y
Daniel Martoma	West Melbourne	N
Darcie Mcgee	Brevard County - Natural Resources	Y
David Wilkison	Melbourne	N
Deborah Coles	Brevard County	Y
Don Kean	Brevard County	N
Duane De Freese	Indian River Lagoon Council	Y
Eddy Galindo	Titusville	Y
Edward Fontanin	Brevard County - Utilities	N
Elizabeth Mascaro	Melbourne Beach	N
Holly Abeels	Florida Sea Grant/University of Florida (UF) / institute of Food and Agricultural Sciences (IFAS) Extension	N
Jane Hart	Brevard County - Planning	Y
Jared Francis	Cocoa Beach	Y
Jason Mahaney	Grant-Valkaria	Y
Jeffrey Ball	Brevard County - Planning	N
John Cooper	Rockledge	Y
John Scott	Brevard County - Emergency Management	N
Leo Angelero	Florida Department of Environmental Protection (DEP)	N
Lisa Morrell	Malabar	Y
Lori Cox	East Central Florida Regional Planning Council (ECFRPC)	Y
Marc Bernath	Brevard County	Y
Mark Ryan	Indian Harbour Beach	N

Invitees		
Name	Agency/Organization	Attended
Michael Casey	Indialantic	N
Mike McCabe	MTWCD	Y
Ntale Kajumba	EPA	Y
Rose Lyons	Brevard County	N
Steve Shams	FDOT	Y
Suzanne Sherman	Palm Bay	N
Tara McCue	ECFRPC	Y
Todd Corwin	Melbourne	N
Tom Frick	SJRWMD	N
Zac Eichholz	Cape Canaveral	Y





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## Transportation Resiliency Master Plan

Task Force Meeting #3 Agenda  
Oct 19, 2021; 9:00 am - 11:00 am

Virtual via GoToMeeting

Please join my meeting from your computer, tablet or smartphone.

<https://global.gotomeeting.com/join/865214157>

You can also dial in using your phone.

United States: +1 (646) 749-3122

Access Code: 865-214-157

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1. Introductions and Meeting Purpose
2. Focus Group Discussions Update for Each Shock/Stressor
3. Network Analysis Methodology – Vulnerable and Critical Corridors
4. Task Force attendees describe their communities' updates on resiliency (as times allows)
5. Next Steps
6. Open Discussion



**RIDE** the **WAVE**  
TO RESILIENCY

# **TRANSPORTATION RESILIENCY MASTER PLAN**

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**TASK FORCE MEETING #3**

**OCTOBER 19, 2021**

**VIRTUAL VIA GOTOMEETING**

**9:00 AM – 11:00 AM**

# AGENDA

- Introductions and Meeting Purpose
- Focus Group Discussions Update
- Draft Network Analysis
- Communities Resiliency Updates (as time allows)
- Next Steps



# INTRODUCTIONS

- Study Team
- Attendees
  - Name
  - Agency/Organization



### Task 3: Data Collection and Analysis

*What are our current conditions?*

- Feedback on engagement strategy/help engage others
- Information/data on current conditions
- Continuity from best existing programs/work
- Information/data on future conditions
- Input on definitions of shocks/stressors



### Task 4: Define Shocks and Stressors

*What future events potentially put our people/infrastructure at risk?*

- Define shocks/stressors
- Feedback on scenarios/projections

*What infrastructure are more important to protect?*

- Advise on identifying the top corridors impacted by the six shocks/stressors & their importance

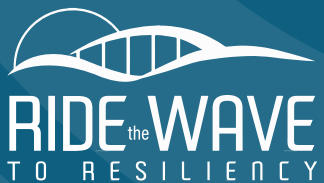


### Task 5: Transportation Resiliency Master Plan Development

*What actions should we take to protect our high-priority infrastructure?*

- Implementing strategies
- Identify barriers to implementation

# FOCUS GROUP DISCUSSIONS UPDATE



# FOCUS GROUP & STAKEHOLDER ONE-ON-ONE DISCUSSIONS

## Hurricanes 7/19

- Andrew Sussman, Hurricane Program Manager at FDEM

## Sea Level Rise/Flooding; Hurricanes/High Winds/Storm Surge/Shoreline Erosion 8/3

- Bach McClure
- Brad Kroetch
- Casey Lyon
- Darcie McGee
- Dr. Randy Parkinson

- Jane Hart
- Jared Francis
- Karl Christiansen
- Mike McGarry
- Tara McCue
- Tim Leech

## High Winds/Storm Surge/Erosion FDOT District Five Maintenance 09/17

- Doug Shockley
- Hector Matos

## Intelligent Transportation System (ITS)

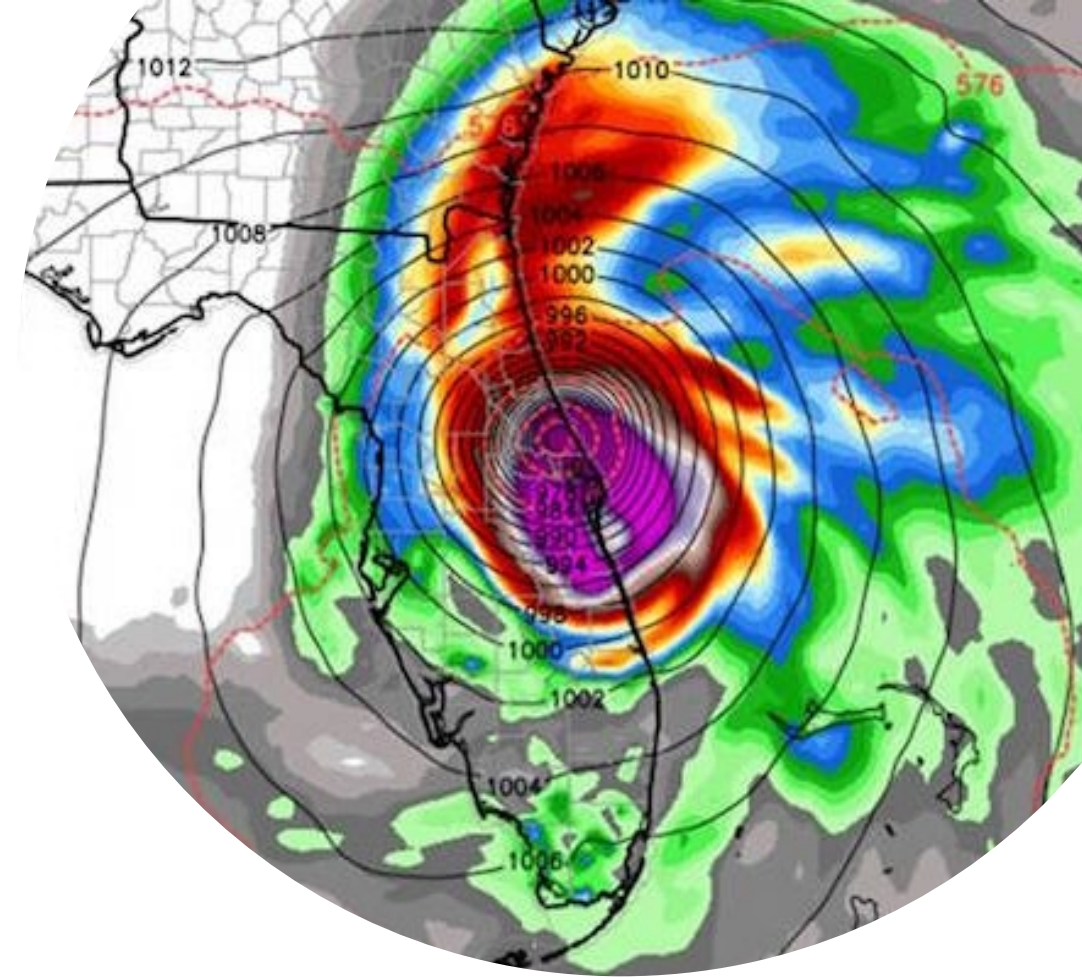
- Jeremy Dilmore, FDOT District Five TSM&O Program Engineer **7/16**
- Rich Ataman, Intelligent Transportation System Operator at Brevard County **9/20**
- Jared Francis, City Engineer, City of Cocoa Beach **9/20**
- Sheryl Bradley, TSM&O Manager FDOT **9/20**

## Heat/Drought/Fire

- Evan Hall, Land Management Specialist, EELs **7/22**
- Patrick Voltaire, Assistant Chief of Fire Operations at Brevard County **10/6**
- Mark Schollmeyer, Fire Chief at Brevard County **10/13**
- Sheryl Bradley and Nathan Mozeleski, ITS/Traffic Project Engineer **10/14**
- Dylan Gavagni, Park Manager at Florida Park Service – St. Sebastian **10/14**

# HURRICANES

- **Increased population growth** as people relocate bring challenges related to evacuations during storms
- **Roads and bridges** also function as **storm surge barriers**
- Regardless of hurricane category, **should prepare for the worst scenarios**
- Mitigation strategies can look like hardening and raising/elevating, but also **policy and programmatic**:
  - Increased preparation for emergency management
  - Supporting resiliency building codes
  - Fostering interagency and multijurisdictional collaboration





# HURRICANES

- Important to distinguish **facilities vulnerable to these shocks/stressors** but also the **criteria that gives facilities importance**
- Historically, causeways designed to withstand **Category 3 hurricanes**
- Corridors should be **prioritized for evacuation routes and access** to facilities like PAFB, Port Canaveral, and KSC



# SEA LEVEL RISE (SLR)/FLOODING

- Current **SLR scenarios don't show growing intensities of precipitation events or tidal events** happening now
- For SLR, should use **2040, 2070, 2100 NOAA High Curves**
- Can expect portions of SR A1A and US 1 to flood regularly
- **Causeways are critical** and must be prioritized for mitigation strategies
- South Brevard County communities isolated with fewer east-west connections
- **Critical segments specifically identified during work sessions**



# HIGH WINDS/STORM SURGE/EROSION

- After 2001 and 2004 storms, used **FEMA money to harden roadways**, yet waves constant chip away at shorelines and even small storms eroding shoreline over time
- **Eroded roadways require a long process to be rebuilt**
- **Causeways eroding** over time and mitigation strategies must be determined
- **Open to exploring proactive strategies** rather than reacting
  - Experimenting with **wave attenuation devices (WADs)** and other complementing strategies
- **US 1 less than 50' from water**
- **SR A1A outfalls are at risk**
- FHP closes causeways at 40 mph winds; **FDOT maintenance cannot travel above 35 mph winds**



# INTELLIGENT TRANSPORTATION SYSTEM (ITS)

- The Space Coast TPO **ITS Master Plan is a good starting place** to understand critical infrastructure
- Vulnerabilities include **cyber security and staffing/resources**
  - May only have one ITS staff persons at an agency
- Without getting into the details of specific security vulnerabilities, can **focus on the impacts other shocks/stressors have on ITS systems**



# INTELLIGENT TRANSPORTATION SYSTEM (ITS)

- Critical corridors include **US 1, SR A1A and SR 520**
- For cyber security, **physical security is the biggest risk**
- Brevard County deploys **backup generators at intersections** at cabinets; inventory of about 60 to give to municipalities as needed
- **Signal head damage** is mostly from **wind events**
- **RTMC facilitates rerouting** as events occur
- If no access to systems, **staff sent out to survey the areas and bring information back** to main office and assess damage



# FIRE/HEAT/DROUGHT

- **Smoke management critical to preserving visibility on roadways** (particularly for north-south corridors) and preventing smoke at hospitals, airports, schools
- **Have had to shut down I-95** in Brevard County because of fire in Indian River County
- **EOC plays a key role in messaging** the public to reduce calls to dispatch center
- **Roads can act as fire break**
- **Wetland wildfires** can burn for long without being noticed until “whiteout” smoke is on the roadway



# FIRE/HEAT/DROUGHT

- Florida Highway Patrol determines to close highway; **fire trucks need full access on roadway without fear of being struck in low visibility**
- **Critical roadways for emergency vehicles are I-95, US 1, all east-west corridors in Brevard County**
- **In worst case of county-wide fire, evacuations are higher priority than fire truck access**
- **Large water plant in Cocoa is critical asset; worst case scenario is power failure**
- **Hazardous materials spill have occurred, and can shut down roads for longer periods than fires**
- **There are public lands that do not currently have controlled burns**



# FIRE/HEAT/DROUGHT

- **Wind direction, wind speeds, temperature, and humidity** all play a role in the start and spread of wildfires
- The **wildland and urban interface** are the places where natural and developed land meet and fires can be particularly dangerous
- In Florida, **green and dead vegetation are susceptible to fire and grassfires on the St. John River can burn over the waterline**
- Examples of corridors traversing wildland and urban interface are **SR 528, US 1, and US 192 west of I-95**
- **Dryness and drought** create conditions where **more fires spark on medians and grassy shoulders**





# FIRE/HEAT/DROUGHT

- Discussed in relation to ITS in Brevard County
- Emergency vehicles have mounted CCTV devices and static devices throughout Brevard County, like I-95
- Testing underway for regional coordinated management systems to synchronize green signals when rerouting and diverting traffic for State and non-State roads
- Response to events have two components: hardware and operational team support
  - Roadway weather information stations located in Brevard County provide roadway condition information for teams to determine the best response on case-by-case basis
- Lightning and grounding are also big disruptors to detect and provide information to motorists



# FIRE/HEAT/DROUGHT

- **Geotextile webbing is used on pedestrian trails on natural lands but highly susceptible to fires**
- **Florida Forest Service burns hundreds of acres of land each year to prevent wildfires**
  - Still, **can expect 5-7 fires** that require interventions every year
- **Building more infrastructure impacts hydrology** which leads to adverse effects on habitats
- **Varying daily weather conditions can make smoke from small fires engulf roadways and reduce visibility**
- **Box culverts can exacerbate smoke on roadways** if they are not maintained properly
- **Roadways through and near conservation lands that are not managed at risk of wildfire impacts**



# TASK FORCE DISCUSSION

Feedback on what we have heard

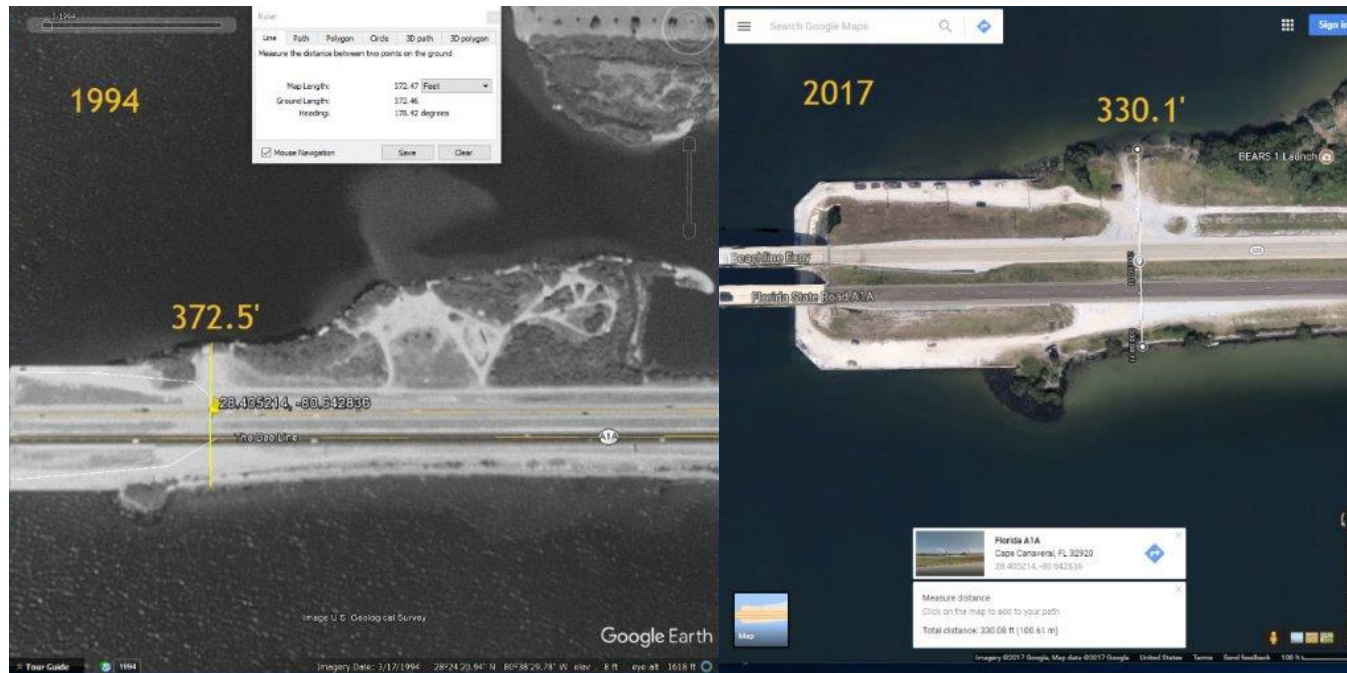
**Do you have any additional info/insight about the impacts of the shocks/stressors on the transportation system?**



# DRAFT NETWORK ANALYSIS

# HOW WE DEFINED SHOCKS/STRESSORS SCENARIOS

- Flooding: FEMA FIRM 100 Year Flood Plain (further discussion occurring to confirm)
- Sea Level Rise: 2100 NOAA High Curve
- Storm Surge/Wind: Hurricane Category 3
- Erosion: Corridors 50'+ from water
- Fire: Undeveloped lands near corridors
- ITS: cyber and physical security being handled by ITS managers; used as type of mitigation strategy

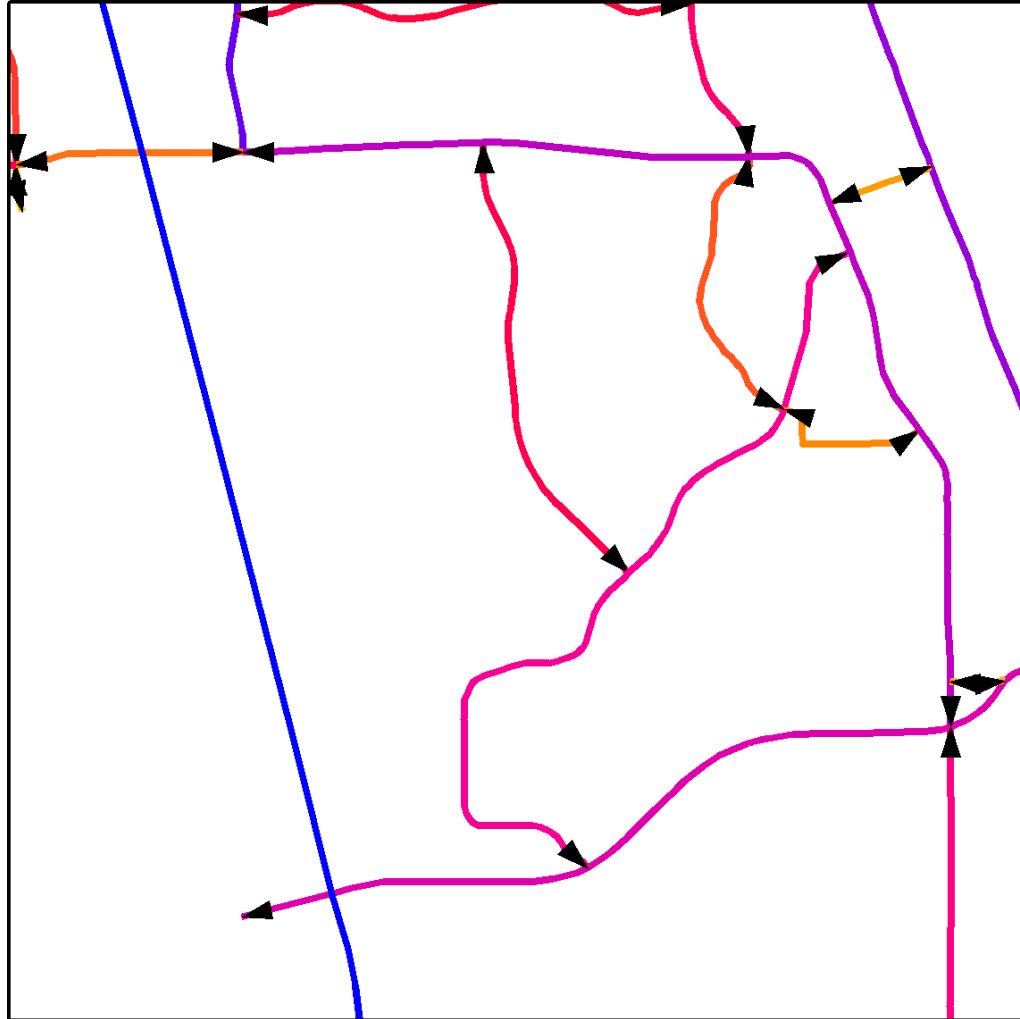


# DEFINING IMPORTANT CORRIDORS IMPACTED BY SHOCKS/STRESSORS

- **Vulnerability** – the magnitude of shocks/stressors impact to different parts of transportation corridors
- **Criticality** – determining which impacted roadways serve a critical population, function, or destination to develop mitigation strategies for



# TRANSPORTATION NETWORK



Functionally classified roads in Brevard county are divided into **322 corridors**

