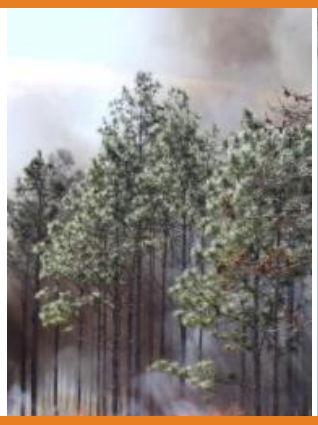
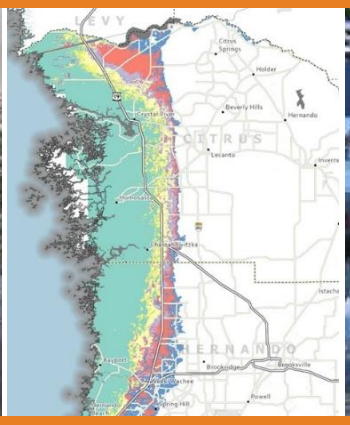
Hernando/Citrus MPO

Vulnerability and Risk Assessment Study




FINAL REPORT

October 5, 2023

Hernando/Citrus MPO

Vulnerability and Resiliency Assessment

Hernando/Citrus Metropolitan Planning Organization

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October 5, 2023

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1 INTRODUCTION AND SUMMARY OF PRIOR STUDIES

1.1 Introduction

Natural disasters such as hurricanes, floods, and wildfires cause extensive damage to transportation infrastructure, disrupting travel and transportation services, and causing significant economic and social impacts. Resiliency is the ability of a community to remain unaffected or reduce the disruption resulting from extreme weather events. Planning for a transportation system that is resilient to natural disasters is crucial to ensuring that people and goods can safely and efficiently move throughout the region following the disruption caused by these disasters. In addition to protecting lives and property, a resilient transportation system also supports emergency evacuation and response efforts, enables the delivery of essential goods and services, and aids in the recovery process after a disaster. Because of this, it is essential to prioritize resilience in transportation planning to minimize the impacts of natural disasters on the transportation system and the communities they serve.

For the MPO, this means addressing resiliency of the region's collector and arterial roadway network. Identifying resilient transportation strategies and vulnerabilities throughout the region is a collaborative effort that requires participation and planning at the local, regional, and state level. To help understand current and past efforts in Hernando and Citrus counties, and across the state, a review of recently completed studies and activities related to resiliency was completed.

Resilience from the transportation perspective is the ability of the transportation system to continue to provide residents with access and mobility in times of natural or man-made disruption. Foremost recently is the resilience of our coastal communities to the impacts of extreme weather-related events such as hurricanes, storm surge, and intense single-day rain events. Several federal grant and formula programs have been developed to assist communities in addressing these challenges through mitigation and adaptation strategies; at the same time, resilience has become a key consideration in the evaluation of transportation projects submitted for discretionary grant programs.

The purpose of this Hernando/Citrus MPO Vulnerability and Risk Assessment Study is to identify vulnerable transportation infrastructure assets and develop recommendations and mitigation strategies that promote system resilience. Transportation infrastructure construction and maintenance is programmed for normal operating conditions. This Study has identified hazards such as storm surge, flooding and wildfires which can disrupt normal operating conditions or damage facilities over short and extended periods of time, and by placing unanticipated financial burdens on budgets. The results of this study have been prioritized to identify the highest priority locations through technical analysis and stakeholder coordination. A series of mitigation strategies have been developed to combat the transportation systems vulnerabilities for the purpose of identifying future projects which can be incorporated into the MPO's 2050 Long Range Transportation Plan.

This report has been organized to provide a clear picture of the review, analysis and findings of the Vulnerability and Risk Assessment. A summary of the report contents is listed below.

Section 1 - Following this introduction is a summary review of the local, regional, and state plans that were assessed as part of this study. Several of these reports form the basis of identifying the subsequent methodology that was followed as well as providing a series of strategy recommendations that were incorporated into the Hernando/Citrus Vulnerability Assessment recommendations.

Section 2 – The Data and Resources section discusses the sources of transportation, community assets and environmental factors that were used in the analysis.

Section 3 – Conducting the assessment of transportation vulnerabilities includes identifying areas of vulnerability from weather-related events and analysis of risk. This section describes the methodology used for conducting this step as well as the concluding results.

Section 4 – Through each step of this study, a Stakeholder Working Group met to discuss study progress and provide input on the methodology for developing recommendations. This section provides details on the working group review and guidance for developing the plan.

Section 5 – To improve transportation resiliency, a series of mitigation strategies was developed. A prioritization methodology was developed for associating these strategies with the region's most vulnerable and critical transportation infrastructure. This section discusses the strategy recommendations that can be used by the MPO, and its planning partners, in addressing resiliency region-wide and location specific.

1.2 Prior Studies and Plans

The documents listed in **Table 1-1** were reviewed to identify common themes and key considerations to guide the development of the Hernando/Citrus Metropolitan Planning Organization's (MPO) Vulnerability and Risk Assessment Study. These documents provide an important foundation for the study, building upon previous efforts to collect data, identify shocks and stressors, and develop mitigation strategies. The plans reviewed and their relation to resiliency-related content can be seen in **Table 1-2.**

TABLE 1-1: STUDIES AND PLANS REVIEWED

Study Type	Study Type Description	Study Name	Date
MPO Plans	Planning studies and reports completed by the MPO which include elements of resiliency related to the transportation network.	Hernando/Citrus 2045 Long Range Transportation Plan (LRTP)	2019
		Hernando/Citrus Transportation Improvement Program (TIP)	2023
Community Plans	Long-range, guiding documents including Goals, Objectives, and Policies for the future development of the jurisdiction.	Hernando County Comprehensive Plan – Coastal Management Element	2018
		Citrus County Comprehensive Plan – Coastal Management Element	
		Citrus County Comprehensive Emergency Management Plan (CEMP)	2019
		Hernando County Comprehensive Emergency Management Plan (CEMP)	2020
		Tampa Bay Regional Planning Council Regional Resiliency Action Plan	2022
Local Mitigation Strategy	A local mitigation strategy assesses shocks and stressors, identifies actions to reduce losses from hazards, and establishes a collaborative process to implement the plan.	Hernando County Local Mitigation Strategy	2020
		Citrus County Local Mitigation Strategy	2020

TABLE 1-2: STUDY/PLAN CONTENT

Type of Plan	Data	Shock/Stressor Identification	Mitigation Options	Prioritization
MPO Plans	☑	☑		☑
Community Plans	☑	☑	☑	
Local Mitigation Strategy	☑	☑	☑	☑

1.2.1 Federal and State Guidance on Incorporating Resiliency into Transportation Planning

Changing conditions such as extreme weather events, environmental changes, economic shifts, and operational disruptions create unique challenges for the two-county Metropolitan Planning Area. Extreme weather events can lead to damaged, eroded, or flooded transportation systems which can present short and long-term risks to safety and mobility. Planning for these events will result in a reduced need for costly repair efforts and, in turn, increase the resilience of the transportation networks and communities. Effective resiliency planning, as described in the Florida Department of Transportation's (FDOT) Resiliency Quick Guide and the Federal Highway Administration's (FHWA) Integrating Resilience into the Transportation Planning Process White Paper, involves a process in which MPOs set clear goals, establish performance measures, identify risks and vulnerabilities, evaluate and adopt mitigation strategies, and demonstrate investment in projects that enhance resiliency. These state and federal guides outline opportunities to incorporate resilience and reliability when developing transportation plans, including:

1. Review the plan goals and objectives to address resilience.
2. Consider resilience when defining problems.
3. Create metrics to monitor progress.
4. Identify and assess strategies in a Needs Plan.
5. Integrate projects and actions that will enhance resiliency in the cost-feasible plan.

When examining a plan's goals, it is important to integrate resiliency either throughout the report or as a standalone goal. When interweaving resiliency into broader transportation goals and objectives, strategies for resiliency can be applied to various subjects such as asset management, economy, freight, operations, and safety. Examples of strategies that incorporate resiliency include focusing on improving infrastructure to withstand the impacts of extreme weather events, providing a transportation system to aid in economic competitiveness, and to incorporate Intelligent Transportation Systems (ITS) to facilitate evacuation routes.

Enacting performance measures and targets can assist in ensuring that goals and objectives relating to resiliency and transportation are being advanced, particularly in the previously mentioned subjects. Furthermore, it is pertinent to assess any vulnerabilities or risks, by performing an inventory to identify susceptible infrastructure as well as a risk assessment to determine where certain weather and environmental conditions could strain the transportation networks. Scenario planning and workshops can also be a useful tool for DOTs and MPOs to assess risks associated with hazards. Based on the findings from the risk assessment or scenario planning, MPOs often will develop a Needs Plan with strategies to address present and future needs. MPOs can use resilience

factors specific to their region to prioritize projects, programs, policies, or other resilience planning efforts included in the Needs Plan that will appropriately strengthen risk and vulnerability mitigation goals. The Cost Feasible Plan, in coordination with the Needs Plan, identifies the projects that can feasibly be completed given the current funding availability.

Florida Transportation Plan

The Florida Transportation Plan (FTP) is a collaborative statewide transportation plan that provides a vision and guidance for Florida's transportation decisions. The plan is divided into four Elements: Vision, Policy, Performance, and Implementation. For the purpose of this study as it relates to resiliency, the Vision and Policy Elements were reviewed. The vision element describes transportation visions and goals over the next 25 years, while the policy element includes goals, objectives, and a concise list of strategies to aid in guiding the efforts to accomplish these goals. The seven goals consistent through all FTP elements included below in **Figure 1-1**.

FIGURE 1-1: FLORIDA TRANSPORTATION PLAN GOAL STATEMENTS

Florida is especially vulnerable to certain environmental threats due to the state's proximity to the coast, particularly hurricanes, rising sea levels, and climate changes. There is a growing recognition of the importance of instituting innovative and effective planning and asset management that prioritize transportation system that is adaptive and resilient to these potential hazards. One of the relevant goals in the FTP is to provide agile, resilient, and quality infrastructure. It is stated that in order to do this, the infrastructure must have the ability to adapt to changing needs, business models, mobility options, technology, and energy sources. Transportation systems should be designed to withstand and recover from various climate disasters or related risks. The definition for infrastructure is expanded in the FTP to also include technological aspects in transportation such as sensors or communication backbones.

Another goal in the FTP related to resiliency is to provide reliable, connected, and efficient mobility for people and freight. It is crucial to provide connected and reliable networks in case of any hazards or disruptions to the systems so that people, freight vehicles, and emergency responders can effectively evacuate or provide support, and so the transportation networks and supply chain can promptly return to normal once the disruption has stopped. This is also related to the safety and security goal as improved emergency evacuation clearance and incident response times will coincide with improved safety. Examples of progress indicators for this goal include the examination of the conditions of pavement, bridges, sidewalks, and transit vehicles, as well as the assessed vulnerability to flooding or storm surge, the frequency for repairs due to damage from extreme weather, and any gaps that may exist between modes/systems.

One of the key strategies introduced in the FTP report is to identify and mitigate risks to Florida's transportation system. To do so, it was stated that Florida plans to act on the related initiatives shown in **Figure 1-2**.

FIGURE 1-2: FLORIDA TRANSPORTATION PLAN VULNERABILITY ASSESSMENT INITIATIVES

Identify vulnerabilities	• Identify hazards that prove to be a risk and implement actions to avoid or prepare the system to tolerate these hazards.
Improve agility of the transportation system	• Expansion of real-time information sharing, improved system management, enhanced multimodal options, and increased redundancy for critical infrastructure.
Address long-term costs	• Include aspects involved with long-term consequences of known vulnerabilities into asset management decisions.
Adaptable transportation planning	• Adapt planning, design, construction, and maintenance techniques to improve resilience, such as incorporating emerging technology, stormwater management, and infrastructure alterations.
Transition of development	• Where possible, enact a long-term strategy to transition infrastructure and development away from vulnerable areas.
Update emergency plans	• Ensure that the existing plans cover preparedness, response, recovery, and mitigation efforts appropriate for the growing severity of extreme weather events, increasing population, and use of technologies.

1.2.2 MPO Planning Documents

Hernando/Citrus MPO 2045 Long Range Transportation Plan

The Hernando Citrus MPO's 2045 Long Range Transportation Plan (LRTP) is guided by its six goals: safety, economy, mobility, intermodal, livability, and preservation.

This study falls in line with the Preservation goal of the 2045 LRTP. Adopted in 2019, the LRTP goals align with the federal planning requirements listed in Fixing America's Transportation (FAST) Act, which called for the improvement of the resiliency and reliability of the transportation system and the reduction or mitigation of stormwater impacts on surface transportation. Since adoption of the 2045 LRTP, the president signed into law the Infrastructure Investment and Jobs Act (IIJA), sometimes referred to as the Bipartisan Infrastructure Law (BIL). IIJA continues to include resiliency planning as one of the planning factors that the MPO must address, and created additional funding programs for the implementation of resilient transportation infrastructure.

In the transportation resilience section of the LRTP, the plan explains that the MPO's planning process involves activities addressing before and after disaster conditions, with efforts to guard against and preemptively mitigate a disaster's effects through identification of steps to restore essential functions, efficient recovery, and rebuilding. This process includes encouraging the development of Comprehensive Emergency Management Plans, Local Mitigation Strategies, Post-Disaster Redevelopment Plans, and connections to the national Strategic Highway Network.

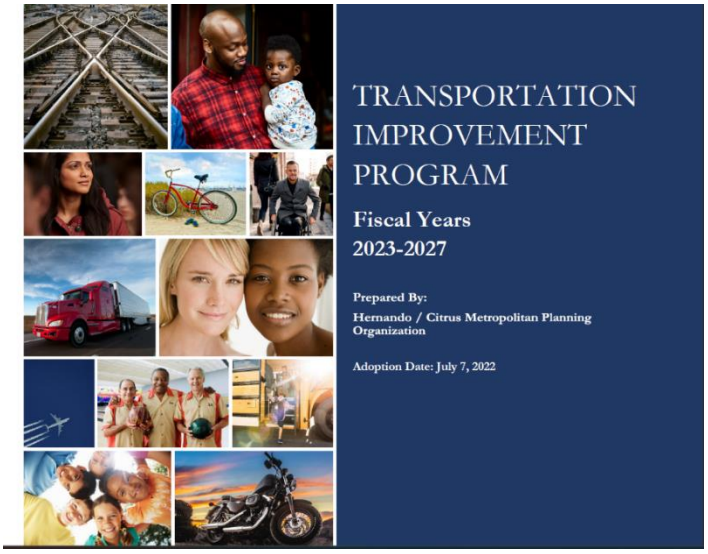
Hernando and Citrus County each have representatives involved with the Tampa Bay Regional Planning Council's Resilience Coalition. Members of the coalition collaborate to develop strategic regional responses for resolving regional issues, focusing on how to reduce regional impacts due to the changing climate, in addition to securing increased levels of funding to support regional infrastructure improvements and develop robust programs to protect the communities throughout the region. The LRTP states that the Hernando/Citrus MPO will work with

the coalition and other partners such as FDOT, local public works departments, and emergency planning agencies, to assist in strengthening the transportation system's resiliency to man-made and natural disasters.

Through the LRTP, the MPO has committed to coordinate with the municipalities, counties, and other local and regional agencies to mitigate impacts to the transportation system from climate change. To achieve this, the MPO uses available data and information, such as mapping and analyzing flood zones, to understand transportation infrastructure that is vulnerable to extreme weather events.

Hernando/Citrus MPO Transportation Improvement Program

The MPO's Transportation Improvement Program (TIP) provides the five-year capital funding plan for transportation improvements in the region. These projects are aligned with goals of local and regional agency plans and reports, including FDOT's 5-year Work Program and SIS Plan, the 2045 LRTP, and other transportation development and master plans. Projects are submitted for funding and prioritized through the MPO's prioritization process.



The TIP states that Prioritization includes a technical analysis of State maintained roadways considering such variables as level of service, performance measure evaluation, cost of upgrading the facility (including resiliency factors), and Project connectivity with the existing roadway system.

1.2.3 Local Plans

Hernando County Comprehensive Plan – Coastal Management Element

The Hernando County Comprehensive Plan's Coastal Management Element establishes Goals, Objectives, and policies to protect, manage, and guide the future of the coastal areas within the County. In particular, Goal 11.02 addresses development in the coastal area, including infrastructure and transportation networks. This goal and relevant objectives are as follows:

- **Goal 11.02 Coastal Zone Development**—Hernando County shall direct new and expanded population concentrations, vulnerable land uses and new infrastructure away from the Coastal Zone as indicated in this Element.
    - **Objective 11.02A:** Hernando County has established a Coastal High Hazard Area (CHHA) where development is limited and regulated consistent with the provisions of this plan to protect private property rights in order to mitigate exposures to hazards and losses related to coastal storms and sea level rise and to responsibly manage the potential fiscal impacts and fiscal responses to the damage from such hazards.
        - **Strategy 11.02A(4):** The following hurricane evacuation clearance time levels of service (LOS) are hereby adopted: a. 12 hours for evacuation to shelter for a category 5 storm; and, b. 16 hours for out-of-county evacuation for a category 5 storm. Proposed development within the Coastal Zone shall meet and maintain the adopted Level of Service and shall be supported by adequate and relevant data and analysis

demonstrating that the adopted hurricane evacuation Level of Service for the Category 5 storm is maintained. Level of Service evaluation for development proposals and for Comprehensive Plan Amendments seeking to increase residential densities within the Coastal Zone shall include data and analysis of the impacts of the proposed development or amendment on the Category 5 hurricane evacuation clearance time Levels of Service.

- **Strategy 11.02A(5):** If review of data and analysis for proposed new developments or Comprehensive Plan Amendments indicates that the hurricane evacuation clearance time Levels of Service will not be achieved, then mitigation may be approved to the extent that it is intended to maintain the adopted Levels of Service. Appropriate mitigation includes, but is not limited to contribution of funding, land or construction services for hurricane shelters and transportation facilities. The data and analysis demonstrating adequate mitigation shall include identification of the type, cost, and timing of the improvement and these shall be made part of a binding agreement between the County and the applicant or developer. Mitigation measures in the agreement that would require capital improvements to construct facilities shall be incorporated into the County's Five-Year Schedule of Capital Improvements with an indication as to the funding source whether funded publicly or otherwise.
- **Strategy 11.02A(6):** The County shall identify and implement ways to reduce and/or mitigate the estimated evacuation clearance times identified in studies promulgated by the State of Florida and/or the Tampa Bay Regional Planning Council.

- **Objective 11.02C:** Existing transportation corridors and those roadways accessing development in the CHHA shall be built and maintained to County standards to ensure that hurricane evacuation clearance times are not reduced.
  - **Strategy 11.02C(1):** The County shall not install new roadway lane miles on the functionally-classified network within the Coastal High Hazard Area (CHHA) unless required for evacuation purposes. Upgrades to existing roadways are limited to intersection improvements for safety reasons, accommodation of cyclists and pedestrians or to technological improvements that facilitate evacuation and maintain or improve evacuation clearance times.
  - **Strategy 11.02C(2):** Levels of service for hurricane evacuation clearance times as outlined in this Chapter, and, for roadways as outlined in the Transportation Element of this Plan, shall be achieved by limiting coastal populations and by adoption of evacuation procedures in the official county evacuation plan.

<u>Citrus County Comprehensive Plan – Coastal Management Element</u>

The Citrus County Comprehensive Plan's Coastal Management Element establishes Goals, Objectives, and policies to protect, manage, and guide the future of the coastal areas within the County. The element includes a citation of Florida statute which prohibits the construction of new causeways or bridges to coastal areas (FS 161.54(2)) and one goal that guides all objectives and policies. Key objectives and policies, among others, under Goal 4 relevant to the transportation system are listed below.

- **GOAL #4 –** Preserve, protect, and enhance resources of the Coastal, Lakes, and River Areas and where appropriate, restrict development activities that would damage or destroy these resources, protect human life, and limit the public expenditure in areas subject to natural disasters.

- **Objective 4.9** The County shall maintain or reduce hurricane evacuation times by requiring that new developments not degrade the existing evacuation Level of Service (LOS).
  - **Policy 4.9.3** The Hurricane Evacuation Level of Service Standard for Out of County evacuation is sixteen (16) hours for a Category 5 storm event.
  - **Policy 4.9.4** All roadway improvements along the County's evacuation network shall include practicable remedies for flooding problems.
  - **Policy 4.9.11** The County shall conduct evacuation traffic analysis using the planned distribution of the County's buildout population. To facilitate this task, the County will utilize a transportation network modeling system. Transportation network modeling shall also be utilized to monitor the impact of large residential projects and of ongoing development on hurricane evacuation times.
- **Objective 4.10** The County shall direct population concentrations away from the Coastal High-Hazard Area through appropriate regulations in the Land Development Code.
  - **Policy 4.10.4** New development, redevelopment, and infrastructure in vulnerable areas shall use best practices to address sea level rise.
  - **Policy 4.10.6** The County shall relocate or replace infrastructure located in the Coastal High Hazard Areas to limit public losses from various events including, but not limited to, storm damage, hurricanes, severe flooding, Sea Level Rise, abandonment of facilities and/or structures, and tornadoes.

Citrus and Hernando County Comprehensive Emergency Management Plan

The Comprehensive Emergency Management Plan (CEMP) establishes a framework for an effective system of comprehensive emergency management for the purpose of:

- Reducing loss of life, injury, and property damage and loss resulting from natural, technological, and manmade emergencies.
- Preparing for prompt and efficient response and recovery activities to protect lives and property impacted by emergencies.
- Responding to emergencies with the effective use of all relevant plans and resources deemed appropriate.
- Recovering from emergencies by providing for the rapid and orderly implementation of restoration and rehabilitation programs for persons and properties affected by emergencies.
- Assisting in awareness, recognition, education, prevention, and mitigation of emergencies that may be caused or aggravated by inadequate planning for, and regulation of, public and private facilities and land use.

The Citrus County CEMP identifies tropical cyclones, extreme weather events (severe storms, tornados, winter storms), and environmental events (flooding, wildfire, drought, extreme temperatures, and sinkholes), as all being high probability with potential major impact. The Hernando County CEMP also references these natural hazards, as well as erosion, seismic activity, and tsunamis.

The Citrus County CEMP plan identifies the following roadways as at risk for hazardous material spills, mass casualty/fatality incidents, hurricane evacuation traffic congestion, and host sheltering/mass care concerns as a result of natural disasters:

- CR 39A
- CR 39
- CR 48
- CR 88
- CR 470
- CR 480
- CR 482
- CR 486
- CR 488
- CR 490A
- CR 490
- CR 491
- CR 494
- CR 495
- CR 581
- SR 44
- SR98/US 700
- SR 200
- US 19/US 98/ SR55

The Hernando County CEMP, unlike the Citrus County CEMP plan, does not provide a comprehensive list of at-risk roadways. Regarding evacuation movement, both plans emphasize the importance of identification and use of short, familiar routes for residents to clear the evacuation area within the shortest amount of time.

The Citrus County CEMP includes a breakdown of Emergency Support Functions (ESF). These functions are organized to address specific emergency issues and identify appropriate responsibilities and duties. ESF-16, which addresses law enforcement and security, identifies the need for coordination with traffic control to expedite the movement of evacuees in the event of an evacuation. Additionally, methods such as requesting the adjustment of traffic signal timing by county or FDOT; establishing staffed traffic control points; modifying lane use; setting up barriers to redirect flow; and towing/pushing disabled vehicles out of the way may also be utilized. The Hernando County CEMP details the steps for disaster-response processes (pre-evacuation, evacuation, and response actions) and areas of responsibility in ESF-1.

Citrus County and Hernando County Local Mitigation Strategies

The Local Mitigation Strategy (LMS) represents a plan to promote mitigation initiatives to improve resilience and lessen the human, economic, and environmental costs of disasters resulting from large-scale hazards in Citrus County and Hernando County. Of particular concern in the LMS and relevant to this study are disaster effects on the transportation system for first responders, continuity of operations, property, facilities, and infrastructure, and economic condition.

The plans can be used as a tool to establish funding priorities for hazard mitigation activities for disaster assistance available following a major disaster. The 2020 through 2025 cycle of the LMS establishes an ongoing hazard mitigation planning program by identifying and assessing potential natural hazards that may pose a threat to life and property, evaluating local mitigation measures that should be undertaken, and outlining procedures for monitoring the implementation of mitigation strategies.

Both County's LMS reports identified fourteen hazards for their risk assessments:

- Flood
- Tropical Cyclones
- Severe Storms
- Wildfire
- Erosion
- Drought
- Extreme Heat
- Geological
- Winter Storm
- Seismic
- Tsunami
- Hazardous Materials Incident
- Radiological Incident
- Cyber Incident

Hazard profiles were created for each of these hazards which included information on the hazard, likely locations, extent (strength/magnitude), previous occurrences, probability of the hazardous event, summary of impacts, a hazard priority index, and a vulnerability analysis. Priority risk indexes score the hazardous events

based on probability, impact, spatial extent, warning time, and duration. Through this process, floods, tropical cyclones, and wildfires were the highest-rated risks for both Hernando County and Citrus County. Each hazard has a detailed risk profile included in the report.

Generally, the LMS recommends the following types of mitigation projects for property protection a disaster abatement:

Property Protection Projects

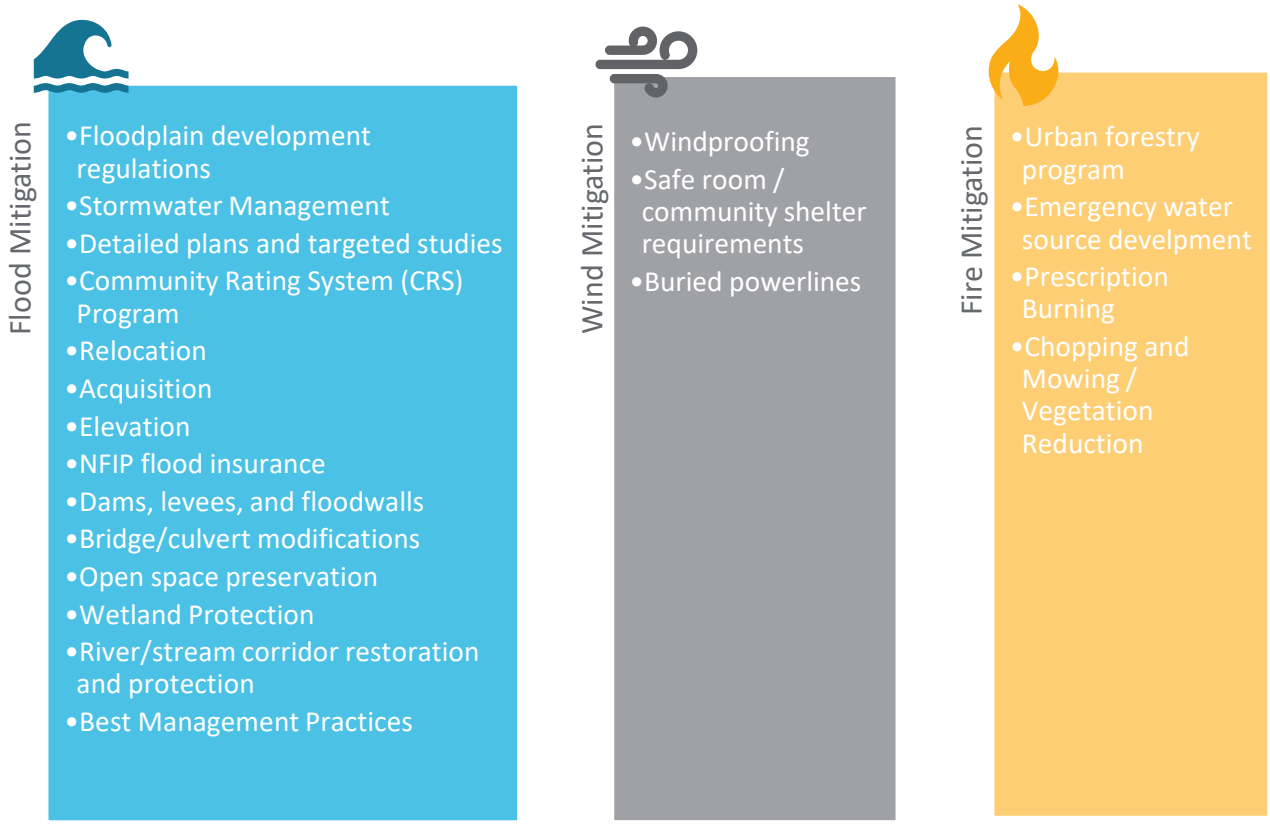
- Relocation/acquisition
- Elevation
- Floodproofing
- Insurance
- Brush/shrub removal
- Emergency response planning
- Wind-proofing

Structural Projects

- Dams/levees/floodwalls
- Bridge/culvert modifications
- Channel modifications/diversions
- Firebreaks
- Sinkhole abatement
- Emergency water source development
- Safe rooms and community shelters

Additionally, the LMS recommends open space preservation, wetland protection, identification and implementation of Best Management Practices, water resources management planning, and river/stream corridor restoration to protect natural resources. The Comprehensive Plan, Land Development Code, Florida Building Code, Capital Improvement Plan, and other emergency response and disaster planning efforts should be utilized to push forward and solidify mitigation efforts.