Most corridors are between **1 and 4 miles** long



# VULNERABILITY ANALYSIS

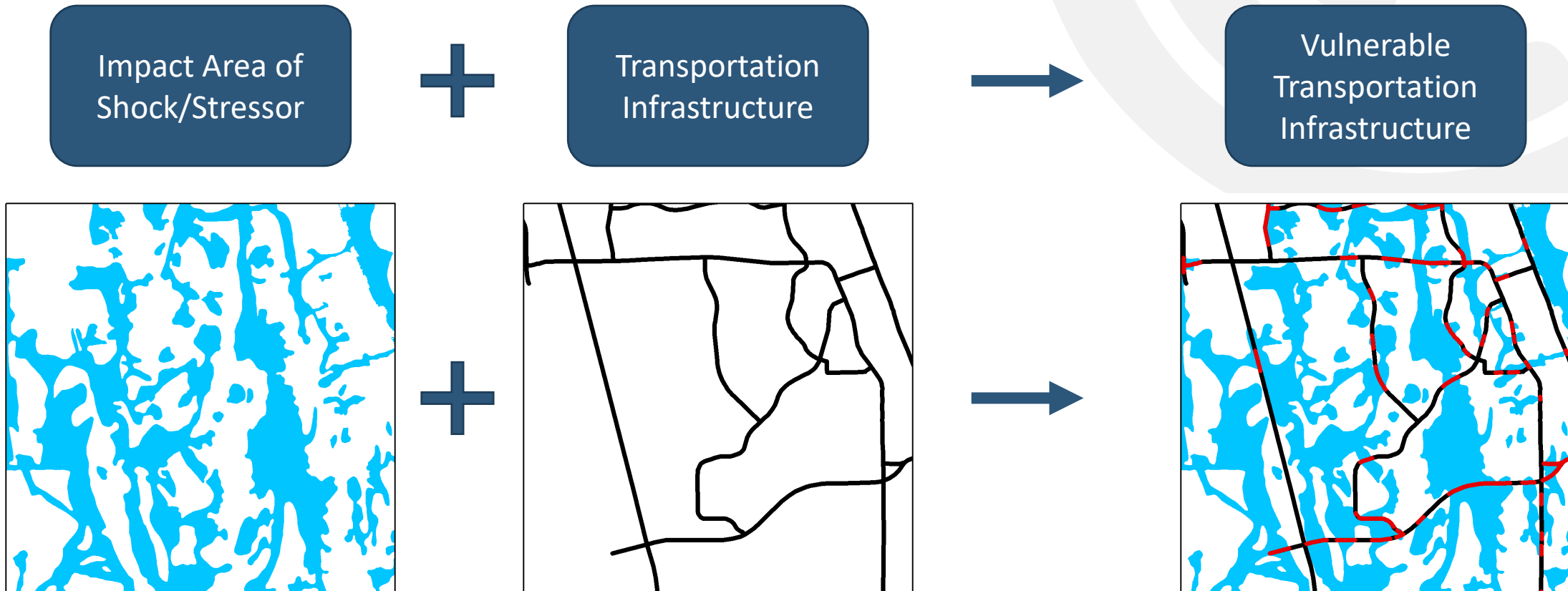


# VULNERABILITY ANALYSIS METHODOLOGY

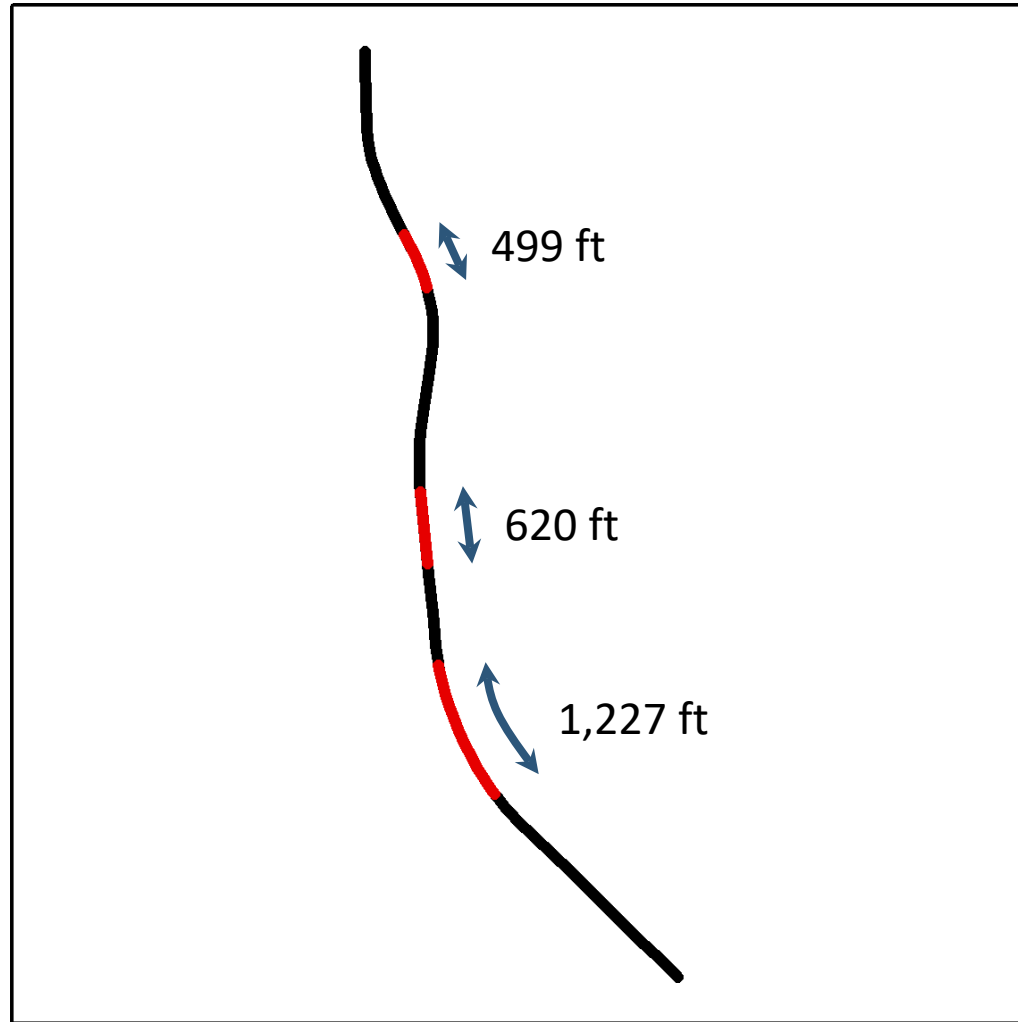
- Determined amount of corridor being impacted by shocks/stressor (length in miles)
- $> 0$  &  $< \frac{1}{4}$  mi impacted as “Vulnerable”
  - About 50% of all corridors
- $\geq \frac{1}{4}$  mi impacted as “Most Vulnerable”
  - About 20% of all corridors



# PROCESS TO DETERMINE VULNERABILITY



# IDENTIFYING VULNERABLE SEGMENTS OF THE CORRIDOR



Corridor A

**2,346 ft = 0.44 mi**  
vulnerable along  
corridor

# VULNERABILITY CRITERIA

Not Vulnerable	Vulnerable	Most Vulnerable
<b>None</b> of the corridor is within the impact area of the shock/stressor	<b>&gt; 0 &amp; &lt; 1/4 mile</b> of the corridor is within the impact area of the shock/stressor	<b>≥ 1/4 mile</b> of the corridor is within the impact area of the shock/stressor

# CRITICALITY ANALYSIS

# CRITICALITY ANALYSIS METHODOLOGY

- Critical Population

- Transportation Disadvantaged Population (TD Population) score
- Poor and Struggling
- Zero Car Households
- Persons of Color
- Households Including a Person with a Disability
- Persons Over 65

- Critical Function

- Functional Classification
- AADT
- Evacuation Route
- Transit Route

- Critical Destinations

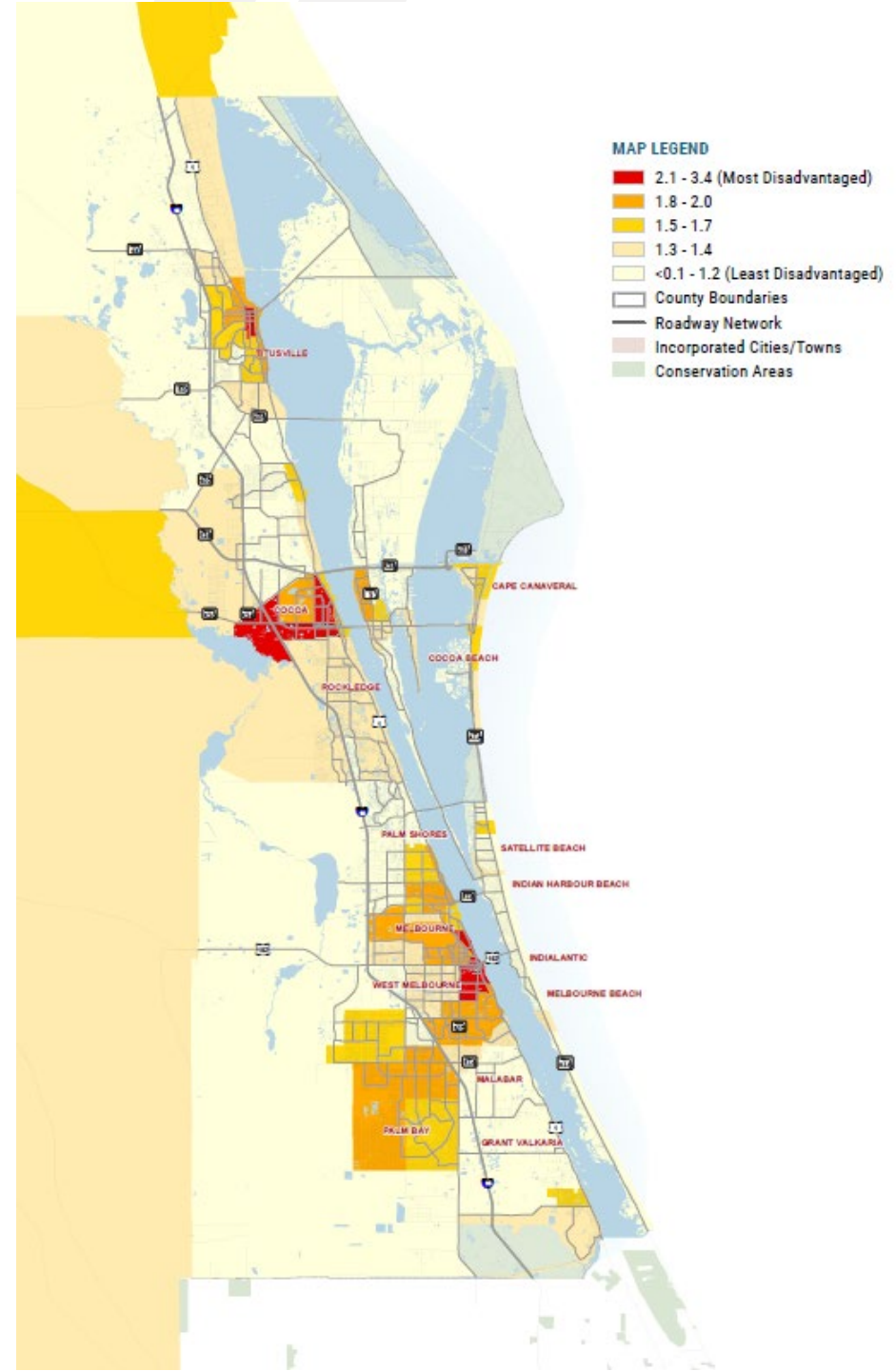
- Major destinations/economic drivers
  - Hospitals
  - Port/Airports
  - PAFB
  - Government Centers
- Activity Centers defined in Bicycle/Pedestrian Master Plan



# TRANSPORTATION DISADVANTAGED POPULATIONS

Criteria considered:

- Overburdened renters
- Population under age 18 in a single-parent household
- Population with a disability
- Population under age 10
- Population over age 75
- Workers without vehicle access
- Population with limited English proficiency
- Low-income population
- Communities of Color (All races and ethnicities beside White Non-Hispanic)



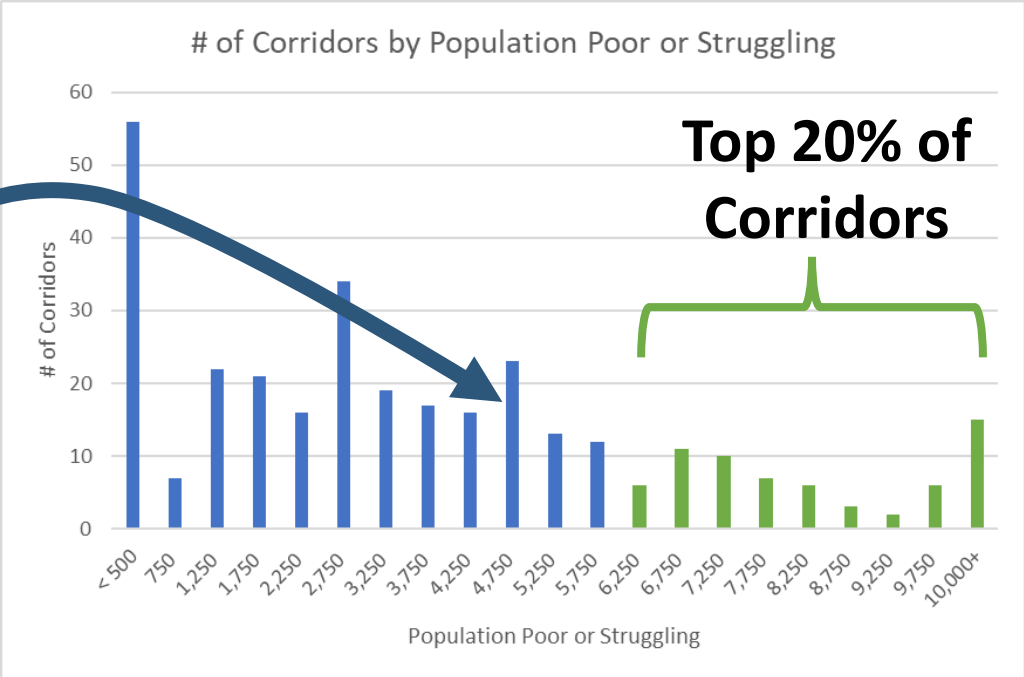
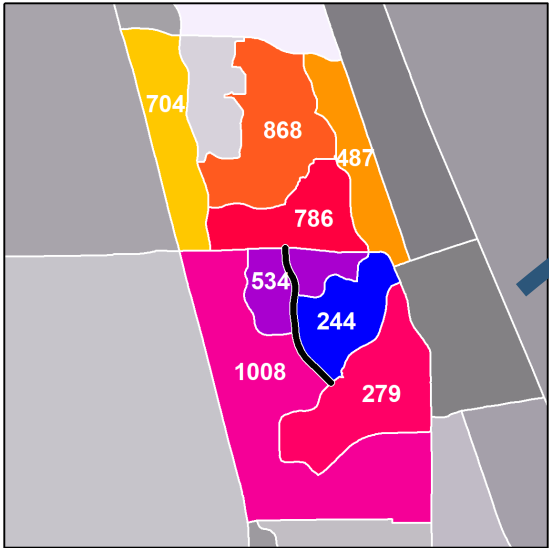
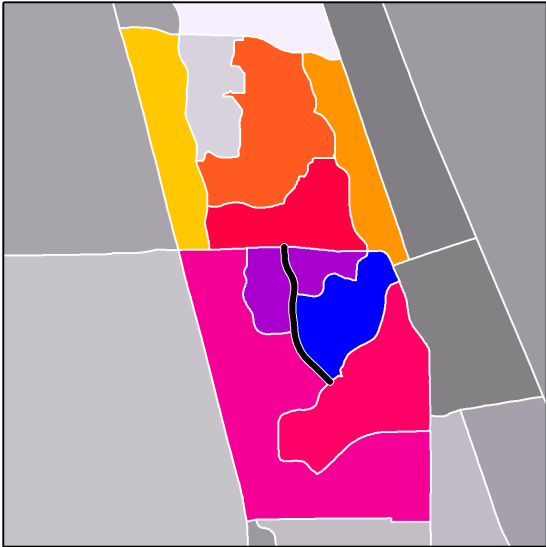
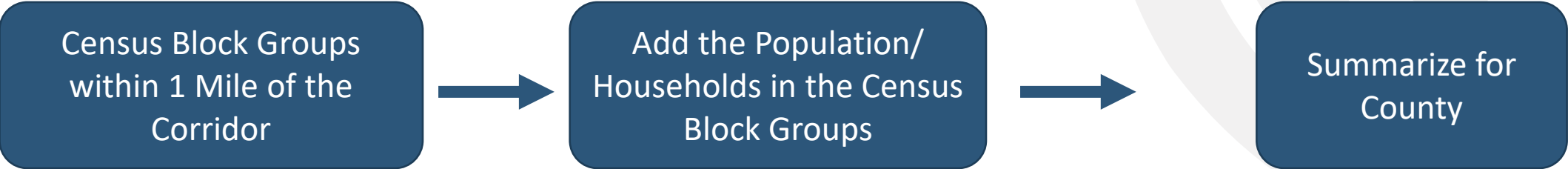
# CRITICAL POPULATION

- **Critical Population** must meet one of the following criteria:
  - Top 20% of corridors serving any one of the five populations:
    - Poor and Struggling
    - Zero Car Households
    - Persons of Color
    - Households Including a Person with a Disability
    - Persons Over 65
  - Maximum TD Population score along the corridor is  $> 2$
- **Most Critical Population:**
  - Top 20% of corridors serving  $> 1$  of the five populations





# PROCESS TO DETERMINE CRITICAL POPULATION



**4,910 people** who are poor or struggling live in a Census Block Group within 1 mile of this corridor

# CRITICAL POPULATION CRITERIA

Not Critical	Critical	Most Critical
Maximum <b>TD Population Score</b> < 2 along the corridor <b>AND</b> Corridor does <b>not</b> serve the <b>Top 20%</b> of critical population groups	Maximum <b>TD Population Score</b> > 2 along the corridor <b>OR</b> Corridor does serve the <b>Top 20%</b> of critical population groups	Corridor serves the <b>Top 20%</b> of <b>at least 2</b> critical population groups

# CRITICAL FUNCTION

- Causeways, I-95, and all east-west connections serve special functions and considered “Most Critical”
- The corridors with an Evacuation Route were also considered “Most Critical”
- “Critical Corridors” met one of the following:
  - Corridors with SCAT route
  - AADT>40,000
  - Functional Class of a Primary Arterial or larger



# CRITICAL FUNCTION CRITERIA

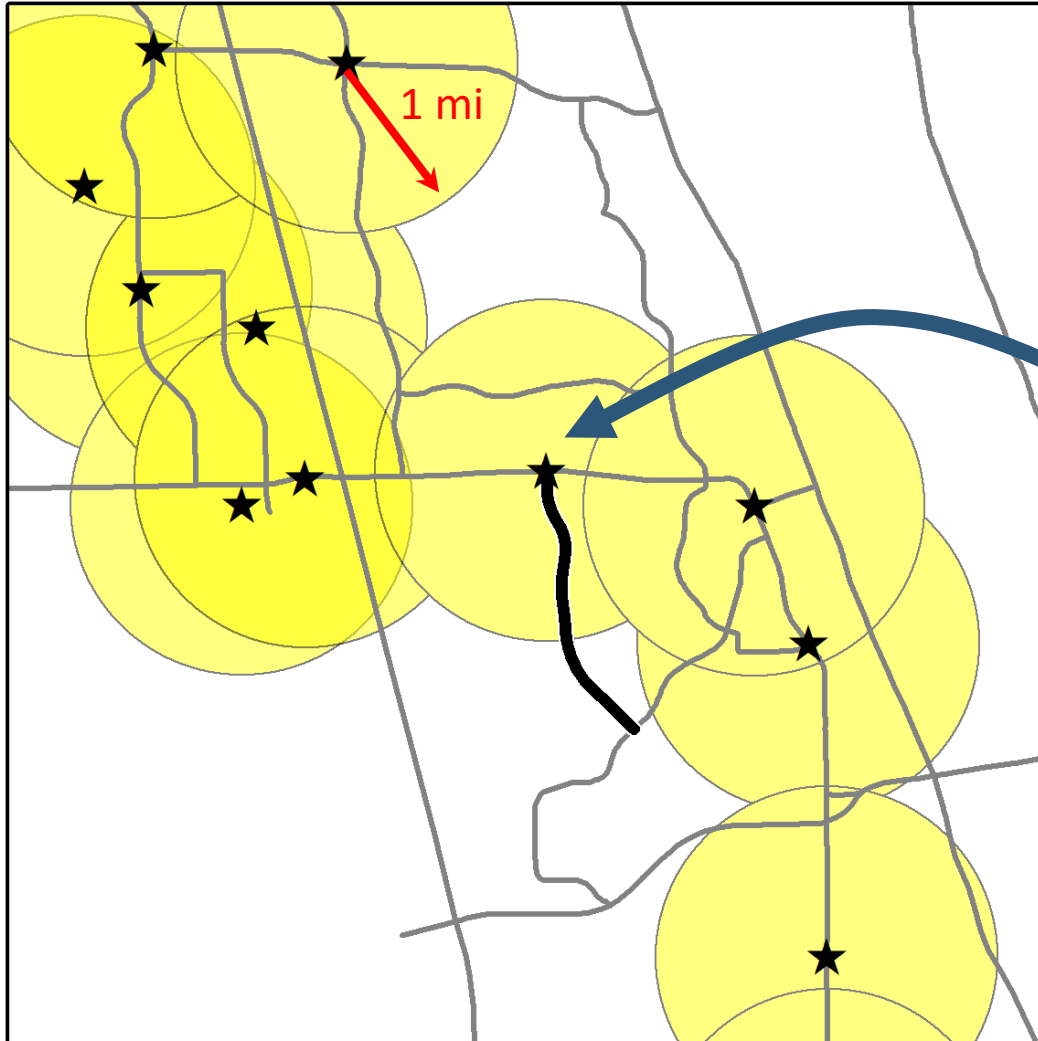
Not Critical	Critical	Most Critical
All <b>other</b> corridors not meeting Critical or Most Critical criteria	Corridors with a <b>SCAT route</b> <b>OR</b> Corridors with a functional classification of a <b>Principal Arterial or larger</b> <b>OR</b> Corridors with an <b>AADT &gt; 40,000</b>	Corridors serving a <b>special function</b> (Interstate, Causeways, East-West Connections) <b>OR</b> Corridors that are an <b>evacuation route</b>

# CRITICAL DESTINATIONS

- Corridors with **> 1 major destination or > 1 activity center** within 1-mile were considered **“Most Critical”**
- The corridors with **one major destination or activity center** within 1-mile were considered **“Critical”**



# PROCESS TO DETERMINE CRITICAL DESTINATIONS



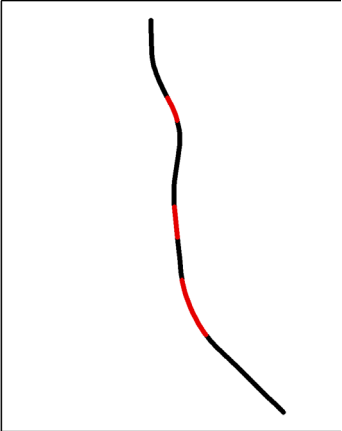
**1 activity center or key destination is within 1 mile of the corridor**

# CRITICAL DESTINATIONS CRITERIA

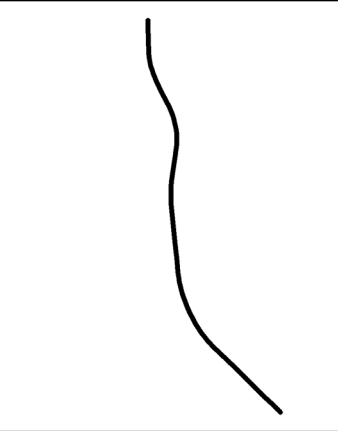
Not Critical	Critical	Most Critical
All <b>other</b> corridors	Corridors that have <b>1 major destination or activity center</b> within 1-mile	Corridors that have <b>more than 1 major destination or activity center</b> within 1-mile

# IDENTIFICATION OF KEY CORRIDORS

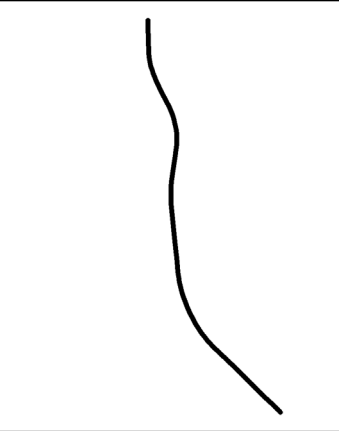
Flood



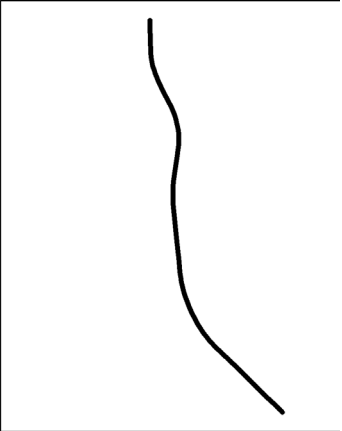
Sea Level Rise



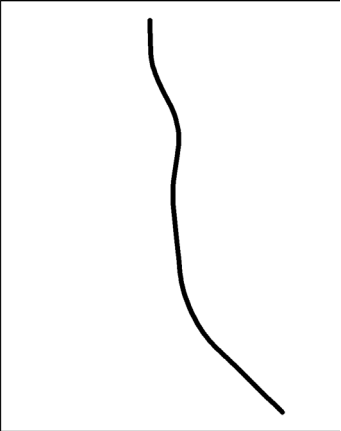
Storm Surge



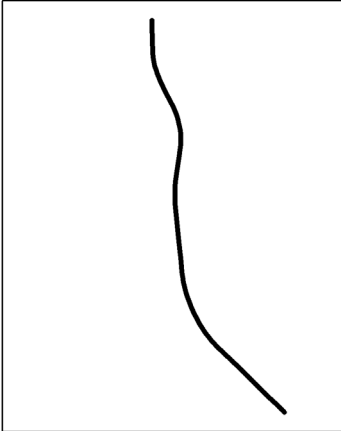
Wind



Erosion



Fire



	Flood	Sea Level Rise	Storm Surge	Wind	Erosion	Fire
Miles Vulnerable	0.4	0.0	0.0	0.0	0.0	0.0
Vulnerable/ Most Vulnerable	Most Vulnerable	Not Vulnerable	Not Vulnerable	Not Vulnerable	Not Vulnerable	Not Vulnerable
Score	2	0	0	0	0	0



Vulnerability Score

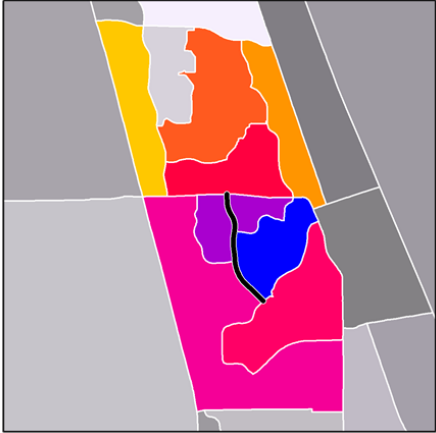


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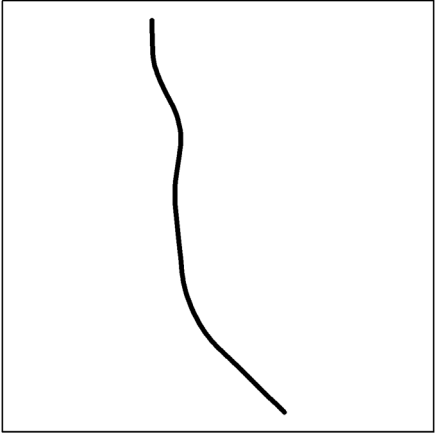


# IDENTIFICATION OF KEY CORRIDORS

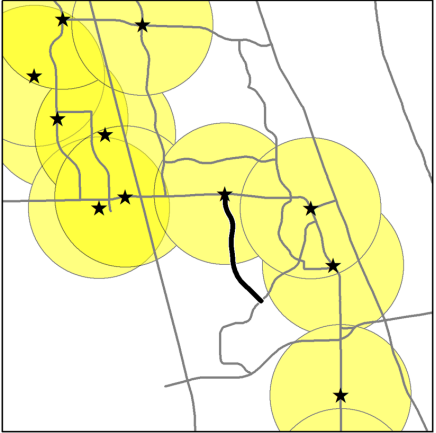
Critical Population



Critical Function



Critical Destination



Critical/ Most Critical	-	Most Critical	Critical
Score	0	2	1

# IDENTIFICATION OF KEY CORRIDORS

Vulnerability Score



Criticality Score



Corridor Score

2



3



6

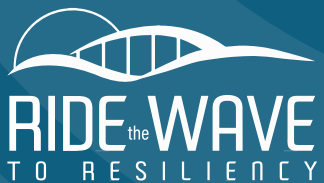
# TASK FORCE DISCUSSION

Do you have any feedback on...

- **On how the shocks/stressors were defined?**
- **About how vulnerability was determined?**
- **Concerning measures used to define criticality?**



# COMMUNITIES RESILIENCY UPDATES



# TASK FORCE DISCUSSION

**Are there any initiatives or activities in your community related to transportation resiliency?**

**In other communities of Brevard County?**



# NEXT STEPS

# NEXT STEPS

- Finalize key critical corridors
- Mitigation strategies for top corridors related to shock/stressor
- Transportation Disadvantaged Populations meetings – December 2021
- Task Force Meeting 4 – March 2022
  - Present key corridors and discuss mitigation strategies





# Thank you!



Sarah Kraum, Senior Transportation Planner



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sarah.kraum@brevardfl.gov



<http://spacecoasttpo.com/>



## APPENDIX B: SUMMARY TABLE DEFINITIONS



## SUMMARY TABLE DEFINITIONS

- ◆ **Rank** – the rank for that specific corridor based on the severity of impact by a specific shock/stressor, the proportion of the roadway impacted by a particular shock/stressor, and the total score for the top 20 corridors
- ◆ **Corridor ID** – a unique identification given to each corridor. There are 406 corridors in total
- ◆ **Road Name and Limits** – these two columns identify the corridor’s name and the extents of the corridor
- ◆ **Area** – the corridors are divided into four areas: North, Central, South, and Barrier islands
- ◆ **City** – the city in which the corridor resides
- ◆ **Length (mi)** – the total length in miles for each corridor
- ◆ **Vuln. Score** – the vulnerability score for each corridor, defined as the following equation:
$$2 \times \text{Number of shocks or stressors with Severe Impact} + 1 \times \text{Number of Shocks or Stressors with Minimal Impact}$$
- ◆ **Critical Score** – the critical score for each corridor, defined as the following equation:
$$2 \times (\text{Most Critical Function} + \text{Most Critical Local Asset}) + 1 \times (\text{Critical Function} + \text{Critical Local Asset}) + 1 \times (\text{Critical Regional Asset})$$
- ◆ **Total Score** – the total score for each corridor, as defined above.
- ◆ **For What is the Corridor Vulnerable? Columns** – determines the severity of impact for each corridor based on the length (miles) of a corridor in a shock/stressor impact area
- ◆ **How much of the Corridor is Vulnerable? Columns** – portion of the corridor vulnerable to a specific shock/stressor based on the length of corridor impacted out of the total length of the corridor
- ◆ **Serves Vuln. Pop.** – determines if the corridor serves vulnerable populations, and the degree of vulnerability
- ◆ **Is the Corridor Critical? Columns** – specifies if the corridor serves a critical function, a critical local asset, and/or a critical regional asset (including causeways), and the degree of criticality



APPENDIX C: VULNERABILITY AND CRITICALITY OF ALL CORRIDORS TABLE



# SCTPO Transportation Resiliency Master Plan: Vulnerability and Criticality Analysis of All Corridors

**Table Description:** This table summarizes the vulnerability of each corridor to shocks or stressors and the criticality of each corridor.

**How Corridors are Ordered:** By descending *Total Score* . Then by descending *Critical Score* . Then alphabetically by *Road Name* .

**Scores:**  
 Vulnerable Score = 2\*# of Shocks or Stressors with Severe Impact + 1\*# of Shocks or Stressors with Minimal Impact  
 Vulnerable Population Score = 2, if the corridor serves a Most Vulnerable Population. Vulnerable Population Score = 1, if the corridor serves a Vulnerable Population  
 Critical Score = 2\*(Most Critical Function + Most Critical Local Asset) + 1\*(Critical Function + Critical Local Asset) + 1\*(Critical Regional Asset)  
 Total Score = Vulnerable Score + (Vulnerable Population Score if Vulnerable Score > 0) \* Critical Score

**Shocks or Stressors:** Flooding (Flood), Sea Level Rise (SLR), Storm Surge, Fire, Shoreline Erosion (Shrl. Erosn.). Severe Impact (Sev. Imp.) has >0.25 mi of the corridor impacted. Minimal Impact (Min. Imp.) has >0 mi but <0.25 mi of the corridor impacted.

**Notes:** The *For What is the Corridor Vulnerable* columns report the summarized extent of impact to the corridor by each shock or stressor. The *How Much of the Corridor is Vulnerable* columns report the portion of the corridor that is impacted by each shock or stressor. *% Vuln.* reports the portion of the corridor that is vulnerable to at least 1 shock or stressor. Some shocks or stressors have overlapping impacts so this number may be less than the sum of the impacts of each shock or stressor. See methodology document for further information on each criteria.

Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
Not in Top 20	60	SR 520 (MERRITT ISLAND CSWY)	SR 520 (HUBERT HUMPHREY CSWY) - SYKES CREEK PKWY	BARRIER ISLANDS	UNINCORPORATED	2.3	8	2	5	50	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	75%	19%	47%	26%	0%	28%	Most Vuln.	Most Crit.	Most Crit.	Yes
SE17	218	US 192 (STRAWBRIDGE AVE/MELBOURNE CSWY)	NEW HAVEN AVE - SR A1A (MIRAMAR AVE)	BARRIER ISLANDS	UNINCORPORATED	2.2	8	1	5	45	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	85%	26%	51%	39%	0%	55%	Vuln.	Most Crit.	Most Crit.	Yes
Not in Top 20	197	SR 518 (EAU GALLIE BLVD)	MONTREAL AVE - SR A1A	BARRIER ISLANDS	MELBOURNE	2.6	8	-	5	40	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	86%	25%	55%	45%	0%	35%	-	Most Crit.	Most Crit.	Yes
FL20; SS15; SE9	217	SR 520 (COCOA BEACH CSWY)	MILFORD POINT DR/BANANA RIVER DR - SR A1A (ATLANTIC AVE)	BARRIER ISLANDS	COCOA BEACH	3.3	8	-	5	40	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	100%	41%	84%	82%	0%	81%	-	Most Crit.	Most Crit.	Yes
Not in Top 20	5023	SR 520 (MERRITT ISLAND CSWY)	SYKES CREEK PKWY - BANANA RIVER DR	BARRIER ISLANDS	UNINCORPORATED	1.3	7	-	5	35	Min. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	100%	5%	89%	52%	0%	40%	-	Most Crit.	Most Crit.	Yes
Not in Top 20	202	SR 404 (PINEDA CSWY)	US 1 - SR A1A (ATLANTIC AVE)	BARRIER ISLANDS	UNINCORPORATED	3.9	8	-	4	32	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	82%	19%	37%	34%	0%	42%	-	Most Crit.	Crit.	Yes
SE16	33	SR 406 (A MAX BREWER MEMORIAL PKWY)	US 1 (WASHINGTON AVE) - SR 406 (A MAX BREWER MEMORIAL PKWY)	BARRIER ISLANDS	TITUSVILLE	1.2	8	-	4	32	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	100%	30%	69%	27%	0%	55%	-	Crit.	Most Crit.	Yes
Not in Top 20	3010	SR 528 (BENNETT CSWY)	US 1 (COCOA BLVD) - SR 3 (COURTENAY PKWY)	BARRIER ISLANDS	UNINCORPORATED	2.9	8	-	4	32	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	74%	12%	32%	49%	7%	44%	-	Most Crit.	Crit.	Yes
Not in Top 20	1010	SR 528 (INDIAN RIVER LAGOON SCENIC HWY)	SR 3 (COURTENAY PKWY) - SR A1A (ASTRONAUT BLVD)	BARRIER ISLANDS	UNINCORPORATED	4.7	8	-	4	32	Min. Imp	Sev. Imp	Sev. Imp	Min. Imp	Sev. Imp	89%	5%	68%	64%	48%	32%	-	Most Crit.	Crit.	Yes
FL6	210	SR A1A (ATLANTIC AVE)	SR 404 (PINEDA CSWY) - S END OF ONE WAY PAIRS	BARRIER ISLANDS	UNINCORPORATED	4.9	8	-	4	32	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	86%	62%	52%	10%	0%	19%	-	Most Crit.	Crit.	Yes
Not in Top 20	207	SR A1A (ATLANTIC ST)	INDIAN RIVER CO - OAK ST	BARRIER ISLANDS	UNINCORPORATED	14.3	8	-	4	32	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	22%	3%	9%	19%	0%	3%	-	Most Crit.	Most Crit.	-
SE10	178	US 1	INDIAN RIVER CO - VALKARIA RD	SOUTH	MALABAR	8.2	7	1	4	32	No Imp	Sev. Imp	Sev. Imp	Min. Imp	Sev. Imp	100%	0%	61%	65%	21%	80%	Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	95	SR 520 (WILLARD ST)	SR 520 (HUBERT HUMPHREY CSWY) - US 1 (COCOA BLVD)	CENTRAL	COCOA	0.6	4	2	5	30	Min. Imp	Min. Imp	Min. Imp	No Imp	Min. Imp	54%	27%	37%	35%	0%	35%	Most Vuln.	Most Crit.	Most Crit.	Yes
Not in Top 20	18	SR 405 (NASA PKWY)	US 1 - SPACE COMMERCE WAY	BARRIER ISLANDS	UNINCORPORATED	5.9	10	-	3	30	Sev. Imp	Sev. Imp	Sev. Imp	Sev. Imp	Sev. Imp	97%	7%	77%	73%	62%	36%	-	Most Crit.	-	Yes
Not in Top 20	5034	US 1	SR 404 (PINEDA CSWY) - SUNTREE BLVD	CENTRAL	UNINCORPORATED	1.8	6	1	4	28	Min. Imp	Sev. Imp	Min. Imp	No Imp	Sev. Imp	36%	2%	16%	6%	0%	28%	Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	94	SR 520 (KING ST)	US 1 (COCOA BLVD) - RIVEREDGE BLVD	CENTRAL	COCOA	0.5	3	2	5	25	Min. Imp	Min. Imp	Min. Imp	No Imp	No Imp	26%	2%	26%	23%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	Yes
SS14	215	SR A1A (ASTRONAUT BLVD)	N ATLANTIC AVE - GEORGE J KING BLVD	BARRIER ISLANDS	CAPE CANAVERAL	1.3	4	1	5	25	No Imp	Sev. Imp	Sev. Imp	No Imp	No Imp	83%	0%	83%	83%	0%	0%	Vuln.	Most Crit.	Most Crit.	Yes
Not in Top 20	1000	I-95	ST JOHNS HERITAGE PKWY - SR 514 (MALABAR RD)	SOUTH	GRANT VALKARIA	7.5	4	2	4	24	Sev. Imp	No Imp	No Imp	Sev. Imp	No Imp	66%	26%	0%	0%	63%	0%	Most Vuln.	Most Crit.	Most Crit.	-
SLR1	2051	SR 3 (COURTENAY PKWY)	TROPICAL TR - SPACE COMMERCE WAY	BARRIER ISLANDS	UNINCORPORATED	3.3	6	-	4	24	No Imp	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	100%	0%	100%	30%	95%	0%	-	Most Crit.	Crit.	Yes
Not in Top 20	209	SR A1A	SR 518 (EAU GALLIE BLVD) - SR 404 (PINEDA CSWY)	BARRIER ISLANDS	SATELLITE BEACH	5.2	4	2	4	24	Sev. Imp	Sev. Imp	No Imp	No Imp	No Imp	9%	5%	9%	0%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	-
SE14	181	US 1 (HARBOR CITY BLVD)	US 192 (STRAWBRIDGE AVE) - SARNO RD	SOUTH	MELBOURNE	3.5	4	2	4	24	Min. Imp	No Imp	Min. Imp	No Imp	Sev. Imp	58%	1%	0%	1%	0%	58%	Most Vuln.	Most Crit.	Most Crit.	-
FL18; SE6	4033	INDIAN RIVER DR	CITY POINT RD - US 1	NORTH	COCOA	3.1	8	-	3	24	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	94%	43%	69%	28%	0%	90%	-	Crit.	Most Crit.	-
SS18; SE20	64	SYKES CREEK PKWY	MERRITT AVE - N BANANA RIVER DR	BARRIER ISLANDS	UNINCORPORATED	1.5	8	-	3	24	Min. Imp	Sev. Imp	Sev. Imp	Min. Imp	Sev. Imp	100%	4%	88%	81%	93%	46%	-	Crit.	Most Crit.	-
Not in Top 20	102	US 1	SUNTREE BLVD - VIERA BLVD	CENTRAL	UNINCORPORATED	2.4	7	1	3	24	Min. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	70%	3%	69%	53%	0%	17%	Vuln.	Most Crit.	Crit.	-
Not in Top 20	349	PINEAPPLE AVE	SR 518 (EB EAU GALLIE BLVD) - PKWY DR	SOUTH	MELBOURNE	2.1	5	2	3	21	No Imp	Sev. Imp	Min. Imp	No Imp	Sev. Imp	46%	0%	17%	1%	0%	34%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	125	SR 518 (EAU GALLIE BLVD) (EB ONLY)	US 1 (HARBOR CITY BLVD) - CAUSEWAY	SOUTH	MELBOURNE	0.5	3	1	5	20	No Imp	Min. Imp	Min. Imp	No Imp	Min. Imp	44%	0%	34%	40%	0%	33%	Vuln.	Most Crit.	Most Crit.	Yes
Not in Top 20	213	SR A1A (ATLANTIC AVE)	N END OF ONE WAY PAIRS - SR 520 (COCOA BEACH CSWY)	BARRIER ISLANDS	COCOA BEACH	2.2	4	-	5	20	No Imp	Sev. Imp	Sev. Imp	No Imp	No Imp	65%	0%	65%	25%	0%	0%	-	Most Crit.	Most Crit.	Yes
Not in Top 20	214	SR A1A (JF KENNEDY BLVD)	SR 520 (COCOA BEACH CSWY) - N ATLANTIC AVE	BARRIER ISLANDS	COCOA BEACH	2.1	3	1	5	20	No Imp	Sev. Imp	Min. Imp	No Imp	No Imp	19%	0%	19%	10%	0%	0%	Vuln.	Most Crit.	Most Crit.	Yes

Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
SLR15	212	SR AIA (ORLANDO AVE) (SB ONLY)	N END OF ONE WAY PAIRS - S END OF ONE WAY PAIRS	BARRIER ISLANDS	COCOA BEACH	3.0	4	-	5	20	No Imp	Sev. Im	Sev. Im	No Imp	No Imp	100%	0%	100%	53%	0%	0%	-	Most Crit.	Most Crit.	Yes
Not in Top 20	5003	I-95	SR 404 (PINEDA CSWY) - WICKHAM RD	CENTRAL	UNINCORPORATED	2.7	3	2	4	20	Sev. Im	No Imp	No Imp	Min. Im	No Imp	41%	10%	0%	0%	31%	0%	Most Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	5020	SR 3 (COURTENAY PKWY )	SR 528 (BENNETT CSWY) - HALL RD	BARRIER ISLANDS	UNINCORPORATED	1.9	5	-	4	20	Min. Im	Sev. Im	No Imp	Min. Im	Min. Im	59%	2%	38%	0%	40%	6%	-	Most Crit.	Crit.	Yes
SLR2; FR1	51	SR 3 (N COURTENAY PKWY)	HALL RD - N TROPICAL TR	BARRIER ISLANDS	UNINCORPORATED	2.7	5	-	4	20	No Imp	Sev. Im	Min. Im	Sev. Im	No Imp	100%	0%	100%	5%	100%	0%	-	Most Crit.	Crit.	Yes
SE3	4030	INDIAN RIVER DR	SR 520 (KING ST) - DIXON BLVD	CENTRAL	COCOA	1.9	8	2	2	20	Sev. Im	Sev. Im	Sev. Im	No Imp	Sev. Im	99%	13%	26%	13%	0%	97%	Most Vuln.	-	Most Crit.	-
SE8	57	S TROPICAL TR	SR 513 (S PATRICK DR) - SR 404 (PINEDA CSWY)	BARRIER ISLANDS	INDIAN HARBOUR BEACH	5.0	8	2	2	20	Sev. Im	Sev. Im	Sev. Im	No Imp	Sev. Im	95%	34%	77%	73%	0%	83%	Most Vuln.	-	Most Crit.	-
SLR18; SS19; FR2	59	SPACE COMMERCE WAY	KENNEDY PKWY - SR 405 (NASA CSWY)	BARRIER ISLANDS	UNINCORPORATED	2.7	6	-	3	18	No Imp	Sev. Im	Sev. Im	Sev. Im	No Imp	100%	0%	99%	80%	100%	0%	-	Most Crit.	-	Yes
SLR3; SS8	383	SR 406 (A MAX BREWER MEMORIAL PKWY)	A MAX BREWER MEMORIAL PKWY - KENNEDY PKWY	BARRIER ISLANDS	TITUSVILLE	6.0	9	-	2	18	Min. Im	Sev. Im	Sev. Im	Sev. Im	Sev. Im	100%	2%	100%	98%	91%	9%	-	Crit.	-	Yes
Not in Top 20	345	NEW HAVEN AVE	US 192 (NEW HAVEN AVE)/FRANKLIN ST - US 192 (STRAWBRIDGE AVE)	SOUTH	UNINCORPORATED	1.1	3	1	4	16	Min. Im	Min. Im	Min. Im	No Imp	No Imp	15%	9%	15%	12%	0%	0%	Vuln.	Crit.	Most Crit.	Yes
FL8	165	SR 404 (PINEDA CSWY)	LAKE ANDREW DR - WICKHAM RD	SOUTH	UNINCORPORATED	3.2	3	1	4	16	Sev. Im	No Imp	No Imp	Min. Im	No Imp	94%	57%	0%	0%	82%	0%	Vuln.	Most Crit.	Crit.	Yes
Not in Top 20	1009	SR 528 (BEACHLINE EXPWY)	I-95 - US 1 (COCOA BLVD)	CENTRAL	COCOA	4.2	3	1	4	16	Sev. Im	No Imp	No Imp	Min. Im	No Imp	41%	11%	0%	0%	37%	0%	Vuln.	Most Crit.	Crit.	Yes
Not in Top 20	39	US 1	MARINA RD - DAIRY RD	NORTH	TITUSVILLE	2.3	3	1	4	16	No Imp	Min. Im	Min. Im	No Imp	Min. Im	7%	0%	3%	3%	0%	6%	Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	182	US 1 (HARBOR CITY BLVD)	SARNO RD - PKWY DR	SOUTH	MELBOURNE	2.6	2	2	4	16	No Imp	No Imp	Min. Im	No Imp	Min. Im	8%	0%	0%	1%	0%	8%	Most Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	37	US 1 (WASHINGTON AVE)	GRACE ST - MARINA RD	NORTH	TITUSVILLE	1.2	4	-	4	16	No Imp	Sev. Im	Sev. Im	No Imp	No Imp	32%	0%	32%	22%	0%	0%	-	Most Crit.	Most Crit.	-
Not in Top 20	192	WICKHAM RD	SR 404 (PINEDA CSWY) - MURRELL RD	CENTRAL	UNINCORPORATED	4.1	2	2	4	16	Sev. Im	No Imp	No Imp	No Imp	No Imp	24%	24%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	344	MELBOURNE AVE	SR 507 (BABCOCK ST) - FRONT ST	SOUTH	MELBOURNE	1.3	6	2	2	16	Min. Im	Sev. Im	Min. Im	No Imp	Sev. Im	27%	15%	21%	16%	0%	25%	Most Vuln.	Crit.	Crit.	-
Not in Top 20	373	RIVERSIDE DR	SR A1A (OAK ST) - US 192 (5TH AVE)	BARRIER ISLANDS	INDIALANTIC	2.0	8	-	2	16	Sev. Im	Sev. Im	Sev. Im	No Imp	Sev. Im	95%	27%	95%	77%	0%	21%	-	-	Most Crit.	-
SLR4	204	RIVERSIDE DR	US 192 (FIFTH AVE) - SR 518 (EAU GALLIE BLVD)	BARRIER ISLANDS	INDIALANTIC	3.8	7	1	2	16	Min. Im	Sev. Im	Sev. Im	No Imp	Sev. Im	100%	6%	100%	48%	0%	7%	Vuln.	-	Most Crit.	-
SLR19; SS7	206	SR 513 (S PATRICK DR )	BANANA RIVER DR - SR 404 (PINEDA CSWY)	BARRIER ISLANDS	SATELLITE BEACH	4.4	6	2	2	16	Sev. Im	Sev. Im	Sev. Im	No Imp	No Imp	100%	13%	99%	99%	0%	0%	Most Vuln.	-	Most Crit.	-
SE15	2178	US 1	VALKARIA RD - SR 514 (MALABAR RD)	SOUTH	MALABAR	3.1	8	-	2	16	Min. Im	Sev. Im	Sev. Im	Min. Im	Sev. Im	100%	1%	26%	25%	84%	56%	-	Most Crit.	-	-
Not in Top 20	126	SR 518 (EAU GALLIE BLVD) (WB ONLY)	CAUSEWAY - US 1 (HARBOR CITY BLVD)	SOUTH	MELBOURNE	0.5	3	-	5	15	No Imp	Min. Im	Min. Im	No Imp	Min. Im	47%	0%	37%	41%	0%	38%	-	Most Crit.	Most Crit.	Yes
Not in Top 20	93	SR 520 (KING ST)	I-95 - SR 501 (CLEARLAKE RD)	CENTRAL	UNINCORPORATED	2.5	1	2	5	15	No Imp	No Imp	No Imp	Min. Im	No Imp	11%	0%	0%	0%	11%	0%	Most Vuln.	Most Crit.	Most Crit.	Yes
Not in Top 20	186	US 192 (NEW HAVEN AVE)	BABCOCK ST - NEW HAVEN AVE	SOUTH	UNINCORPORATED	1.3	2	1	5	15	No Imp	Min. Im	Min. Im	No Imp	No Imp	1%	0%	0%	1%	0%	0%	Vuln.	Most Crit.	Most Crit.	Yes
Not in Top 20	43	FORTENBERRY RD	S COURTENAY PKWY - SYKES CREEK PKWY	BARRIER ISLANDS	UNINCORPORATED	1.1	5	-	3	15	Min. Im	Sev. Im	Sev. Im	No Imp	No Imp	95%	15%	95%	57%	0%	0%	-	Crit.	Most Crit.	-
SLR5; SS1	62	SYKES CREEK PKWY	FORTENBERRY RD - SR 520 (MERRITT ISLAND CSWY)	BARRIER ISLANDS	UNINCORPORATED	0.4	5	-	3	15	Min. Im	Sev. Im	Sev. Im	No Imp	No Imp	100%	9%	100%	100%	0%	0%	-	Crit.	Most Crit.	-
SLR6; SS2	63	SYKES CREEK PKWY	SR 520 (MERRITT ISLAND CSWY) - MERRITT AVE	BARRIER ISLANDS	UNINCORPORATED	0.3	5	-	3	15	No Imp	Sev. Im	Sev. Im	No Imp	Min. Im	100%	0%	100%	100%	0%	10%	-	Crit.	Most Crit.	-
Not in Top 20	2182	US 1	PKWY DR - SR 404 (PINEDA CSWY)	SOUTH	MELBOURNE	3.5	3	2	3	15	No Imp	No Imp	Min. Im	No Imp	Sev. Im	40%	0%	0%	2%	0%	40%	Most Vuln.	Most Crit.	Crit.	-
Not in Top 20	180	US 1 (DIXIE HWY)	RJ CONLAN BLVD - US 192 (STRAWBRIDGE AVE)	SOUTH	MELBOURNE	2.0	4	1	3	15	Min. Im	No Imp	Min. Im	No Imp	Sev. Im	20%	2%	0%	1%	0%	20%	Vuln.	Most Crit.	Crit.	-
FL12; SLR17	203	RIDGEWOOD AVE	YOUNG AVE - CENTRAL BLVD	BARRIER ISLANDS	CAPE CANAVERAL	1.9	6	1	2	14	Sev. Im	Sev. Im	Sev. Im	No Imp	No Imp	100%	51%	100%	56%	0%	0%	Vuln.	-	Most Crit.	-
Not in Top 20	58	S TROPICAL TR	S COURTENAY PKWY - SR 520 (MERRITT ISLAND CSWY)	BARRIER ISLANDS	UNINCORPORATED	5.6	7	-	2	14	Min. Im	Sev. Im	Sev. Im	No Imp	Sev. Im	67%	0%	45%	27%	0%	33%	-	-	Most Crit.	-
SE11	179	US 1 (DIXIE HWY)	MALABAR RD - RJ CONLAN BLVD	SOUTH	MALABAR	3.8	6	1	2	14	No Imp	Sev. Im	Sev. Im	No Imp	Sev. Im	82%	0%	12%	11%	0%	79%	Vuln.	Most Crit.	-	-
Not in Top 20	156	MICCO RD	ST JOHNS HERITAGE PKWY - US 1	SOUTH	UNINCORPORATED	5.1	3	-	4	12	Sev. Im	No Imp	No Imp	Min. Im	No Imp	38%	10%	0%	0%	28%	0%	-	Most Crit.	Most Crit.	-
Not in Top 20	5011	SR 46	I-95 - US 1	NORTH	UNINCORPORATED	1.5	3	-	4	12	Sev. Im	No Imp	No Imp	Min. Im	No Imp	90%	33%	0%	0%	90%	0%	-	Most Crit.	Most Crit.	-
Not in Top 20	124	SR 518 (EAU GALLIE BLVD)	WICKHAM RD - US 1 (HARBOR CITY BLVD)	SOUTH	MELBOURNE	2.5	1	2	4	12	No Imp	Min. Im	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	-
SS12	1011	SR A1A (BENNETT CSWY)	SR 528 (BEACHLINE EXPWY) - GEORGE J KING BLVD	BARRIER ISLANDS	UNINCORPORATED	0.7	3	-	4	12	No Imp	No Imp	Sev. Im	No Imp	Min. Im	88%	0%	0%	88%	0%	2%	-	Most Crit.	Crit.	Yes
Not in Top 20	38	US 1 (HOPKINS AVE)	MARINA RD - GRACE ST	NORTH	TITUSVILLE	1.2	3	-	4	12	No Imp	Sev. Im	Min. Im	No Imp	No Imp	24%	0%	24%	14%	0%	0%	-	Most Crit.	Most Crit.	-
Not in Top 20	193	WICKHAM RD	LAKE ANDREW DR - MURRELL RD	CENTRAL	UNINCORPORATED	0.8	1	2	4	12	Min. Im	No Imp	No Imp	No Imp	No Imp	17%	17%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	1003	I-95	SR 518 (EAU GALLIE BLVD) - PINEDA CSWY	SOUTH	UNINCORPORATED	5.0	3	1	3	12	Sev. Im	No Imp	No Imp	Min. Im	No Imp	70%	13%	0%	0%	60%	0%	Vuln.	Most Crit.	Crit.	-
Not in Top 20	5033	MURRELL RD	VIERA BLVD - BARNES BLVD	CENTRAL	ROCKLEDGE	2.1	2	2	3	12	Sev. Im	No Imp	No Imp	No Imp	No Imp	38%	38%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	2085	MURRELL RD	WICKHAM RD - VIERA BLVD	CENTRAL	ROCKLEDGE	2.5	2	2	3	12	Sev. Im	No Imp	No Imp	No Imp	No Imp	28%	28%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
FR3	26	SR 50 (CHENEY HWY)	ORANGE CO - I-95	NORTH	TITUSVILLE	5.2	4	-	3	12	Min. Im	Min. Im	No Imp	Sev. Im	No Imp	100%	0%	0%	0%	100%	0%	-	Most Crit.	Crit.	-
Not in Top 20	191	WICKHAM RD	PKWY DR - SR 404 (PINEDA CSWY)	SOUTH	MELBOURNE	3.0	2	2	3	12	Sev. Im	No Imp	No Imp	No Imp	No Imp	16%	16%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
SLR20; SS17; SE18	369	MINUTEMEN CSWY	TOM WARRINER BLVD - SR A1A (S ATLANTIC AVE)	BARRIER ISLANDS	COCOA BEACH	1.5	6	-	2	12	No Imp	Sev. Im	Sev. Im	No Imp	Sev. Im	99%	0%	99%	81%	0%	53%	-	-	Most Crit.	-
FL9	201	OCEAN BEACH BLVD	WAKULLA LN - YOUNG AVE	BARRIER ISLANDS	COCOA BEACH	1.3	6	-	2	12	Sev. Im	Sev. Im	Sev. Im	No Imp	No Imp	81%	52%	81%	26%	0%	0%	-	-	Most Crit.	-



Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
FR7	24	SR 46	VOLUSIA CO - FAWN LAKE BLVD	NORTH	UNINCORPORATED	4.5	4	-	2	8	Min. Imp	Min. Imp	No Imp	Sev. Imp	No Imp	100%	0%	0%	0%	100%	0%	-	Most Crit.	-	-
SLR12; SS6	205	SR 513 (S PATRICK DR )	SR 518 (EAU GALLIE BLVD) - BANANA RIVER DR	BARRIER ISLANDS	INDIAN HARBOUR BEACH	0.9	4	-	2	8	No Imp	Sev. Imp	Sev. Imp	No Imp	No Imp	100%	0%	100%	100%	0%	0%	-	-	Most Crit.	-
FR8	2092	SR 520 (KING ST)	ORANGE CO - SR 524	CENTRAL	UNINCORPORATED	2.9	3	1	2	8	Min. Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	0%	0%	0%	100%	0%	Vuln.	Most Crit.	-	-
Not in Top 20	2108	VIERA BLVD	MURRELL RD - US 1	CENTRAL	UNINCORPORATED	1.9	2	2	2	8	Sev. Imp	No Imp	No Imp	No Imp	No Imp	30%	30%	0%	0%	0%	0%	Most Vuln.	Crit.	Crit.	-
FL3; SLR10; SS5	5025	N BANANA RIVER DR	SR 520 (MERRITT ISLAND CSWY) - SYKES CREEK PKWY	BARRIER ISLANDS	UNINCORPORATED	1.0	8	-	1	8	Sev. Imp	Sev. Imp	Sev. Imp	Min. Imp	Min. Imp	100%	92%	100%	100%	27%	13%	-	Crit.	-	-
Not in Top 20	53	N TROPICAL TR	GRANT RD - SR 3 (N COURTENAY PKWY)	BARRIER ISLANDS	UNINCORPORATED	4.9	7	-	1	7	Min. Imp	Sev. Imp	Sev. Imp	Min. Imp	Min. Imp	67%	3%	67%	35%	63%	1%	-	-	Crit.	-
Not in Top 20	66	BARNES BLVD	SR 519 (FISKE BLVD) - MURRELL RD	CENTRAL	ROCKLEDGE	1.3	1	1	3	6	No Imp	No Imp	No Imp	Min. Imp	No Imp	21%	0%	0%	0%	21%	0%	Vuln.	Crit.	Most Crit.	-
Not in Top 20	366	COCOA BEACH CSWY	SR A1A (N ATLANTIC AVE) - OCEAN BEACH BLVD	BARRIER ISLANDS	COCOA BEACH	0.2	2	-	3	6	No Imp	Min. Imp	Min. Imp	No Imp	No Imp	25%	0%	25%	25%	0%	0%	-	Crit.	Most Crit.	-
Not in Top 20	109	DR MARTIN LUTHER KING JR BLVD	US 192 (NEW HAVEN AVE) - APOLLO BLVD	SOUTH	MELBOURNE	1.5	1	1	3	6	Min. Imp	No Imp	No Imp	No Imp	No Imp	13%	13%	0%	0%	0%	0%	Vuln.	Crit.	Most Crit.	-
FR11	1005	I-95	SR 407 (CHALLENGER MEMORIAL PKWY) - SR 50 (CHENEY HWY)	NORTH	UNINCORPORATED	3.7	2	-	3	6	No Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	0%	0%	0%	100%	0%	-	Most Crit.	Crit.	-
FR19	5009	I-95	SR 50 (CHENEY HWY) - SR 406 (GARDEN ST)	NORTH	TITUSVILLE	4.4	2	-	3	6	No Imp	No Imp	No Imp	Sev. Imp	No Imp	98%	0%	0%	0%	98%	0%	-	Most Crit.	Crit.	-
Not in Top 20	34	SR 407 (CHALLENGER MEMORIALPKWY)	I-95 - SR 405 (COLUMBIA BLVD)	NORTH	TITUSVILLE	2.5	2	-	3	6	Min. Imp	No Imp	No Imp	Min. Imp	No Imp	86%	8%	0%	0%	84%	0%	-	Most Crit.	Crit.	-
Not in Top 20	97	SR 524	COX RD - SR 524 (INDUSTRY RD)	CENTRAL	COCOA	1.7	1	1	3	6	No Imp	No Imp	No Imp	Min. Imp	No Imp	29%	0%	0%	0%	29%	0%	Vuln.	Most Crit.	Crit.	-
Not in Top 20	5035	STADIUM PKWY	VIERA BLVD - I-95	CENTRAL	UNINCORPORATED	1.9	1	1	3	6	No Imp	No Imp	No Imp	Min. Imp	No Imp	75%	0%	0%	0%	75%	0%	Vuln.	Crit.	Most Crit.	-
Not in Top 20	194	WICKHAM RD	LAKE ANDREW DR - CHARLIE CORBEIL WY	CENTRAL	UNINCORPORATED	2.1	1	1	3	6	Min. Imp	No Imp	No Imp	No Imp	No Imp	4%	4%	0%	0%	0%	0%	Vuln.	Crit.	Most Crit.	-
FR9	2114	BABCOCK ST	INDIAN RIVER CO - MICCO RD	SOUTH	GRANT VALKARIA	3.9	3	-	2	6	Min. Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	1%	0%	0%	100%	0%	-	Most Crit.	-	-
FR10	114	BABCOCK ST	MICCO RD - GRANT RD	SOUTH	GRANT VALKARIA	3.5	3	-	2	6	Min. Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	6%	0%	0%	100%	0%	-	Most Crit.	-	-
Not in Top 20	1	BARNA AVE	SR 405 (COLUMBIA BLVD) - PARK AVE	NORTH	TITUSVILLE	4.8	1	2	2	6	No Imp	No Imp	No Imp	Min. Imp	No Imp	28%	0%	0%	0%	28%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	71	COX RD	SR 520 (KING ST) - SR 524	CENTRAL	COCOA	1.8	2	1	2	6	Min. Imp	No Imp	No Imp	Min. Imp	No Imp	46%	7%	0%	0%	46%	0%	Vuln.	-	Most Crit.	-
Not in Top 20	120	CROTON RD	LAKE WASHINGTON RD - POST RD	SOUTH	MELBOURNE	1.7	1	2	2	6	Min. Imp	No Imp	No Imp	No Imp	No Imp	4%	4%	0%	0%	0%	0%	Most Vuln.	Crit.	Crit.	-
Not in Top 20	1007	I-95	DEERING PKWY - VOLUSIA CO	NORTH	UNINCORPORATED	1.4	3	-	2	6	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	100%	39%	0%	0%	100%	0%	-	Most Crit.	-	-
Not in Top 20	1004	I-95	SR 524 - SR 528 (BEACHLINE EXPWY)	CENTRAL	UNINCORPORATED	2.8	2	1	2	6	Min. Imp	No Imp	No Imp	Min. Imp	No Imp	57%	2%	0%	0%	57%	0%	Vuln.	Most Crit.	-	-
Not in Top 20	342	KNECHT RD	PORT MALABAR BLVD - PALM BAY RD	SOUTH	PALM BAY	1.1	1	2	2	6	Min. Imp	No Imp	No Imp	No Imp	No Imp	6%	6%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	5036	LAKE ANDREW DR	JUDGE F JAMIESON PKWY - VIERA BLVD	CENTRAL	UNINCORPORATED	1.4	2	1	2	6	Sev. Imp	No Imp	No Imp	No Imp	No Imp	28%	28%	0%	0%	0%	0%	Vuln.	-	Most Crit.	-
Not in Top 20	81	LAKE DR	SR 520 (KING ST) - SR 501 (CLEARLAKE RD)	CENTRAL	UNINCORPORATED	1.9	1	2	2	6	Min. Imp	No Imp	No Imp	No Imp	No Imp	4%	4%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	148	LAKE WASHINGTON RD	LAKE WASHINGTON - WICKHAM RD	SOUTH	MELBOURNE	3.8	3	-	2	6	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	58%	14%	0%	0%	52%	0%	-	-	Most Crit.	-
Not in Top 20	45	LUCAS RD	N TROPICAL TR - SR 3 (N COURTENAY PKWY)	BARRIER ISLANDS	UNINCORPORATED	0.6	3	-	2	6	No Imp	Sev. Imp	Min. Imp	No Imp	No Imp	45%	0%	45%	42%	0%	0%	-	-	Most Crit.	-
Not in Top 20	307	PARK AVE	SR 405 (SOUTH ST) - SR 406 (GARDEN ST)	NORTH	TITUSVILLE	3.9	1	2	2	6	No Imp	No Imp	No Imp	Min. Imp	No Imp	48%	0%	0%	0%	48%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	92	SR 520 (KING ST)	SR 524 - I-95	CENTRAL	UNINCORPORATED	2.0	2	1	2	6	Min. Imp	No Imp	No Imp	Min. Imp	No Imp	96%	6%	0%	0%	96%	0%	Vuln.	Most Crit.	-	-
Not in Top 20	2097	SR 524	I-95 - COX RD	CENTRAL	COCOA	1.3	2	1	2	6	Min. Imp	No Imp	No Imp	Min. Imp	No Imp	78%	15%	0%	0%	78%	0%	Vuln.	Most Crit.	-	-
Not in Top 20	96	SR 524	SR 520 (KING ST) - I-95	CENTRAL	COCOA	1.7	2	1	2	6	Min. Imp	No Imp	No Imp	Min. Imp	No Imp	78%	13%	0%	0%	78%	0%	Vuln.	Most Crit.	-	-
Not in Top 20	183	US 192	OSCEOLA CO - I-95	SOUTH	UNINCORPORATED	9.8	3	-	2	6	Min. Imp	No Imp	No Imp	Sev. Imp	No Imp	83%	2%	0%	0%	83%	0%	-	Most Crit.	-	-
Not in Top 20	187	VALKARIA RD	BABCOCK ST - US 1	SOUTH	GRANT VALKARIA	5.6	3	-	2	6	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	84%	8%	0%	0%	82%	0%	-	-	Most Crit.	-
SS20	149	MAIN ST	RIVERVIEW DR - US 1	SOUTH	UNINCORPORATED	0.4	6	-	1	6	Min. Imp	Min. Imp	Sev. Imp	Min. Imp	Min. Imp	100%	15%	45%	78%	100%	48%	-	-	Crit.	-
Not in Top 20	1012	SR A1A (BENNETT CSWY) (NB OFF RAMP)	SR A1A (BENNETT CSWY) - SAMUEL C PHILLIPS PKWY	BARRIER ISLANDS	UNINCORPORATED	2.2	6	-	1	6	Min. Imp	Min. Imp	Sev. Imp	No Imp	Sev. Imp	63%	2%	4%	39%	0%	36%	-	-	-	Yes
Not in Top 20	211	SR A1A (ATLANTIC AVE) (NB ONLY)	S END OF ONE WAY PAIRS - N END OF ONE WAY PAIRS	BARRIER ISLANDS	COCOA BEACH	3.0	1	-	5	5	No Imp	Min. Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Most Crit.	Most Crit.	Yes
Not in Top 20	303	HARRISON ST	KNOX MCRAE DR - US 1 (WASHINGTON AVE)	NORTH	TITUSVILLE	2.8	3	2	1	5	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	56%	16%	0%	0%	48%	0%	Most Vuln.	-	Crit.	-
Not in Top 20	5051	N TROPICAL TR	SR 520 (MERRITT ISLAND CSWY) - LUCAS RD	BARRIER ISLANDS	UNINCORPORATED	1.4	4	1	1	5	No Imp	Sev. Imp	Sev. Imp	No Imp	No Imp	76%	0%	76%	25%	0%	0%	Vuln.	-	Crit.	-
Not in Top 20	172	ST ANDREWS BLVD	SR 404 (PINEDA CSWY) - WICKHAM RD	CENTRAL	UNINCORPORATED	3.2	3	2	1	5	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	44%	26%	0%	0%	33%	0%	Most Vuln.	-	Crit.	-
Not in Top 20	50	SR 3 (N COURTENAY PKWY)	LUCAS RD - SR 528 (BENNETT CSWY)	BARRIER ISLANDS	UNINCORPORATED	2.1	1	-	4	4	No Imp	No Imp	No Imp	Min. Imp	No Imp	14%	0%	0%	0%	14%	0%	-	Most Crit.	Most Crit.	-
Not in Top 20	28	SR 405 (COLUMBIA BLVD)	SR 407 (CHALLENGER MEMORIAL PKWY) - US 1	NORTH	TITUSVILLE	1.8	1	-	4	4	No Imp	No Imp	No Imp	Min. Imp	No Imp	15%	0%	0%	0%	15%	0%	-	Most Crit.	Crit.	Yes
Not in Top 20	5014	SR 50 (CHENEY HWY)	I-95 - SR 405 (COLUMBIA BLVD)	NORTH	TITUSVILLE	0.3	1	-	4	4	No Imp	No Imp	No Imp	Min. Imp	No Imp	100%	0%	0%	0%	100%	0%	-	Most Crit.	Crit.	Yes
Not in Top 20	2207	SR A1A (OAK ST)	OAK ST - US 192 (FIFTH AVE)	BARRIER ISLANDS	UNINCORPORATED	3.2	1	-	4	4	No Imp	No Imp	No Imp	No Imp	Min. Imp	2%	0%	0%	0%	0%	2%	-	Most Crit.	Most Crit.	-
Not in Top 20	35	US 1 (WASHINGTON AVE)	FAY BLVD - SR 405 (NASA CSWY)	NORTH	UNINCORPORATED	3.7	1	-	4	4	No Imp	No Imp	No Imp	No Imp	Min. Imp	8%	0%	0%	0%	6%	2%	-	Most Crit.	Crit.	Yes





Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
Not in Top 20	11	GRISSOM PKWY	PORT ST JOHN PKWY - KINGS HWY	NORTH	UNINCORPORATED	2.5	2	-	1	2	Min. Imp	No Imp	No Imp	Min. Imp	No Imp	26%	9%	0%	0%	22%	0%	-	-	Crit.	-
Not in Top 20	17	KINGS HWY	GRISSOM PKWY - US 1	NORTH	UNINCORPORATED	1.7	2	-	1	2	Sev. Imp	No Imp	No Imp	No Imp	No Imp	17%	17%	0%	0%	0%	0%	-	-	Crit.	-
Not in Top 20	166	PINEHURST AVE	WICKHAM RD - ST ANDREWS BLVD	CENTRAL	UNINCORPORATED	1.1	2	-	1	2	Sev. Imp	No Imp	No Imp	No Imp	No Imp	29%	29%	0%	0%	0%	0%	-	-	Crit.	-
Not in Top 20	2352	RIVIERA DR	PORT MALABAR BLVD - PALM BAY RD	SOUTH	PALM BAY	0.7	1	1	1	2	Min. Imp	No Imp	No Imp	No Imp	No Imp	24%	24%	0%	0%	0%	0%	Vuln.	-	Crit.	-
Not in Top 20	5024	S COURTENAY PKWY	CONE RD - SR 520 (MERRITT ISLAND CSWY)	BARRIER ISLANDS	UNINCORPORATED	0.7	2	-	1	2	No Imp	Sev. Imp	No Imp	No Imp	No Imp	64%	0%	64%	0%	0%	0%	-	-	Crit.	-
Not in Top 20	175	SUNTREE BLVD	WICKHAM RD - US 1	CENTRAL	UNINCORPORATED	0.4	2	-	1	2	Min. Imp	Min. Imp	No Imp	No Imp	No Imp	29%	28%	1%	0%	0%	0%	-	-	Crit.	-
Not in Top 20	362	4TH ST	BREVARD AVE - SR A1A (ORLANDO AVE)	BARRIER ISLANDS	COCOA BEACH	0.1	1	-	1	1	No Imp	Min. Imp	No Imp	No Imp	No Imp	100%	0%	100%	0%	0%	0%	-	Crit.	-	-
Not in Top 20	7	FAY BLVD	GOLFVIEW AVE - GRISSOM PKWY	NORTH	UNINCORPORATED	2.0	1	-	1	1	No Imp	No Imp	No Imp	Min. Imp	No Imp	54%	0%	0%	0%	54%	0%	-	-	Crit.	-
Not in Top 20	2315	GUS HIPP BLVD	MURRELL RD - US 1 (ROCKLEDGE BLVD)	CENTRAL	ROCKLEDGE	1.0	1	-	1	1	Min. Imp	No Imp	No Imp	No Imp	No Imp	17%	17%	0%	0%	0%	0%	-	-	Crit.	-
Not in Top 20	136	HARLOCK RD	AURORA RD - LAKE WASHINGTON RD	SOUTH	MELBOURNE	1.0	1	-	1	1	No Imp	No Imp	No Imp	Min. Imp	No Imp	100%	0%	0%	0%	100%	0%	-	-	Crit.	-
Not in Top 20	23	SISSON RD	SR 405 (COLUMBIA BLVD) - SR 50 (CHENEY HWY)	NORTH	TITUSVILLE	2.0	1	-	1	1	Min. Imp	No Imp	No Imp	No Imp	No Imp	5%	5%	0%	0%	0%	0%	-	-	Crit.	-
Not in Top 20	5013	SR 405 (SOUTH ST)	FOX LAKE RD - SINGLETON AVE	NORTH	TITUSVILLE	1.3	1	-	1	1	No Imp	No Imp	No Imp	Min. Imp	No Imp	100%	0%	0%	0%	100%	0%	-	Crit.	-	-
Not in Top 20	31	SR 406 (GARDEN ST)	CARPENTER RD - I-95	NORTH	TITUSVILLE	0.5	1	-	1	1	No Imp	No Imp	No Imp	Min. Imp	No Imp	58%	0%	0%	0%	58%	0%	-	Crit.	-	-
Not in Top 20	5032	SR 520 (KING ST)	SR 501 (CLEARLAKE RD) - US 1 (COCOA BLVD)	CENTRAL	UNINCORPORATED	1.4	-	2	5	-	No Imp	No Imp	No Imp	No Imp	No Imp	17%	0%	0%	0%	17%	0%	Most Vuln.	Most Crit.	Most Crit.	Yes
Not in Top 20	110	APOLLO BLVD	FEE AVE - SARNO RD	SOUTH	MELBOURNE	3.2	-	2	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	Yes
Not in Top 20	1001	I-95	SR 514 (MALABAR RD) - PALM BAY RD	SOUTH	PALM BAY	3.0	-	2	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	5004	I-95	WICKHAM RD - VIERA BLVD	CENTRAL	UNINCORPORATED	2.6	-	2	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	152	MALABAR RD	EMERSON DR - SAN FILIPPO DR	SOUTH	PALM BAY	0.9	-	-	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Most Crit.	Most Crit.	-
Not in Top 20	151	MALABAR RD	MINTON RD - EMERSON DR	SOUTH	PALM BAY	1.5	-	2	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	158	MINTON RD	EMERSON DR - US 192 (NEW HAVEN AVE)	SOUTH	UNINCORPORATED	3.2	-	1	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	157	MINTON RD	MALABAR RD - EMERSON DR	SOUTH	PALM BAY	2.3	-	2	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	5052	SR 406 (GARDEN ST)	I-95 - SINGLETON AVE	NORTH	TITUSVILLE	0.9	-	-	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Most Crit.	Most Crit.	-
Not in Top 20	32	SR 406 (GARDEN ST)	SINGLETON AVE - US 1 (WASHINGTON AVE)	NORTH	TITUSVILLE	1.9	-	1	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	27	SR 50 (CHENEY HWY)	BARNA AVE - US 1	NORTH	TITUSVILLE	1.5	-	-	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Most Crit.	Most Crit.	-
Not in Top 20	117	SR 507 (BABCOCK ST)	FLORIDA AVE - US 192 (NEW HAVEN AVE)	SOUTH	MELBOURNE	1.5	-	2	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	116	SR 507 (BABCOCK ST)	SR 514 (MALABAR RD) - PALM BAY RD	SOUTH	PALM BAY	2.5	-	2	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	160	SR 508 (NASA BLVD)	EDDIE ALLEN RD - US 1 (HARBOR CITY BLVD)	SOUTH	MELBOURNE	1.4	-	1	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	Crit.	Most Crit.	Yes
Not in Top 20	153	SR 514 (MALABAR RD)	SAN FILIPPO DR - SR 507 (BABCOCK ST)	SOUTH	PALM BAY	0.8	-	-	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Most Crit.	Most Crit.	-
Not in Top 20	208	SR AIA (MIRAMAR AVE)	US 192 (FIFTH AVE) - SR 518 (EAU GALLIE BLVD)	BARRIER ISLANDS	INDIALANTIC	3.4	-	-	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Most Crit.	Most Crit.	-
Not in Top 20	2035	US 1	SR 528 (BENNETT CSWY) - CAMP RD	NORTH	UNINCORPORATED	3.2	-	-	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Most Crit.	Most Crit.	-
Not in Top 20	106	US 1 (COCOA BLVD)	PEACHTREE ST - SR 528 (BENNETT CSWY)	CENTRAL	COCOA	3.3	-	2	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	105	US 1 (COCOA BLVD)	ROSA L JONES BLVD - PEACHTREE ST	CENTRAL	COCOA	0.5	-	2	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	104	US 1 (ROCKLEDGE BLVD)	BARTON BLVD - ROSA L JONES BLVD	CENTRAL	ROCKLEDGE	1.5	-	2	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	2039	US 1 (WASHINGTON AVE)	DAIRY RD - SR 46	NORTH	TITUSVILLE	1.9	-	-	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Most Crit.	Most Crit.	-
Not in Top 20	184	US 192 (NEW HAVEN AVE)	I-95 - MINTON RD/WICKHAM RD	SOUTH	UNINCORPORATED	2.0	-	-	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Most Crit.	Most Crit.	-
Not in Top 20	185	US 192 (NEW HAVEN AVE)	MINTON RD - BABCOCK ST	SOUTH	UNINCORPORATED	3.1	-	2	4	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Most Crit.	-
Not in Top 20	113	AURORA RD	WICKHAM RD - US 1 (HARBOR CITY BLVD)	SOUTH	MELBOURNE	2.4	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	118	BABCOCK ST	US 192 (NEW HAVEN AVE) - US 1 (HARBOR CITY BLVD)	SOUTH	MELBOURNE	2.6	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	312	BARTON BLVD	SR 519 (FISKE BLVD) - US 1 (ROCKLEDGE BLVD)	CENTRAL	ROCKLEDGE	1.2	-	-	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Crit.	Most Crit.	-
Not in Top 20	331	ELDRON BLVD	BAYSIDE LAKES BLVD - AMERICANA BLVD	SOUTH	PALM BAY	4.3	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	76	FISKE BLVD	SR 520 (KING ST) - DIXON BLVD	CENTRAL	COCOA	1.2	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	333	FLORIDA AVE	HOLLYWOOD BLVD - SR 507 (BABCOCK ST)	SOUTH	MELBOURNE	2.0	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	77	FLORIDA AVE	US 1 (ROCKLEDGE BLVD) - SR 520 (KING ST)	CENTRAL	COCOA	1.3	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-

Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
Not in Top 20	138	HIBISCUS BLVD	EVANS RD - US 1 (HARBOR CITY BLVD)	SOUTH	MELBOURNE	3.0	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	1026	HICKORY ST	NEW HAVEN AVE - US 192 (STRAWBRIDGE AVE)	SOUTH	MELBOURNE	0.1	-	1	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	Crit.	Most Crit.	-
Not in Top 20	139	HICKORY ST	US 192 (STRAWBRIDGE AVE) - SR 508 (NASA BLVD)	SOUTH	MELBOURNE	1.0	-	1	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	Crit.	Most Crit.	-
Not in Top 20	5001	I-95	PALM BAY RD - US 192 (NEW HAVEN AVE)	SOUTH	WEST MELBOURNE	4.4	-	1	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	Most Crit.	Crit.	-
Not in Top 20	80	JUDGE F JAMIESON WY	STADIUM PKWY - LAKE ANDREW DR	CENTRAL	UNINCORPORATED	0.5	-	1	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	Crit.	Most Crit.	-
Not in Top 20	2148	LAKE WASHINGTON RD	WICKHAM RD - US 1 (HARBOR CITY BLVD)	SOUTH	MELBOURNE	2.1	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	150	MALABAR RD	JUPITER BLVD - MINTON RD	SOUTH	PALM BAY	1.5	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	85	MURRELL RD	BARNES BLVD - BARTON BLVD	CENTRAL	ROCKLEDGE	2.7	-	1	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	Crit.	Most Crit.	-
Not in Top 20	199	N ATLANTIC AVE	SR A1A (ASTRONAUT BLVD) - GEORGE KING BLVD	BARRIER ISLANDS	CAPE CANAVERAL	1.2	-	1	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	Crit.	Most Crit.	-
Not in Top 20	159	NASA BLVD	EVANS RD - EDDIE ALLEN RD	SOUTH	MELBOURNE	1.4	-	-	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Crit.	Crit.	Yes
Not in Top 20	162	PALM BAY RD	HOLLYWOOD BLVD - SR 507 (BABCOCK ST)	SOUTH	UNINCORPORATED	1.7	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	161	PALM BAY RD	MINTON RD - HOLLYWOOD BLVD	SOUTH	UNINCORPORATED	1.3	-	-	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Crit.	Most Crit.	-
Not in Top 20	163	PALM BAY RD	SR 507 (BABCOCK ST) - US 1 (DIXIE HWY)	SOUTH	PALM BAY	2.5	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	86	PEACHTREE ST	SR 501 (CLEARLAKE RD) - FORREST AVE	CENTRAL	COCOA	1.5	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	167	PORT MALABAR RD	SR 507 (BABCOCK ST) - US 1 (DIXIE HWY)	SOUTH	PALM BAY	3.2	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	168	POST RD	WICKHAM RD - US 1 (HARBOR CITY BLVD)	SOUTH	MELBOURNE	1.5	-	1	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	Crit.	Most Crit.	-
Not in Top 20	316	ROSA JONES BLVD	SR 519 (FISKE BLVD) - US 1 (S COCOA BLVD)	CENTRAL	COCOA	0.8	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	171	SARNO RD	WICKHAM RD - US 1 (HARBOR CITY BLVD)	SOUTH	MELBOURNE	2.5	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	70	SR 501 (CLEARLAKE RD)	MICHIGAN AVE - SR 524 (INDUSTRY RD)	CENTRAL	COCOA	1.1	-	1	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	Crit.	Most Crit.	-
Not in Top 20	69	SR 501 (CLEARLAKE RD)	SR 520 (KING ST) - MICHIGAN AVE	CENTRAL	UNINCORPORATED	2.2	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	2%	0%	0%	0%	2%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	170	SR 5054 (SARNO RD)	SR 518 (EAU GALLIE BLVD) - WICKHAM RD	SOUTH	MELBOURNE	1.4	-	-	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Crit.	Most Crit.	-
Not in Top 20	5046	SR 507 (BABCOCK ST)	PALM BAY RD - EBER BLVD	SOUTH	MELBOURNE	1.0	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Crit.	-
Not in Top 20	5043	SR 507 (BABCOCK ST)	PIRATE LN - FLORIDA AVE	SOUTH	MELBOURNE	0.5	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Most Crit.	Crit.	-
Not in Top 20	75	SR 519 (FISKE BLVD)	BARTON BLVD - SR 520 (KING ST)	CENTRAL	COCOA	1.7	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	16	SR 524 (INDUSTRY RD)	SR 524 - GRISSOM PKWY	CENTRAL	COCOA	0.6	-	1	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	2%	0%	0%	0%	2%	0%	Vuln.	Most Crit.	Crit.	-
Not in Top 20	101	STADIUM PKWY	JUDGE F JAMIESON WY - VIERA BLVD	CENTRAL	UNINCORPORATED	1.4	-	-	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Crit.	Most Crit.	-
Not in Top 20	5029	VARR AVE	ROSA L JONES DR - SR 520 (KING ST)	CENTRAL	COCOA	0.4	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	189	WICKHAM RD	NASA BLVD - SARNO RD	SOUTH	MELBOURNE	1.5	-	-	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Crit.	Most Crit.	-
Not in Top 20	190	WICKHAM RD	SARNO RD - PKWY DR	SOUTH	MELBOURNE	2.5	-	2	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Most Crit.	-
Not in Top 20	188	WICKHAM RD	US 192 (NEW HAVEN AVE) - NASA BLVD	SOUTH	WEST MELBOURNE	1.4	-	-	3	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Crit.	Most Crit.	-
Not in Top 20	322	BAYSIDE LAKES BLVD	DE GROODT RD - DATELAND RD	SOUTH	PALM BAY	2.1	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	2	CAMP RD	GRISSOM PKWY - US 1 (COCOA BLVD)	NORTH	UNINCORPORATED	1.6	-	-	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	-	Most Crit.	-
Not in Top 20	119	CROTON RD	SARNO RD - LAKE WASHINGTON RD	SOUTH	MELBOURNE	1.7	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	5044	DAIRY RD	PALM BAY RD - FLORIDA AVE	SOUTH	MELBOURNE	1.5	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Crit.	-
Not in Top 20	302	DELEON AVE	HARRISON ST - SR 406 (GARDEN ST)	NORTH	TITUSVILLE	2.1	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	73	DIXON BLVD	SR 501 (CLEARLAKE RD) - US 1 (COCOA BLVD)	CENTRAL	COCOA	1.2	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Crit.	-
Not in Top 20	127	EBER BLVD	SR 509 (MINTON RD) - LIPSCOMB ST	SOUTH	MELBOURNE	4.1	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Crit.	-
Not in Top 20	2131	EMERSON DR	JUPITER BLVD - MINTON RD	SOUTH	PALM BAY	1.5	-	-	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Crit.	Crit.	-
Not in Top 20	130	EMERSON DR	MALABAR RD - MINTON RD	SOUTH	PALM BAY	3.6	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Crit.	-
Not in Top 20	2314	EYSTER BLVD	SR 519 (FISKE BLVD) - MURRELL RD	CENTRAL	ROCKLEDGE	1.3	-	-	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	6%	0%	0%	0%	6%	0%	-	-	Most Crit.	-
Not in Top 20	332	FEE AVE	DR MARTIN LUTHER KING JR BLVD - US 1 (HARBOR CITY BLVD)	SOUTH	MELBOURNE	1.4	-	1	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	-	Most Crit.	-
Not in Top 20	78	FORREST AVE	SR 520 (KING ST) - US 1 (COCOA BLVD)	CENTRAL	COCOA	1.0	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	137	HENRY AVE	MINTON RD - COUNTRY CLUB RD	SOUTH	MELBOURNE	2.8	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	15	HOPKINS AVE	SR 50 (CHENEY HWY) - BREVARD ST	NORTH	TITUSVILLE	3.1	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Crit.	-
Not in Top 20	5006	I-95	SR 520 (KING ST) - SR 524	CENTRAL	COCOA	1.2	-	1	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	18%	0%	0%	0%	18%	0%	Vuln.	Most Crit.	-	-

Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
Not in Top 20	146	JUPITER BLVD	MALABAR RD SW - EMERSON DR	SOUTH	PALM BAY	2.3	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Crit.	-
Not in Top 20	5030	LAKE DR	SR 501 (CLEARLAKE RD) - SR 520 (KING ST)	CENTRAL	UNINCORPORATED	0.7	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	306	MAIN ST	PARK AVE - US 1 (HOPKINS AVE)	NORTH	TITUSVILLE	0.6	-	1	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	-	Most Crit.	-
Not in Top 20	5048	MINTON RD	JUPITER BLVD - MALABAR RD	SOUTH	PALM BAY	0.8	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	5040	NASA BLVD	WICKHAM RD - EVANS RD	SOUTH	MELBOURNE	1.4	-	-	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Crit.	-	Yes
Not in Top 20	19	OLD DIXIE HWY	SR 406 (GARDEN ST) - PARKER ST; CUYLER ST	NORTH	TITUSVILLE	3.7	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	386	PARKER ST	SINGLETON AVE - OLD DIXIE HWY	NORTH	UNINCORPORATED	0.3	-	-	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	78%	0%	0%	0%	78%	0%	-	-	Most Crit.	-
Not in Top 20	90	PINEDA ST	PEACHTREE ST - DIXON BLVD	CENTRAL	COCOA	1.1	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	351	PORT MALABAR BLVD	SR 507 (BABCOCK ST) - PALM BAY RD	SOUTH	PALM BAY	1.7	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	5042	PROSPECT AVE/LIPSCOMB ST	PALM BAY RD - FLORIDA AVE	SOUTH	UNINCORPORATED	1.5	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Crit.	-
Not in Top 20	317	SCHOOL ST	LAKE DR - WILSON AVE	CENTRAL	COCOA	1.1	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	355	STACK BLVD	PALM BAY RD - EBER BLVD	SOUTH	MELBOURNE	1.0	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
Not in Top 20	100	STADIUM PKWY	WICKHAM RD - JUDGE F JAMIESON WY	CENTRAL	UNINCORPORATED	1.4	-	1	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	-	Most Crit.	-
Not in Top 20	311	TROPIC ST	SINGLETON AVE - PARK AVE	NORTH	TITUSVILLE	1.3	-	1	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	-	Most Crit.	-
Not in Top 20	177	UNIVERSITY BLVD	COUNTRY CLUB RD - US 1 (DIXIE HWY)	SOUTH	MELBOURNE	1.7	-	2	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	Crit.	-
Not in Top 20	2107	VIERA BLVD	STADIUM PKWY - MURRELL RD	CENTRAL	UNINCORPORATED	1.1	-	1	2	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	-	Most Crit.	-
Not in Top 20	5041	BASS PRO DR	PALM BAY RD - RIVIERA DR	SOUTH	PALM BAY	0.4	-	-	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	-	Crit.	-
Not in Top 20	328	CULVER DR	EMERSON DR - PALM BAY RD	SOUTH	PALM BAY	0.5	-	-	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Crit.	-	-
Not in Top 20	2005	DAIRY RD	SINGLETON AVE - US 1 (WASHINGTON AVE)	NORTH	UNINCORPORATED	0.9	-	-	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Crit.	-	-
Not in Top 20	2329	DE GROODT RD	BAYSIDE LAKES BLVD - JUPITER BLVD	SOUTH	PALM BAY	2.4	-	2	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Crit.	-
Not in Top 20	129	EMERSON DR	DATELAND RD - MALABAR RD	SOUTH	PALM BAY	3.0	-	2	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	Crit.	-	-
Not in Top 20	132	EVANS RD	US 192 (NEW HAVEN AVE) - NASA BLVD	SOUTH	UNINCORPORATED	1.0	-	-	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Crit.	-	-
Not in Top 20	5045	FLORIDA AVE	SR 507 (BABCOCK ST) - JAMES ST/NORTHVIEW ST	SOUTH	MELBOURNE	1.5	-	2	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Crit.	-
Not in Top 20	134	GATEWAY DR	HIBISCUS BLVD - NASA BLVD	SOUTH	MELBOURNE	0.5	-	-	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Crit.	-	-
Not in Top 20	337	GLENDALE AVE	PACE DR - EMERSON DR	SOUTH	PALM BAY	1.1	-	-	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	20%	0%	0%	0%	20%	0%	-	Crit.	-	-
Not in Top 20	5017	GRISSOM PKWY	SR 405 (COLUMBIA BLVD) - SISSON RD	NORTH	TITUSVILLE	0.7	-	-	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	-	Crit.	-
Not in Top 20	5053	HOLLYWOOD BLVD	PALM BAY RD - FLORIDA AVE	SOUTH	PALM BAY	1.6	-	2	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Crit.	-
Not in Top 20	143	JOHN RODES BLVD	SR 518 (EAU GALLIE BLVD) - AURORA RD	SOUTH	MELBOURNE	0.8	-	-	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	15%	0%	0%	0%	15%	0%	-	Crit.	-	-
Not in Top 20	84	MICHIGAN AVE	SR 501 (CLEARLAKE RD) - US 1 (COCOA BLVD)	CENTRAL	COCOA	0.5	-	1	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	-	Crit.	-
Not in Top 20	83	MICHIGAN AVE	TIGER TR - SR 501 (CLEARLAKE RD)	CENTRAL	COCOA	1.3	-	1	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	-	Crit.	-
Not in Top 20	346	NORFOLK PKWY	PALM BAY RD - MINTON RD	SOUTH	WEST MELBOURNE	0.9	-	-	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	Crit.	-	-
Not in Top 20	324	PROSPECT AVE/LIPSCOMB ST	FLORIDA AVE - US 1 (DIXIE HWY)	SOUTH	UNINCORPORATED	1.4	-	2	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Crit.	-
Not in Top 20	352	RIVIERA DR	PALM BAY RD - PORT MALARBAR BLVD	SOUTH	PALM BAY	2.4	-	2	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Crit.	-
Not in Top 20	169	RJ CONLAN BLVD	PALM BAY RD - US 1 (DIXIE HWY)	SOUTH	PALM BAY	1.7	-	1	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	Crit.	-	-
Not in Top 20	2090	ROSETINE ST	RANGE RD - SR 501 (CLEARLAKE RD)	CENTRAL	COCOA	1.0	-	2	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Crit.	-
Not in Top 20	315	ROY WALL BLVD	SR 519 (FISKE BLVD) - MURRELL RD	CENTRAL	ROCKLEDGE	1.3	-	2	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Crit.	-
Not in Top 20	377	WAKULLA LANE	SR A1A (N ATLANTIC AVE) - OCEAN BEACH BLVD	BARRIER ISLANDS	COCOA BEACH	0.1	-	-	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	-	Crit.	-
Not in Top 20	358	WALDEN BLVD/WYOMING DR	EMERSON DR - BABCOCK ST	SOUTH	PALM BAY	1.8	-	2	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	Crit.	-
Not in Top 20	360	WH JACKSON ST	GRANT ST - US 1 (HARBOR CITY BLVD)	SOUTH	MELBOURNE	0.5	-	1	1	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	-	Crit.	-
Not in Top 20	319	1ST ST	BRABROOK AVE - US 1	SOUTH	GRANT VALKARIA	0.4	2	-	-	-	No Imp	Min. Im	Min. Im	No Imp	No Imp	18%	0%	15%	16%	0%	0%	-	-	-	-
Not in Top 20	65	ADAMSON RD	SR 524 - CITRUS BLVD	CENTRAL	UNINCORPORATED	4.5	3	1	-	-	Sev. Im	No Imp	No Imp	Min. Im	No Imp	47%	8%	0%	0%	47%	0%	Vuln.	-	-	-
Not in Top 20	320	AMERICANA BLVD	JUPITER BLVD - MINTON RD	SOUTH	PALM BAY	1.9	-	2	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	-	-
Not in Top 20	5054	AMERICANA BLVD	MINTON RD - EMERSON DR	SOUTH	PALM BAY	1.7	-	2	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	-	-
Not in Top 20	321	ATZ RD	WEBER RD - COREY RD	SOUTH	MALABAR	1.0	2	-	-	-	Min. Im	No Imp	No Imp	Min. Im	No Imp	92%	18%	0%	0%	92%	0%	-	-	-	-
FL5; FR13	382	BEACH RD	A MAX BREWER MEMORIAL PKWY - SAMUEL C PHILLIPS PKWY	BARRIER ISLANDS	UNINCORPORATED	8.8	8	-	-	-	Sev. Im	Sev. Im	Sev. Im	Sev. Im	No Imp	100%	64%	91%	76%	100%	0%	-	-	-	-
Not in Top 20	390	BRABROOK AVE	GRANT RD - 1ST ST	SOUTH	GRANT VALKARIA	0.3	1	-	-	-	Min. Im	No Imp	No Imp	No Imp	No Imp	9%	9%	0%	0%	0%	0%	-	-	-	-
Not in Top 20	5012	CARPENTER RD	FOX LAKE RD - GARDEN ST	NORTH	UNINCORPORATED	2.2	1	-	-	-	No Imp	No Imp	No Imp	Min. Im	No Imp	99%	0%	0%	0%	99%	0%	-	-	-	-
Not in Top 20	4	CARPENTER RD	SR 406 (GARDEN ST) - SR 46 (MAIN ST)	NORTH	UNINCORPORATED	3.7	1	-	-	-	No Imp	No Imp	No Imp	Min. Im	No Imp	60%	0%	0%	0%	60%	0%	-	-	-	-
Not in Top 20	300	COUNTRY CLUB DR	S PARK AVE - US 1 (WASHINGTON AVE)	NORTH	TITUSVILLE	2.2	-	2	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	-	-

Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
Not in Top 20	379	COURTENAY PKWY	KENNEDY PKWY - VOLUSIA COUNTY LINE	BARRIER ISLANDS	UNINCORPORATED	9.1	9	-	-	-	Sev. Imp	Sev. Imp	Sev. Imp	Sev. Imp	Min. Imp	91%	10%	77%	34%	64%	1%	-	-	-	-
Not in Top 20	72	COX RD	SR 524 - JAMES RD	CENTRAL	COCOA	1.3	3	1	-	-	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	61%	34%	0%	0%	27%	0%	Vuln.	-	-	-
Not in Top 20	5	DAIRY RD	CARPENTER RD - SINGLETON AVE	NORTH	UNINCORPORATED	0.9	1	-	-	-	Min. Imp	No Imp	No Imp	No Imp	No Imp	32%	8%	0%	0%	24%	0%	-	-	-	-
Not in Top 20	122	DAIRY RD	US 192 (NEW HAVEN AVE) - HIBISCUS BLVD	SOUTH	MELBOURNE	0.4	-	-	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	-	-	-
FL14	6	DEERING PKWY	I-95 - US 1	NORTH	UNINCORPORATED	0.9	3	-	-	-	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	100%	46%	0%	0%	100%	0%	-	-	-	-
Not in Top 20	367	DESOTO PKWY	SR 513 (S PATRICK DR) - SR A1A	BARRIER ISLANDS	SATELLITE BEACH	1.1	4	-	-	-	No Imp	Sev. Imp	Sev. Imp	No Imp	No Imp	89%	0%	89%	68%	0%	0%	-	-	-	-
Not in Top 20	1027	EAU GALLE BLVD	INSPIRATION LN - JONES RD	SOUTH	UNINCORPORATED	0.3	2	-	-	-	Min. Imp	No Imp	No Imp	Min. Imp	No Imp	100%	0%	0%	0%	100%	0%	-	-	-	-
Not in Top 20	334	FOUNDATION PARK BLVD	SAN FILIPPO DR - BABCOCK ST	SOUTH	MALABAR	0.7	1	-	-	-	Min. Imp	No Imp	No Imp	No Imp	No Imp	27%	27%	0%	0%	0%	0%	-	-	-	-
Not in Top 20	9	FOX LAKE RD	FDX LAKE PARK - KNOX MCRAE DR	NORTH	UNINCORPORATED	1.8	3	-	-	-	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	100%	20%	0%	0%	100%	0%	-	-	-	-
Not in Top 20	79	FRIDAY RD	SR 520 (KING ST) - SR 524	CENTRAL	COCOA	0.9	3	1	-	-	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	95%	28%	0%	0%	79%	0%	Vuln.	-	-	-
Not in Top 20	219	FRIDAY RD	SR 524 - JAMES RD	CENTRAL	COCOA	2.0	1	1	-	-	Min. Imp	No Imp	No Imp	No Imp	No Imp	2%	2%	0%	0%	0%	0%	Vuln.	-	-	-
Not in Top 20	336	GARVEY RD	HARPER BLVD - MALABAR RD	SOUTH	PALM BAY	1.3	-	2	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	-	-
Not in Top 20	1016	GOLFVIEW AVE	FAY BLVD - FLORA VISTA PL	NORTH	UNINCORPORATED	0.4	1	-	-	-	No Imp	No Imp	No Imp	Min. Imp	No Imp	100%	0%	0%	0%	100%	0%	-	-	-	-
FR14	13	GOLFVIEW AVE	PORT ST JOHN PKWY - FAY BLVD	NORTH	UNINCORPORATED	0.5	2	-	-	-	No Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	0%	0%	0%	100%	0%	-	-	-	-
FL19	135	GRANT RD	BABCOCK ST - OLD DIXIE HWY	SOUTH	GRANT VALKARIA	6.0	4	-	-	-	Sev. Imp	No Imp	No Imp	Sev. Imp	No Imp	83%	43%	0%	0%	81%	0%	-	-	-	-
Not in Top 20	380	GRANT RD	N TROPICAL TRAIL - SR 3 (N COURTENAY PKWY)	BARRIER ISLANDS	UNINCORPORATED	0.3	1	-	-	-	No Imp	Min. Imp	No Imp	No Imp	No Imp	38%	0%	7%	0%	38%	0%	-	-	-	-
Not in Top 20	10	GRISSOM PKWY	CANAVERAL GROVES BLVD - PORT ST JOHN PKWY	NORTH	UNINCORPORATED	2.2	3	-	-	-	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	45%	21%	0%	0%	39%	0%	-	-	-	-
Not in Top 20	5016	GRISSOM PKWY	INDUSTRY RD - CANAVERAL GROVES BLVD	CENTRAL	UNINCORPORATED	3.0	3	-	-	-	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	34%	26%	0%	0%	20%	0%	-	-	-	-
Not in Top 20	44	HALL RD	N TROPICAL TR - SR 3 (N COURTENAY PKWY)	BARRIER ISLANDS	UNINCORPORATED	0.6	4	-	-	-	No Imp	Min. Imp	Min. Imp	Min. Imp	Min. Imp	62%	0%	36%	11%	42%	1%	-	-	-	-
Not in Top 20	339	HALL RD	WEBER RD - COREY RD	SOUTH	MALABAR	1.0	1	-	-	-	No Imp	No Imp	No Imp	Min. Imp	No Imp	94%	0%	0%	0%	94%	0%	-	-	-	-
Not in Top 20	340	HARPER BLVD/HURLEY BLVD	GARVEY RD - MALABAR RD	SOUTH	PALM BAY	2.5	2	2	-	-	Sev. Imp	No Imp	No Imp	No Imp	No Imp	26%	26%	0%	0%	0%	0%	Most Vuln.	-	-	-
Not in Top 20	140	HOLLYWOOD BLVD	FLORIDA AVE - US 192 (NEW HAVEN AVE)	SOUTH	PALM BAY	1.5	-	1	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	-	-	-
SE5	5026	INDIAN RIVER DR	DIXON BLVD - CITY POINT RD	CENTRAL	COCOA	1.9	8	1	-	-	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	92%	27%	31%	25%	0%	92%	Vuln.	-	-	-
Not in Top 20	144	JORDAN BLASS DR	ST ANDREWS BLVD - WICKHAM RD	CENTRAL	UNINCORPORATED	0.6	1	1	-	-	Min. Imp	No Imp	No Imp	No Imp	No Imp	25%	25%	0%	0%	0%	0%	Vuln.	-	-	-
Not in Top 20	145	JUPITER BLVD	MALABAR RD - EMERSON DR	SOUTH	PALM BAY	3.5	-	2	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	-	-
SLR14; SS13; FR15	381	KENNEDY PKWY	BEACH RD - A MAX BREWER MEMORIAL PKWY	BARRIER ISLANDS	UNINCORPORATED	3.2	8	-	-	-	Sev. Imp	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	100%	8%	100%	84%	100%	0%	-	-	-	-
Not in Top 20	305	KNOX MCRAE DR	BARNA AVE - US 1 (WASHINGTON AVE)	NORTH	TITUSVILLE	1.7	-	2	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	-	-
Not in Top 20	2305	KNOX MCRAE DR	HARRISON ST - BARNA AVE	NORTH	TITUSVILLE	1.9	2	1	-	-	Min. Imp	No Imp	No Imp	Min. Imp	No Imp	58%	3%	0%	0%	58%	0%	Vuln.	-	-	-
Not in Top 20	387	LAMPLIGHTER DR	PACE DR - EMERSON DR	SOUTH	PALM BAY	1.0	-	1	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	-	-	-
Not in Top 20	2150	MALABAR RD	ST JOHNS HERITAGE PKWY - JUPITER BLVD	SOUTH	PALM BAY	2.5	3	2	-	-	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	16%	12%	0%	0%	16%	0%	Most Vuln.	-	-	-
Not in Top 20	1025	MELBOURNE AVE	COUNTRY CLUB RD - SR 507 (BABCOCK ST)	SOUTH	MELBOURNE	0.2	-	1	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	-	-	-
FL7; SS9	49	N BANANA RIVER DR/MORNINGSIDE DR/BANANA RIVER DR	SYKES CREEK PKWY - SR 528 (BENNETT CSWY)	BARRIER ISLANDS	UNINCORPORATED	2.7	9	-	-	-	Sev. Imp	Sev. Imp	Sev. Imp	Min. Imp	Sev. Imp	100%	59%	97%	96%	66%	28%	-	-	-	-
SS16	48	NEWFOUND HARBOR DR	MORRIS MANOR - SR 520 (COCOA BEACH CSWY)	BARRIER ISLANDS	UNINCORPORATED	3.8	7	-	-	-	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Min. Imp	98%	14%	98%	82%	0%	3%	-	-	-	-
Not in Top 20	1029	OLD DIXIE HWY	US 1 - VALKARIA RD	SOUTH	GRANT VALKARIA	4.3	5	-	-	-	No Imp	Sev. Imp	Sev. Imp	Min. Imp	No Imp	62%	0%	58%	48%	17%	0%	-	-	-	-
Not in Top 20	20	PARRISH RD	HOLDER RD - US 1	NORTH	UNINCORPORATED	1.5	3	-	-	-	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	53%	26%	0%	0%	53%	0%	-	-	-	-
Not in Top 20	348	PINE CONE RD	TURTLE MOUND RD - POST RD	SOUTH	MELBOURNE	0.5	1	-	-	-	Min. Imp	No Imp	No Imp	No Imp	No Imp	20%	20%	0%	0%	0%	0%	-	-	-	-
Not in Top 20	5028	PINEDA ST	CLEARLAKE RD - DIXON RD	CENTRAL	COCOA	1.1	1	2	-	-	Min. Imp	No Imp	No Imp	No Imp	No Imp	1%	1%	0%	0%	0%	0%	Most Vuln.	-	-	-
Not in Top 20	5039	PKWY DR	TURTLE MOUND RD - WICKHAM RD	SOUTH	MELBOURNE	1.0	2	-	-	-	Sev. Imp	No Imp	No Imp	No Imp	No Imp	40%	40%	0%	0%	0%	0%	-	-	-	-
Not in Top 20	5031	PLUCKEBAUM RD	CLEARLAKE RD - FISKE BLVD	CENTRAL	ROCKLEDGE	0.8	1	1	-	-	No Imp	No Imp	No Imp	Min. Imp	No Imp	90%	0%	0%	0%	90%	0%	Vuln.	-	-	-
Not in Top 20	88	PLUCKEBAUM RD	RANGE RD - CLEARLAKE RD	CENTRAL	ROCKLEDGE	1.0	2	1	-	-	Min. Imp	No Imp	No Imp	Min. Imp	No Imp	100%	2%	0%	0%	100%	0%	Vuln.	-	-	-
Not in Top 20	21	PORT ST JOHN PKWY	GOLFVIEW AVE - GRISSOM PKWY	NORTH	UNINCORPORATED	1.6	3	-	-	-	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	100%	38%	0%	0%	100%	0%	-	-	-	-
Not in Top 20	1015	RANCH RD	I-95 - GRISSOM PKWY	NORTH	UNINCORPORATED	1.4	3	-	-	-	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	76%	37%	0%	0%	64%	0%	-	-	-	-
Not in Top 20	309	RANEY RD	KNOX MCRAE DR - COUNTRY CLUB RD	NORTH	TITUSVILLE	1.0	-	2	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Most Vuln.	-	-	-
Not in Top 20	5027	RANGE RD	PLUCKEBAUM RD - SR 520 (KING ST)	CENTRAL	UNINCORPORATED	0.7	1	1	-	-	No Imp	No Imp	No Imp	Min. Imp	No Imp	56%	0%	0%	0%	56%	0%	Vuln.	-	-	-
Not in Top 20	89	RANGE RD	SR 520 (KING ST) - TIGER TR	CENTRAL	UNINCORPORATED	1.8	1	1	-	-	Min. Imp	No Imp	No Imp	No Imp	No Imp	9%	9%	0%	0%	0%	0%	Vuln.	-	-	-
SE2	3028	ROCKLEDGE DR	COQUINA RD - PARK AVE	CENTRAL	ROCKLEDGE	2.1	4	-	-	-	No Imp	Sev. Imp	No Imp	No Imp	Sev. Imp	100%	0%	61%	0%	0%	100%	-	-	-	-
FL4; SE7	1028	ROCKLEDGE DR	US 1 (ROCKLEDGE DR) - COQUINA RD	CENTRAL	UNINCORPORATED	1.9	8	-	-	-	Sev. Imp	Sev. Imp	Sev. Imp	Min. Imp	Sev. Imp	96%	78%	96%	78%	0%	87%	-	-	-	-
SS10; SE4	1031	ROCKY POINT RD	US 1 - US 1	SOUTH	MALABAR	1.4	7	-	-	-	No Imp	Sev. Imp	Sev. Imp	Min. Imp	Sev. Imp	100%	0%	94%	93%	52%	95%	-	-	-	-
SE12	2055	S COURTENAY PKWY/TROPICAL TR	SR 404 (PINEDA CSWY) - TROPICAL TR	BARRIER ISLANDS	UNINCORPORATED	6.0	7	-	-	-	Min. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	97%	3%	87%	57%	0%	79%	-	-	-	-

Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
SLR16	375	SHEARWATER DR	SR 513 (S PATRICK DR) - SR A1A	BARRIER ISLANDS	SATELLITE BEACH	0.7	3	-	-	-	No Imp	Sev. Im	Min. Im	No Imp	No Imp	100%	0%	100%	16%	0%	0%	-	-	-	-
Not in Top 20	310	SHEPARD DR	SR 407 (CHALLENGER MEMORIAL PKWY) - GRISSOM PKWY	NORTH	TITUSVILLE	1.0	1	-	-	-	No Imp	No Imp	No Imp	Min. Im	No Imp	31%	0%	0%	0%	31%	0%	-	-	-	-
Not in Top 20	353	SHERIDAN RD	JOHN RODES BLVD - WICKHAM RD	SOUTH	WEST MELBOURNE	1.7	-	-	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	-	-	-
FL10; FR16	1030	ST JOHNS HERITAGE PKWY	BABCOCK ST - MICCO RD	SOUTH	PALM BAY	4.0	4	-	-	-	Sev. Im	No Imp	No Imp	Sev. Im	No Imp	100%	52%	0%	0%	100%	0%	-	-	-	-
Not in Top 20	5047	ST JOHNS HERITAGE PKWY	EMERSON DR - US 192 (NEW HAVEN AVE)	SOUTH	PALM BAY	3.8	3	-	-	-	Sev. Im	No Imp	No Imp	Min. Im	No Imp	30%	29%	0%	0%	30%	0%	-	-	-	-
FL2; FR17	5050	ST JOHNS HERITAGE PKWY	US 192 - I-95	SOUTH	UNINCORPORATED	1.7	4	-	-	-	Sev. Im	No Imp	No Imp	Sev. Im	No Imp	100%	98%	0%	0%	100%	0%	-	-	-	-
Not in Top 20	176	TURTLE MOUND RD	SR 518 (EAU GALLIE BLVD) - PINECONE RD	SOUTH	MELBOURNE	2.6	2	1	-	-	Sev. Im	No Imp	No Imp	No Imp	No Imp	35%	35%	0%	0%	0%	0%	Vuln.	-	-	-
Not in Top 20	357	WACO BLVD	EMERSON DR - BABCOCK ST	SOUTH	PALM BAY	1.6	-	1	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	Vuln.	-	-	-
Not in Top 20	1019	WARNING WAY	TROPICAL TR - TROPICAL TR	BARRIER ISLANDS	UNINCORPORATED	0.4	1	-	-	-	No Imp	Min. Im	No Imp	No Imp	No Imp	45%	0%	45%	0%	0%	0%	-	-	-	-
Not in Top 20	1023	WILLOWWOOD DR	EBER BLVD - WILLOWWOOD DR	SOUTH	UNINCORPORATED	0.3	-	-	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	-	-	-
Not in Top 20	388	WINGATE DR	MINTON RD - HOLLYWOOD BLVD	SOUTH	WEST MELBOURNE	1.1	-	-	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	-	-	-
Not in Top 20	195	WOODY BURKE DR	HIBISCUS BLVD - NASA BLVD	SOUTH	MELBOURNE	0.6	-	-	-	-	No Imp	No Imp	No Imp	No Imp	No Imp	0%	0%	0%	0%	0%	0%	-	-	-	-

APPENDIX D: SHOCKS/STRESSORS TOP 20 SUMMARY TABLES



TOP 20 CORRIDORS – FLOODING



## SCTPO Transportation Resiliency Master Plan: Top 20 Most Critical Corridors Vulnerable to Flooding

**Table Description:** This table identifies the Top 20 corridors that are impacted by Flooding and serve the most critical role in the transportation network.