Detailed, hazard-specific mitigation factors are shown in the graphic below.



Mitigation projects are ranked in the LMS based on cost-benefit analysis, repetitive losses mitigated, consistency with LMS goals, funding availability, and reduction of critical facility vulnerability.

1.2.4 Peer Agency Resiliency Studies

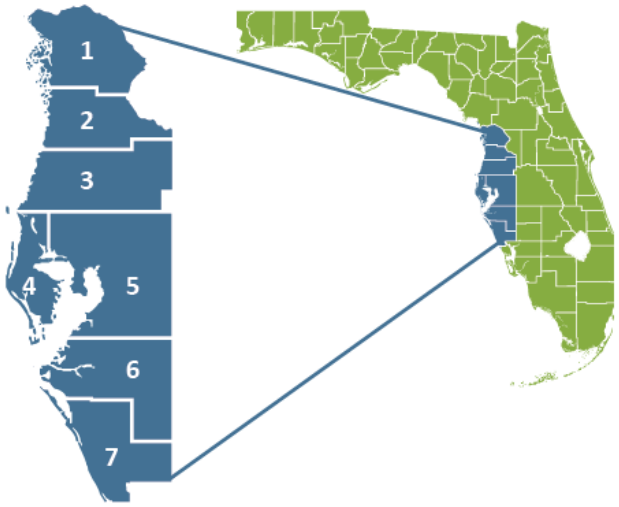
Tampa Bay Regional Planning Council Regional Resiliency Action Plan

The Regional Resiliency Action Plan (RRAP) is a living document created to address resilience challenges, prioritized through intergovernmental and community collaboration, intended to guide action over the next five years. The Vision is that the RRAP will help reduce risk to people and property by anticipating and preparing for sea level rise, storms, flooding, extreme heat, and other emerging hazards.

The RRAP is meant to serve as a voluntary tool for the region and local governments. The plan identifies regional opportunities for collaboration and provides a menu of local best practices to create a clear, though challenging, path forward for the region and includes a broad set of best practices to guide implementation of resilience-building actions that each jurisdiction could choose to implement. The RRAP is a framework for concerted regional action rather than a set of directives for specific projects or programs at the local level, recognizing that decisions on the timing and approach are best determined by each local government.

The Tampa Bay 7-County Resiliency Coalition Region:

1. Citrus County
2. Hernando County
3. Pasco County
4. Pinellas County
5. Hillsborough County
6. Manatee County
7. Sarasota County



The plan provides an in depth look at an array of resiliency, mitigation, and post-disaster response strategies, but of particular interest to this study is Goal 7 of the plan:

> "*The Region will have a connected multimodal transportation network that is resilient to extreme weather, reduces local emissions, reduces automobile congestion, and enhances equitable mobility and public safety*."

Each goal is accompanied by related objectives and approaches that facilitate the underlying goal through regional collaboration and local action strategies. To support the above goal, the main objectives are to mitigate climate-related impacts, advance the transition to renewable, accessible, and resilient mobility systems, and invest in low-emissions transportation infrastructure and air quality improvements. Regionally, transportation infrastructure staff can coordinate to define best practices for adaptation, coordination of improvements, and incorporation of multimodal transportation options. Additionally, regional collaboration on a regional Electric Vehicle Master Plan and to coordinate funding mechanisms to implement electric vehicle infrastructure will assist in the implementation of resiliency improvements to regional transportation systems.

Recommended local coordination strategies include integrating transportation resiliency in community plans, setting minimum roadway elevation standards, defining electric mobility goals, and devising improvements to

multiuse trails or bicycle and pedestrian travel. Additional examples of recommended local action strategies involve utilizing local data to update transportation plans, define electric charging infrastructure needs, and to prioritize accessory facilities for bus stops, sidewalks, and trails to mitigate the impacts of extreme weather in transit-dependent neighborhoods.

Sarasota/Manatee MPO Resiliency Vulnerability Assessment

The Sarasota Manatee MPO's Resiliency Vulnerability Assessment Study uses the 2045 LRTP objectives related to resiliency and high-priority hazards including storm surge, nuisance flooding, and wildfires that have already been identified through local planning efforts to guide the focus topics for the study. The study utilized existing transportation data, regional assets, and environmental factors to evaluate their regions vulnerability and current conditions. Additionally, the study describes vulnerability and risk assessment methodologies, mitigation strategies, and project prioritization and recommendations.

The Sarasota Manatee MPO Resiliency Study also included a vulnerability assessment that was consistent with the Federal Highway Administration's (FHWA) vulnerability assessment and adaptation framework. Vulnerabilities were described within three categories: exposure, adaptive capacity, and criticality. Risks to transportation assets were also assessed and ranked from low to high risk. Examples of evaluation criteria used for vulnerability include annual average daily traffic (AADT), functional classification, evacuation or transit routes, etc. The criteria for risk assessment included an evaluation of the probability of impacts from a hazard and a cost analysis of the consequences. Both the vulnerability and risk assessments assigned each asset a score to determine a priority list for potential mitigation.

The mitigation strategies defined in the study were grouped into four categories: Infrastructure hardening, green and sustainable solutions, planning and policy solutions, and public education and preparedness, which are further described in **Table 1-3**. These mitigation strategies were used to develop a mitigation strategy matrix which can be used to determine specific mitigation efforts, project prioritization, and categorize vulnerable or important facilities. Factors such as cost feasibility, timeframe for completion, and lead agencies were included into the mitigation strategy matrix. The transportation facilities were then assessed by their exposure and criticality then placed into three tiers, which helped to guide decisions on the prioritization of potential projects.

TABLE 1-3: SARASOTA/MANATEE MPO RESILIENCY STUDY MITIGATION STRATEGIES AND RELEVANT ACTIONS

Mitigation Strategy	Relevant Actions
Infrastructure Hardening	- *Underground utilities* such as electric lines along key corridors with high vulnerability. - *Retrofit assets* to build adaptive capacity, for example seawalls along roadways or raised infrastructure. - *Relocate* critical or vulnerable transportation assets like a transit hub. - *Redundant* construction of new corridors or infrastructure to isolated areas to reduce burden of existing facilities. - *Maintenance and Operation* of transportation assets to maintain resilient infrastructure. - *Drainage improvements* to areas adjacent to roadways with known flooding issues. - *Replacement* of existing infrastructure that will improve movement or efficiency before, during, and after extreme weather events.
Green and Sustainable Solutions	- *Utilize Native Tree Species* that have strong wind-resistance and remove invasive species along urban corridors with the potential to fall and block evacuation routes. - *Construct Natural Features* along coastal roadways or urban corridors.

Mitigation Strategy	Relevant Actions
Planning and Policy Solutions	- *Land Use and Zoning Revisions* aimed to minimize the demand for transportation infrastructure to sustain new development in vulnerable areas. - *Asset Management Guidebooks* can aid in integrating resiliency efforts into the management of assets. - *After Action Reports* after a weather event helps to identify areas where there is opportunity for enhancements in emergency management and recovery - *Grants* are an effective way to implement infrastructure hardening and green solutions.
Public Education and Preparedness	- *Highway Alert Lifesaving Technology (HALT)* can be installed on roadways with frequent flooding. - *Shelter and Evacuation Route Education* through public information campaigns and social media. - *Citizen Reporting System* where citizens can report any hazardous road conditions, which can be used by the MPO to better understand areas in need of resilience mitigation strategies.

Hillsborough County TPO Vulnerability Assessment and Adaptation Pilot Project

The Hillsborough County TPO Vulnerability Assessment and Adaptation Pilot Project took a similar approach as Sarasota Manatee MPO in their Resiliency Study as far as the types of data collected and assessment processes, but Hillsborough incorporates some of their own unique approaches and strategies that focus more so on the cost analysis of mitigation efforts or climatic consequences. The study consists of three phases:

1) Creating an inventory of multimodal transportation assets and assessing their risk from sea level rise, storm surge, and inland flooding.
2) Estimates the regional mobility losses resulting from disruptions to the identified facilities using the MPO's travel demand model.
3) Estimating general economic losses associated with disruption of critical links and developing strategies for managing climate risk with associated cost-effective measures.

In Phase 1 of the study, the Hillsborough County TPO identified highest priority and most at risk facilities. Phase 2 assessed the data collected from Phase 1 using transportation modeling software to determine cost-benefit adaptation strategies. An adaptation analysis was completed in Phase 3 of the study. This analysis included a menu of physical adaptation strategies to effectively address the anticipated risks of inundation associated with each asset and the marginal cost and potential range of reductions to disruptions for each strategy. The strategies fell into three categories: exposure, sensitivity, and adaptive capacity, as shown in **Figure 1-3**. The three specific strategies chosen in the study for further assessment include:

- Limit exposure through raised roadway profiles.
- Mitigate sensitivity using wave attenuation devices (WADs) and roadway base enhancements to reduce saturation sensitivity.
- Increase adaptive capacity through drainage improvements for faster recovery.

FIGURE 1-3 HILLSBOROUGH COUNTY TPO ADAPTATION STRATEGY MENU

Conclusions and Key Takeaways

There are common themes and practices that are consistent throughout professional plans and studies involving resiliency and vulnerability. It is common practice to first identify goals and objectives that directly address resiliency. Once identified, the goals and objectives will lay a foundation to guide the remainder of the analysis and planning process. Collecting data used to define the current problems and needs of the transportation infrastructure, the people and facilities it serves, and any potential vulnerabilities follow as the next step. It is important to include resiliency considerations in the criteria when identifying evaluation criteria, performance measures, and targets for transportation projects.

Typically, the data analysis is conducted through GIS, but a variety of software platforms can be utilized to perform analysis or modeling. Combining the data analysis with stakeholder input produces a vulnerability or risk assessment built upon empirical observations and areas of potential risk to the transportation system from a network-wide perspective. Once a thorough assessment has been completed, strategies and action plans can be developed based on the findings and the underlying goals set early in the process. There are a multitude of mitigation strategies which can be identified and summarized based on the local context of the analysis being conducted. While compiling a list of strategies is a large component of the studies that were reviewed, outlining the cost feasibility and breakdown of priority is a key element when planning for and incorporating resiliency strategies into plans and MPO processes.

2 DATA AND RESOURCES

2.1 Overview

Gathering composite data for conducting the analysis of risk and vulnerability requires identifying a broad range of data sources and providers. This section outlines the data used for evaluating the vulnerability of transportation facilities and assets. Data used in this analysis was collected from state and local agencies.

In addition to the following maps and data descriptions, additional maps and table illustrating the existing data conditions can be found in Appendix A.

2.2 Environmental Factors

Relevant data sources were used to determine vulnerability of the region's transportation infrastructure to natural hazards. Data were gathered from national data sets in order to determine areas of vulnerability for the Hernando/Citrus MPO.

2.2.1 Storm Surge / Inundation

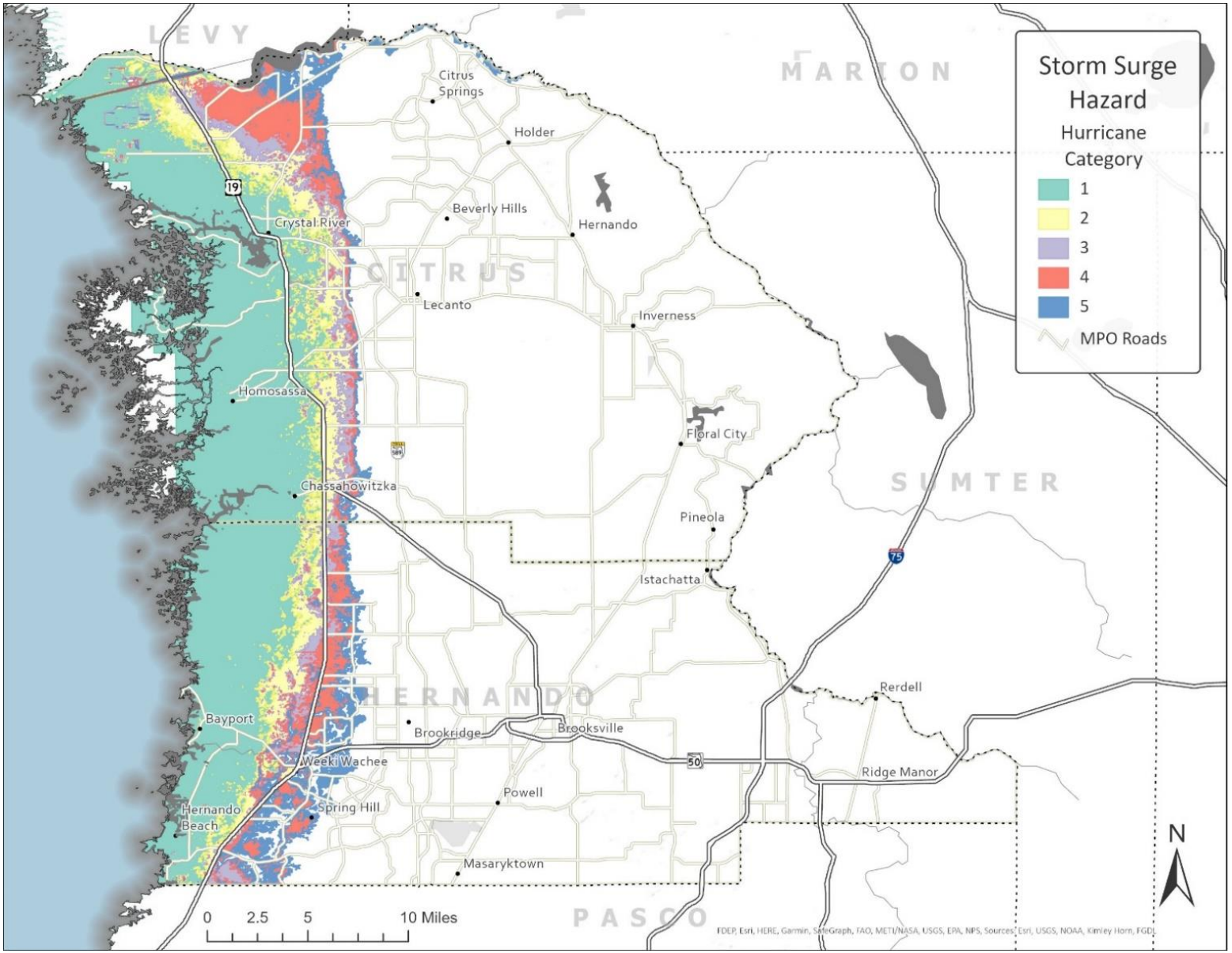
Evaluation of storm surge was conducted through use of data compiled by the National Oceanic and Atmospheric Administration National Hurricane Center (NHC). The storm surge data set includes five categories based on modeling of tropical storm/hurricane events.

The storm surge areas, identified using the Sea, Lake, and Overland Surges from Hurricanes (SLOSH) model, are created by computing the maximum storm surge resulting from up to 100,000 hypothetical storms simulated through each SLOSH grid of varying forward speed, radius of maximum wind, storm intensity, landfall location, tide level, and storm direction. For planning purposes, the NHC uses a representative sample of hypothetical storms to estimate the near worst–case scenario of flooding for each hurricane category. These simulations are used to create a set of operational and planning products. **Map 2-1** shows the storm surge zones for Citrus and Hernando counties, and highlights the coastal areas most susceptible to the destructive waves and higher water levels associated with the storm events.

Image Courtesy ABC News / Getty Images

Storm surge caused by Hurricane Idalia in 2023 resulted in major flooding, including the intersection of US 19 and Citrus Avenue in Crystal River.

MAP 2-1: STORM SURGE HAZARD AREAS



2.2.2 Flood Hazard

The Digital Flood Insurance Rate Map (DFIRM) maps, developed by the Federal Emergency Management Agency (FEMA), are intended to alert property owners of the potential for flooding to occur in a given year. Often referred to as the 100-year floodplain, the DFIRM data identifies Special Flood Hazard Areas where there is a 1% chance that flooding will occur during any given year. This data set also includes river/stream flood hazard areas with a 1% or greater change of shallow flooding each year.

Map 2-2 illustrates the areas designated as Special Flood Hazard Areas (VE, A, AE and AH) as well as river/stream flood hazard areas (AO).

Image Courtesy Tampa Bay Times

Flooding in Ridge Manor as a result of the Withlacoochee River reaching flood stage following Hurricane Irma in 2017 that shut-off access to many residential areas.

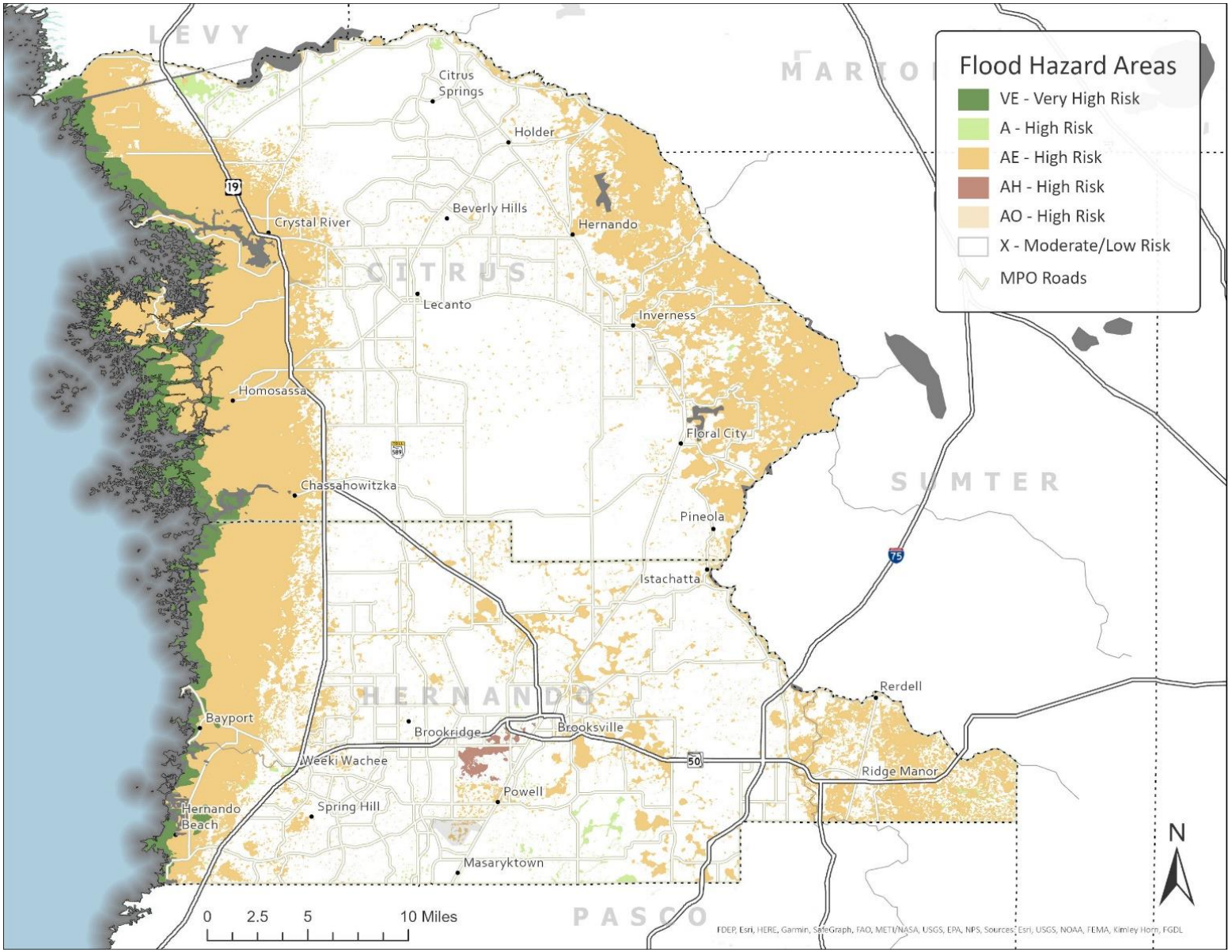
2.2.3 Fire Hazard

The US Department of Agriculture's Forest Service Division has organized areas of Wildfire Hazard Potential (WHP) into five classifications: very low, low, moderate, high, and very high. Shown in **Map 2-3**, the areas mapped with higher WHP values represent fuels with a higher probability of experiencing torching, crowning, and other forms of extreme fire behavior under conducive weather conditions, based primarily on landscape conditions.

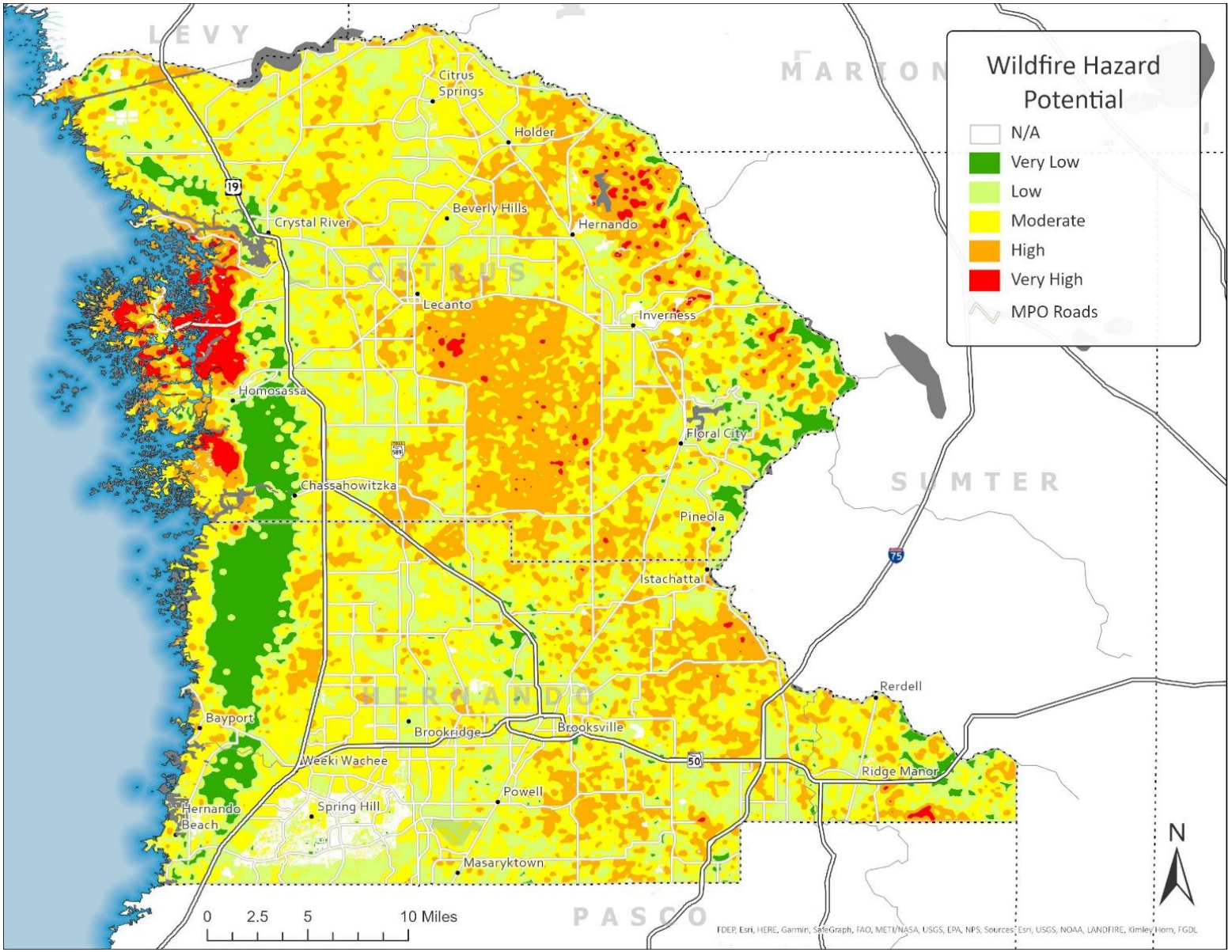

Image Courtesy Baynews9

The Barclay Fire in 2021 consumed more than five acres and resulted in the closing of Barclay Avenue between Cortez Boulevard and Elgin Boulevard.

MAP 2-2: FLOOD HAZARD AREAS



MAP 2-3: WILDFIRE HAZARD AREAS



2.3 Transportation Facilities

The Hernando/Citrus MPO is responsible for the planning activities of the regional transportation system. This includes coordinating with FDOT, county and city agencies to ensure that the region's system is maintained and resilient to weather-related events. The MPO maintains a GIS database of the region's collector and arterials roadways for planning purposes. **Map 2-4** illustrates the regions existing and potential future roadways with the hurricane evacuation routes highlighted.

A tabular listing of the roadway segments included in this vulnerability and risk assessment has been included in **Appendix B**.

Map 2-4 also shows the location of the general aviation airports and rail lines in the area. Public airports in Citrus County include Crystal River Airport (Captain Tom Davis Field) in the west and Inverness Airport in the east. Hernando County only has one public airport: Brooksville-Tampa Bay Regional Airport. Inverness Airport is mostly trafficked by recreational flyers (75%[1]) with the remainder of activities being visiting aircrafts. About 40% of Crystal River Airport operations are comprised of flight training, 30% are business flights, and most remaining operations are from transient visiting aircraft. The Brooksville-Tampa Bay Regional Airport in Hernando County is nestled in an ideal location between US 41 and the Suncoast Parkway and handles the majority of general aviation services.

The MPO's planning activities also include coordination with the local agency transit providers. **Map 2-5** shows the current transit routes operated by Citrus County Transit and TheBus in Hernando County.

2.4 Community Facilities

In addition to documenting the existing transportation system, assessing resiliency also includes a review of the places and community assets that need to be accessed. Facilities were categorized based on the function they serve during a natural disaster as listed below.

- Shelters[2]: 35 designated shelter locations in Citrus and Hernando counties were listed by each counties evacuation maps and primarily included public schools.
- Utilities[3]: in total, 352 facilities were identified for this category. Facilities included water, wastewater, electric, and solid waste facilities.
- Emergency Services[3]: 96 facilities were identified for this category. Listed facilities include 0fire stations, law enforcement facilities, emergency medical services and hospitals, emergency operations centers and stations for the Coast Guard and National Guard.
- Airport/Heliport[3]: 26 public and private airstrips and helipads were included as these may serve beneficial for transporting equipment or people during evacuation and recovery phases.

These facilities are displayed on **Map 2-6**. A series of maps is included in **Appendix A** to illustrate the distribution of each facility category along with a detailed list of each facility and its location.

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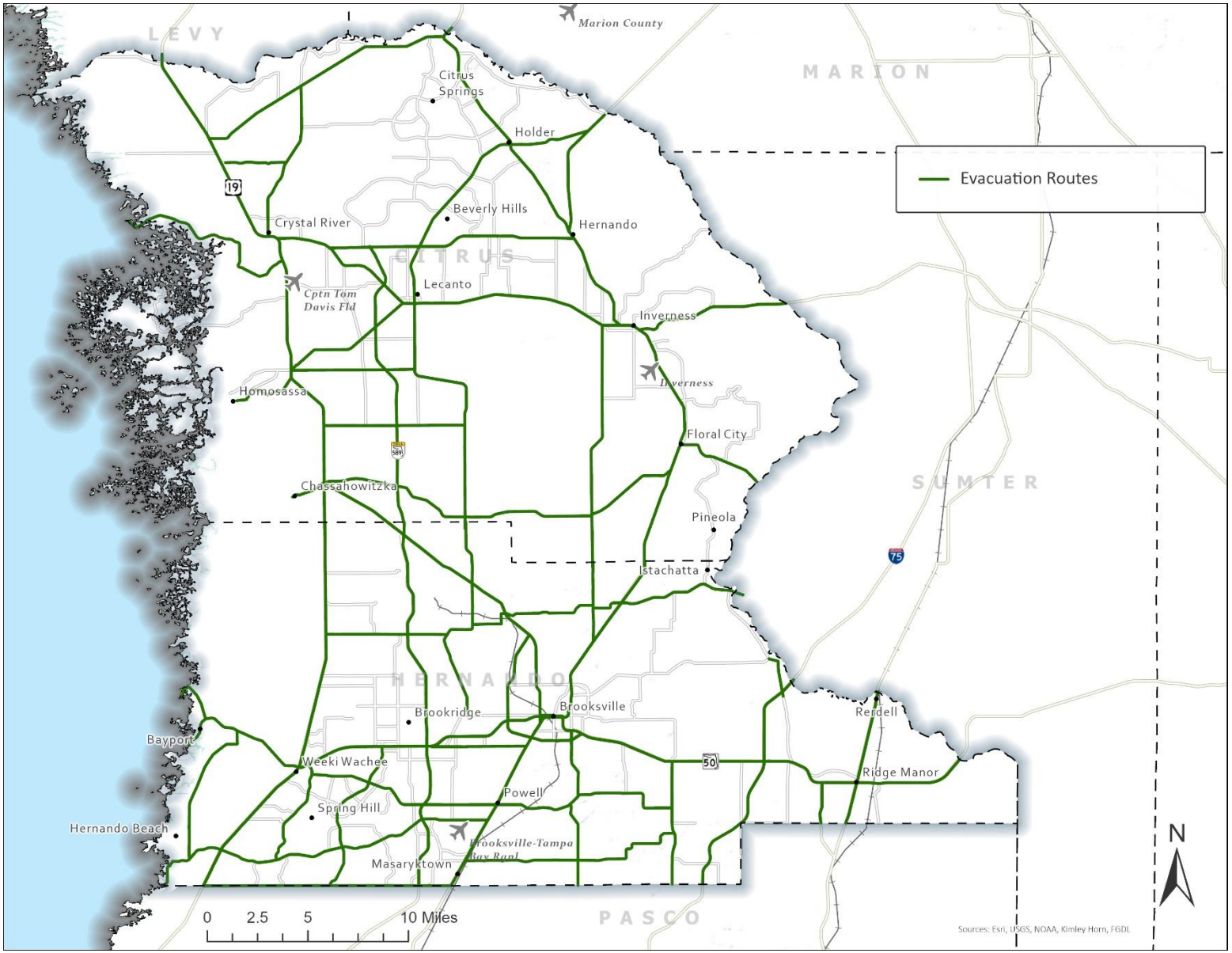
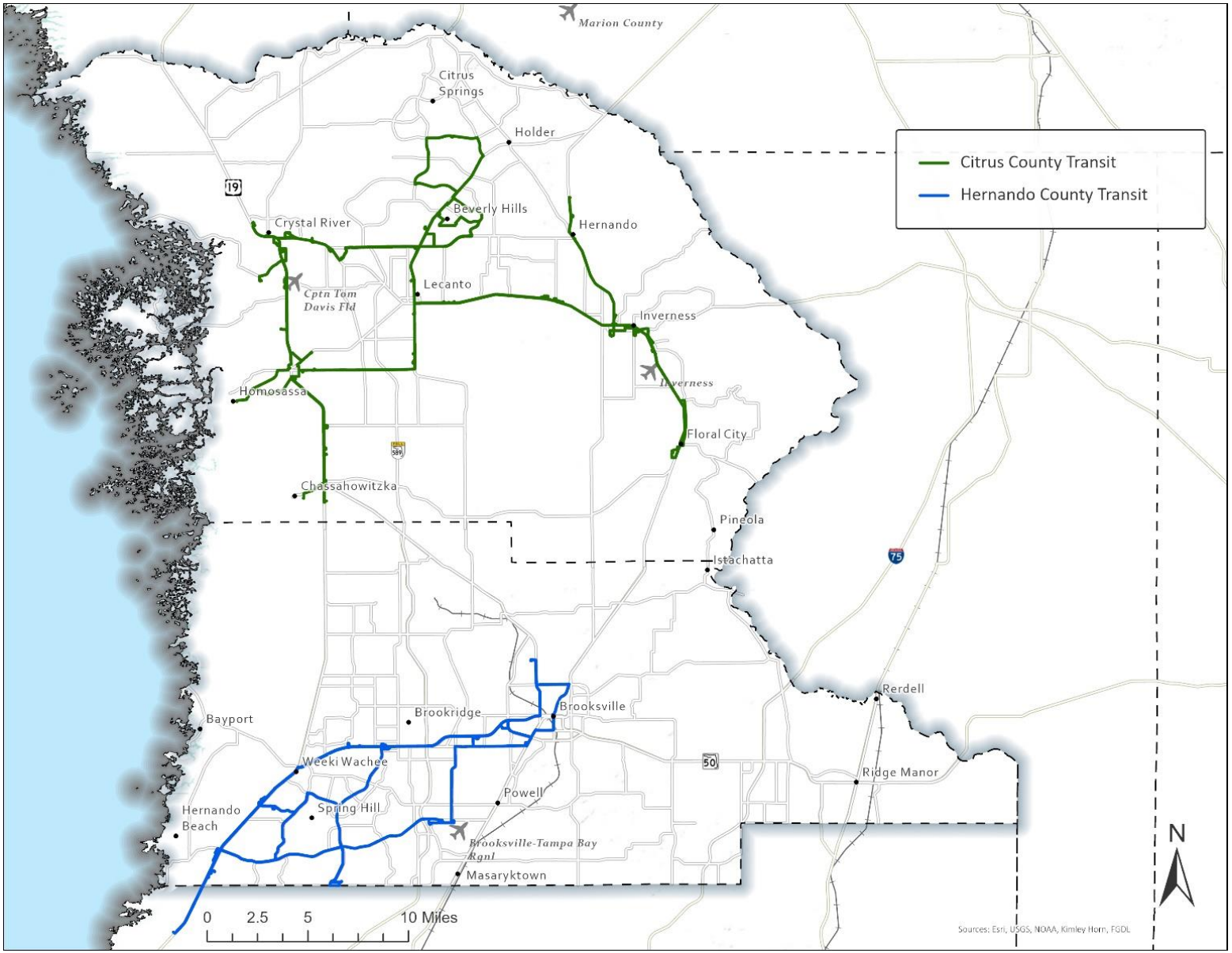
[1] https://www.citrusbocc.com/departments/public_works/engineering/aviation_section/inverness_airport.php
[2] Citrus County 2022 Disaster Planning Guide and Hernando County 2022 Evacuation Map
[3] Florida Geographic Data Library (FGDL) and Florida Department of Environmental Protection (FDEP) Geospatial Open Data portal

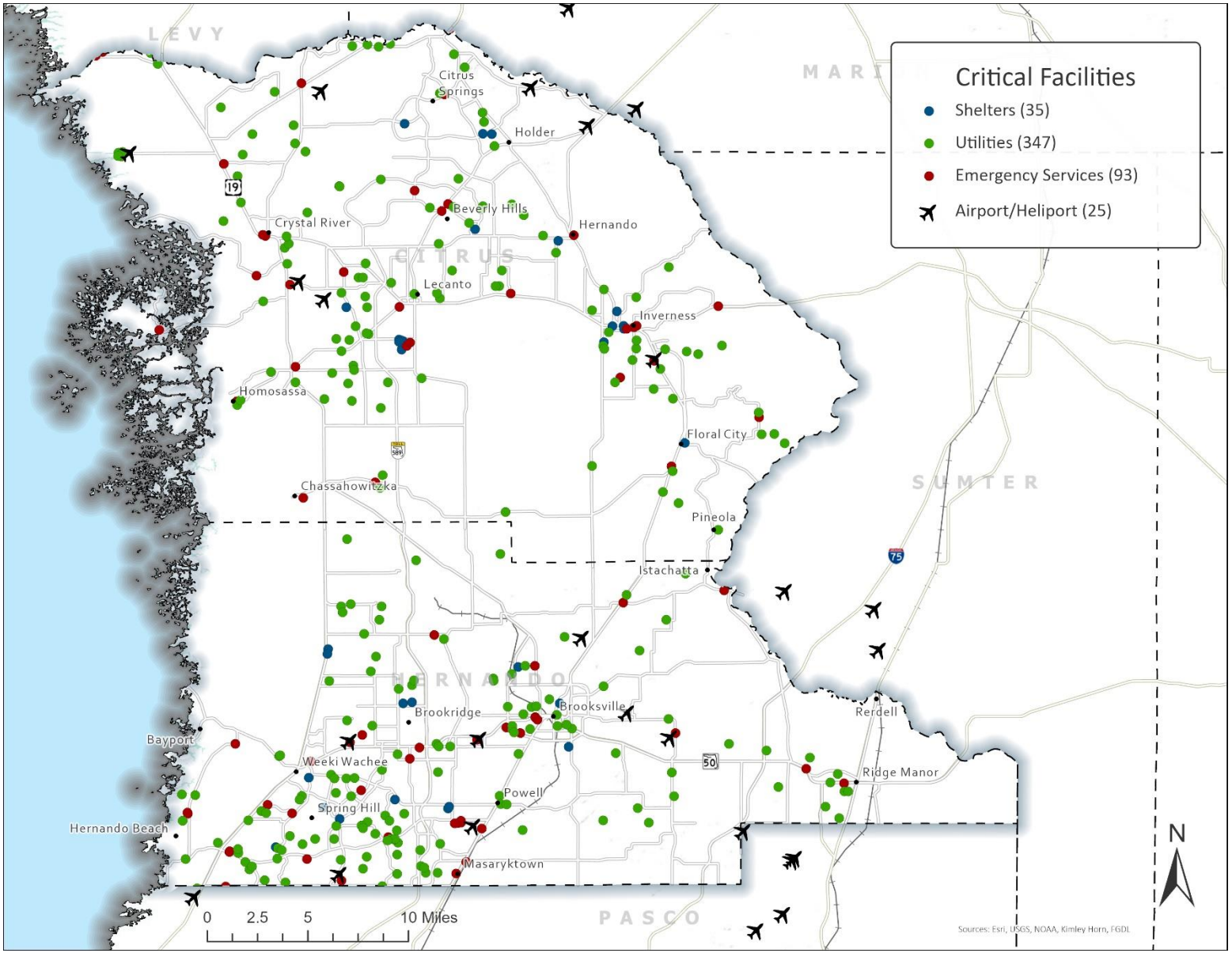
MAP 2-4: TRANSPORTATION FACILITIES OVERVIEW



MAP 2-5: TRANSIT ROUTES



MAP 2-6: CRITICAL FACILITIES

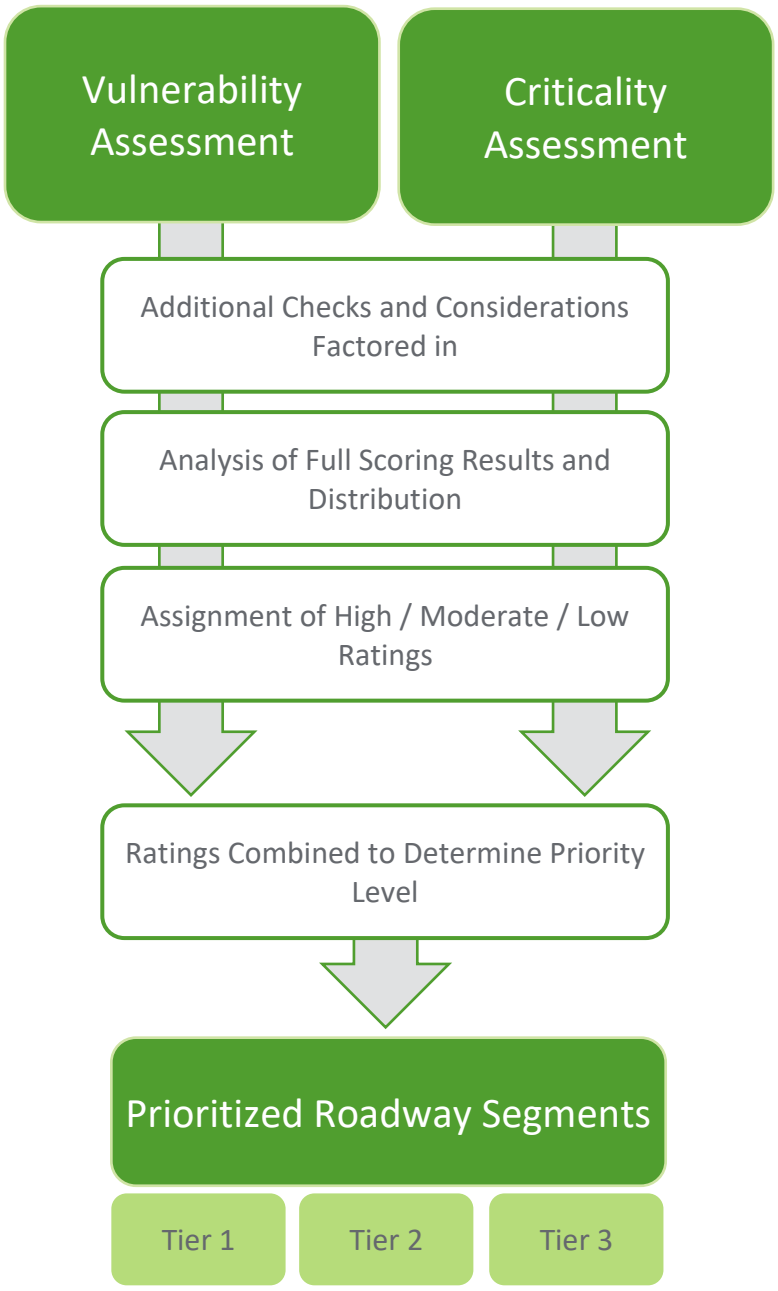


3 ASSESSMENT AND PRIORITIZATION

3.1 Methodology

This section describes how the data was analyzed to determine transportation vulnerability and assess the risk from weather-related events. Consistent with the guidance provided by FHWA, the analysis was included an assessment of transportation vulnerability (or risk) and a review of critical transportation infrastructure in developing a list of priority roadway segments for developing recommended mitigation strategies as illustrated in **Figure 3-1**. All analysis for this assessment was performed in ArcGIS Pro 3.0.3 with a complete listing of the results included in **Appendix B**.

FIGURE 3-1: VULNERABILITY ASSESSMENT METHODOLOGY



3.2 Vulnerability

This stage of the analysis assessed potential exposure to natural hazards for segments of the regional roadway network. A score for each hazard was calculated and combined for roadway segments exposed to multiple threats. Using the data sources discussed previously, a determination was made regarding the degree to which each natural hazard was considered. For Storm surge, it was determined that all five levels of storm surge should be used. Only the high and very high flood hazard areas were used for determining vulnerability. Finally, for the fire hazard potential, only the areas of high and very high potential were used. Road segments were examined to establish whether they were within the identified hazard areas for each of the three environmental factors.

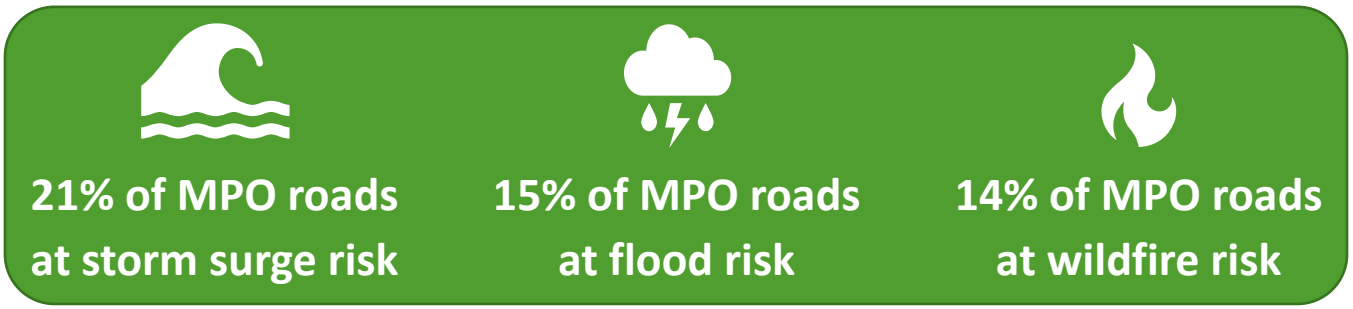
A vulnerability score was assigned to each road segment based on the percent of the road segment that overlapped or intersected each of the environmental factors identified hazard areas. **Table 3-1** provides a summary of the factors there were applied for each hazard with a description of the formula used to calculate the vulnerability score below. Additional data for each roadway segment is included in **Appendix B**.

(1 x % Cat. 1 or 2 Storm Surge) + (0.33 x % Cat. 3, 4 or 5 Storm Surge) + (0.1 x % Flood Zone) + (0.05 x % Fire)

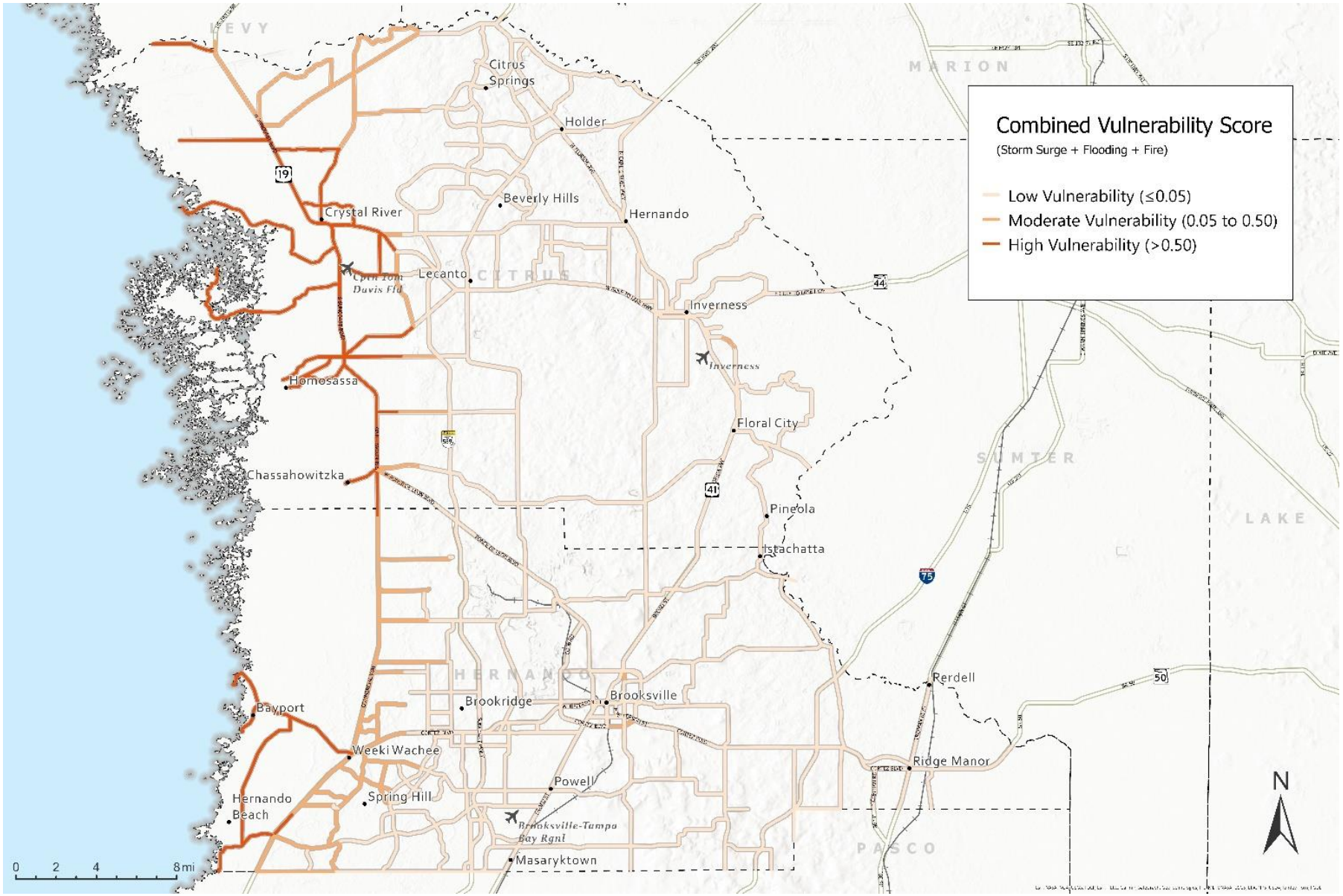
TABLE 3-1: FACTORS FOR CALCULATING VULNERABILITY

Event Type	Multiplier	Impact Area Vulnerability Criteria
Storm Surge	x 1.00	Segments in Category 1 & Category 2 Areas
Storm Surge	x 0.33	Segments in Category 3, Category 4, & Category 5 Areas
Inland Flooding	x 0.10	Segments in 100-Year Floodplain Area (*1% Annual Chance of Flooding*)
Wildfire	x 0.05	Segments in High & Very High Wildfire Risk Areas

Using the calculated scores, values were converted to a scale of 0 to 1 for consistency with 1 being the most vulnerable to natural hazards and 0 being the least vulnerable based on this methodology. Data distribution and natural groupings of the final vulnerability scores determined the classification into the low, moderate, and high categories shown in **Map 3-1**.



MAP 3-1: ROAD SEGMENT VULNERABILITY SCORES



3.3 Criticality

Criticality of road segments was determined based on the function of the roadway segment as well as the proximity or access each provides to critical facilities. These two factors of criticality were combined into a composite criticality score for determining priority locations.

3.3.1 Transportation Function

Multiple factors were used to determine critical transportation function as shown in **Table 3-2**. Based on input received from the Stakeholder Working Group, described in Section 4, several factors were considered to be of a more critical nature and could receive up to two points. The critical transportation function score is an unweighted sum from each category, with maximum possible score of 11.

TABLE 3-2: FACTORS FOR CALCULATING CRITICAL TRANSPORTATION FUNCTION

Number of Points	Evacuation Route?	Primary Access or Bridge?	Traffic Volumes	Transit Services	Functional Class	FDOT SIS Facility?
0 Points	No	No	AADT < 12,000	No Transit Routes	Local or Minor Collector	No
1 Points	*Not Possible*	*Not Possible*	AADT ≥ 12,000 but < 35,000	At Least One Transit Route	Major Collector or Minor Arterial	*Not Possible*
2 Points	Yes	Yes	AADT ≥ 35,000	*Not Possible*	Major Arterial or Principal Arterial	Yes

3.3.2 Critical Facility Access

Access to critical facilities was based determined using a series of community facilities and the proximity to a roadway segment. In total, four categories A road segment is considered more critical if it provides access to critical facilities. **Table 3-3** illustrates how scores were assigned for each roadways segment. With each facility category receiving up to 2 points, the maximum critical facility score for each road segment was 8 points.

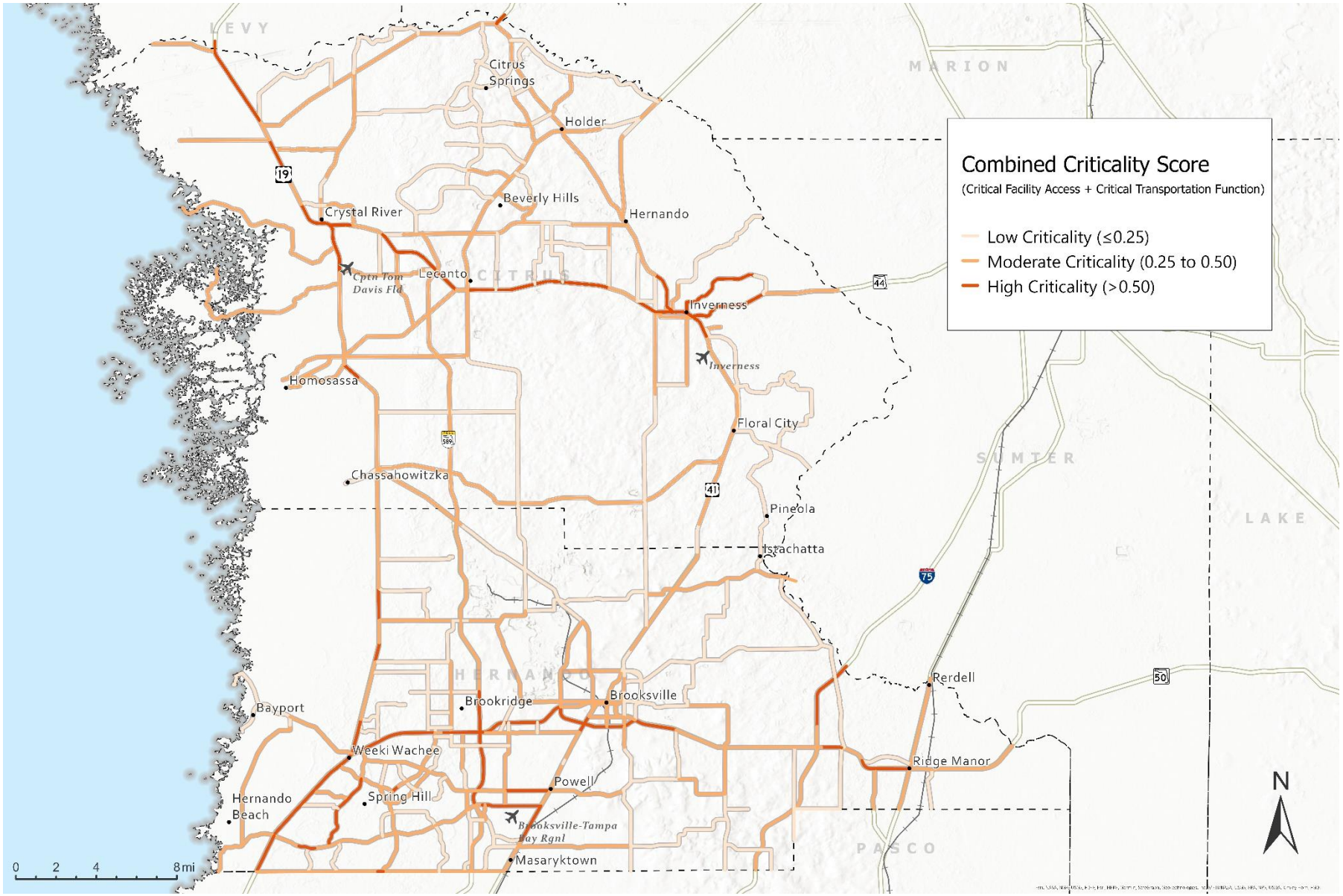
TABLE 3-3: FACTORS FOR CALCULATING CRITICAL FACILITY ACCESS

Category	0 points	1 point	2 points
Medical & Emergency Response - Hospital, EMS, Police, Fire	no critical facilities within one mile.	one critical facility within one mile.	two or more critical facilities within one mile.
Evacuation Shelters - In Most Recent County Plans			
Airports - Public, Private, Heliport			
Utility Services & Emergency Resources - Water, Electric, Debris Removal			

3.3.3 Combined Criticality Score

The transportation function and critical facility scores were equally weighted, combined and converted to a scale of 0 to 1, with 1 being the most critical and 0 being the least critical. Data distribution and natural groupings of the final criticality scores determined the classification into low, moderate, and high categories as shown in **Map 3-2**.