**How Corridors are Ordered:** By descending Severity of Impact of Flood. Then by descending % Flood. Then by descending Total Score. Then alphabetically by Road Name and Limits.

**Scores:**

Vulnerable Score = 2\*# of Shocks or Stressors with Severe Impact + 1\*# of Shocks or Stressors with Minimal Impact

Vulnerable Population Score = 2, if the corridor serves a Most Vulnerable Population. Vulnerable Population Score = 1, if the corridor serves a Vulnerable Population

Critical Score = 2\*(Most Critical Function + Most Critical Local Asset) + 1\*(Critical Function + Critical Local Asset) + 1\*(Critical Regional Asset)

Total Score = Vulnerable Score + (Vulnerable Population Score if Vulnerable Score > 0) \* Critical Score

**Shocks or Stressors:** Flooding (Flood), Sea Level Rise (SLR), Storm Surge, Fire, Shoreline Erosion (Shrl. Erosn.). Severe Impact (Sev. Imp.) has >0.25 mi of the corridor impacted. Minimal Impact (Min. Imp.) has >0 mi but <0.25 mi of the corridor impacted.

**Notes:** The *For What is the Corridor Vulnerable* columns report the summarized extent of impact to the corridor by each shock or stressor. The *How Much of the Corridor is Vulnerable* columns report the portion of the corridor that is impacted by each shock or stressor. % Vuln. reports the portion of the corridor that is vulnerable to at least 1 shock or stressor. Some shocks or stressors have overlapping impacts so this number may be less than the sum of the impacts of each shock or stressor. See methodology document for further information on each criteria.

Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
FL1	173	ST JOHNS HERITAGE PKWY	MALABAR RD - EMERSON DR	SOUTH	PALM BAY	2.3	3	-	1	3	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	100%	100%	0%	0%	99%	0%	-	-	Crit.	-
FL2	5050	ST JOHNS HERITAGE PKWY	US 192 - I-95	SOUTH	UNINCORPORATED	1.7	4	-	-	-	Sev. Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	98%	0%	0%	100%	0%	-	-	-	-
FL3	5025	N BANANA RIVER DR	SR 520 (MERRITT ISLAND CSWY) - SYKES CREEK PKWY	BARRIER ISLANDS	UNINCORPORATED	1.0	8	-	1	8	Sev. Imp	Sev. Imp	Sev. Imp	Min. Imp	Min. Imp	100%	92%	100%	100%	27%	13%	-	Crit.	-	-
FL4	1028	ROCKLEDGE DR	US 1 (ROCKLEDGE DR) - COQUINA RD	CENTRAL	UNINCORPORATED	1.9	8	-	-	-	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	96%	78%	96%	78%	0%	87%	-	-	-	-
FL5	382	BEACH RD	A MAX BREWER MEMORIAL PKWY - SAMUEL C PHILLIPS PKWY	BARRIER ISLANDS	UNINCORPORATED	8.8	8	-	-	-	Sev. Imp	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	100%	64%	91%	76%	100%	0%	-	-	-	-
FL6	210	SR A1A (ATLANTIC AVE)	SR 404 (PINEDA CSWY) - S END OF ONE WAY PAIRS	BARRIER ISLANDS	UNINCORPORATED	4.9	8	-	4	32	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	86%	62%	52%	10%	0%	19%	-	Most Crit.	Crit.	Yes
FL7	49	N BANANA RIVER DR/MORNINGSIDE DR/BANANA RIVER DR	SYKES CREEK PKWY - SR 528 (BENNETT CSWY)	BARRIER ISLANDS	UNINCORPORATED	2.7	9	-	-	-	Sev. Imp	Sev. Imp	Sev. Imp	Min. Imp	Sev. Imp	100%	59%	97%	96%	66%	28%	-	-	-	-
FL8	165	SR 404 (PINEDA CSWY)	LAKE ANDREW DR - WICKHAM RD	SOUTH	UNINCORPORATED	3.2	3	1	4	16	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	94%	57%	0%	0%	82%	0%	Vuln.	Most Crit.	Crit.	Yes
FL9	201	OCEAN BEACH BLVD	WAKULLA LN - YOUNG AVE	BARRIER ISLANDS	COCOA BEACH	1.3	6	-	2	12	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	No Imp	81%	52%	81%	26%	0%	0%	-	-	Most Crit.	-
FL10	1030	ST JOHNS HERITAGE PKWY	BABCOCK ST - MICCO RD	SOUTH	PALM BAY	4.0	4	-	-	-	Sev. Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	52%	0%	0%	100%	0%	-	-	-	-
FL11	5019	CANAVERAL GROVES BLVD	GRISSOM PKWY - US 1	NORTH	UNINCORPORATED	1.7	2	-	1	2	Sev. Imp	No Imp	No Imp	No Imp	No Imp	51%	51%	0%	0%	0%	0%	-	-	Crit.	-
FL12	203	RIDGEWOOD AVE	YOUNG AVE - CENTRAL BLVD	BARRIER ISLANDS	CAPE CANAVERAL	1.9	6	1	2	14	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	No Imp	100%	51%	100%	56%	0%	0%	Vuln.	-	Most Crit.	-
FL13	3000	I-95	INDIAN RIVER CO - ST JOHNS HERITAGE PKWY	SOUTH	PALM BAY	5.8	4	-	2	8	Sev. Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	48%	0%	0%	100%	0%	-	Most Crit.	-	-
FL14	6	DEERING PKWY	I-95 - US 1	NORTH	UNINCORPORATED	0.9	3	-	-	-	Sev. Imp	No Imp	No Imp	Min. Imp	No Imp	100%	46%	0%	0%	100%	0%	-	-	-	-
FL15	91	SPYGLASS HILL RD	MURRELL RD - PINEHURST AVE	CENTRAL	UNINCORPORATED	1.6	2	2	2	8	Sev. Imp	No Imp	No Imp	No Imp	No Imp	45%	45%	0%	0%	0%	0%	Most Vuln.	-	Most Crit.	-
FL16	87	PINEHURST AVE/HOLIDAY SPRINGS RD	WICKHAM RD - VIERA BLVD	CENTRAL	UNINCORPORATED	2.5	2	1	1	3	Sev. Imp	No Imp	No Imp	No Imp	No Imp	44%	44%	0%	0%	0%	0%	Vuln.	-	Crit.	-
FL17	5037	SR 404 (PINEDA CSWY)	WICKHAM RD - US 1	CENTRAL	UNINCORPORATED	0.7	2	-	4	8	Sev. Imp	No Imp	No Imp	No Imp	No Imp	44%	44%	0%	0%	0%	0%	-	Most Crit.	Crit.	Yes
FL18	4033	INDIAN RIVER DR	CITY POINT RD - US 1	NORTH	COCOA	3.1	8	-	3	24	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	94%	43%	69%	28%	0%	90%	-	Crit.	Most Crit.	-
FL19	135	GRANT RD	BABCOCK ST - OLD DIXIE HWY	SOUTH	GRANT VALKARIA	6.0	4	-	-	-	Sev. Imp	No Imp	No Imp	Sev. Imp	No Imp	83%	43%	0%	0%	81%	0%	-	-	-	-
FL20	217	SR 520 (COCOA BEACH CSWY)	MILFORD POINT DR/BANANA RIVER DR - SR A1A (ATLANTIC AVE)	BARRIER ISLANDS	COCOA BEACH	3.3	8	-	5	40	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	100%	41%	84%	82%	0%	81%	-	Most Crit.	Most Crit.	Yes



## TOP 20 CORRIDORS – SEA LEVEL RISE



# SCTPO Transportation Resiliency Master Plan: Top 20 Most Critical Corridors Vulnerable to Sea Level Rise

**Table Description:** This table identifies the Top 20 corridors that are impacted by Sea Level Rise and serve the most critical role in the transportation network.

**How Corridors are Ordered:** By descending Severity of Impact of SLR. Then by descending % SLR. Then by descending Total Score. Then alphabetically by Road Name and Limits.

**Scores:**

Vulnerable Score = 2\*# of Shocks or Stressors with Severe Impact + 1\*# of Shocks or Stressors with Minimal Impact

Vulnerable Population Score = 2, if the corridor serves a Most Vulnerable Population. Vulnerable Population Score = 1, if the corridor serves a Vulnerable Population

Critical Score = 2\*(Most Critical Function + Most Critical Local Asset) + 1\*(Critical Function + Critical Local Asset) + 1\*(Critical Regional Asset)

Total Score = Vulnerable Score + (Vulnerable Population Score if Vulnerable Score > 0) \* Critical Score

**Shocks or Stressors:** Flooding (Flood), Sea Level Rise (SLR), Storm Surge, Fire, Shoreline Erosion (Shrl. Erosn.). Severe Impact (Sev. Imp.) has >0.25 mi of the corridor impacted. Minimal Impact (Min. Imp.) has >0 mi but <0.25 mi of the corridor impacted.

**Notes:** The *For What is the Corridor Vulnerable* columns report the summarized extent of impact to the corridor by each shock or stressor. The *How Much of the Corridor is Vulnerable* columns report the portion of the corridor that is impacted by each shock or stressor. % *Vuln.* reports the portion of the corridor that is vulnerable to at least 1 shock or stressor. Some shocks or stressors have overlapping impacts so this number may be less than the sum of the impacts of each shock or stressor. See methodology document for further information on each criteria.

Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
SLR1	2051	SR 3 (COURTENAY PKWY)	TROPICAL TR - SPACE COMMERCE WAY	BARRIER ISLANDS	UNINCORPORATED	3.3	6	-	4	24	No Imp	Sev. Im	Sev. Im	Sev. Im	No Imp	100%	0%	100%	30%	95%	0%	-	Most Crit.	Crit.	Yes
SLR2	51	SR 3 (N COURTENAY PKWY)	HALL RD - N TROPICAL TR	BARRIER ISLANDS	UNINCORPORATED	2.7	5	-	4	20	No Imp	Sev. Im	Min. Im	Sev. Im	No Imp	100%	0%	100%	5%	100%	0%	-	Most Crit.	Crit.	Yes
SLR3	383	SR 406 (A MAX BREWER MEMORIAL PKWY)	A MAX BREWER MEMORIAL PKWY - KENNEDY PKWY	BARRIER ISLANDS	TITUSVILLE	6.0	9	-	2	18	Min. Im	Sev. Im	Sev. Im	Sev. Im	Sev. Im	100%	2%	100%	98%	91%	9%	-	Crit.	-	Yes
SLR4	204	RIVERSIDE DR	US 192 (FIFTH AVE) - SR 518 (EAU GALLIE BLVD)	BARRIER ISLANDS	INDIALANTIC	3.8	7	1	2	16	Min. Im	Sev. Im	Sev. Im	No Imp	Sev. Im	100%	6%	100%	48%	0%	7%	Vuln.	-	Most Crit.	-
SLR5	62	SYKES CREEK PKWY	FORTENBERRY RD - SR 520 (MERRITT ISLAND CSWY)	BARRIER ISLANDS	UNINCORPORATED	0.4	5	-	3	15	Min. Im	Sev. Im	Sev. Im	No Imp	No Imp	100%	9%	100%	100%	0%	0%	-	Crit.	Most Crit.	-
SLR6	63	SYKES CREEK PKWY	SR 520 (MERRITT ISLAND CSWY) - MERRITT AVE	BARRIER ISLANDS	UNINCORPORATED	0.3	5	-	3	15	No Imp	Sev. Im	Sev. Im	No Imp	Min. Im	100%	0%	100%	100%	0%	10%	-	Crit.	Most Crit.	-
SLR7	363	BANANA RIVER BLVD	ST LUCIE LN - SR 520 (COCOA BEACH CAUSEWAY)	BARRIER ISLANDS	COCOA BEACH	0.3	5	-	2	10	Min. Im	Sev. Im	Sev. Im	No Imp	No Imp	100%	10%	100%	100%	0%	0%	-	-	Most Crit.	-
SLR8	364	BREVARD AVE	SR A1A (ORLANDO AVE) - 4TH ST	BARRIER ISLANDS	COCOA BEACH	2.0	5	-	2	10	Min. Im	Sev. Im	Sev. Im	No Imp	No Imp	100%	10%	100%	67%	0%	0%	-	-	Most Crit.	-
SLR9	5022	PLUMOSA ST	SR 520 (MERRITT ISLAND CSWY) - MERRITT AVE	BARRIER ISLANDS	UNINCORPORATED	0.3	5	-	2	10	Min. Im	Sev. Im	Sev. Im	No Imp	No Imp	100%	42%	100%	100%	0%	0%	-	-	Most Crit.	-
SLR10	5025	N BANANA RIVER DR	SR 520 (MERRITT ISLAND CSWY) - SYKES CREEK PKWY	BARRIER ISLANDS	UNINCORPORATED	1.0	8	-	1	8	Sev. Im	Sev. Im	Sev. Im	Min. Im	Min. Im	100%	92%	100%	100%	27%	13%	-	Crit.	-	-
SLR11	54	PLUMOSA ST	CONE RD - SR 520 (MERRITT ISLAND CSWY)	BARRIER ISLANDS	UNINCORPORATED	0.7	4	-	2	8	No Imp	Sev. Im	Sev. Im	No Imp	No Imp	100%	0%	100%	40%	0%	0%	-	-	Most Crit.	-
SLR12	205	SR 513 (S PATRICK DR )	SR 518 (EAU GALLIE BLVD) - BANANA RIVER DR	BARRIER ISLANDS	INDIAN HARBOUR BEACH	0.9	4	-	2	8	No Imp	Sev. Im	Sev. Im	No Imp	No Imp	100%	0%	100%	100%	0%	0%	-	-	Most Crit.	-
SLR13	46	MERRITT AVE	N TROPICAL TR - SR 3 (N COURTENAY PKWY)	BARRIER ISLANDS	UNINCORPORATED	0.4	3	-	1	3	No Imp	Sev. Im	Min. Im	No Imp	No Imp	100%	0%	100%	50%	0%	0%	-	-	Crit.	-
SLR14	381	KENNEDY PKWY	BEACH RD - A MAX BREWER MEMORIAL PKWY	BARRIER ISLANDS	UNINCORPORATED	3.2	8	-	-	-	Sev. Im	Sev. Im	Sev. Im	Sev. Im	No Imp	100%	8%	100%	84%	100%	0%	-	-	-	-
SLR15	212	SR A1A (ORLANDO AVE) (SB ONLY)	N END OF ONE WAY PAIRS - S END OF ONE WAY PAIRS	BARRIER ISLANDS	COCOA BEACH	3.0	4	-	5	20	No Imp	Sev. Im	Sev. Im	No Imp	No Imp	100%	0%	100%	53%	0%	0%	-	Most Crit.	Most Crit.	Yes

Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
SLR16	375	SHEARWATER DR	SR 513 (S PATRICK DR) - SR A1A	BARRIER ISLANDS	SATELLITE BEACH	0.7	3	-	-	-	No Imp	Sev. Im	Min. Im	No Imp	No Imp	100%	0%	100%	16%	0%	0%	-	-	-	-
SLR17	203	RIDGEWOOD AVE	YOUNG AVE - CENTRAL BLVD	BARRIER ISLANDS	CAPE CANAVERAL	1.9	6	1	2	14	Sev. Im	Sev. Im	Sev. Im	No Imp	No Imp	100%	51%	100%	56%	0%	0%	Vuln.	-	Most Crit.	-
SLR18	59	SPACE COMMERCE WAY	KENNEDY PKWY - SR 405 (NASA CSWY)	BARRIER ISLANDS	UNINCORPORATED	2.7	6	-	3	18	No Imp	Sev. Im	Sev. Im	Sev. Im	No Imp	100%	0%	99%	80%	100%	0%	-	Most Crit.	-	Yes
SLR19	206	SR 513 (S PATRICK DR )	BANANA RIVER DR - SR 404 (PINEDA CSWY)	BARRIER ISLANDS	SATELLITE BEACH	4.4	6	2	2	16	Sev. Im	Sev. Im	Sev. Im	No Imp	No Imp	100%	13%	99%	99%	0%	0%	Most Vuln.	-	Most Crit.	-
SLR20	369	MINUTEMEN CSWY	TOM WARRINER BLVD - SR A1A (S ATLANTIC AVE)	BARRIER ISLANDS	COCOA BEACH	1.5	6	-	2	12	No Imp	Sev. Im	Sev. Im	No Imp	Sev. Im	99%	0%	99%	81%	0%	53%	-	-	Most Crit.	-

## TOP 20 CORRIDORS – STORM SURGE



# SCTPO Transportation Resiliency Master Plan: Top 20 Most Critical Corridors Vulnerable to Storm Surge

**Table Description:** This table identifies the Top 20 corridors that are impacted by Storm Surge and serve the most critical role in the transportation network.

**How Corridors are Ordered:** By descending Severity of Impact of Storm Surge. Then by descending % Surge. Then by descending Total Score. Then alphabetically by Road Name and Limits.

**Scores:**

Vulnerable Score = 2\*# of Shocks or Stressors with Severe Impact + 1\*# of Shocks or Stressors with Minimal Impact

Vulnerable Population Score = 2, if the corridor serves a Most Vulnerable Population. Vulnerable Population Score = 1, if the corridor serves a Vulnerable Population

Critical Score = 2\*(Most Critical Function + Most Critical Local Asset) + 1\*(Critical Function + Critical Local Asset) + 1\*(Critical Regional Asset)

Total Score = Vulnerable Score + (Vulnerable Population Score if Vulnerable Score > 0) \* Critical Score

**Shocks or Stressors:** Flooding (Flood), Sea Level Rise (SLR), Storm Surge, Fire, Shoreline Erosion (Shrl. Erosn.). Severe Impact (Sev. Imp.) has >0.25 mi of the corridor impacted. Minimal Impact (Min. Imp.) has >0 mi but <0.25 mi of the corridor impacted.

**Notes:** The *For What is the Corridor Vulnerable* columns report the summarized extent of impact to the corridor by each shock or stressor. The *How Much of the Corridor is Vulnerable* columns report the portion of the corridor that is impacted by each shock or stressor. *% Vuln.* reports the portion of the corridor that is vulnerable to at least 1 shock or stressor. Some shocks or stressors have overlapping impacts so this number may be less than the sum of the impacts of each shock or stressor. See methodology document for further information on each criteria.

Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
SS1	62	SYKES CREEK PKWY	FORTENBERRY RD - SR 520 (MERRITT ISLAND CSWY)	BARRIER ISLANDS	UNINCORPORATED	0.4	5	-	3	15	Min. Imp	Sev. Imp	Sev. Imp	No Imp	No Imp	100%	9%	100%	100%	0%	0%	-	Crit.	Most Crit.	-
SS2	63	SYKES CREEK PKWY	SR 520 (MERRITT ISLAND CSWY) - MERRITT AVE	BARRIER ISLANDS	UNINCORPORATED	0.3	5	-	3	15	No Imp	Sev. Imp	Sev. Imp	No Imp	Min. Imp	100%	0%	100%	100%	0%	10%	-	Crit.	Most Crit.	-
SS3	363	BANANA RIVER BLVD	ST LUCIE LN - SR 520 (COCOA BEACH CAUSEWAY)	BARRIER ISLANDS	COCOA BEACH	0.3	5	-	2	10	Min. Imp	Sev. Imp	Sev. Imp	No Imp	No Imp	100%	10%	100%	100%	0%	0%	-	-	Most Crit.	-
SS4	5022	PLUMOSA ST	SR 520 (MERRITT ISLAND CSWY) - MERRITT AVE	BARRIER ISLANDS	UNINCORPORATED	0.3	5	-	2	10	Min. Imp	Sev. Imp	Sev. Imp	No Imp	No Imp	100%	42%	100%	100%	0%	0%	-	-	Most Crit.	-
SS5	5025	N BANANA RIVER DR	SR 520 (MERRITT ISLAND CSWY) - SYKES CREEK PKWY	BARRIER ISLANDS	UNINCORPORATED	1.0	8	-	1	8	Sev. Imp	Sev. Imp	Sev. Imp	Min. Imp	Min. Imp	100%	92%	100%	100%	27%	13%	-	Crit.	-	-
SS6	205	SR 513 (S PATRICK DR )	SR 518 (EAU GALLIE BLVD) - BANANA RIVER DR	BARRIER ISLANDS	INDIAN HARBOUR BEACH	0.9	4	-	2	8	No Imp	Sev. Imp	Sev. Imp	No Imp	No Imp	100%	0%	100%	100%	0%	0%	-	-	Most Crit.	-
SS7	206	SR 513 (S PATRICK DR )	BANANA RIVER DR - SR 404 (PINEDA CSWY)	BARRIER ISLANDS	SATELLITE BEACH	4.4	6	2	2	16	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	No Imp	100%	13%	99%	99%	0%	0%	Most Vuln.	-	Most Crit.	-
SS8	383	SR 406 (A MAX BREWER MEMORIAL PKWY)	A MAX BREWER MEMORIAL PKWY - KENNEDY PKWY	BARRIER ISLANDS	TITUSVILLE	6.0	9	-	2	18	Min. Imp	Sev. Imp	Sev. Imp	Sev. Imp	Sev. Imp	100%	2%	100%	98%	91%	9%	-	Crit.	-	Yes
SS9	49	N BANANA RIVER DR/MORNINGSIDE DR/BANANA RIVER DR	SYKES CREEK PKWY - SR 528 (BENNETT CSWY)	BARRIER ISLANDS	UNINCORPORATED	2.7	9	-	-	-	Sev. Imp	Sev. Imp	Sev. Imp	Min. Imp	Sev. Imp	100%	59%	97%	96%	66%	28%	-	-	-	-
SS10	1031	ROCKY POINT RD	US 1 - US 1	SOUTH	MALABAR	1.4	7	-	-	-	No Imp	Sev. Imp	Sev. Imp	Min. Imp	Sev. Imp	100%	0%	94%	93%	52%	95%	-	-	-	-
SS11	368	JACKSON AVE	SR 513 (S PATRICK DR) - SR A1A	BARRIER ISLANDS	SATELLITE BEACH	0.8	4	-	1	4	No Imp	Sev. Imp	Sev. Imp	No Imp	No Imp	94%	0%	94%	92%	0%	0%	-	-	Crit.	-
SS12	1011	SR A1A (BENNETT CSWY)	SR 528 (BEACHLINE EXPWY) - GEORGE J KING BLVD	BARRIER ISLANDS	UNINCORPORATED	0.7	3	-	4	12	No Imp	No Imp	Sev. Imp	No Imp	Min. Imp	88%	0%	0%	88%	0%	2%	-	Most Crit.	Crit.	Yes
SS13	381	KENNEDY PKWY	BEACH RD - A MAX BREWER MEMORIAL PKWY	BARRIER ISLANDS	UNINCORPORATED	3.2	8	-	-	-	Sev. Imp	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	100%	8%	100%	84%	100%	0%	-	-	-	-
SS14	215	SR A1A (ASTRONAUT BLVD)	N ATLANTIC AVE - GEORGE J KING BLVD	BARRIER ISLANDS	CAPE CANAVERAL	1.3	4	1	5	25	No Imp	Sev. Imp	Sev. Imp	No Imp	No Imp	83%	0%	83%	83%	0%	0%	Vuln.	Most Crit.	Most Crit.	Yes
SS15	217	SR 520 (COCOA BEACH CSWY)	MILFORD POINT DR/BANANA RIVER DR - SR A1A (ATLANTIC AVE)	BARRIER ISLANDS	COCOA BEACH	3.3	8	-	5	40	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	100%	41%	84%	82%	0%	81%	-	Most Crit.	Most Crit.	Yes
SS16	48	NEWFOUND HARBOR DR	MORRIS MANOR - SR 520 (COCOA BEACH CSWY)	BARRIER ISLANDS	UNINCORPORATED	3.8	7	-	-	-	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Min. Imp	98%	14%	98%	82%	0%	3%	-	-	-	-

Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
SS17	369	MINUTEMEN CSWY	TOM WARRINER BLVD - SR A1A (S ATLANTIC AVE)	BARRIER ISLANDS	COCOA BEACH	1.5	6	-	2	12	No Imp	Sev. Im	Sev. Im	No Imp	Sev. Im	99%	0%	99%	81%	0%	53%	-	-	Most Crit.	-
SS18	64	SYKES CREEK PKWY	MERRITT AVE - N BANANA RIVER DR	BARRIER ISLANDS	UNINCORPORATED	1.5	8	-	3	24	Min. Im	Sev. Im	Sev. Im	Min. Im	Sev. Im	100%	4%	88%	81%	93%	46%	-	Crit.	Most Crit.	-
SS19	59	SPACE COMMERCE WAY	KENNEDY PKWY - SR 405 (NASA CSWY)	BARRIER ISLANDS	UNINCORPORATED	2.7	6	-	3	18	No Imp	Sev. Im	Sev. Im	Sev. Im	No Imp	100%	0%	99%	80%	100%	0%	-	Most Crit.	-	Yes
SS20	149	MAIN ST	RIVERVIEW DR - US 1	SOUTH	UNINCORPORATED	0.4	6	-	1	6	Min. Im	Min. Im	Sev. Im	Min. Im	Min. Im	100%	15%	45%	78%	100%	48%	-	-	Crit.	-

## TOP 20 CORRIDORS – FIRE



# SCTPO Transportation Resiliency Master Plan: Top 20 Most Critical Corridors Vulnerable to Fire

**Table Description:** This table identifies the Top 20 corridors that are impacted by Fire and serve the most critical role in the transportation network.

**How Corridors are Ordered:** By descending Severity of Impact of Fire. Then by descending % Fire. Then by descending Total Score. Then alphabetically by Road Name and Limits.

**Scores:**  
 Vulnerable Score = 2\*# of Shocks or Stressors with Severe Impact + 1\*# of Shocks or Stressors with Minimal Impact  
 Vulnerable Population Score = 2, if the corridor serves a Most Vulnerable Population. Vulnerable Population Score = 1, if the corridor serves a Vulnerable Population  
 Critical Score = 2\*(Most Critical Function + Most Critical Local Asset) + 1\*(Critical Function + Critical Local Asset) + 1\*(Critical Regional Asset)  
 Total Score = Vulnerable Score + (Vulnerable Population Score if Vulnerable Score > 0) \* Critical Score

**Shocks or Stressors:** Flooding (Flood), Sea Level Rise (SLR), Storm Surge, Fire, Shoreline Erosion (Shrl. Erosn.). Severe Impact (Sev. Imp.) has >0.25 mi of the corridor impacted. Minimal Impact (Min. Imp.) has >0 mi but <0.25 mi of the corridor impacted.

**Notes:** The *For What is the Corridor Vulnerable* columns report the summarized extent of impact to the corridor by each shock or stressor. The *How Much of the Corridor is Vulnerable* columns report the portion of the corridor that is impacted by each shock or stressor. % *Vuln.* reports the portion of the corridor that is vulnerable to at least 1 shock or stressor. Some shocks or stressors have overlapping impacts so this number may be less than the sum of the impacts of each shock or stressor. See methodology document for further information on each criteria.

Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
FR1	51	SR 3 (N COURTENAY PKWY)	HALL RD - N TROPICAL TR	BARRIER ISLANDS	UNINCORPORATED	2.7	5	-	4	20	No Imp	Sev. Imp	Min. Imp	Sev. Imp	No Imp	100%	0%	100%	5%	100%	0%	-	Most Crit.	Crit.	Yes
FR2	59	SPACE COMMERCE WAY	KENNEDY PKWY - SR 405 (NASA CSWY)	BARRIER ISLANDS	UNINCORPORATED	2.7	6	-	3	18	No Imp	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	100%	0%	99%	80%	100%	0%	-	Most Crit.	-	Yes
FR3	26	SR 50 (CHENEY HWY)	ORANGE CO - I-95	NORTH	TITUSVILLE	5.2	4	-	3	12	Min. Imp	Min. Imp	No Imp	Sev. Imp	No Imp	100%	0%	0%	0%	100%	0%	-	Most Crit.	Crit.	-
FR4	2034	SR 407 (CHALLENGER MEMORIAL PKWY)	SR 528 (BEACHLINE EXPWY) - I-95	NORTH	TITUSVILLE	4.3	3	2	2	10	Min. Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	1%	0%	0%	100%	0%	Most Vuln.	Most Crit.	-	-
FR5	3000	I-95	INDIAN RIVER CO - ST JOHNS HERITAGE PKWY	SOUTH	PALM BAY	5.8	4	-	2	8	Sev. Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	48%	0%	0%	100%	0%	-	Most Crit.	-	-
FR6	2156	MICCO RD	BABCOCK ST - ST JOHNS HERITAGE PKWY	SOUTH	UNINCORPORATED	2.6	4	-	2	8	Sev. Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	13%	0%	0%	100%	0%	-	Most Crit.	-	-
FR7	24	SR 46	VOLUSIA CO - FAWN LAKE BLVD	NORTH	UNINCORPORATED	4.5	4	-	2	8	Min. Imp	Min. Imp	No Imp	Sev. Imp	No Imp	100%	0%	0%	0%	100%	0%	-	Most Crit.	-	-
FR8	2092	SR 520 (KING ST)	ORANGE CO - SR 524	CENTRAL	UNINCORPORATED	2.9	3	1	2	8	Min. Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	0%	0%	0%	100%	0%	Vuln.	Most Crit.	-	-
FR9	2114	BABCOCK ST	INDIAN RIVER CO - MICCO RD	SOUTH	GRANT VALKARIA	3.9	3	-	2	6	Min. Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	1%	0%	0%	100%	0%	-	Most Crit.	-	-
FR10	114	BABCOCK ST	MICCO RD - GRANT RD	SOUTH	GRANT VALKARIA	3.5	3	-	2	6	Min. Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	6%	0%	0%	100%	0%	-	Most Crit.	-	-
FR11	1005	I-95	SR 407 (CHALLENGER MEMORIAL PKWY) - SR 50 (CHENEY HWY)	NORTH	UNINCORPORATED	3.7	2	-	3	6	No Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	0%	0%	0%	100%	0%	-	Most Crit.	Crit.	-
FR12	29	SR 405 (SOUTH ST)	SR 50 (CHENEY HWY) - FOX LAKE RD	NORTH	TITUSVILLE	2.1	2	-	2	4	No Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	0%	0%	0%	100%	0%	-	Crit.	Crit.	-
FR13	382	BEACH RD	A MAX BREWER MEMORIAL PKWY - SAMUEL C PHILLIPS PKWY	BARRIER ISLANDS	UNINCORPORATED	8.8	8	-	-	-	Sev. Imp	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	100%	64%	91%	76%	100%	0%	-	-	-	-
FR14	13	GOLFVIEW AVE	PORT ST JOHN PKWY - FAY BLVD	NORTH	UNINCORPORATED	0.5	2	-	-	-	No Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	0%	0%	0%	100%	0%	-	-	-	-
FR15	381	KENNEDY PKWY	BEACH RD - A MAX BREWER MEMORIAL PKWY	BARRIER ISLANDS	UNINCORPORATED	3.2	8	-	-	-	Sev. Imp	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	100%	8%	100%	84%	100%	0%	-	-	-	-
FR16	1030	ST JOHNS HERITAGE PKWY	BABCOCK ST - MICCO RD	SOUTH	PALM BAY	4.0	4	-	-	-	Sev. Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	52%	0%	0%	100%	0%	-	-	-	-
FR17	5050	ST JOHNS HERITAGE PKWY	US 192 - I-95	SOUTH	UNINCORPORATED	1.7	4	-	-	-	Sev. Imp	No Imp	No Imp	Sev. Imp	No Imp	100%	98%	0%	0%	100%	0%	-	-	-	-



Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
FR18	3003	I-95	SR 519 (FISKE BLVD) - SR 520 (KING ST)	CENTRAL	UNINCORPORATED	5.7	2	2	2	8	No Imp	No Imp	No Imp	Sev. Im	No Imp	99%	0%	0%	0%	99%	0%	Most Vuln.	Most Crit.	-	-
FR19	5009	I-95	SR 50 (CHENEY HWY) - SR 406 (GARDEN ST)	NORTH	TITUSVILLE	4.4	2	-	3	6	No Imp	No Imp	No Imp	Sev. Im	No Imp	98%	0%	0%	0%	98%	0%	-	Most Crit.	Crit.	-
FR20	1008	SR 528 (BEACHLINE EXPWY)	ORANGE CO - I-95	NORTH	UNINCORPORATED	5.9	3	2	2	10	Min. Im	No Imp	No Imp	Sev. Im	No Imp	96%	1%	0%	0%	96%	0%	Most Vuln.	Most Crit.	-	-

TOP 20 CORRIDORS – SHORELINE EROSION



# SCTPO Transportation Resiliency Master Plan: Top 20 Most Critical Corridors Vulnerable to Shoreline Erosion

**Table Description:** This table identifies the Top 20 corridors that are impacted by Shoreline Erosion and serve the most critical role in the transportation network.

**How Corridors are Ordered:** By descending Severity of Impact of Shrl. Eros. Then by descending % Shrl. Eros. Then by descending Total Score. Then alphabetically by Road Name and Limits.

**Scores:**  
 Vulnerable Score = 2\*# of Shocks or Stressors with Severe Impact + 1\*# of Shocks or Stressors with Minimal Impact  
 Vulnerable Population Score = 2, if the corridor serves a Most Vulnerable Population. Vulnerable Population Score = 1, if the corridor serves a Vulnerable Population  
 Critical Score = 2\*(Most Critical Function + Most Critical Local Asset) + 1\*(Critical Function + Critical Local Asset) + 1\*(Critical Regional Asset)  
 Total Score = Vulnerable Score + (Vulnerable Population Score if Vulnerable Score > 0) \* Critical Score

**Shocks or Stressors:** Flooding (Flood), Sea Level Rise (SLR), Storm Surge, Fire, Shoreline Erosion (Shrl. Eros.). Severe Impact (Sev. Imp.) has >0.25 mi of the corridor impacted. Minimal Impact (Min. Imp.) has >0 mi but <0.25 mi of the corridor impacted.

**Notes:** The *For What is the Corridor Vulnerable* columns report the summarized extent of impact to the corridor by each shock or stressor. The *How Much of the Corridor is Vulnerable* columns report the portion of the corridor that is impacted by each shock or stressor. *% Vuln.* reports the portion of the corridor that is vulnerable to at least 1 shock or stressor. Some shocks or stressors have overlapping impacts so this number may be less than the sum of the impacts of each shock or stressor. See methodology document for further information on each criteria.

Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
SE1	4028	ROCKLEDGE DR	PARK AVE - BOUGAINVILLEA DR	CENTRAL	ROCKLEDGE	1.7	5	-	2	10	Min. Imp	Sev. Imp	No Imp	No Imp	Sev. Imp	100%	1%	60%	0%	0%	100%	-	-	Most Crit.	-
SE2	3028	ROCKLEDGE DR	COQUINA RD - PARK AVE	CENTRAL	ROCKLEDGE	2.1	4	-	-	-	No Imp	Sev. Imp	No Imp	No Imp	Sev. Imp	100%	0%	61%	0%	0%	100%	-	-	-	-
SE3	4030	INDIAN RIVER DR	SR 520 (KING ST) - DIXON BLVD	CENTRAL	COCOA	1.9	8	2	2	20	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	99%	13%	26%	13%	0%	97%	Most Vuln.	-	Most Crit.	-
SE4	1031	ROCKY POINT RD	US 1 - US 1	SOUTH	MALABAR	1.4	7	-	-	-	No Imp	Sev. Imp	Sev. Imp	Min. Imp	Sev. Imp	100%	0%	94%	93%	52%	95%	-	-	-	-
SE5	5026	INDIAN RIVER DR	DIXON BLVD - CITY POINT RD	CENTRAL	COCOA	1.9	8	1	-	-	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	92%	27%	31%	25%	0%	92%	Vuln.	-	-	-
SE6	4033	INDIAN RIVER DR	CITY POINT RD - US 1	NORTH	COCOA	3.1	8	-	3	24	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	94%	43%	69%	28%	0%	90%	-	Crit.	Most Crit.	-
SE7	1028	ROCKLEDGE DR	US 1 (ROCKLEDGE DR) - COQUINA RD	CENTRAL	UNINCORPORATED	1.9	8	-	-	-	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	96%	78%	96%	78%	0%	87%	-	-	-	-
SE8	57	S TROPICAL TR	SR 513 (S PATRICK DR) - SR 404 (PINEDA CSWY)	BARRIER ISLANDS	INDIAN HARBOUR BEACH	5.0	8	2	2	20	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	95%	34%	77%	73%	0%	83%	Most Vuln.	-	Most Crit.	-
SE9	217	SR 520 (COCOA BEACH CSWY)	MILFORD POINT DR/BANANA RIVER DR - SR A1A (ATLANTIC AVE)	BARRIER ISLANDS	COCOA BEACH	3.3	8	-	5	40	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	100%	41%	84%	82%	0%	81%	-	Most Crit.	Most Crit.	Yes
SE10	178	US 1	INDIAN RIVER CO - VALKARIA RD	SOUTH	MALABAR	8.2	7	1	4	32	No Imp	Sev. Imp	Sev. Imp	Min. Imp	Sev. Imp	100%	0%	61%	65%	21%	80%	Vuln.	Most Crit.	Most Crit.	-
SE11	179	US 1 (DIXIE HWY)	MALABAR RD - RJ CONLAN BLVD	SOUTH	MALABAR	3.8	6	1	2	14	No Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	82%	0%	12%	11%	0%	79%	Vuln.	Most Crit.	-	-
SE12	2055	S COURTENAY PKWY/TROPICAL TR	SR 404 (PINEDA CSWY) - TROPICAL TR	BARRIER ISLANDS	UNINCORPORATED	6.0	7	-	-	-	Min. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	97%	3%	87%	57%	0%	79%	-	-	-	-
SE13	4029	ROCKLEDGE DR	BOUGAINVILLEA DR - SR 520 (KING ST)	CENTRAL	COCOA	1.0	5	1	2	12	Min. Imp	Sev. Imp	No Imp	No Imp	Sev. Imp	74%	2%	71%	0%	0%	70%	Vuln.	-	Most Crit.	-
SE14	181	US 1 (HARBOR CITY BLVD)	US 192 (STRAWBRIDGE AVE) - SARNO RD	SOUTH	MELBOURNE	3.5	4	2	4	24	Min. Imp	No Imp	Min. Imp	No Imp	Sev. Imp	58%	1%	0%	1%	0%	58%	Most Vuln.	Most Crit.	Most Crit.	-
SE15	2178	US 1	VALKARIA RD - SR 514 (MALABAR RD)	SOUTH	MALABAR	3.1	8	-	2	16	Min. Imp	Sev. Imp	Sev. Imp	Min. Imp	Sev. Imp	100%	1%	26%	25%	84%	56%	-	Most Crit.	-	-
SE16	33	SR 406 (A MAX BREWER MEMORIAL PKWY)	US 1 (WASHINGTON AVE) - SR 406 (A MAX BREWER MEMORIAL PKWY)	BARRIER ISLANDS	TITUSVILLE	1.2	8	-	4	32	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	100%	30%	69%	27%	0%	55%	-	Crit.	Most Crit.	Yes
SE17	218	US 192 (STRAWBRIDGE AVE/MELBOURNE CSWY)	NEW HAVEN AVE - SR A1A (MIRAMAR AVE)	BARRIER ISLANDS	UNINCORPORATED	2.2	8	1	5	45	Sev. Imp	Sev. Imp	Sev. Imp	No Imp	Sev. Imp	85%	26%	51%	39%	0%	55%	Vuln.	Most Crit.	Most Crit.	Yes

Corridor Summary											For What is the Corridor Vulnerable?					How Much of the Corridor is Vulnerable?					Serves a Vulnerable Population?	Is the Corridor Critical?			
Rank	Corridor ID	Road Name	Limits	Area	City	Length (mi)	Vuln. Score	Vuln. Pop.	Critical Score	Total Score	Flood	SLR	Storm Surge	Fire	Shrl. Eros.	% Vuln.	% Flood	% SLR	% Surge	% Fire	% Shrl. Eros.	Serves Vuln. Pop.	Serves a Crit. Func.	Serves a Crit. Local Asset	Serves a Crit. Reg. Asset
SE18	369	MINUTEMEN CSWY	TOM WARRINER BLVD - SR A1A (S ATLANTIC AVE)	BARRIER ISLANDS	COCOA BEACH	1.5	6	-	2	12	No Imp	Sev. Im	Sev. Im	No Imp	Sev. Im	99%	0%	99%	81%	0%	53%	-	-	Most Crit.	-
SE19	36	US 1	SR 50 (CHENEY HWY) - GRACE ST	NORTH	TITUSVILLE	3.0	4	2	2	12	No Imp	Sev. Im	No Imp	No Imp	Sev. Im	58%	0%	25%	0%	0%	48%	Most Vuln.	Most Crit.	-	-
SE20	64	SYKES CREEK PKWY	MERRITT AVE - N BANANA RIVER DR	BARRIER ISLANDS	UNINCORPORATED	1.5	8	-	3	24	Min. Im	Sev. Im	Sev. Im	Min. Im	Sev. Im	100%	4%	88%	81%	93%	46%	-	Crit.	Most Crit.	-