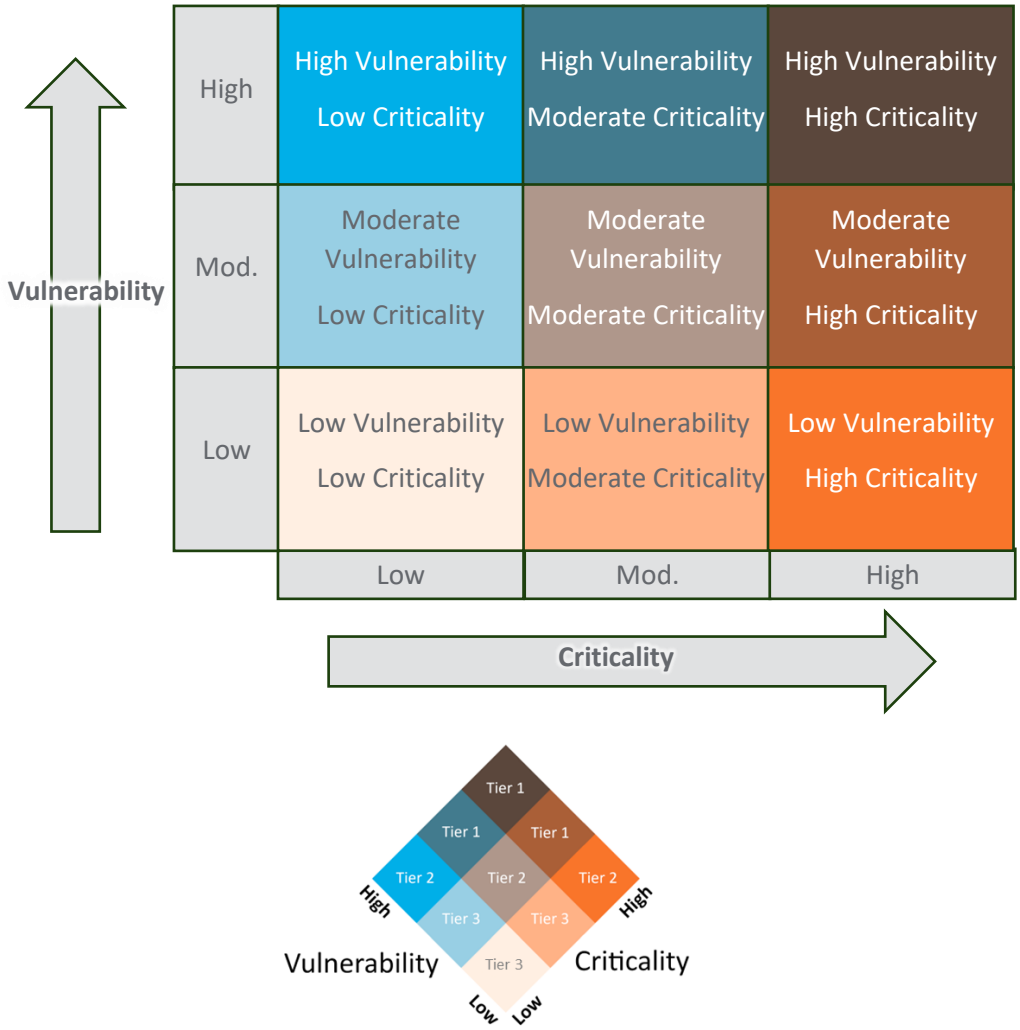
MAP 3-2: ROAD SEGMENT CRITICALITY SCORES



3.4 Prioritized Locations

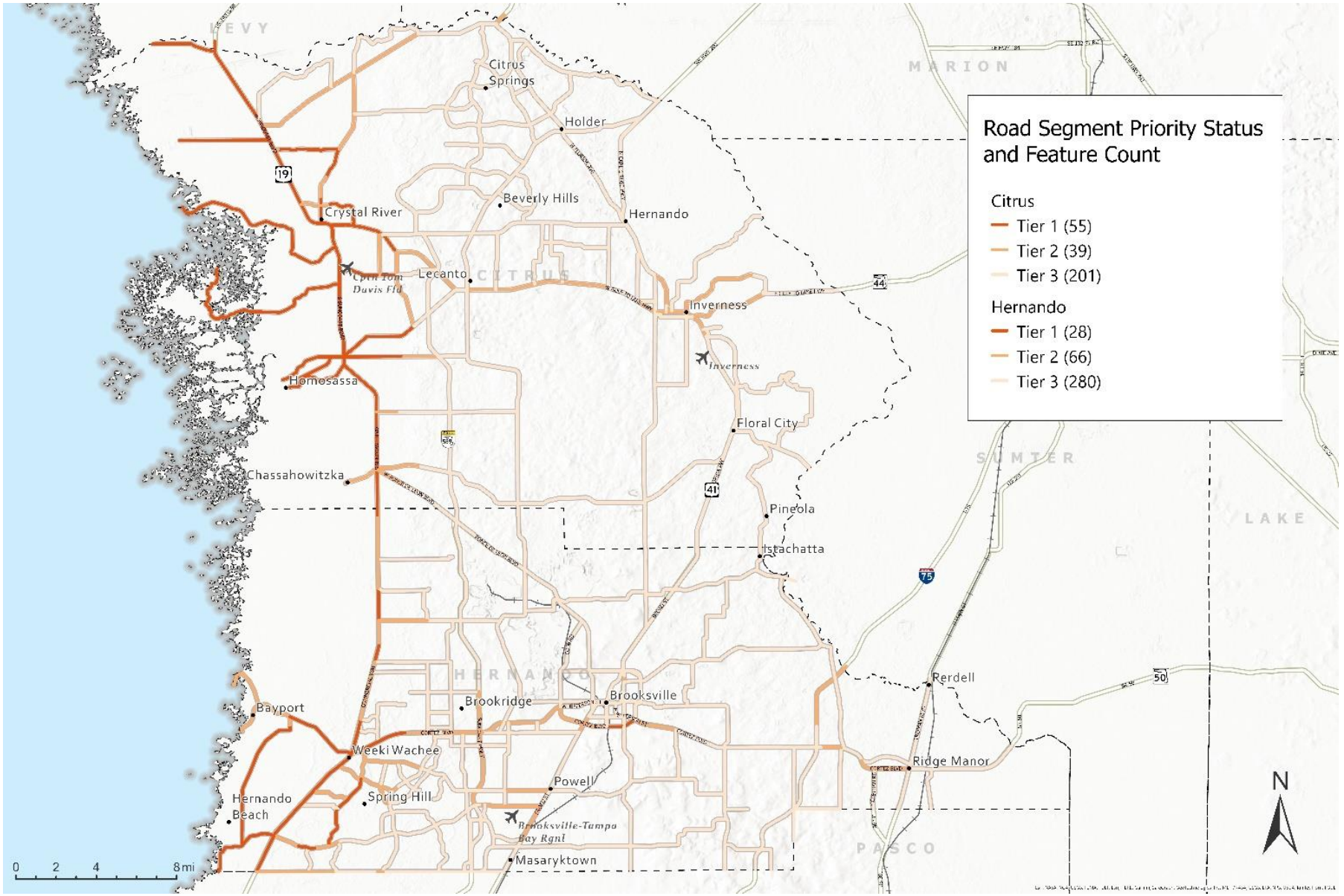
Road segments were classified into one of three tiers depending on the vulnerability and criticality score described previously. Tier 1 includes the most critical and vulnerable road segments while Tier 3 includes those with the lowest combined vulnerability and criticality score. **Figure 3-2** illustrates how the road segments were grouped for prioritization and the corresponding tier assignments for the various combinations.

FIGURE 3-2: PRIORITIZATION SCHEMA



Map 3-3 visualizes the final tier classifications for all road segments with the number of segments falling within each tier by county. The Tier 1 segment count and coverage is highest in northwest Citrus County and southwest Hernando County, while the Tier 2 segments have a wider distribution pattern that includes large portions of major east-west state roads, proximity to airports, and primary routes in/out of each county. A map showing the detailed combination of vulnerability and criticality is included in **Appendix B**.

MAP 3-3: ROAD SEGMENT PRIORITY STATUS



4 STAKEHOLDER ENGAGEMENT AND OUTREACH

At the beginning of the study process, a stakeholder group of representatives from the MPO's planning partner agencies was formed to guide development of the technical analysis. This group met three times during the Vulnerability and Risk Assessment Study. Members of the Stakeholder Working Group represented the following list of agencies.

- Citrus County
- Citrus County School District
- Citrus County Sheriff/EOC
- Citrus County Transit
- Citrus Utilities
- City of Brooksville
- City of Crystal River
- City of Inverness
- Division of Forestry
- Hernando County
- Hernando County Fire
- Hernando County Emergency Operation Center
- Hernando County School District
- Hernando County Sheriff
- Hernando County Transit
- Hernando Utilities

The three Stakeholder Meetings were all well attended and held in the Hernando County Training Facility, located at 1661 Blaise Drive. Meetings were noticed and open to the public to attend. A description of each meeting is provided in the following sections. Presentations made during each meeting with the stakeholders are provided in Appendix C.

4.1 Stakeholder Meeting 1

The first stakeholder meeting was held on April 19, 2023. At this meeting, the consultant provided an overview of the study's purpose and objectives. A review of MPO's goal of preserving the transportation system was identified as the basis for conducting this study.

Presentation at this meeting also included identification of the environmental data sources, review of each factor and how that data translated into risk for the transportation system. Information was also presented to the stakeholders regarding review of previous local and regional resiliency studies that have been completed.

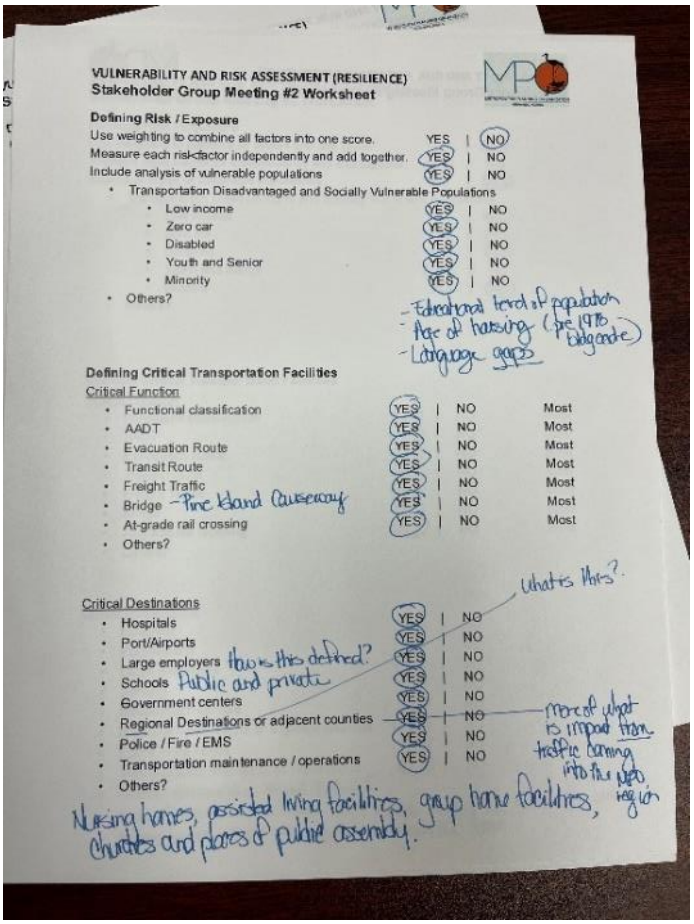
This meeting concluded with an interactive exercise where stakeholders reviewed the existing data maps (pictured to the left), and provided local context to areas of importance in developing vulnerable areas. During this review, it was noted that observed flooding occurs in areas not identified in the FEMA data set. This resulted in additional areas around Weeki Wachee, Masaryktown, and Brooksville being included in the analysis of transportation facilities vulnerable to flooding.

Additional comments provided by stakeholder members included functionality of certain roadways. This topic was further discussed during the second meeting. Of specific note, comments included the use of local roadways for evacuation purposes and single-point access routes leading to coastal areas (ex: Ozona and Fort Island Trail) west of US 19.

4.2 Stakeholder Meeting 2

The second stakeholder meeting was held on May 17, 2023. During this meeting, the consultant team presented additional guidance regarding the incorporation of resiliency planning provided by FDOT. The primary purpose of this meeting was to develop and review and vulnerability analysis methodology with the stakeholders.

Based on the document review, example methodologies from two Florida MPO's (Sarasota/Manatee MPO and Space Coast TPO) were presented to the group for discussion. Stakeholders were also presented with information for assessing transportation criticality during this meeting.


VULNERABILITY AND RISK ASSESSMENT (RESILIENCE)
Stakeholder Group Meeting #2 Worksheet

Defining Risk / Exposure
Use weighting to combine all factors into one score. YES | NO
Measure each risk-factor independently and add together. YES | NO
Include analysis of vulnerable populations YES | NO
- Transportation Disadvantaged and Socially Vulnerable Populations
  - Low income YES | NO
  - Zero car YES | NO
  - Disabled YES | NO
  - Youth and Senior YES | NO
  - Minority YES | NO
- Others?

- Educational level of population
- Age of housing (pre 1978 Belgarde)
- Language gaps

Defining Critical Transportation Facilities
Critical Function
- Functional classification YES | NO Most
- AADT YES | NO Most
- Evacuation Route YES | NO Most
- Transit Route YES | NO Most
- Freight Traffic YES | NO Most
- Bridge – Pine Island Causeway YES | NO Most
- At-grade rail crossing YES | NO Most
- Others?

Critical Destinations
- Hospitals YES | NO
- Port/Airports YES | NO
- Large employers How is this defined? YES | NO
- Schools Public and private YES | NO
- Government centers YES | NO
- Regional Destinations or adjacent counties YES | NO
- Police / Fire / EMS YES | NO
- Transportation maintenance / operations YES | NO
- Others?

What is this?
More of what is impact from traffic coming into the MPO region
Nursing homes, assisted living facilities, group home facilities, Churches and places of public assembly.

Following discussion of the example methodologies, stakeholders completed a series of questions designed to identify the factors the group saw as most important for determining transportation criticality. The group was also asked to identify a preference for considering vulnerability factors and the methodology for assessing exposure/risk.

Pictured to the left is an example of a completed questionnaire. Based on the results of this exercise, a blended approach for determining vulnerability and criticality was developed, as previously discussed.

The final topic presented at this meeting was an initial review of potential mitigation strategies. One of the topics related to strategies mentioned during this meeting as well as the first meeting, was regarding the topic of controlled burns and the need to maintain under-brush that becomes fuel for the spread of wildfires. It was noted that this maintenance activity is vitally necessary for fire management and included as part of county Local Mitigation Strategies as it relates to code enforcement and should be considered as a regional strategy for supporting transportation resiliency that requires continued coordination with land use planning, zoning, code enforcement, and fire prevention services.

4.3 Stakeholder Meeting 3

Held on August 23, 2023, the final stakeholder meeting included a report back to the stakeholders on the methodology that was applied, based on the 2nd meeting's input, for determining vulnerability and criticality.

Results of the vulnerability and criticality assessments were presented and discussed with the group. Similar to the map review conducted during the first meeting, maps of the resulting vulnerability tiers and recommended locations (discussed in the next section) were available for review and comment by the stakeholders.

Stakeholders provided additional context regarding the Ridge Manor area in eastern Hernando County flooding from the Withlacoochee River exceeding flood stage as a result of heavy rains and discharge from the Green Swamp. Similar to concerns regarding the need to address controlled burns, the need to mitigate for these flooding events are identified in the Hernando County LMS. While these flooding events haven't impacted the regional roadway system, coordinated efforts should continue in assessing and reducing weather-related vulnerabilities such as this.

4.4 MPO Advisory Committee and Board Meetings

Presentations were made to the MPO's advisory committee during the course of this study. The consultant team also presented to the MPO Board while the study was progressing. Involvement of the MPO's advisory committee provided additional opportunities for local planning and engineering professionals, and citizens to hear about the study progress and provide input into directing the study.

July 26, 2023, Committee Presentation: This presentation followed the first and second stakeholder meetings. Committee members received updates on the evaluation of the weather-related hazards and system vulnerability.

September 27,2023, Committee Presentation: During this presentation, the advisory committees heard updates on the analysis of the criticality and vulnerability factors. Priority recommendations and mitigation strategies were also presented.

MPO Board Presentations: following each of the advisory committee presentations, the consultant team provided updates to the MPO Board (August 3, 2023, and October 5, 2023). At the October 5, 2023, presentation, MPO Board Members approved the recommendations of this study.

5 STRATEGIES AND RECOMMENDATIONS

5.1 Adaptation & Mitigation Strategies

Addressing the vulnerabilities identified for the high priority roadway segments is accomplished by related potential mitigation strategies aimed at decreasing transportation vulnerabilities and improving resiliency.

Each strategy represents a broad approach for developing a more resilient transportation system. Numerous actions or specific improvements are possible within each strategy depending on factors such as context, level of risk, types of potential impacts, and the locally preferred approach to mitigation. The strategy options shown are based on the event types included in this assessment (storm surge, flooding, and wildfire) and are not intended to be an exhaustive list.

Strategies for mitigating environmental risks and exposure to impacts can range from early-stage planning and programming activities to construction and asset management. Resiliency planning is not just an emergency management activity, and as such the identified strategies can be incorporated into most departments and partner agencies activities at multiple levels of government.

While a strategy may fall into more than one category, **Table 5-1** lists the strategies and the primary category with which each is most-closely associated. This list of strategies has been used to identify future opportunities for addressing transportation resiliency. **Appendix D** contains a full list of strategies and example applications.

TABLE 5-1: MITIGATION STRATEGY CATEGORIES

PLANNING & POLICY-BASED STRATEGIES
• Revise Land Use Policies, Zoning Code Requirements, or Minimum Design Standards
• Pursue Grant Funding Intended for Resiliency Upgrades or Infrastructure Repair Efforts
• Prioritize Resiliency and Recovery Planning or Preparation Activities
• Increase Public Awareness with Outreach and Education Campaigns
• Adjust Operating, Maintenance, Inspection, or Regular Repair Cycles

CAPITAL IMPROVEMENT & INFRASTRUCTURE STRATEGIES
• Protect Existing Infrastructure
• Upgrade/Strengthen Facilities or Key Components
• Relocate Facilities or Key Components
• Incorporate Natural Features into the Built-Environment
• Improve Drainage Conditions

TECHNOLOGY-BASED STRATEGIES
• Install Warning Systems or Dynamic Messaging Technology
• Integrate, Share, and Protect Data Resources or Applications

5.2 Strategy Recommendations

The top-priority facilities identified by the previously described assessment and scoring processes were compiled into groups of similar facilities for the purpose of identifying and recommending mitigations strategies. Grouping these facilities is a way to help reduce redundancy when developing recommendations. It also recognizes the interrelated aspect of transportation networks and the areawide approach needed for resiliency planning. The groups used are based on a combination of factors including relative location, surrounding land uses, roadway characteristics, and specific vulnerabilities.

Recommendations in this section are organized into two broad categories. The first includes those that apply to the entire MPO Planning Area. The second includes those that are location specific and could be appropriate for one or more of the priority groups.

Map 5-1 shows the location of the eleven priority groups used for developing recommendations, with **Table 5-2** providing information on the specific facilities included and the limits of each unique roadway. It should be noted that the priority group numbering was assigned in sequential order based on location. It does not indicate a higher priority status, risk potential, or level of need associated with each group. Additional information related to prioritization scoring for individual roadway segments and a full menu of mitigation strategies can be found in **Appendix B** and **Appendix D**, respectively.

In addition to the identified strategies which are directly designed to mitigate weather-related hazards, additional strategies can be implemented which will support resiliency efforts in the region. One specific example of this is the Electric Vehicle (EV) charging stations that are currently programmed in the MPO's Transportation Improvement Program. The addition of EV infrastructure is a direct response by FDOT for supporting emerging technologies. This added infrastructure will make owning an EV more viable and will also provide additional charging opportunities during times of evacuation.

MAP 5-1: PRIORITY GROUP LOCATIONS

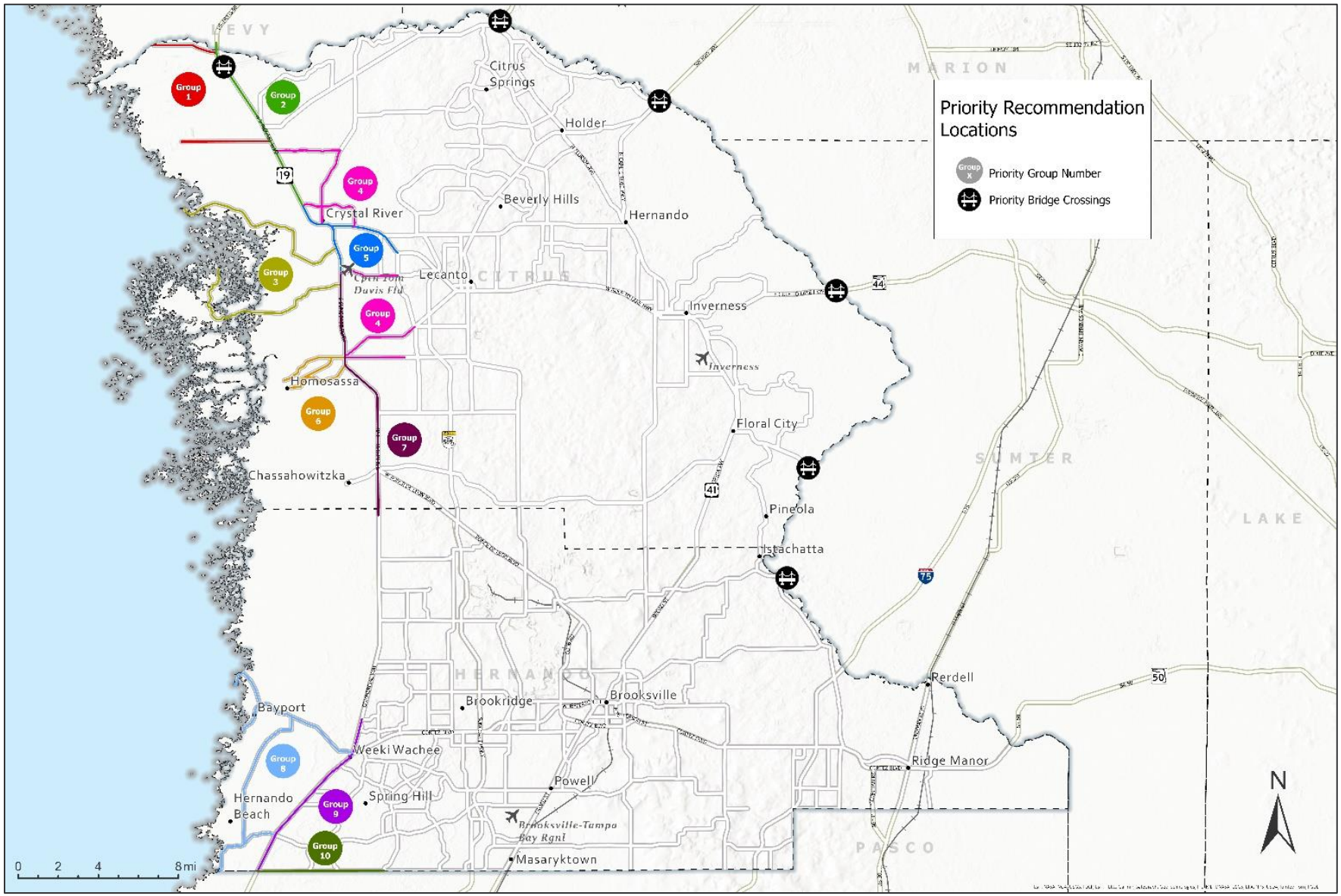


TABLE 5-2: PRIORITY GROUP FACILITIES

	Roadway Segment	From	To	Length (miles)
Priority Group 1 Coastal Citrus County (North)	Power Line St	Power Plant	US 19	3.9
	River Rd	US 19	Caribee Point	2.8
Priority Group 2 US 19 (Citrus County North)	US 19 / US 98 / Suncoast Blvd	Turkey Oak Dr	Levy County	9.0
Priority Group 3 Coastal Citrus County (Crystal River)	CR 44 / Ft. Island Trail	Fort Island Park	US 19 / US 98 / Suncoast Blvd	9.2
	CR 494 / Ozello Trail	Sanddollar Lane	US 19 / US 98 / Suncoast Blvd	9.4
Priority Group 4 Inland Citrus County	CR 490 / Homosassa Trail	US 19 / US 98 / Suncoast Blvd	Rock Crusher Rd	3.6
	CR 490A / Grover Cleveland Blvd	US 19 / US 98 / Suncoast Blvd	Claridge Avenue	2.6
	CR 495 / Citrus Ave	US 19 / US 98 / Suncoast Blvd	Emerald Oaks Dr	3.9
	Emerald Oaks Dr	US 19 / US 98 / Suncoast Blvd	CR 495 / Citrus Ave	2.9
	Turkey Oak Dr	US 19 / US 98 / Suncoast Blvd	SR 44 / Gulf to Lake Hwy	3.3
	Venable St	US 19 / US 98 / Suncoast Blvd	Rock Crusher Rd	2.6
Priority Group 5 Crystal River	SR 44 / Gulf to Lake Hwy	US 19 / US 98 / Suncoast Blvd	Rock Crusher Rd	3.4
	US 19 / US 98 / Suncoast Blvd	Venable St	Turkey Oak Dr	4.2
Priority Group 6 Coastal Citrus County (Homosassa Springs)	CR 490 / Yulee Dr	Woodland Place	US 19 / US 98 / Suncoast Blvd	3.2
	CR 490A / Halls River Rd	Riverview Circle	US 19 / US 98 / Suncoast Blvd	3.1
	Fishbowl Dr	CR 490 / Yulee Dr	CR 490A / Halls River Rd	2.0
Priority Group 7 US 19 (Citrus County South)	US 19 / US 98 / Suncoast Blvd	Hernando County	Venable St	12.6
Priority Group 8 Coastal Hernando County	CR 550 / Cortez Blvd	Bayport Park Pier	US 19 / Commercial Way	6.6
	CR 595 / Osowaw Blvd	Pasco County	US 19 / Commercial Way	3.8
	Pine Island Dr	Pine Island Park	CR 550 / Cortez Blvd	2.7
	Shoal Line Blvd	CR 595 / Osowaw Blvd	CR 550 / Cortez Blvd	7.3
Priority Group 9 US 19 (Hernando County South)	US 19 / Commercial Way	CR 578 / County Line Rd	Ridge Rd (North of SR 50 / Cortez Blvd)	9.0
Priority Group 10 County Line Road	CR 578 / County Line Rd	US 19 / Commercial Way	Mariner Blvd	2.2
Priority Bridge Group	CR 476 / Lake Lindsey Rd at the Withlacoochee River			
	SR 48 / Bushnell Rd at the Withlacoochee River			
	SR 44 / Gulf to Lake Hwy at the Withlacoochee River			
	SR 200 / Carl G Rose Hwy at the Withlacoochee River			
	US 41 / Florida Ave at the Withlacoochee River			
	US 19 at the Withlacoochee River and the Cross Florida Barge Canal			

While the Vulnerability and Risk Assessment Study is complete, the MPO will continue to explore opportunities for increasing resiliency of the transportation system through continual planning efforts. Just as the 2045 LRTP includes a goal for addressing system preservation, future LRTP updates will incorporate best practice examples for analysis and development of transportation projects that address the identified vulnerabilities.

In addition to planning of future projects in the LRTP, there are actions and steps that the MPO can begin taking now. Recently, FDOT released the Resilience Action Plan for the State Highway System[4]. Included in this action plan is a strategy framework for addressing resiliency at each stage of project development, including asset management and maintenance. Coordination between the MPO, FDOT, county and municipal agencies is a critical component of the MPOs function and purpose.

Below are several action steps listed in the FDOT Resilience Action Plan that have been adapted for the MPO.

- Sharing data developed as part of the vulnerability and risk assessment with local agencies can provide insight into locations where resiliency improvements can be incorporated into other activities such as incorporating drainage improvements into a scheduled resurfacing project.
- Facilitating connections to technical and financial resources from federal and other state agencies, such as the Federal Highway Administration, the Transportation Research Board, the U.S. Environmental Protection Agency, the National Oceanic and Atmospheric Administration, the Florida Department of Environmental Protection, the Florida Division of Emergency Management, the Florida Department of Economic Opportunity, and Florida's water management districts.
- Participating in training and technical support on how to incorporate resilience into transportation projects, policies, and procedures, including how to effectively use database, interactive maps, and tools made available by FDOT.
- Facilitating information sharing through peer exchanges, coordination meetings, participation in regional collaboratives, or data clearinghouses.

Resiliency planning requires participation at all levels from local jurisdictions all the way to federal agencies. The MPO, as a collaborative agency, brings together all the affected parties and provides opportunities for this level of participation. During the stakeholder working group meetings, the topics of controlled-burns and flooding in Ridge Manor were brought up as regional topics that have a very localized effect. While the MPO's study doesn't directly address these concerns with specific strategy recommendations, the MPO can be a conduit for connecting local agencies with available resources for mitigating these hazards.

Addressing transportation resiliency is becoming a more critical factor for the MPO to address. As important is addressing transportation-disadvantaged or socially-vulnerable populations. Requirements included in IIJA, which govern the MPO's activities, cover resiliency planning as well as planning for populations in disadvantaged communities. Next steps for the MPO in implementing recommendations of this study should incorporate analysis of disadvantaged communities and the identification of mitigation strategies that improve resiliency and equitable access to work and shopping destinations.

The remainder of this section covers the recommended strategies for the priority groups listed in Table 5-2.

[4] https://www.fdot.gov/planning/policy/resilience/resilience-action-plan

Priority Bridge Group Recommendations

Bridges crossing Withlacoochee River and Cross Florida Barge Canal are often in isolated areas without redundant infrastructure. These bridges carry major US and State route designations serving regional travel and evacuation activity during emergency events. Although not evaluated separately from the overall roadway network, these locations were given special consideration. They are called out specially as priority locations because of their unique critical function, ties to regional mobility, and potential consequences associated with their failure. Information related to the condition of each bridge facility is provided in **Table 5-3**, followed by the applicable strategies recommended for consideration at priority bridge locations.

TABLE 5-3: PRIORITY BRIDGE CHARACTERISTICS

Roadway	Waterway	Year Built	# of Lanes	Scour Condition	Sufficiency Rating	Functionally Obsolete?	Bridge Condition
CR 476 / Lake Lindsey Rd	Withlacoochee River	1951	2	Unknown	Sufficient	No	Fair
SR 48 / Bushnell Rd	Withlacoochee River	1929	2	Stable	Sufficient	No	Fair
SR 44 / Gulf to Lake Hwy	Withlacoochee River	1989	4	Stable	Sufficient	No	Good
SR 200 / Carl G Rose Hwy	Withlacoochee River	1935	2	Countermeasures Installed	Sufficient	Yes	Fair
US 41 / Florida Ave	Withlacoochee River	1987	4	Stable	Sufficient	No	Fair
US 19 / US 98 / Suncoast Blvd	Withlacoochee River	1973	4	Stable	Sufficient	No	Fair
US 19 / US 98 / Suncoast Blvd	Cross Florida Barge Canal	2010	4	Stable	Sufficient	No	Good

Source: FHWA National Bridge Inventory, 2021

MITIGATION STRATEGY RECOMMENDATIONS

Priority Bridge Locations are spread throughout the northern and eastern boundaries of the MPO Planning Area, mostly in Citrus County crossing the Withlacoochee River. All bridge structures are vulnerable to flooding and the impacts of moving water. Bridges located closer to the Gulf of Mexico are additionally vulnerable to storm surge conditions, and those connecting to Marion and Sumter counties are near high-risk wildfire areas. Even if not directly located in areas with a high likelihood of severe impacts, the bridges in this group are considered a critical component due to the potential for traffic disruptions and bottleneck conditions during evacuation events with limited options for alternative routing in some cases.

In addition to broader planning or policy level changes, the following strategies and example actions related to capital improvements may be appropriate for reducing risk exposure and making these facilities more resilient.

Protect Existing Infrastructure - Examples include constructing concrete walls, revetment structures, or other measures to protect bridge piers and limit the impact of storm surge activity.

Upgrade/Strengthen Facilities or Key Components - Examples include expanding roadway shoulders to create additional capacity during evacuation conditions, reinforcing bridge foundations with rip rap, or adding toe scour protection to prevent the likelihood of washout during flooding events.

Relocate Facilities or Key Components - Examples include elevating bridge decks in strategic locations or relocating sensitive components to reduce exposure.

Install Warning Systems or Dynamic Messaging Technology - Examples include sensors for detecting roadway inundation, along with some combination of flashing beacons, gates, and/or dynamic signage for alerting motorists of dangerous conditions.

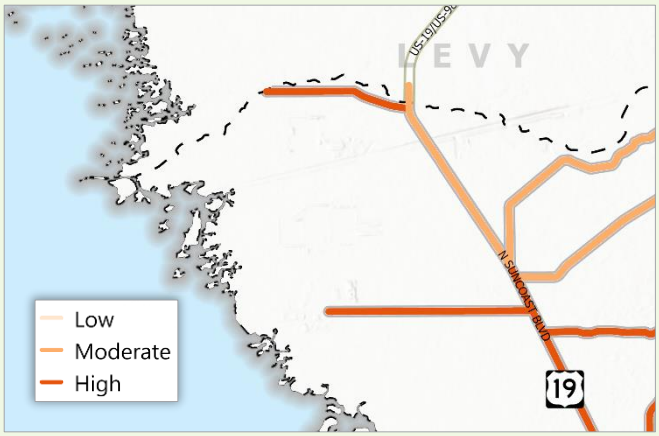
Improve Drainage Conditions - Examples include installing fail-safe measures such as backflow preventers or pumps near high-risk waterways and bridge crossings, replacing or prioritizing maintenance activities for aging drainage structures, or using permeable pavement in flood-prone areas.

Priority Group 1 - Coastal Citrus County (North)

PRIORITIZATION ASSESSMENT SUMMARY

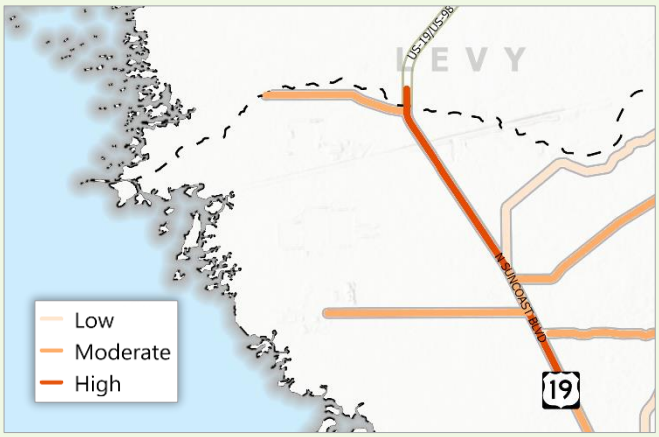
Vulnerability Rating: High

Contributing Impact Areas:
Storm Surge, Flooding, Fire



Criticality Rating: Moderate

Contributing Factors: Primary Access Route, Utility Services, Emergency Response Services



MITIGATION STRATEGY RECOMMENDATIONS

Priority Group 1 is partially within all three impact areas used for this assessment. Its proximity to the coastline makes these roadways (River Road and Powerline St) especially vulnerable to storm surge and flooding concerns, with limited alternative routes for emergency access or evacuation purposes. The presence of the Crystal River Energy Complex, a power-generating facility with regional significance, also makes this area highly critical from an accessibility and asset protection standpoint.

In addition to broader planning or policy level changes, the following strategies related to capital improvements may be appropriate for reducing risk exposure and increasing resiliency in this context. Examples of specific actions or improvements are provided after each strategy to show ways it could be applied.

Protect Existing Infrastructure - Examples include constructing concrete flood walls or revetment structures to limit the impact of storm surge activity.

Upgrade/Strengthen Facilities or Key Components - Examples include reinforcing roadway shoulders with gabion mats or sheet-pile walls and bridge foundations with rip rap or toe scour protection to prevent the likelihood of washout during flooding events.

Relocate Facilities or Key Components - Examples include elevating roadway sections or bridge decks in strategic locations or relocating utilities to reduce exposure.

Incorporate Natural Features - Examples include creating barrier islands or replenishing sand dunes, wetlands, or other natural vegetation to serve as a natural buffer for reducing the severity of coastal wave impacts during storm events.

Install Warning Systems or Dynamic Messaging Technology - Examples include installing sensors for detecting roadway inundation, along with some combination of flashing beacons, gates, and/or dynamic signage for alerting motorists of dangerous conditions.

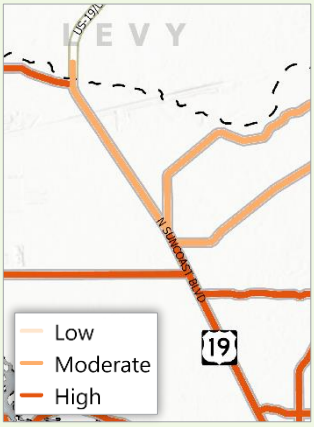
Improve Drainage Conditions - Examples include installing fail-safe measures such as backflow preventers or pumps near high-risk waterways and bridge crossings, replacing or prioritizing maintenance activities for aging drainage structures, or using permeable pavement in flood-prone areas.

Priority Group 2 - US 19 (Citrus County North)

PRIORITIZATION ASSESSMENT SUMMARY

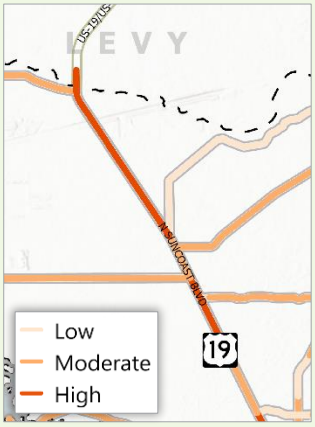
Vulnerability Rating: Moderate to High

Contributing Impact Areas:
Storm Surge, Flooding, Fire



Criticality Rating: Moderate to High

Contributing Factors: Roadway Size, Traffic Volumes, Evacuation Route, Utility Services



MITIGATION STRATEGY RECOMMENDATIONS

Priority Group 2 is partially within all three impact areas used for this assessment. As with Priority Group 1, this portion of the US 19 corridor also provides critical access to the regionally significant Crystal River Energy Complex, as well as a major medical facility to the south. It additionally connects to two priority bridge locations (over the Cross Florida Barge Canal and the Withlacoochee River) before crossing into Levy County, making a critical corridor for evacuation, utility services, and medical emergency response purposes.

In addition to broader planning or policy level changes, the following strategies related to capital improvements may be appropriate for reducing risk exposure and increasing resiliency in this context. Examples of specific actions or improvements are provided after each strategy to show ways it could be applied.

Protect Existing Infrastructure - Examples include constructing concrete flood walls or revetment structures to limit the impact of storm surge activity.

Upgrade/Strengthen Facilities or Key Components - Examples include upgrading traffic signals at coastal intersections from strain poles to mast arms to provide more stability and reinforcing roadway shoulders with gabion mats or sheet-pile walls to prevent the likelihood of washout during flooding events.

Relocate Facilities or Key Components - Examples include elevating roadway sections or bridge decks in strategic locations or relocating utilities to reduce exposure.

Incorporate Natural Features - Examples include creating barrier islands or replenishing sand dunes, wetlands, or other natural vegetation to serve as a natural buffer for reducing the severity of coastal wave impacts during storm events.

Install Warning Systems or Dynamic Messaging Technology - Examples installing Intelligent Transportation Systems (ITS) signage for dynamic real-time message alerts and updates during evacuations or emergency events and installing sensors for detecting roadway inundation, along with some combination of flashing beacons, gates, and/or dynamic signage for alerting motorists of dangerous conditions.

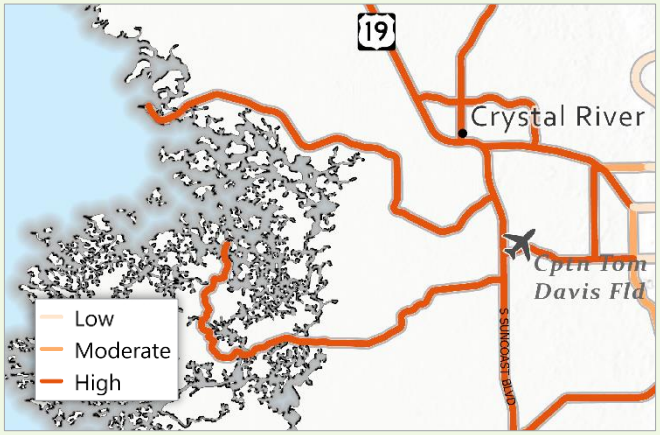
Improve Drainage Conditions - Examples include installing fail-safe measures such as backflow preventers or pumps near high-risk waterways and bridge crossings, replacing or prioritizing maintenance activities for aging drainage structures, or using permeable pavement in flood-prone areas.

Priority Group 3 - Coastal Citrus County (Crystal River)

PRIORITIZATION ASSESSMENT SUMMARY

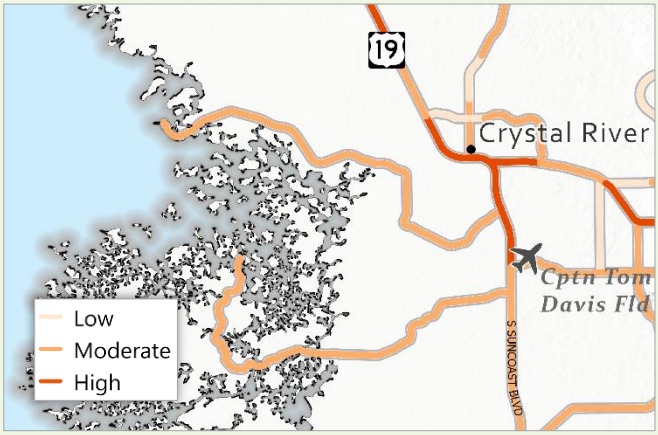
Vulnerability Rating: High

Contributing Impact Areas:
Storm Surge, Flooding, Fire



Criticality Rating: Moderate

Contributing Factors: Primary Access Route, Utility Services, Emergency Services, Evacuation Route



MITIGATION STRATEGY RECOMMENDATIONS

Priority Group 3 is within all three impact areas used for this assessment and is uniquely vulnerable to wildfire risks compared to other priority groups. Its proximity to the coastline makes these roadways especially vulnerable to storm surge and flooding concerns, with limited alternative routes for emergency access or evacuation purposes. A combination of impact exposure, isolated residential developments, multiple bridges, surrounding land composition, and outside trips for recreational purposes combine to increase both the risk and travel activity associated with Ft. Island Trail and Ozello Trail.

In addition to broader planning or policy level changes, the following strategies related to capital improvements may be appropriate for reducing risk exposure and increasing resiliency in this context. Examples of specific actions or improvements are provided after each strategy to show ways it could be applied.

Protect Existing Infrastructure - Examples include constructing concrete flood walls or revetment structures to limit the impact of storm surge activity.

Upgrade/Strengthen Facilities or Key Components - Examples include constructing roundabouts in high-risk areas so that traffic functions can be maintained without signals or signage, upgrading to fire-resistant components, and reinforcing roadway shoulders with gabion mats or sheet-pile walls and bridge foundations with rip rap or toe scour protection to prevent the likelihood of washout during flooding events.

Relocate Facilities or Key Components - Examples include elevating roadway sections or bridge decks in strategic locations and relocating utilities or facilities to reduce exposure based on long-term vision and cost-benefit determinations.

Incorporate Natural Features - Examples include creating barrier islands or replenishing sand dunes, wetlands, or other natural vegetation to serve as a natural buffer for reducing the severity of coastal wave impacts during storm events.

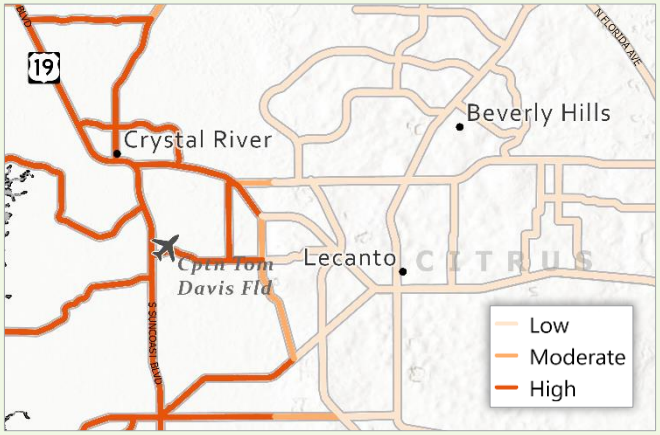
Install Warning Systems or Dynamic Messaging Technology - Examples include sensors for detecting roadway inundation, along with some combination of flashing beacons, gates, and/or dynamic signage for alerting motorists of dangerous conditions.

Priority Group 4 - Inland Citrus County

PRIORITIZATION ASSESSMENT SUMMARY

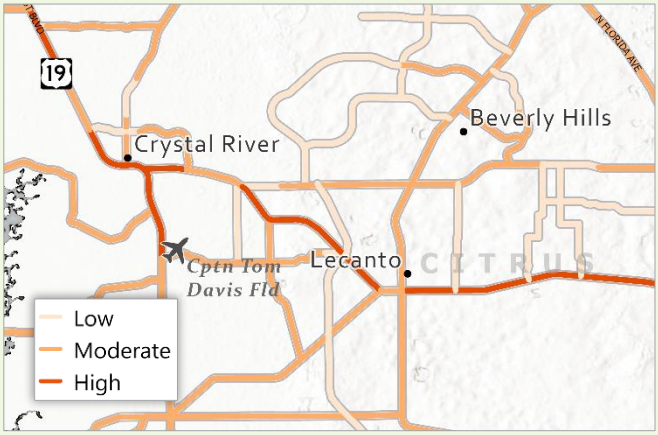
Vulnerability Rating: High

Contributing Impact Areas:
Storm Surge, Flooding, Fire



Criticality Rating: Low to Moderate

Contributing Factors: Roadway Size, Evacuation Route, Utility Services, Emergency Services



MITIGATION STRATEGY RECOMMENDATIONS

Priority Group 4 is partially within all three impact areas used for this assessment. It consists of major critical roadways east of US 19 in central Citrus County that may serve as alternatives for access or avoiding other roadways in this area with the potential for flooding impacts.

In addition to broader planning or policy level changes, the following strategies related to capital improvements may be appropriate for reducing risk exposure and increasing resiliency in this context. Examples of specific actions or improvements are provided after each strategy to show ways it could be applied.

Protect Existing Infrastructure - Examples include constructing additional retention areas or bioswales to reduce flooding impacts.

Upgrade/Strengthen Facilities or Key Components - Examples include installing solar-powered backup components for critical items or upgrading sensitive components such as traffic signal wires and lighting fixtures so they are more resistant to damage.

Relocate Facilities or Key Components - Examples include elevating roadway sections or bridge decks in strategic locations or relocating utilities to reduce exposure.

Incorporate Natural Features - Examples include using or changing to native varieties of landscaping and tree species that are more resistant to threats and can help minimize impacts to the built environment.

Install Warning Systems or Dynamic Messaging Technology - Examples include installing Intelligent Transportation Systems (ITS) signage for dynamic real-time message alerts and updates during evacuations or emergency events.

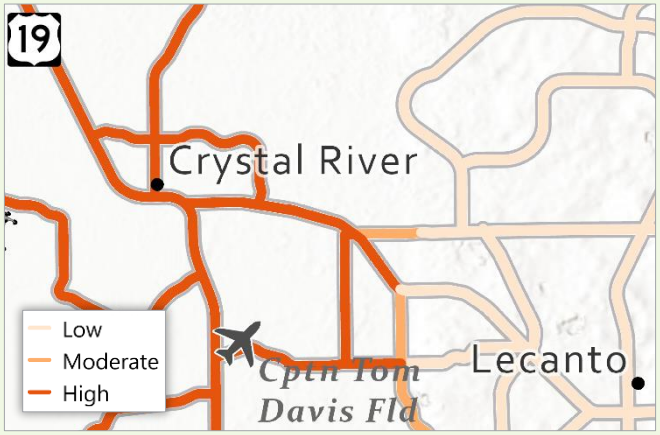
Improve Drainage Conditions - Examples include reinforcing or adding fail-safe measures to coastal outfalls to prevent upstream flooding when structures fail during storm events, replacing or prioritizing maintenance activities for aging drainage structures, or using permeable pavement in flood-prone areas.

Priority Group 5 - Crystal River

PRIORITIZATION ASSESSMENT SUMMARY

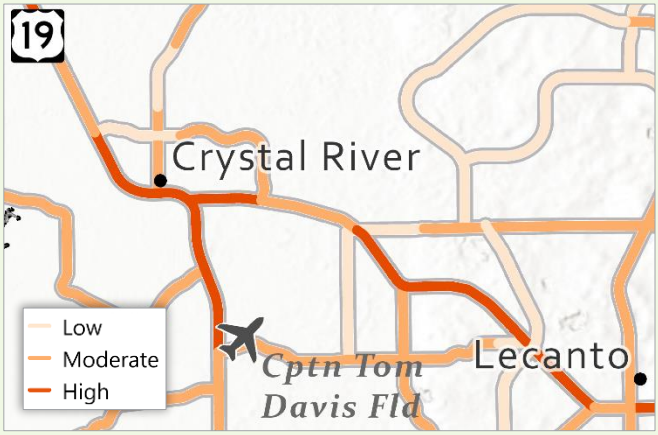
Vulnerability Rating: High

Contributing Impact Areas:
Storm Surge, Flooding



Criticality Rating: Moderate to High

Contributing Factors: Primary Access Route, Utility Services, Evacuation Route, Roadway Size,



MITIGATION STRATEGY RECOMMENDATIONS

Priority Group 5 is partially within the flooding and storm surge impact areas used for this assessment. It consists of two major roadway facilities (US 19 and SR 44) that bisect Crystal River in two directions, supporting relatively high traffic volumes and serving as critical evacuation routes moving north, south, and east of the area. The higher development density, populations, and associated critical facilities nearby also increase the significance of these roadways for accessibility purposes during flooding events.

In addition to broader planning or policy level changes, the following strategies related to capital improvements may be appropriate for reducing risk exposure and increasing resiliency in this context. Examples of specific actions or improvements are provided after each strategy to show ways it could be applied.

Protect Existing Infrastructure - Examples include constructing additional retention areas or bioswales to reduce flooding impacts.

Upgrade/Strengthen Facilities or Key Components - Examples include expanding roadway shoulders to create adaptive capacity used during evacuation conditions or upgrading sensitive components such as traffic signal wires and lighting fixtures so they are more resistant to damage.

Relocate Facilities or Key Components - Examples include elevating roadway sections in strategic locations or relocating utilities to reduce exposure.

Incorporate Natural Features - Examples include using or changing to native varieties of landscaping and tree species that are more resistant to threats and can help minimize impacts to the built environment.

Install Warning Systems or Dynamic Messaging Technology – Examples include installing Intelligent Transportation Systems (ITS) signage for dynamic real-time message alerts and updates during evacuations or emergency events.

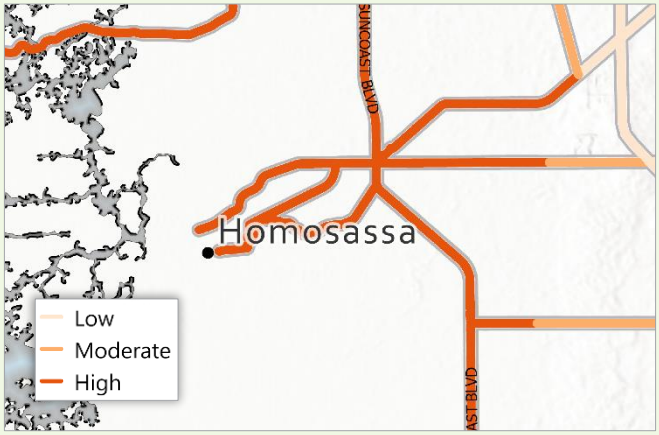
Improve Drainage Conditions - Examples include reinforcing or adding fail-safe measures to coastal outfalls to prevent upstream flooding when structures fail during storm events or using permeable pavement in flood-prone areas.

Priority Group 6 - Coastal Citrus County (Homosassa Springs)

PRIORITIZATION ASSESSMENT SUMMARY

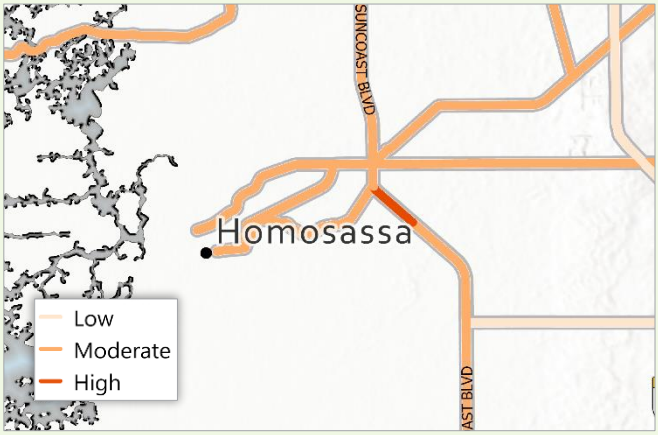
Vulnerability Rating: High

Contributing Impact Areas:
Storm Surge, Flooding



Criticality Rating: Moderate

Contributing Factors: Primary Access Route, Utility Services, Evacuation Route, Emergency Services



MITIGATION STRATEGY RECOMMENDATIONS

Priority Group 6 is within all three impact areas used for this assessment. Its proximity to the coastline makes these roadways especially vulnerable to storm surge and flooding concerns, with limited alternative routes for emergency access or evacuation purposes. The amount existing residential housing, businesses, and recreational destinations in vulnerable locations along the Homosassa River underscores the importance of Halls River Rd, Fishbowl Dr, and Yulee Dr during evacuation or unexpected flooding events.

In addition to broader planning or policy level changes, the following strategies related to capital improvements may be appropriate for reducing risk exposure and increasing resiliency in this context. Examples of specific actions or improvements are provided after each strategy to show ways it could be applied.

Protect Existing Infrastructure - Examples include constructing concrete flood walls or revetment structures to limit the impact of storm surge activity.

Upgrade/Strengthen Facilities or Key Components - Examples include reinforcing roadway shoulders with gabion mats or sheet-pile walls and bridge foundations with rip rap or toe scour protection to prevent the likelihood of washout during flooding events and constructing roundabouts in high-risk areas so that traffic functions can be maintained without signals or signage.

Relocate Facilities or Key Components - Examples include elevating roadway sections or bridge decks in strategic locations or relocating utilities to reduce exposure.

Incorporate Natural Features - Examples include creating barrier islands or replenishing sand dunes, wetlands, or other natural vegetation to serve as a natural buffer for reducing the severity of coastal wave impacts during storm events.

Install Warning Systems or Dynamic Messaging Technology - Examples include sensors for detecting roadway inundation, along with some combination of flashing beacons, gates, and/or dynamic signage for alerting motorists of dangerous conditions.

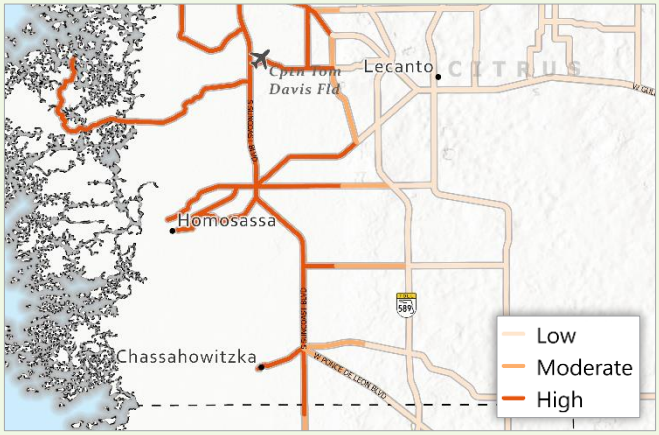
Improve Drainage Conditions - Examples include installing fail-safe measures such as backflow preventers or pumps near high-risk waterways and bridge crossings, replacing or prioritizing maintenance activities for aging drainage structures, or using permeable pavement in flood-prone areas.

Priority Group 7 - US 19 (Citrus County South)

PRIORITIZATION ASSESSMENT SUMMARY

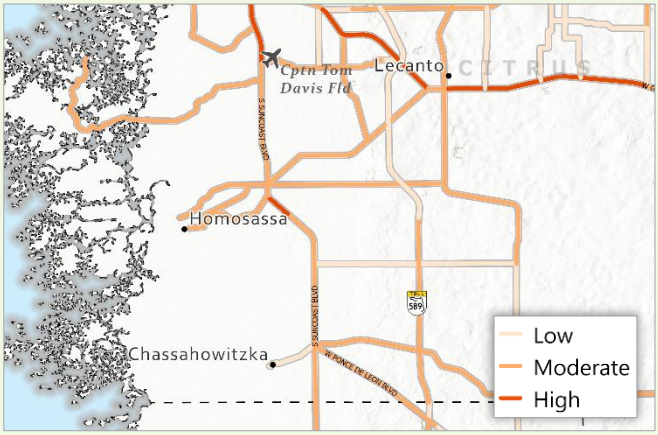
Vulnerability Rating: High

Contributing Impact Areas:
Storm Surge, Flooding, Fire



Criticality Rating: Moderate to High

Contributing Factors: Evacuation Route, Utility Services, Roadway Size, Traffic Volumes, Transit Services



MITIGATION STRATEGY RECOMMENDATIONS

Priority Group 7 is partially within all three impact areas used for this assessment. As with the other priority group locations along US 19 in Citrus and Hernando counties, these segments support high traffic volumes and are critical for evacuation, emergency response, and general mobility and access purposes, especially the segment south of Homosassa Springs which provides access to several medical facilities.

In addition to broader planning or policy level changes, the following strategies related to capital improvements may be appropriate for reducing risk exposure and increasing resiliency in this context. Examples of specific actions or improvements are provided after each strategy to show ways it could be applied.

Protect Existing Infrastructure - Examples include constructing additional retention areas or bioswales to reduce flooding impacts and constructing concrete flood walls or revetment structures to limit the impact of storm surge activity.

Upgrade/Strengthen Facilities or Key Components - Examples include reinforcing roadway shoulders with gabion mats or sheet-pile walls to prevent the likelihood of washout during flooding events and upgrading traffic signals at coastal intersections from strain poles to mast arms to provide more stability.

Relocate Facilities or Key Components - Examples include elevating roadway sections or bridge decks in strategic locations or relocating utilities to reduce exposure.

Incorporate Natural Features - Examples include using or changing to native varieties of landscaping and tree species that are more resistant to threats and can help minimize impacts to the built environment.

Install Warning Systems or Dynamic Messaging Technology - Examples include sensors for detecting roadway inundation, along with some combination of flashing beacons, gates, and/or dynamic signage for alerting motorists of dangerous conditions and installing Intelligent Transportation Systems (ITS) signage for dynamic real-time message alerts and updates during evacuations or emergency events.

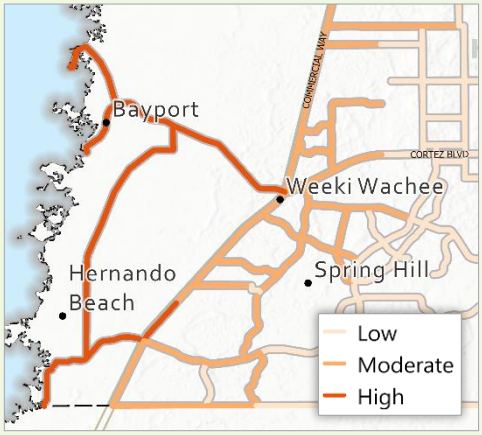
Improve Drainage Conditions - Examples include prioritizing maintenance activities for aging drainage structures and using permeable pavement in flood-prone areas.

Priority Group 8 - Coastal Hernando County

PRIORITIZATION ASSESSMENT SUMMARY

Vulnerability Rating: High

Contributing Impact Areas:
Storm Surge, Flooding, Fire



Criticality Rating: Low to Moderate

Contributing Factors: Primary Access Route, Utility Services, Roadway Size, Evacuation Route

MITIGATION STRATEGY RECOMMENDATIONS

Priority Group 8 is partially within all three impact areas used for this assessment. Its proximity to the coastline makes these roadways west of US 19 especially vulnerable to storm surge and flooding concerns, with limited alternative routes for emergency access or evacuation purposes. Roads in this group provide connectivity to US 19 and several relatively large residential areas, as well as providing access to numerous parks and recreation areas nearby.

In addition to broader planning or policy level changes, the following strategies related to capital improvements may be appropriate for reducing risk exposure and increasing resiliency in this context. Examples of specific actions or improvements are provided after each strategy to show ways it could be applied.

Protect Existing Infrastructure - Examples include constructing concrete flood walls or revetment structures to limit the impact of storm surge activity.

Upgrade/Strengthen Facilities or Key Components - Examples include reinforcing roadway shoulders with gabion mats or sheet-pile walls and bridge foundations with rip rap or toe scour protection to prevent the likelihood of washout during flooding events and constructing roundabouts in high-risk areas so that traffic functions can be maintained without signals or signage.

Relocate Facilities or Key Components - Examples include elevating roadway sections or bridge decks in strategic locations.

Incorporate Natural Features - Examples include creating barrier islands or replenishing sand dunes, wetlands, or other natural vegetation to serve as a natural buffer for reducing the severity of coastal wave impacts during storm events.

Install Warning Systems or Dynamic Messaging Technology - Examples include sensors for detecting roadway inundation, along with some combination of flashing beacons, gates, and/or dynamic signage for alerting motorists of dangerous conditions.

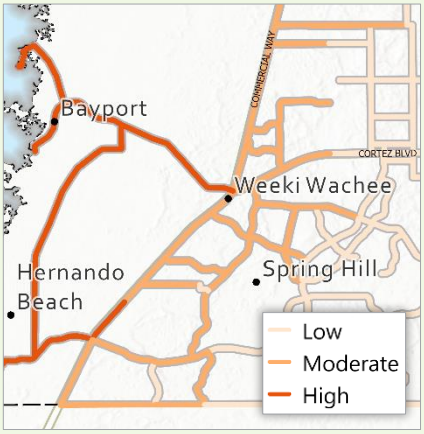
Improve Drainage Conditions - Examples include installing fail-safe measures such as backflow preventers or pumps near high-risk waterways and bridge crossings, replacing or prioritizing maintenance activities for aging drainage structures, or using permeable pavement in flood-prone areas.

Priority Group 9 - US 19 (Hernando County South)

PRIORITIZATION ASSESSMENT SUMMARY

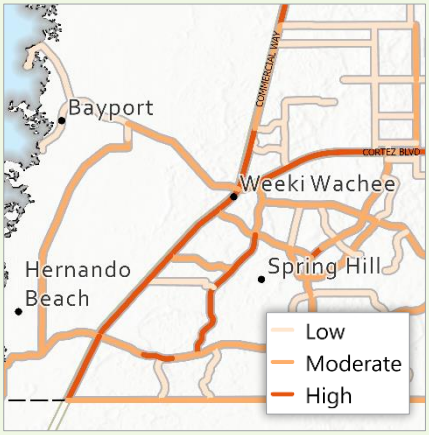
Vulnerability Rating: Moderate to High

Contributing Impact Areas:
Storm Surge, Flooding



Criticality Rating: High

Contributing Factors: Emergency Services, Utility Services, Roadway Size, Traffic Volumes, Evacuation Route



MITIGATION STRATEGY RECOMMENDATIONS

Priority Group 9 is partially within the flooding and storm surge impact areas used for this assessment. This segment of US 19 (from County Line Road to Ridge Road, north of SR 50) is a major roadway facility serving a high volume of traffic to/from Pasco County to the south, used for public transportation and evacuation purposes, and provides access to multiple critical facilities in the area.

In addition to broader planning or policy level changes, the following strategies related to capital improvements may be appropriate for reducing risk exposure and increasing resiliency in this context. Examples of specific actions or improvements are provided after each strategy to show ways it could be applied.

Protect Existing Infrastructure - Examples include constructing additional retention areas or bioswales to reduce flooding impacts.

Upgrade/Strengthen Facilities or Key Components - Examples include expanding roadway shoulders to create adaptive capacity used during evacuation conditions or upgrading sensitive components such as traffic signal wires and lighting fixtures so they are more resistant to damage.

Relocate Facilities or Key Components - Examples include elevating roadway sections or bridge decks in strategic locations or relocating utilities to reduce exposure.

Incorporate Natural Features - Examples include using or changing to native varieties of landscaping and tree species that are more resistant to threats and can help minimize impacts to the built environment.

Install Warning Systems or Dynamic Messaging Technology - Examples include installing Intelligent Transportation Systems (ITS) signage for dynamic real-time message alerts and updates during evacuations or emergency events.

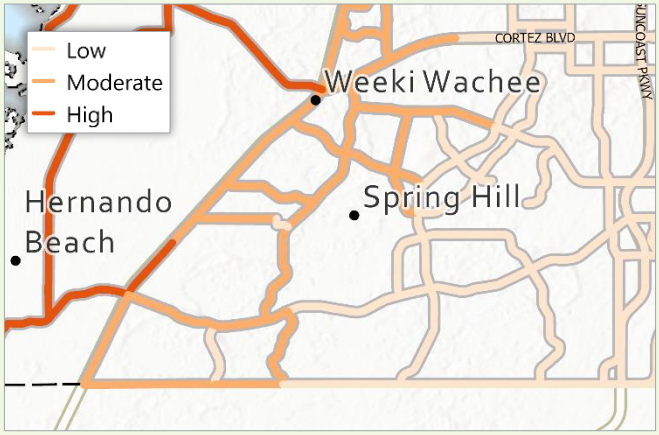
Improve Drainage Conditions - Examples include reinforcing or adding fail-safe measures to coastal outfalls to prevent upstream flooding when structures fail during storm events or using permeable pavement in flood-prone areas.

Priority Group 10 - County Line Road

PRIORITIZATION ASSESSMENT SUMMARY

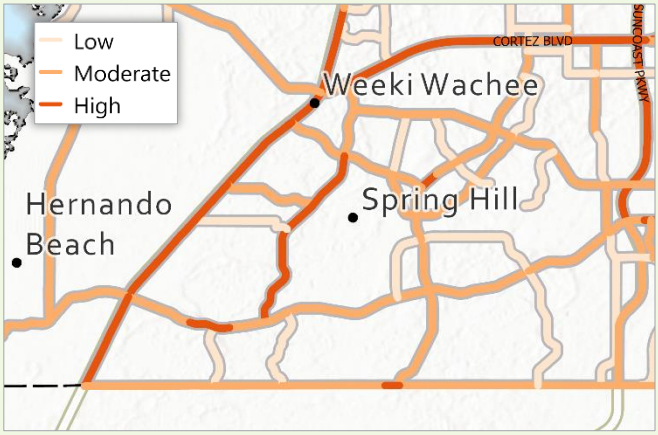
Vulnerability Rating: Low to Moderate

Contributing Impact Areas:
Storm Surge, Flooding



Criticality Rating: Moderate to High

Contributing Factors:
Evacuation Route, Utility Services, Traffic Volumes



MITIGATION STRATEGY RECOMMENDATIONS

Priority Group 10 is partially within the flooding and storm surge impact areas used for this assessment. It provides critical access between the major north-south roadway facilities on the east (US 41 and the Suncoast Parkway) and west (US 19) sides of Hernando County, as well as multiple medical facilities and transit route connections in between.

In addition to broader planning or policy level changes, the following strategies related to capital improvements may be appropriate for reducing risk exposure and increasing resiliency in this context. Examples of specific actions or improvements are provided after each strategy to show ways it could be applied.

Protect Existing Infrastructure - Examples include constructing additional retention areas or bioswales to reduce flooding impacts.

Upgrade/Strengthen Facilities or Key Components - Examples include upgrading sensitive components such as traffic signal wires and lighting fixtures so they are more resistant to damage.

Relocate Facilities or Key Components - Examples include elevating roadway sections in strategic locations or relocating utilities to reduce exposure.

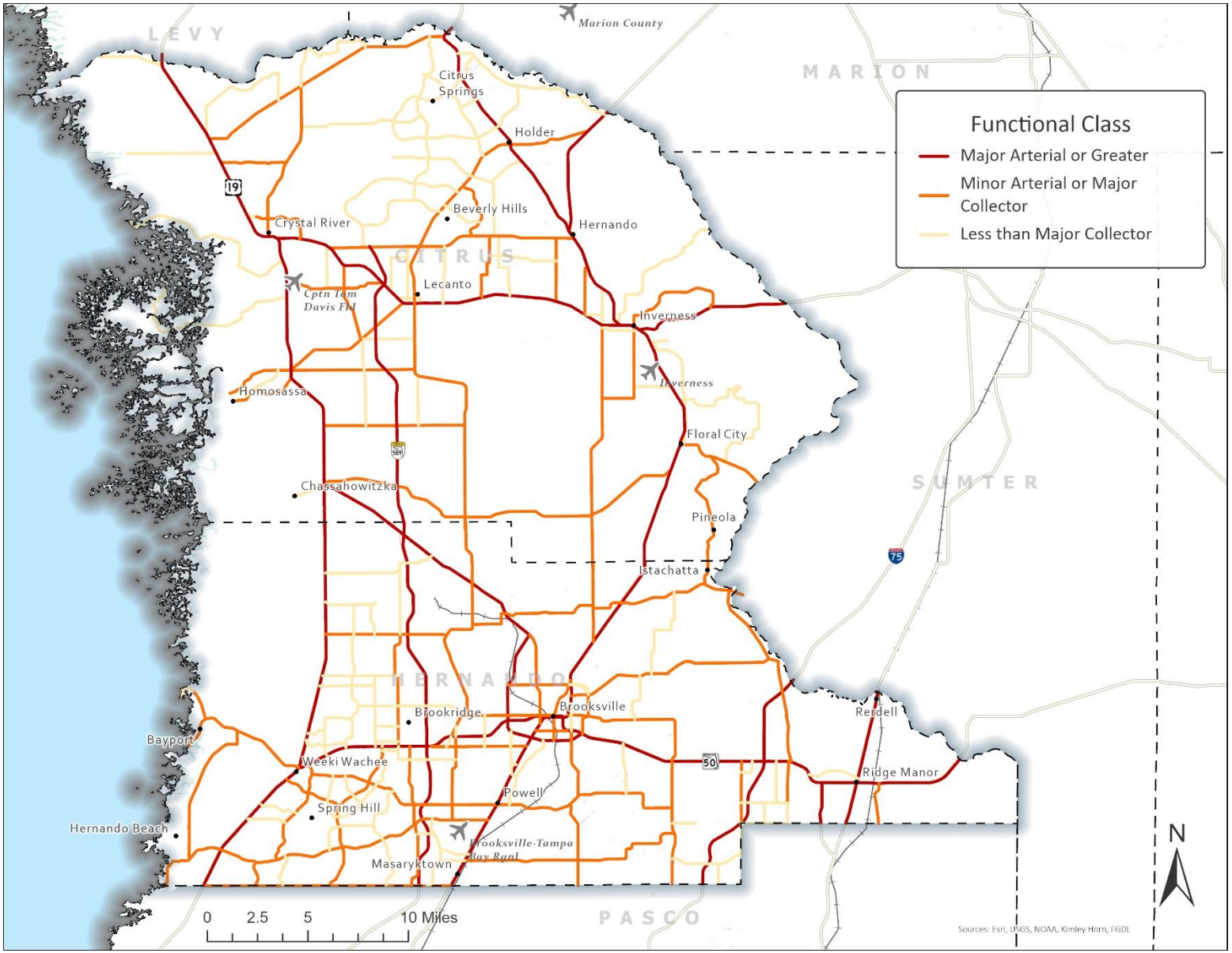
Incorporate Natural Features - Examples include using or changing to native varieties of landscaping and tree species that are more resistant to threats and can help minimize impacts to the built environment.

Install Warning Systems or Dynamic Messaging Technology - Examples include installing Intelligent Transportation Systems (ITS) signage for dynamic real-time message alerts and updates during evacuations or emergency events.

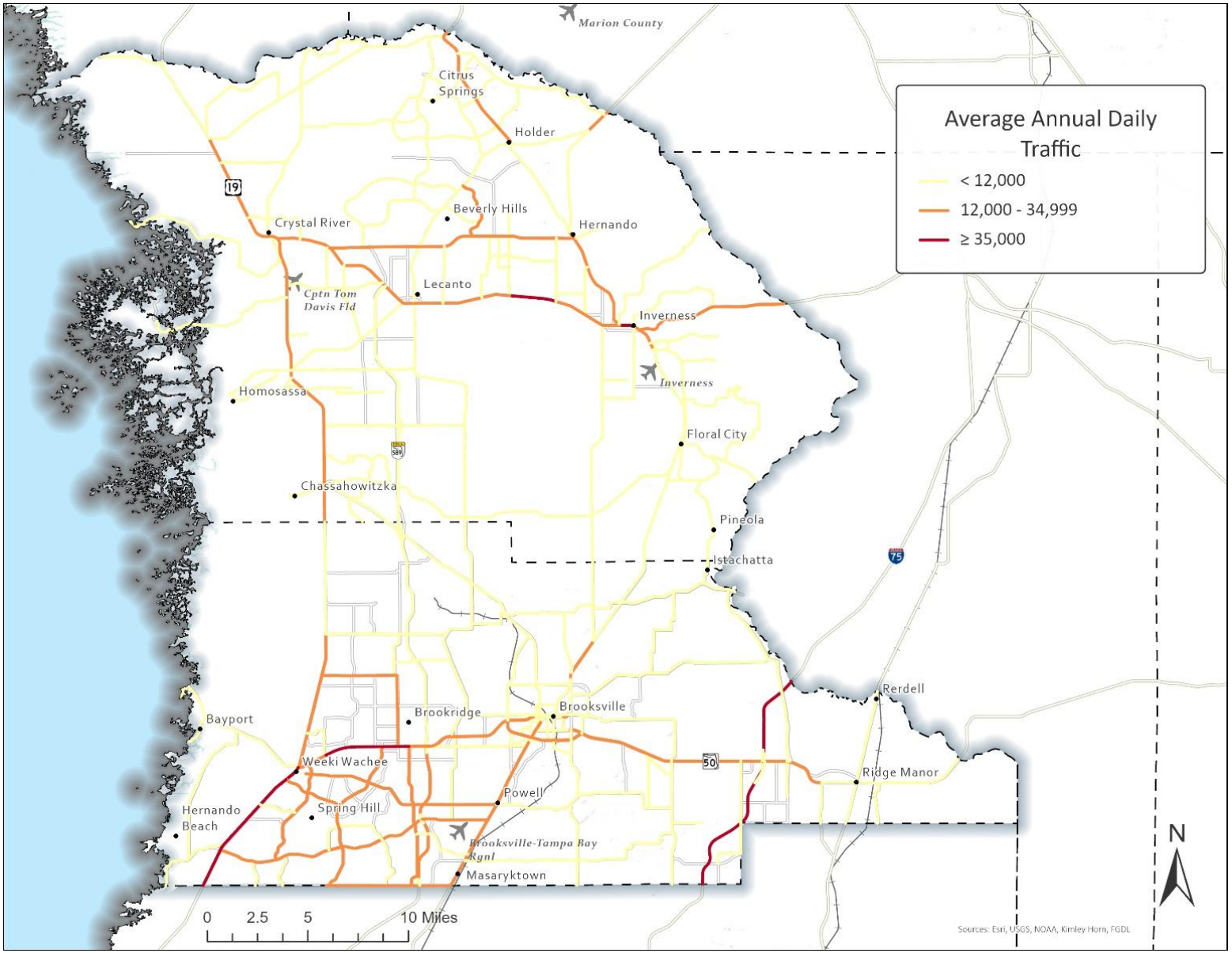
Improve Drainage Conditions - Examples include reinforcing or adding fail-safe measures to coastal outfalls to prevent upstream flooding when structures fail during storm events or using permeable pavement in flood-prone areas.

APPENDIX A EXISTING CONDITIONS

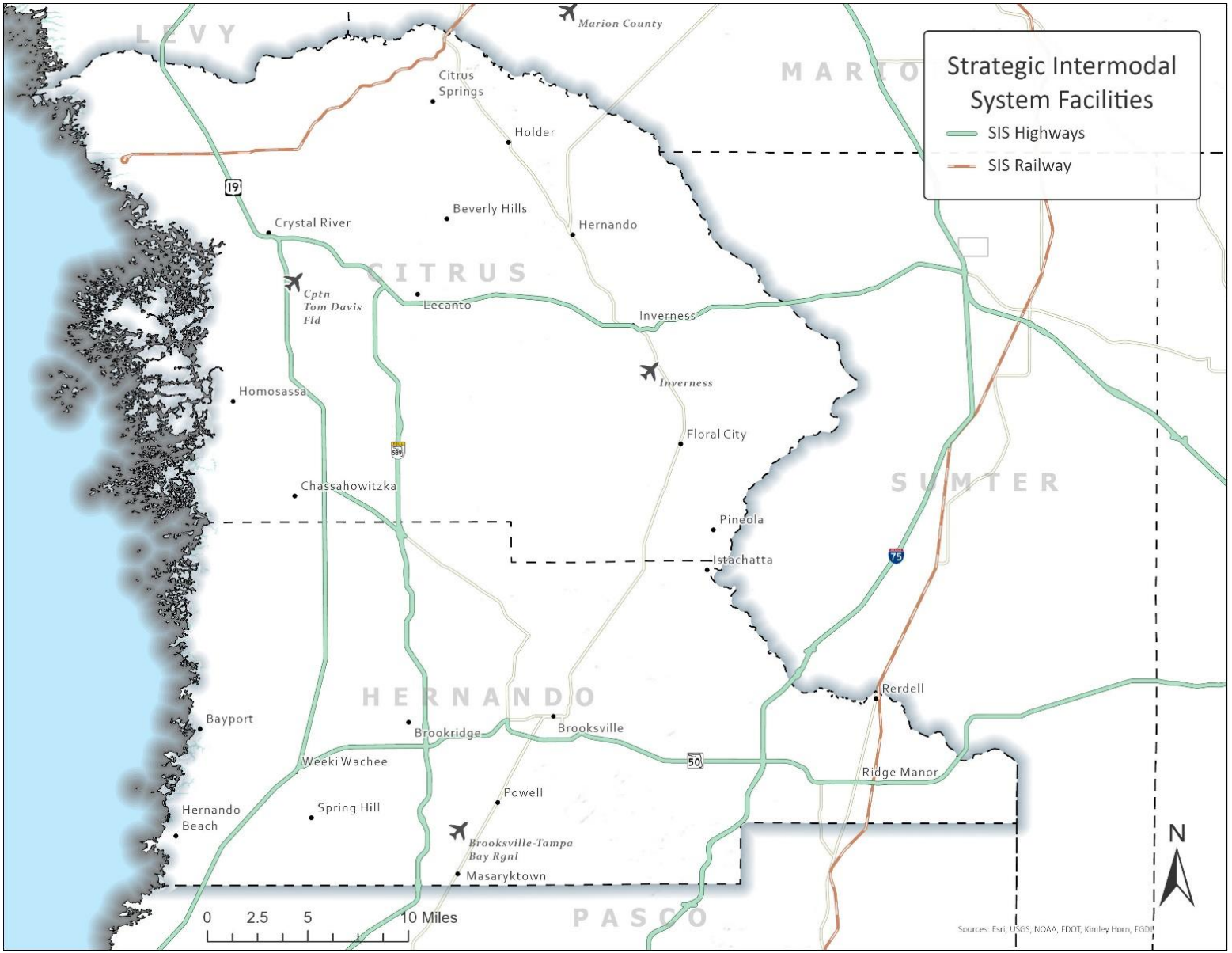
MAP A-1: EXISTING ROADWAY FUNCTIONAL CLASSIFICATIONS



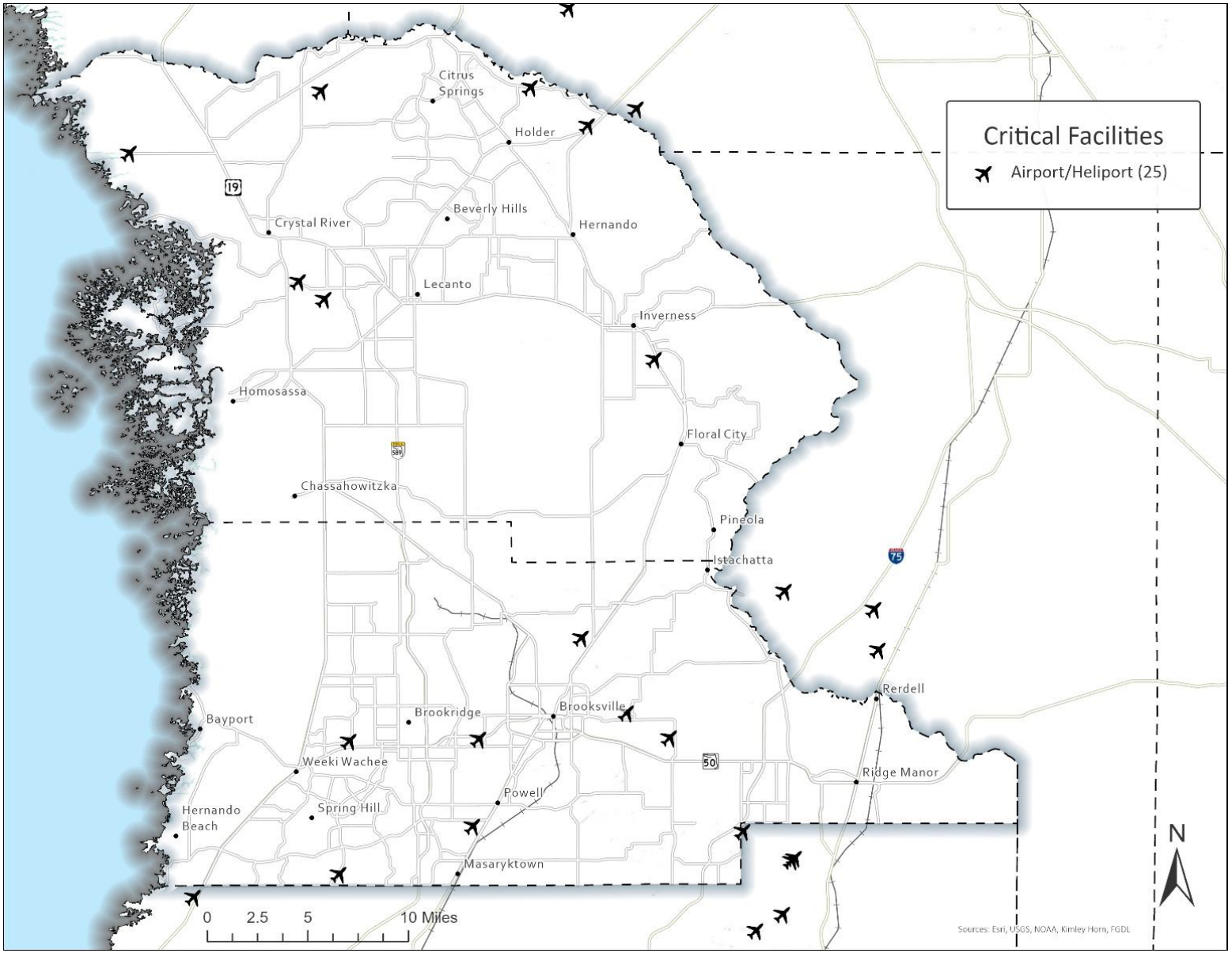
MAP A-2: EXISTING AVERAGE ANNUAL DAILY TRAFFIC



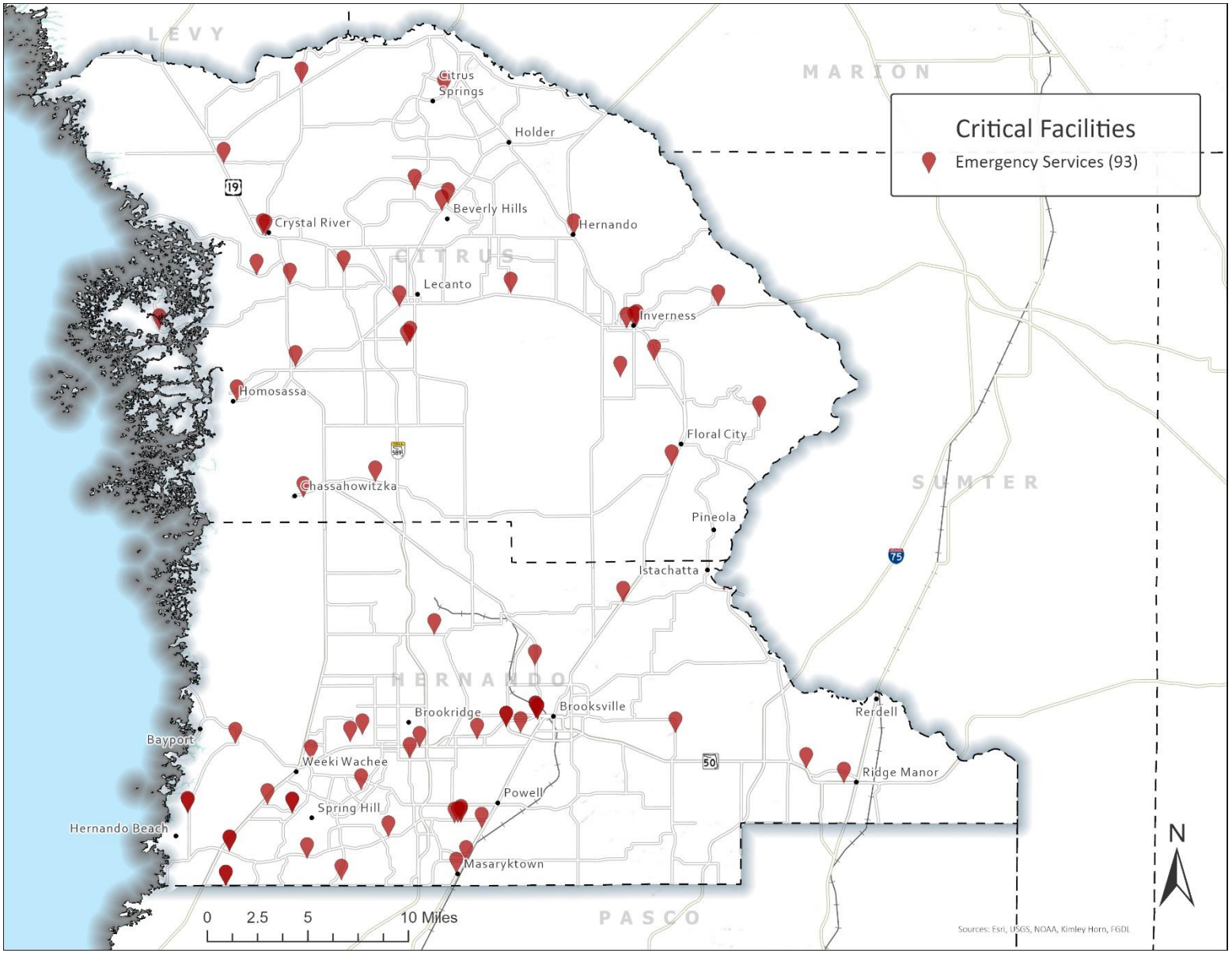
MAP A-3: STRATEGIC INTERMODAL SYSTEM FACILITIES



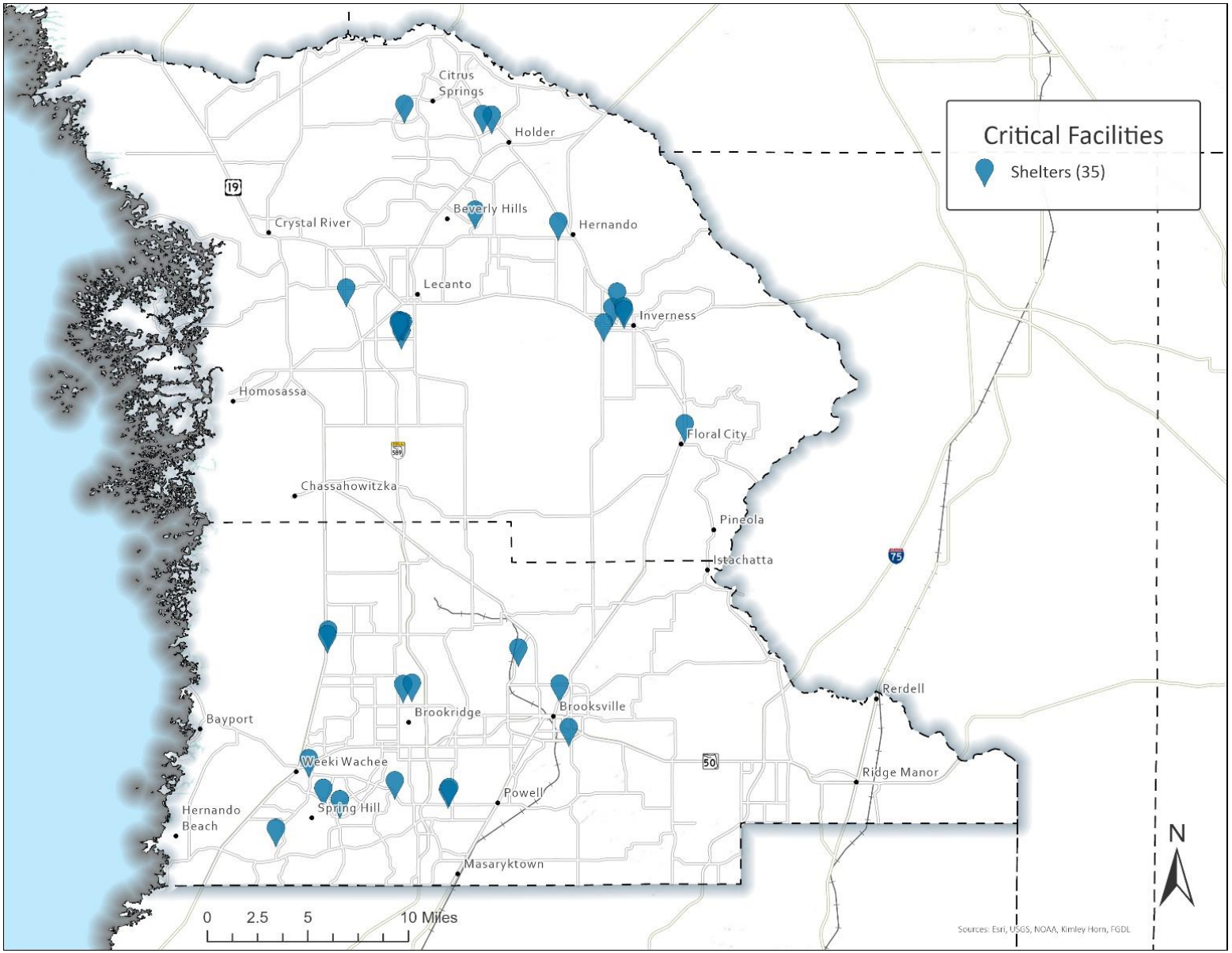
MAP A-4: COMMUNITY FACILITIES: AIRPORT/HELIPORT



MAP A-5: COMMUNITY FACILITIES: EMERGENCY SERVICES



MAP A-6: COMMUNITY FACILITIES: SHELTERS



MAP A-7: COMMUNITY FACILITIES: UTILITIES

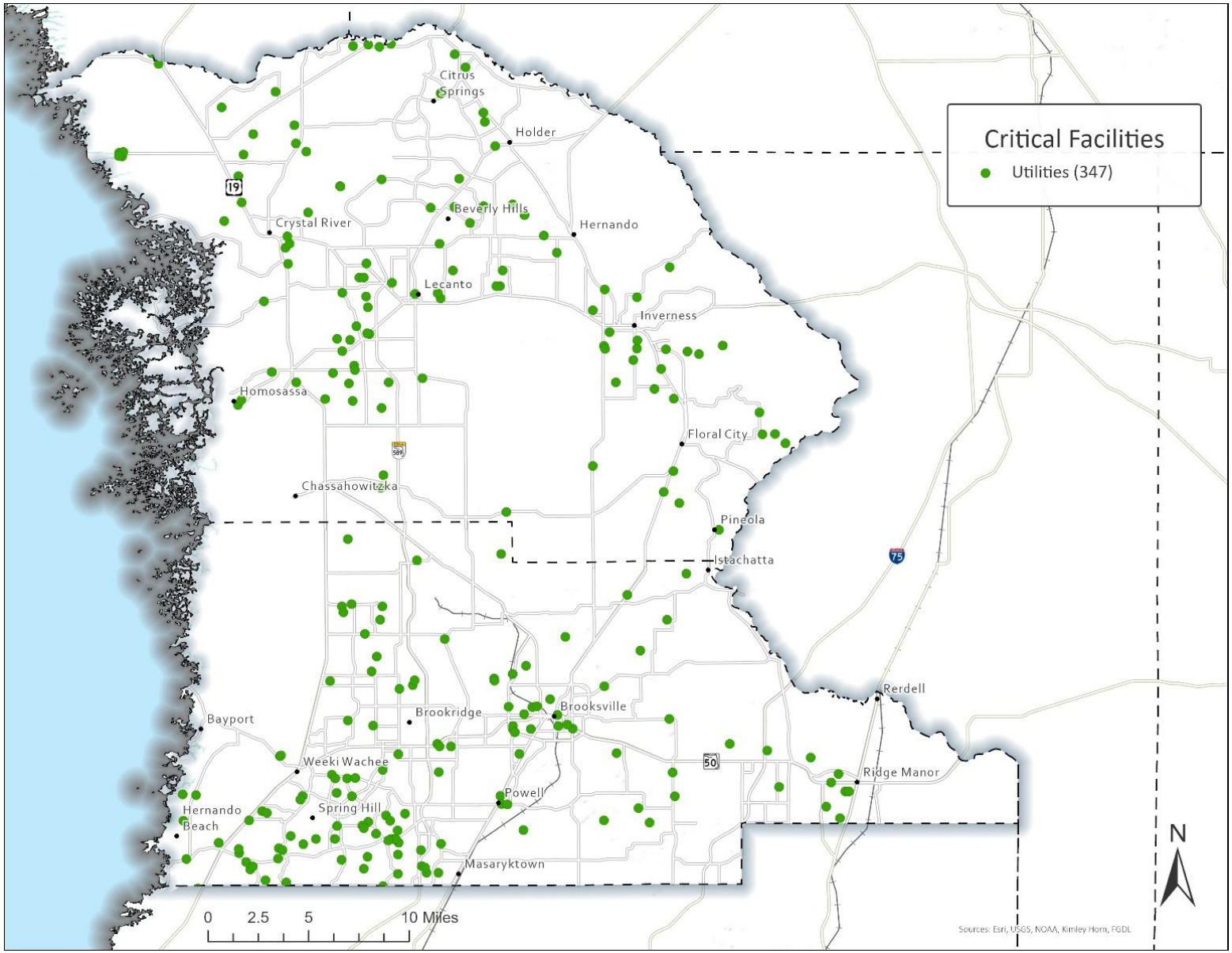


TABLE A-1: CITRUS COUNTY CRITICAL FACILITIES

Facility Category	Name	Address	City	Zip Code	Type
Shelters	C.R.E.S.T. School	2600 S Panther Pride Dr	Lecanto	34461	Shelter
	Citrus Springs MS	150 W Citrus Springs Blvd	Citrus Springs	34443	Shelter
	Withlacoochee Vocational Technical School	1201 W Main Hwy 44 W	Inverness	34450	Shelter
	Citrus Springs Es	3570 W Century Blvd	Citrus Springs	34443	Shelter
	Inverness MS	1950 N Us Highway 41	Inverness	34450	Shelter
	Forest Ridge Es	2927 N Forest Ridge	Hernando	34442	Shelter
	Renaissance Center School	3630 W Educational Path	Lecanto	34461	Shelter
	Citrus Hs	600 W Highland Blvd	Inverness	34452	Shelter
	Floral City Es	8457 E Marvin St	Floral City	34436	Shelter
	Central Ridge Es	185 W Citrus Springs Blvd	Citrus Springs	34443	Shelter
	Hernando Es	2975 E Trailblazer Ln	Hernando	34442	Shelter
	Pleasant Grove Es	630 Pleasant Grove Road	Inverness	34452	Shelter
	Inverness Primary School	206 South Line Avenue	Inverness	34452	Shelter
	Lecanto Primary School	3790 West Educational Path	Lecanto	34461	Shelter
	Lecanto MS	3800 West Educational Path	Lecanto	34461	Shelter
	Lecanto Hs	3810 West Educational Path	Lecanto	34461	Shelter
	Rock Crusher Es	814 South Rock Crusher Road	Homosassa	34448	Shelter
Emergency Services	Citrus County Sheriff's Dept. Headquarters	1 Dr Martin Luther King Jr Ave	Inverness	34450	Law Enforcement
	Cirus County Sheriff's Office - Westside Office	123 NW Us Hwy 19	Crystal River	34428	Law Enforcement
	Citrus County Sheriff's Dept. Civil Air Patrol	3450 S Airport Rd	Inverness	34452	Law Enforcement
	Citrus County FD Station 14	9515 N Citrus Springs Blvd	Dunnellon	34434	Fire Station
	Citrus County Sheriff Office- Beverly Hills Substation	4095 N Lecanto Hwy	Beverly Hills	34465	Law Enforcement
	Citrus County Fire Department	3600 W Sovereign Path Ste 291	Lecanto	34461	Fire Station
	Citrus County EOC	3549 Saunders Way	Lecanto	34461	Emergency Operations Center
	Kensington FD Station 23	285 S Kensington Ave	Inverness	34453	Fire Station
	Citrus County FD Station 4	10300 S Riviera Dr	Homosassa	34448	Fire Station

Facility Category	Name	Address	City	Zip Code	Type
	Highlanwater Distribution Facility FD Station 8	4325 S Little Al Pt	Inverness	34452	Fire Station
	Citrus County FD Station 17	10030 W Fort Island Traill	Crystal River	34429	Fire Station
	Chassahowitzka FD Station 18	5000 W Oak Park Blvd	Homosassa	34446	Fire Station
	Pine Ridge FD Station 20	4785 N Elkcam Blvd	Beverly Hills	34465	Fire Station
	Hernando FD Station 5	3673 E Orange Dr	Hernando	34442	Fire Station
	Citrus County FD Station 3	8408 W Homosassa Trail	Homosassa	34448	Fire Station
	Citrus County FD Station 6	9837 E Gulf to Lake Hwy	Inverness	34450	Fire Station
	Beverly Hills FD Station 13	4 Regina Blvd	Beverly Hills	34465	Fire Station
	Connell Heights FD Station 7	800 N Rock Crusher Rd	Crystal River	34429	Fire Station
	Ozello VFD Station 11	14300 W Ozello Trail	Crystal River	34429	Fire Station
	Derosa FD Station 9	10165 N Citrus Ave	Dunnellon	34433	Fire Station
	Citrus County FD Station 10	10950 W Yulee Dr	Homosassa	34448	Fire Station
	Floral City Fire Department	6535 S Withlapopka Dr	Floral City	34436	Fire Station
	Floral City FD Station 24	7880 E Spanish Trail	Floral City	34436	Fire Station
	Crystal River Fire Department	650 NW 3Rd Ave	Crystal River	34428	Fire Station
	Inverness FD Station 2	105 S Apopka Ave	Inverness	34452	Fire Station
	Nature Coast Emergency Medical Foundation	3876 W Country Hill Dr	Lecanto	34461	Emergency Medical Service
	Citrus Memorial Hosp	502 Highland Blvd	Inverness	34452	Hospital - Acute Care
	Seven Rivers Regional Medical Center	6201 N Suncoast Blvd	Crystal River	34428	Hospital - Acute Care
	Det 1 325Th Maint. Co	8551 W Venable St	Crystal River	34429	National Guard
Airport/Heliport	J. R.S Stolport		Dunnellon	34433	Airport
	Crystal River Power Plant Heliport		Crystal River	34428	Heliport/Helipad
	Inverness Airport	4250 S Airport Rd	Inverness	34450	Airport
	Seven Feathers Airport	1786 E Withlacoochee Trail	Dunnellon	34434	Airport
	Post Oak Ranch Airport		Homosassa	34448	Airport
	Crystal River Airport	718 N Lindberg Terrace	Crystal River	34429	Airport

Facility Category	Name	Address	City	Zip Code	Type
Utilities	Crystal River	15015 W Power Line St	Crystal River	34428	Electric Substation
	Crystal River Nuclear Power Plant	15015 W Power Line St	Crystal River	34428	Nuclear Power Plant
	Crystal River East	6642 N Marylois Pt	Crystal River	34428	Electric Substation
	Holder	6860 N Lecanto Hwy	Dunnellon	34434	Electric Substation
	Lecanto Dump	4Mi S Lecanto, W Sr491	Lecanto	34461	Disaster Debris Management Site
	Maylen Avenue	261 N Maylen Avenue	Lecanto	34460	Disaster Debris Management Site
	Citrus Co Debris Staging Site #1	11450 N. Florida Avenue	Dunellon	34434	Disaster Debris Management Site
	Citrus Co Debris Staging Site #2	5040 W Oak Park Blvd	Homosassa	34434	Disaster Debris Management Site
	City Of Crystal River Debris Staging Site #1	405 Se 7Th Avenue	Crystal River	34429	Disaster Debris Management Site
	City Of Crystal River Debris Staging Site #2	7040 N Citrus Avenue	Crystal River	34428	Disaster Debris Management Site
	Watson St DDMS	7140 E Watson St	Inverness	34450	Disaster Debris Management Site
	Homosassa Trail Debris Staging Site	5272 W Homosassa Trail	Lecanto	34461	Disaster Debris Management Site
	31 Water Distribution Facilities		County-Wide		Water Resources
	52 Wastewater Treatment Facilities		County-Wide		Water Resources
	64 Water Treatment Facilities		County-Wide		Water Resources

TABLE A-2: HERNANDO COUNTY CRITICAL FACILITIES

Facility Category	Name	Address	City	Zip Code	Type
Shelter	Springstead Hs	3300 Mariner Blvd	Spring Hill	34609	Shelter
	Deltona Es	2055 Deltona Blvd	Spring Hill	34606	Shelter
	Central Hs	14075 Ken Austin Pkwy	Brooksville	34613	Shelter
	Challenger K-8	13400 Elgin Blvd	Spring Hill	34609	Shelter
	Hernando Hs	700 Bell Ave	Brooksville	34601	Shelter
	West Hernando MS	14325 Ken Austin Pkwy	Brooksville	34613	Shelter
	Nature Coast Tech Hs	4057 California St	Brooksville	34604	Shelter
	Winding Waters K-8	12240 Vespa Way	Weeki Wachee	34614	Shelter
	Weeki Wachee Hs	12150 Vespa Way	Weeki Wachee	34614	Shelter
	Explorer K-8	10252 Northcliffe Blvd	Spring Hill	34608	Shelter
	Fox Chapel MS	9412 Fox Chapel Lane	Spring Hill	34606	Shelter
	Chocachatti Es	4135 California St	Brooksville	34604	Shelter
	Moton Es	7175 Emerson Road	Brooksville	34601	Shelter
	Parrott MS	19220 Youth Drive	Brooksville	34601	Shelter
Emergency Services	Bayfront Medical Center Bayflite 4 Ambulance	16300 Flight Path Dr	Brooksville	34604	Emergency Medical Service
	Florida Dept Of Law Enforcement - Brooksville Field Office	19245 Cortez Blvd	Brooksville	34601	Law Enforcement
	Florida Highway Patrol Substation	17028 Ayers Rd	Masaryktown	34604	Law Enforcement
	Florida Highway Patrol Troop C	11319 Ponce De Leon Blvd	Brooksville	34601	Law Enforcement
	Brooksville Police Station	87 Veterans Ave	Brooksville	34601	Law Enforcement
	Hernando Beach VFD	3451 Shoal Line Blvd	Spring Hill	34607	Fire Station
	High Point VFD	8008 Baltic St	Brooksville	34613	Fire Station
	Hernando County Fire Rescue Hq.	60 Veterans Ave	Brooksville	34601	Fire Station
	Hernando County Fr St 2	3444 Bob Hartung Ct	Spring Hill	34606	Fire Station
	Hernando County Fr St 12	6335 Ovenbird Rd	Brooksville	34613	Fire Station
	Hernando County Fr St 8	32409 Cortez Blvd	Webster	33597	Fire Station
	Hernando County Fr St 10	85 Veterans Ave	Brooksville	34601	Fire Station
	Hernando County Fr St 13	15370 Centralia Rd	Brooksville	34614	Fire Station
	Hernando County Fr St 3	13240 Spring Hill Dr	Spring Hill	34609	Fire Station

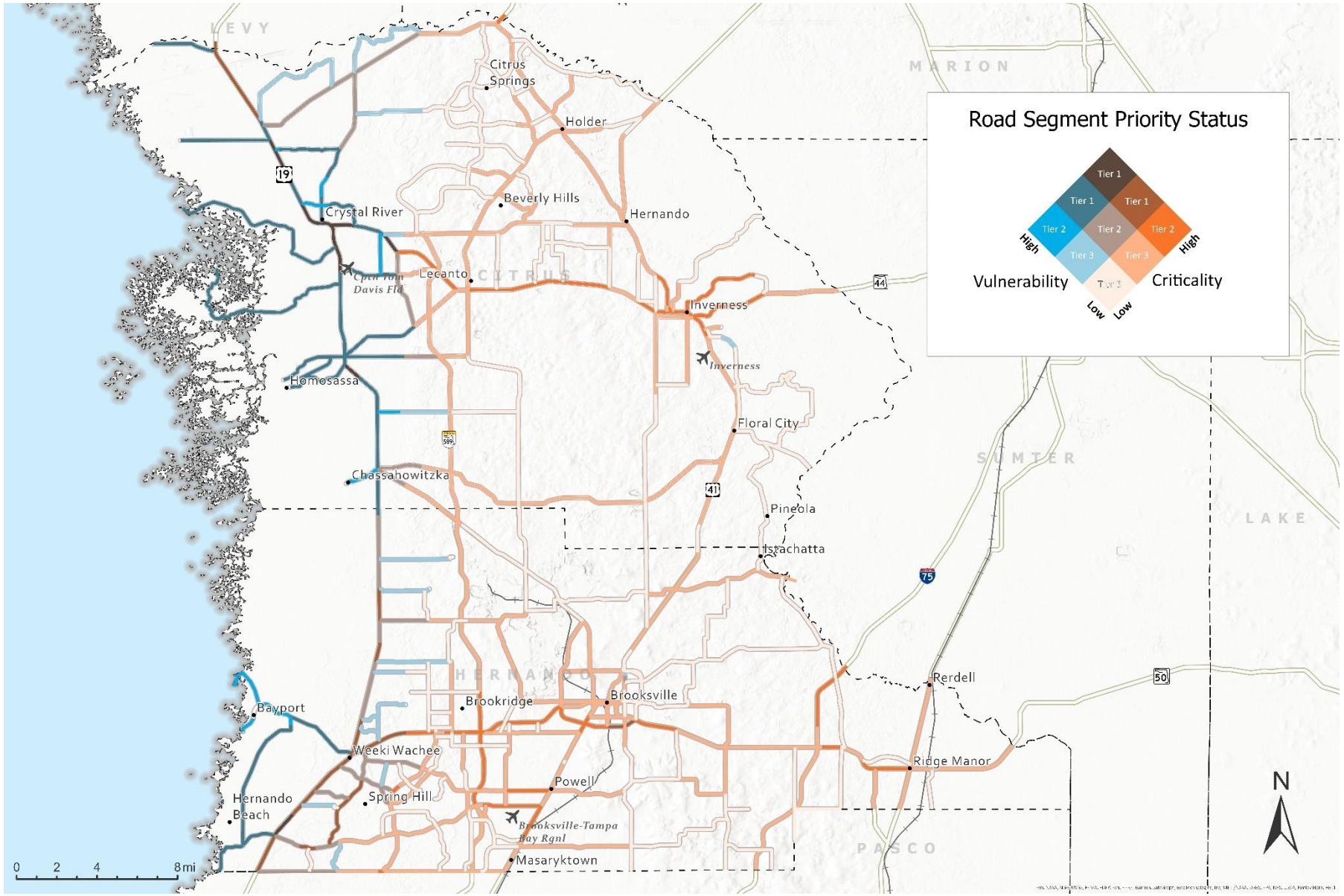
Facility Category	Name	Address	City	Zip Code	Type
	Hernando County Fr St 7	26671 Mondon Hill Rd	Brooksville	34602	Fire Station
	Tri-County VFD St 91	28444 Forbes St	Brooksville	34601	Fire Station
	Spring Hill Fire Resc Dist	3444 Bob Hartung Ct	Spring Hill	34606	Emergency Medical Service
	Hernando County Fire Rescue Hq	60 Veterans Ave	Brooksville	34601	Emergency Medical Service
	Hernando County Fr St 1 Annex	1461 Parker Ave	Spring Hill	34606	Fire Station
	Hernando County EOC	18900 Cortez Blvd	Brooksville	34601	Emergency Operations Center
	Hernando County Fr St 6	7383 Shoal Line Blvd	Weeki Wachee	34607	Fire Station
	Hernando County Fr St 11	6338 Barclay Ave	Spring Hill	34609	Fire Station
	Hernando County Fr St 9	24064 Lake Linwater Distribution Facility Rd	Brooksville	34601	Fire Station
	Hernando Sheriff's Office Substation - Westside	7499 Forest Oaks Blvd	Spring Hill	34606	Law Enforcement
	Hernando County Fr St 4	5083 Mariner Blvd	Spring Hill	34609	Fire Station
	Hernando County Fr St 1	1479 Parker Ave	Spring Hill	34606	Fire Station
	Hernando County Fr St 5	9490 Eldridge Rd	Spring Hill	34608	Fire Station
	Hernando County Fr St 14	3001 Broad St	Brooksville	34604	Fire Station
	Hernando Sheriff's Office Hq	18900 Cortez Blvd	Brooksville	34601	Law Enforcement
	Hernando Sheriff's Office Substation - Southside	1399 Broad St	Brooksville	34604	Law Enforcement
	Hernando Sheriff's Office Substation - Eastside	34240 Cortez Blvd	Dade City	33523	Law Enforcement
	Hernando Beach Substation	4005 Shoal Line Blvd	Hernando Beach	34607	Law Enforcement
	Spring Hill Regional Hosp	10461 Quality Dr	Spring Hill	34609	Hospital - Acute Care
	Springbrook Hospital	7007 Grove Rd	Brooksville	34609	Hospital
	Oak Hill Hosp	11375 Cortez Blvd	Brooksville	34613	Hospital - Acute Care
	Brevera Health Brooksville	17240 Cortez Blvd	Brooksville	34601	Hospital - Acute Care
	Army Aviation Support Facility #2	16388 Helicopter Dr	Brooksville	34604	National Guard
	Det 1 Co C 3Rd Sf Bn 20Th Sf G	16386 Spring Hill Dr	Brooksville	34604	National Guard

Facility Category	Name	Address	City	Zip Code	Type
	1/H/171St Av	16330 Flight Path Drive	Brooksville	34604	National Guard
Airport/Heliport	Grand Vista Ranch		Brooksville	34601	Airport
	Spring Hill Hospital Helistop				Heliport/Helipad
	HCA Oak Hill Hospital Helistop	11375 Cortez Blvd	Brooksville	34613	Heliport/Helipad
	Lz Shadow Heliport				Heliport/Helipad
	Hernando Healthcare Brooksville Heliport				Heliport/Helipad
	Chinsegut Airport		Brooksville	34601	Airport
	Hernando County Airport		Brooksville	34604	Airport
Utilities	FDOT/Mason Smith	South of Mason Smith Road & West of Us 41	Brooksville	34604	Disaster Debris Management Site
	Ridge Manor Community Park Debris Management Site	34030 Ridge Manor Blvd.	Ridge Manor	33523	Disaster Debris Management Site
	Anderson Snow Park Debris Management Site	1360 Anderson Snow Road	Spring Hill	34609	Disaster Debris Management Site
	Ernie Wever Youth Park Debris Management Site	19743 Youth Drive	Brooksville	34601	Disaster Debris Management Site
	Hernando County DDMS - Site 1 - Smith Property	899 Providence Blvd	Brooksville	34601	Disaster Debris Management Site
	Hernando County DDMS- Site 3 - Spring Lake Hwy	26349 Spring Lake Highway	Brooksville	34602	Disaster Debris Management Site
	Hernando County DDMS - Site 5 - Airport Site	Corporate Blvd	Spring Hill	34609	Disaster Debris Management Site
	Hernando County DDMS- Site 4 - Hernando Beach	1671 Osowaw Blvd	Hernando Beach	34607	Disaster Debris Management Site
	Kettering Site	Kettering Road	Brooksville	34602	Disaster Debris Management Site
	Shoal Line Site	4496 Shoal Line Blvd	Hernando Beach	34607	Disaster Debris Management Site
	Cobb Site	Cobb Road	Brooksville	34601	Disaster Debris Management Site
	Blaise Drive	End of Blaise Dr	Brooksville	34601	Disaster Debris Management Site
	City of Brooksville DDMS	600 S Brooksville Ave	Brooksville	34601	Disaster Debris Management Site
	West Hernando Transfer Station	2525 Osowaw Blvd	Spring Hill	35607	Disaster Debris Management Site

Facility Category	Name	Address	City	Zip Code	Type
	Hernando County Northwest Landfill	14450 Landfill Rd	Brooksville	34614	Disaster Debris Management Site
	41 Water Treatment Facilities		County-Wide	34602	Water Resources
	54 Water Distribution Facilities		County-Wide	34604	Water Resources
	40 Wastewater Treatment Facilities		County-Wide	34604	Water Resources

APPENDIX B VULNERABILITY AND CRITICALITY RESULTS

MAP B-1: VULNERABILITY AND CRITICALITY RANKING RESULTS



Hernando/Citrus MPO
Vulnerability Resiliency Assessment
Citrus County Roadways

Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)								
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
	3035	ANNA JO DR from CR 581, S to APOPKA RD, S	1.39	0.0	0.0	0.0	0.0	0.0000	0	0	0	1	0	0	1	2	0	0	0	2	0.1705	Low	Low	3
	10455	ANTHONY AVE from CR 486 to OVERDRIVE CIR	2.72	0.0	0.0	2.9	40.8	0.0157	0	0	0	0	0	0	0	2	1	0	0	3	0.1875	Low	Low	3
	10460	ANTHONY AVE from OVERDRIVE CIR to CR 491	0.91	0.0	0.0	0.0	61.2	0.0207	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	500	APOPKA AVE from INVERNESS BLVD to US 41 (SR 44) (MAIN ST)	1.16	0.0	0.0	1.7	0.0	0.0011	0	1	0	1	0	0	2	2	2	2	0	6	0.4659	Low	Moderate	3
	3033	APOPKA AVE from ANNA JO DR to INVERNESS BLVD	2.40	0.0	0.0	1.6	0.0	0.0011	0	0	0	1	0	0	1	2	0	2	1	5	0.3580	Low	Moderate	3
	10265	BASSWOOD DR from US 19, N to RIVERWOOD DR, W	1.35	13.6	86.4	0.0	0.0	0.2843	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Moderate	Low	3
	312	CARDINAL ST from US 19, S to GROSS AVE, S	1.00	73.1	26.8	0.0	0.0	0.5541	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	High	Low	2
	314	CARDINAL ST from GROSS AVE, S to SUNCOAST PKWY/HILLTOP RD, S	2.24	0.0	25.9	0.0	0.0	0.0577	0	0	0	1	2	0	3	1	0	0	0	1	0.1989	Moderate	Low	3
	316	CARDINAL ST from SUNCOAST PKWY/HILLTOP RD, S to CR 491, S	2.91	0.0	0.0	0.0	33.7	0.0114	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	3018	CENTURY BLVD from CITRUS SPRINGS BLVD, N to EMPIRE AVE, N	0.62	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	0	1	0	0	1	0.0625	Low	Low	3
	3019	CENTURY BLVD from EMPIRE AVE, N to ELKCAM BLVD, N	0.69	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	0	1	0	0	1	0.0625	Low	Low	3
	65	CITRUS HILLS BLVD from REEHILL ST, W to CR 486, W	1.57	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	10090	CITRUS SPRINGS BLVD, E from US 41/MAC PL, W/WITHLACOOCHEE TRAIL to CR 39, E	2.40	0.0	0.0	0.0	20.1	0.0068	0	0	0	0	0	0	0	2	2	0	1	5	0.3125	Low	Moderate	3
	3022	CITRUS SPRINGS BLVD, N from ELKCAM BLVD, N to DUNKLIN ST/ CENTURY BLVD, W	1.77	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	1	1	0	0	2	0.1250	Low	Low	3
	3024	CITRUS SPRINGS BLVD, N from DELTONA BLVD, N to ELKCAM BLVD, N	1.37	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	3030	CITRUS SPRINGS BLVD, N from US 41, N to DELTONA BLVD, N	0.97	0.0	0.0	0.0	78.4	0.0265	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	10085	CITRUS SPRINGS BLVD, N from CR 39, W to US 41, N	1.35	0.0	0.0	0.0	5.7	0.0019	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	3011.1	CITRUS SPRINGS BLVD, W from DELTONA BLVD, N to GREENDALE DR, N	0.51	0.0	0.0	0.0	27.9	0.0094	0	0	0	0	0	0	0	2	2	0	0	4	0.2500	Low	Low	3
	3011.2	CITRUS SPRINGS BLVD, W from GREENDALE DR, N to US 41/MAC PL, W/WITHLACOOCHEE TRAIL	0.53	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	2	0	0	4	0.2500	Low	Low	3
	3014.1	CITRUS SPRINGS BLVD, W from ELKCAM BLVD, N to GIBRALTER DR, N	1.58	0.0	0.0	0.0	0.0	0.0000	0	1	0	0	0	0	1	0	1	0	0	1	0.1080	Low	Low	3
	3014.2	CITRUS SPRINGS BLVD, W from GIBRALTER DR, N to DELTONA BLVD, N	0.65	0.0	0.0	0.0	34.2	0.0116	0	1	0	0	0	0	1	2	2	0	0	4	0.2955	Low	Moderate	3
	3016.1	CITRUS SPRINGS BLVD, W from GATEWOOD DR, N to HAZELWOOD RD, N	0.68	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	0	1	0	0	1	0.0625	Low	Low	3
	3016.2	CITRUS SPRINGS BLVD, W from HAZELWOOD RD, N to ELKCAM BLVD, N	1.28	0.0	0.0	0.6	0.0	0.0004	0	0	0	0	0	0	0	0	1	0	0	1	0.0625	Low	Low	3
	3020	CITRUS SPRINGS BLVD, W from DUNKLIN ST/ CENTURY BLVD, W to GATEWOOD DR, N	0.21	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	0	1	0	0	1	0.0625	Low	Low	3
	3031	COUNTRY CLUB BLVD from DELTONA BLVD, N to TRAVIS DR, N	0.28	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	1	0	1	0	2	0.1250	Low	Low	3
	3032	COUNTRY CLUB BLVD from TRAVIS DR, N to US 41, N	0.51	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	10525	COUNTRY OAKS TER from S.R. 44 to C.R. 486	2.80	0.0	0.0	0.9	34.8	0.0124	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	10275	COURT HOUSE SQ from US 41 to APOPKA AVE, N	0.11	0.0	0.0	10.2	0.0	0.0069	0	1	0	1	0	0	2	1	2	2	0	5	0.4034	Low	Moderate	3
	181	CR 39 (ISTACHATTA RD) from HERNANDO CO. LINE to FLORAL PARK DR, E	4.63	0.0	0.0	3.0	33.5	0.0134	0	0	0	1	0	0	1	2	0	0	0	2	0.1705	Low	Low	3
	191	CR 39 (ISTACHATTA RD) from FLORAL PARK DR, E to CR 48, E	1.64	0.0	0.0	43.0	42.8	0.0435	0	0	0	1	0	0	1	0	0	0	0	0	0.0455	Low	Low	3
	10	CR 39 (WITHLACOOCHEE TRAIL) from US 41, N to CITRUS SPRINGS BLVD, N	0.81	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	20	CR 39 (WITHLACOOCHEE TRAIL) from CITRUS SPRINGS BLVD, N to SR 200, N	6.83	0.0	0.0	0.0	23.5	0.0079	0	0	0	0	0	0	0	2	0	0	2	4	0.2500	Low	Low	3
	180.1	CR 39A (GOBBLER DR) from US 41, S to OLD FLORAL CITY RD	0.20	0.0	0.0	0.0	0.0	0.0000	0	1	0	0	0	0	1	2	0	0	0	2	0.1705	Low	Low	3
	180.2	CR 39A (GOBBLER DR) from OLD FLORAL CITY RD to BASS TERR, S	2.18	0.0	0.0	0.6	0.0	0.0004	0	0	0	0	0	2	2	2	0	0	0	2	0.2159	Low	Low	3
	200	CR 39A (TRAILS END RD) from CR 39A, E to CR 48, E	2.28	0.0	0.0	0.0	8.5	0.0029	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	0	CR 39A (WITHLAPOPKA DR) from BASS TERR, S to CR 39A, E	4.96	0.0	0.0	9.9	1.5	0.0072	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
3	350	CR 44 (FT ISLAND TRAIL) from PALM SPRINGS TERR, N to US 19, S	1.48	100.0	0.0	100.0	0.0	0.7432	0	1	0	0	2	0	3	2	0	1	0	3	0.3239	High	Moderate	1
3	10020	CR 44 (FT ISLAND TRAIL) from FORT ISLAND PARK to PALM SPRINGS TERR, N	7.75	99.8	0.2	100.0	54.3	0.7608	0	0	0	0	2	2	4	2	0	1	0	3	0.3693	High	Moderate	1
	110	CR 470 (GOSPEL ISLAND RD) from US 41, E to CRESCENT DR, E	4.07	0.0	0.0	0.8	15.3	0.0057	0	0	0	1	0	2	3	2	2	2	0	6	0.5114	Low	High	2
	120	CR 470 (GOSPEL ISLAND RD) from CRESCENT DR, E to SR 44, E	1.31	0.0	0.0	0.0	55.0	0.0186	0	0	0	1	0	0	1	0	0	1	0	1	0.1080	Low	Low	3
	210.1	CR 48 (BUSHNELL RD) from SUMTER COUNTY LINE to CR 39A, E	1.96	0.0	0.0	2.9	0.0	0.0020	0	0	0	1	2	2	5	0	0	0	0	0	0.2273	Low	Low	3
	210.2	CR 48 (BUSHNELL RD) from CR 39A, E to CR 39, S	0.40	0.0	0.0	0.0	43.7	0.0148	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	190.2	CR 48 (ORANGE AVE) from OLD FLORAL CITY RD to US 41, S	0.13	0.0	0.0	0.0	0.0	0.0000	0	1	0	1	2	0	4	0	1	0	0	1	0.2443	Low	Low	3
	190.3	CR 48 (ORANGE AVE) from CR 39, S to DUVAL ISLAND RD	0.96	0.0	0.0	0.0	35.9	0.0121	0	0	0	1	2	0	3	0	1	0	0	1	0.1989	Low	Low	3
	190.4	CR 48 (ORANGE AVE) from DUVAL ISLAND RD to OLD FLORAL CITY RD	0.64	0.0	0.0	0.0	0.0	0.0000	0	1	0	1	2	0	4	0	1	0	0	1	0.2443	Low	Low	3

Hernando/Citrus MPO
Vulnerability Resiliency Assessment
Citrus County Roadways

Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)								
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
	250.1	CR 480 (OAK PARK BLVD) from CORKWOOD BLVD to URBAN BOUNDARY	0.46	0.0	0.0	0.0	0.0	0.0000	0	0	0	1	2	0	3	2	0	1	0	3	0.3239	Low	Moderate	3
	250.2	CR 480 (OAK PARK BLVD) from URBAN BOUNDARY to CR 491, S	3.60	0.0	0.0	0.0	43.9	0.0148	0	0	0	1	2	0	3	2	0	1	0	3	0.3239	Low	Moderate	3
	280.1	CR 480 (OAK PARK BLVD) from US 98 to CYPRESS/OAK VILLAGE BLVD	1.92	23.7	67.3	3.1	6.1	0.3144	0	0	0	1	2	0	3	2	0	1	0	3	0.3239	Moderate	Moderate	2
	280.2	CR 480 (OAK PARK BLVD) from CYPRESS/OAK VILLAGE BLVD to CORKWOOD BLVD	0.85	0.0	0.0	0.0	0.0	0.0000	0	0	0	1	2	0	3	2	0	1	0	3	0.3239	Low	Moderate	3
	220	CR 480 (STAGE COACH TRAIL) from CR 581, S to MERIDITH AVE, S	3.61	0.0	0.0	0.0	27.7	0.0094	0	0	0	1	2	0	3	2	0	1	0	3	0.3239	Low	Moderate	3
	230	CR 480 (STAGE COACH TRAIL) from MERIDITH AVE, S to US 41, S	0.65	0.0	0.0	0.9	5.5	0.0024	0	0	0	1	2	0	3	2	0	1	0	3	0.3239	Low	Moderate	3
	232	CR 480 (STAGE COACH TRAIL) from BRITTLE RD, S to CR 581, S	4.11	0.0	0.0	0.0	43.9	0.0148	0	0	0	1	2	0	3	2	0	0	0	2	0.2614	Low	Moderate	3
	240	CR 480 (STAGE COACH TRAIL) from CR 491, N to BRITTLE RD, S	1.53	0.0	0.0	0.0	60.8	0.0205	0	0	0	1	2	0	3	2	0	0	0	2	0.2614	Low	Moderate	3
	50	CR 486 (NORVELL BRYANT HWY) from CROFT AVE, N to US 41, N	0.77	0.0	0.0	0.0	13.6	0.0046	1	0	0	1	2	0	4	2	1	1	0	4	0.4318	Low	Moderate	3
	54.1	CR 486 (NORVELL BRYANT HWY) from ANNAPOLIS AVE, N to TRUCKS AVE	0.17	0.0	0.0	0.0	0.0	0.0000	1	0	0	1	2	0	4	0	0	0	0	0	0.1818	Low	Low	3
	54.3	CR 486 (NORVELL BRYANT HWY) from TRUCKS AVE to MCGEE DR	0.29	0.0	0.0	0.0	10.1	0.0034	1	0	0	1	2	0	4	0	0	0	0	0	0.1818	Low	Low	3
	54.4	CR 486 (NORVELL BRYANT HWY) from MCGEE DR to URBAN BOUNDARY (E)	0.61	0.0	0.0	0.0	100.0	0.0338	1	0	0	1	2	0	4	2	0	0	0	2	0.3068	Low	Moderate	3
	56	CR 486 (NORVELL BRYANT HWY) from CLEMENTS AVE, N to ANNAPOLIS AVE, N	0.34	0.0	0.0	0.0	0.0	0.0000	1	0	0	1	2	0	4	0	0	0	0	0	0.1818	Low	Low	3
	60	CR 486 (NORVELL BRYANT HWY) from CR 491, N to OTTAWA AVE, N	1.08	0.0	0.0	0.0	65.7	0.0222	1	1	0	1	2	0	5	2	0	0	0	2	0.3523	Low	Moderate	3
	62	CR 486 (NORVELL BRYANT HWY) from RESTON TERR to ESSEX AVE, N	0.42	0.0	0.0	0.0	0.0	0.0000	1	0	0	1	2	0	4	2	1	0	0	3	0.3693	Low	Moderate	3
	64	CR 486 (NORVELL BRYANT HWY) from ESSEX AVE, N to ANTHONY AVE, N	0.21	0.0	0.0	0.0	0.0	0.0000	1	0	0	1	2	0	4	0	1	0	0	1	0.2443	Low	Low	3
	66	CR 486 (NORVELL BRYANT HWY) from ANTHONY AVE, N to CITRUS HILLS BLVD, N	0.21	0.0	0.0	0.0	0.0	0.0000	1	0	0	1	2	0	4	0	1	0	0	1	0.2443	Low	Low	3
	68	CR 486 (NORVELL BRYANT HWY) from CITRUS HILLS BLVD, N to CLEMENTS AVE, N	0.09	0.0	0.0	0.0	0.0	0.0000	1	0	0	1	0	0	2	0	0	0	0	0	0.0909	Low	Low	3
	70	CR 486 (NORVELL BRYANT HWY) from CLYDESDALE AVE, N to CR 491, N	0.98	0.0	0.0	1.5	8.7	0.0040	1	1	0	1	2	0	5	2	0	0	0	2	0.3523	Low	Moderate	3
	330.1	CR 486 (NORVELL BRYANT HWY) from SR 44, W to MEADOWCREST BLVD	0.70	54.5	45.5	4.4	0.0	0.4728	1	0	0	1	2	0	4	0	0	0	0	0	0.1818	Moderate	Low	3
	330.2	CR 486 (NORVELL BRYANT HWY) from MEADOWCREST BLVD to URBAN BOUNDARY (W)	0.20	0.0	80.7	0.0	0.0	0.1800	1	1	0	1	2	0	5	0	0	0	0	0	0.2273	Moderate	Low	3
	400	CR 486 (NORVELL BRYANT HWY) from PINE RIDGE BLVD, W to CLYDESDALE AVE, N	1.49	0.0	0.0	0.0	45.5	0.0154	1	1	0	1	2	0	5	1	0	0	0	1	0.2898	Low	Moderate	3
	410	CR 486 (NORVELL BRYANT HWY) from URBAN BOUNDARY (W) to PINE RIDGE BLVD, W	0.55	0.0	0.0	0.0	0.0	0.0000	1	1	0	1	2	0	5	1	0	0	0	1	0.2898	Low	Moderate	3
	1019	CR 486 (NORVELL BRYANT HWY) from URBAN BOUNDARY (E) to CROFT AVE, N	1.00	0.0	0.0	0.0	29.1	0.0098	1	0	0	1	2	0	4	2	1	1	0	4	0.4318	Low	Moderate	3
	1026	CR 486 (NORVELL BRYANT HWY) from OTTAWA AVE, N to FOREST RIDGE BLVD, N	1.35	0.0	0.0	0.0	0.0	0.0000	1	1	0	1	2	0	5	2	1	0	0	3	0.4148	Low	Moderate	3
	1027	CR 486 (NORVELL BRYANT HWY) from FOREST RIDGE BLVD, N to RESTON TERR	0.35	0.0	0.0	0.0	0.0	0.0000	1	0	0	1	2	0	4	2	1	0	0	3	0.3693	Low	Moderate	3
	380	CR 488 (DUNNELLON RD) from US 19, N to NORTHCUT AVE, N	3.72	11.6	88.4	0.0	6.0	0.2777	0	0	0	1	2	0	3	2	0	0	0	2	0.2614	Moderate	Moderate	2
	390	CR 488 (DUNNELLON RD) from RIVERBEND RD, W to US 41, N	3.53	0.0	6.1	0.0	10.4	0.0171	0	0	0	1	2	0	3	2	0	2	0	4	0.3864	Low	Moderate	3
	391	CR 488 (DUNNELLON RD) from NORTHCUT AVE, N to CR 495, N	1.20	0.0	87.6	0.0	0.0	0.1953	0	0	0	1	2	0	3	2	0	1	1	4	0.3864	Moderate	Moderate	2
	401	CR 488 (DUNNELLON RD) from CR 495, N to RIVERBEND RD, W	3.41	0.0	40.5	0.0	0.0	0.0902	0	0	0	1	2	0	3	2	0	1	1	4	0.3864	Moderate	Moderate	2
4	300	CR 490 (HOMOSASSA TRAIL) from US 19, S to CANADIAN WAY, S	0.52	100.0	0.0	100.0	0.0	0.7433	0	1	0	1	2	0	4	2	0	1	0	3	0.3693	High	Moderate	1
	320.2	CR 490 (HOMOSASSA TRAIL) from ROCK CRUSHER RD, S to URBAN BOUNDARY	0.50	0.0	0.0	0.0	26.8	0.0090	0	0	0	1	2	0	3	2	0	0	0	2	0.2614	Low	Moderate	3
	320.3	CR 490 (HOMOSASSA TRAIL) from URBAN BOUNDARY to SR 44, W	2.08	0.0	0.0	0.0	50.2	0.0169	0	0	0	1	2	0	3	2	0	1	0	3	0.3239	Low	Moderate	3
4	1004A	CR 490 (HOMOSASSA TRAIL) from CANADIAN WAY, S to ROCK CRUSHER RD, S	3.09	70.1	24.6	33.4	27.5	0.5601	0	0	0	1	2	0	3	2	0	1	0	3	0.3239	High	Moderate	1
6	294	CR 490 (YULEE DR) from BRADSHAW ST, W to US 19, S	0.66	100.0	0.0	98.7	0.0	0.7423	0	1	0	1	2	0	4	2	0	1	0	3	0.3693	High	Moderate	1
6	298.1	CR 490 (YULEE DR) from WOODLAND PL, W to FISHBOWL DR, W	0.98	100.0	0.0	100.0	0.0	0.7432	0	0	0	1	2	0	3	2	0	1	0	3	0.3239	High	Moderate	1
6	298.2	CR 490 (YULEE DR) from FISHBOWL DR, W to BRADSHAW ST, W	1.54	100.0	0.0	100.0	0.0	0.7432	0	1	0	1	2	0	4	2	0	1	0	3	0.3693	High	Moderate	1
4	292	CR 490A (GROVER CLEVELAND BLVD) from US 19, S to CLARIDGE AVE, S	2.60	89.7	10.2	52.3	0.0	0.6646	0	1	0	1	2	0	4	2	0	1	0	3	0.3693	High	Moderate	1
	310.1	CR 490A (GROVER CLEVELAND BLVD) from CLARIDGE AVE, S to CORBETT AVE, S	1.50	4.8	22.9	0.0	0.0	0.0833	0	1	0	1	2	0	4	2	0	0	0	2	0.3068	Moderate	Moderate	2
	310.2	CR 490A (GROVER CLEVELAND BLVD) from CORBETT AVE, S to CR 491, S	1.29	0.0	0.0	1.6	10.5	0.0047	0	1	0	1	2	0	4	2	1	0	0	3	0.3693	Low	Moderate	3
6	290	CR 490A (HALLS RIVER RD) from FISHBOWL DR, W to US 19, S	0.58	100.0	0.0	100.0	0.0	0.7431	0	1	0	1	0	2	4	2	0	1	0	3	0.3693	High	Moderate	1
6	302	CR 490A (HALLS RIVER RD) from RIVERVIEW CIR, S to FISHBOWL DR, W	2.57	100.0	0.0	100.0	0.0	0.7433	0	0	0	1	0	2	3	2	0	2	0	4	0.3864	High	Moderate	1
	21	CR 491 (LECANTO HWY) from TRAM RD, N to SR 200, N	1.77	0.0	0.0	0.0	64.0	0.0216	0	0	0	1	2	0	3	0	0	0	1	1	0.1989	Low	Low	3
	30	CR 491 (LECANTO HWY) from US 41, N to TRAM RD, N	1.73	0.0	0.0	0.0	28.8	0.0097	0	0	0	1	2	0	3	1	1	0	0	2	0.2614	Low	Moderate	3
	40	CR 491 (LECANTO HWY) from DELTONA BLVD, N to US 41, N	1.36	0.0	0.0	0.0	16.2	0.0055	0	0	0	1	2	0	3	1	2	0	0	3	0.3239	Low	Moderate	3

Hernando/Citrus MPO
Vulnerability Resiliency Assessment
Citrus County Roadways

Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)								
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
	81	CR 491 (LECANTO HWY) from CR 486, W to BLACK DIAMOND CIR	1.21	0.0	0.0	0.0	34.6	0.0117	0	1	0	1	2	0	4	2	0	1	0	3	0.3693	Low	Moderate	3
	85	CR 491 (LECANTO HWY) from AUDUBON PARK PATH to HORACE ALLEN ST, W	2.33	0.0	0.0	0.0	31.2	0.0106	0	1	0	1	2	0	4	2	0	0	0	2	0.3068	Low	Moderate	3
	85.1	CR 491 (LECANTO HWY) from SR 44, E to AUDUBON PARK PATH	0.81	0.0	0.0	0.0	32.9	0.0111	0	1	0	1	2	0	4	2	0	1	0	3	0.3693	Low	Moderate	3
	85.3	CR 491 (LECANTO HWY) from HORACE ALLEN ST, W to CR 486	0.59	0.0	0.0	3.0	30.3	0.0123	0	1	0	1	2	0	4	2	0	0	0	2	0.3068	Low	Moderate	3
	87	CR 491 (LECANTO HWY) from EDUCATIONAL PATH, W to SR 44, W	2.19	0.0	0.0	0.0	48.0	0.0162	0	1	0	1	2	0	4	1	2	2	0	5	0.4943	Low	Moderate	3
	97	CR 491 (LECANTO HWY) from PINE RIDGE BLVD, W to FOREST RIDGE BLVD, N	0.37	0.0	0.0	0.0	0.0	0.0000	0	1	0	1	2	0	4	2	0	1	0	3	0.3693	Low	Moderate	3
	99	CR 491 (LECANTO HWY) from FOREST RIDGE BLVD, N to DELTONA BLVD, N	1.76	0.0	0.0	0.8	18.6	0.0068	0	1	0	1	2	0	4	2	0	0	0	2	0.3068	Low	Moderate	3
	103	CR 491 (LECANTO HWY) from MUSTANG/REGINA BLVD to ROOSEVELT BLVD	0.39	0.0	0.0	0.0	0.0	0.0000	0	1	0	1	2	0	4	2	0	2	0	4	0.4318	Low	Moderate	3
	105.1	CR 491 (LECANTO HWY) from ROOSEVELT BLVD to BEVERLY HILLS BLVD	0.53	0.0	0.0	0.0	0.0	0.0000	0	1	0	1	2	0	4	2	0	2	0	4	0.4318	Low	Moderate	3
	105.2	CR 491 (LECANTO HWY) from BEVERLY HILLS BLVD to PINE RIDGE BLVD, W	0.33	0.0	0.0	0.0	0.0	0.0000	0	1	0	1	2	0	4	2	0	2	0	4	0.4318	Low	Moderate	3
	107	CR 491 (LECANTO HWY) from BLACK DIAMOND CIR to TRUMAN BLVD	0.53	0.0	0.0	0.0	0.0	0.0000	0	1	0	1	2	0	4	2	0	2	0	4	0.4318	Low	Moderate	3
	109	CR 491 (LECANTO HWY) from TRUMAN BLVD to MUSTANG/REGINA BLVD	0.19	0.0	0.0	0.0	0.0	0.0000	0	1	0	1	2	0	4	2	0	2	0	4	0.4318	Low	Moderate	3
	231	CR 491 (LECANTO HWY) from HERNANDO CO. LINE to CR 480, W	0.58	0.0	0.0	3.3	80.8	0.0295	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	241	CR 491 (LECANTO HWY) from CR 480, W to CASON CT, W	1.76	0.0	0.0	0.0	18.6	0.0063	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	301	CR 491 (LECANTO HWY) from G. CLEVELD BLVD, W to EDUCATIONAL PATH, W	1.07	0.0	0.0	5.5	0.0	0.0037	0	1	0	1	2	0	4	1	2	2	0	5	0.4943	Low	Moderate	3
	311	CR 491 (LECANTO HWY) from LEISURE BLVD to G. CLEVELD BLVD, W	0.40	0.0	0.0	0.0	44.8	0.0151	0	0	0	1	2	0	3	1	0	0	0	1	0.1989	Low	Low	3
	313	CR 491 (LECANTO HWY) from CARDINAL ST, W to LEISURE BLVD	4.09	0.0	0.0	0.0	52.9	0.0179	0	0	0	1	2	0	3	1	0	0	0	1	0.1989	Low	Low	3
	315	CR 491 (LECANTO HWY) from CASON CT, W to CARDINAL ST, W	2.77	0.0	0.0	0.0	14.4	0.0049	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
3	360.1	CR 494 (OZELLO TRAIL) from US 19, S to URBAN BOUNDARY	1.46	100.0	0.0	88.0	0.0	0.7351	0	0	0	0	0	2	2	2	0	1	1	4	0.3409	High	Moderate	1
3	360.2	CR 494 (OZELLO TRAIL) from URBAN BOUNDARY to SANDDOLLAR LN, W	7.92	100.0	0.0	100.0	62.6	0.7644	0	0	0	0	0	2	2	2	0	1	0	3	0.2784	High	Moderate	1
4	371	CR 495 (CITRUS AVE) from TURKEY OAK DR, N to URBAN BOUNDARY	0.42	100.0	0.0	100.0	0.0	0.7434	0	0	0	1	2	0	3	0	0	2	0	2	0.2614	High	Moderate	1
	381	CR 495 (CITRUS AVE) from BASILICO ST, W to CR 488, W	1.48	0.0	94.9	0.0	2.5	0.2125	0	0	0	1	2	0	3	1	0	1	1	3	0.3239	Moderate	Moderate	2
	1045	CR 495 (CITRUS AVE) from DUNKLIN ST, W to BASILICO ST, W	0.54	0.0	100.0	0.0	0.0	0.2229	0	0	0	1	2	0	3	2	0	0	0	2	0.2614	Moderate	Moderate	2
4	10000	CR 495 (CITRUS AVE) from US 19, N to TURKEY OAK DR, N	0.90	100.0	0.0	100.0	0.0	0.7433	0	0	0	1	2	0	3	2	0	2	0	4	0.3864	High	Moderate	1
4	10005	CR 495 (CITRUS AVE) from URBAN BOUNDARY to TOM MASON DR, W	1.04	100.0	0.0	80.7	0.0	0.7302	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	High	Low	2
4	10010	CR 495 (CITRUS AVE) from TOM MASON DR, W to EMERALD OAKS DR, W	1.51	73.7	26.3	16.3	0.0	0.5676	0	0	0	1	2	0	3	2	0	0	0	2	0.2614	High	Moderate	1
	10350	CR 495 (CITRUS AVE) from CR 488, W to RIVERBEND DR	1.81	0.0	34.5	0.0	0.0	0.0770	0	0	0	0	0	0	0	0	0	1	1	2	0.1250	Moderate	Low	3
	1045A	CR 495 (CITRUS AVE) from EMERALD OAKS DR, W to DUNKLIN ST, W	1.91	13.2	86.8	1.4	10.8	0.2873	0	0	0	1	2	0	3	2	0	0	0	2	0.2614	Moderate	Moderate	2
	111	CR 581 (PLEASANT GROVE RD) from CITY LIMITS to SR 44	1.21	0.0	0.0	0.0	5.3	0.0018	0	0	0	1	2	0	3	2	2	0	0	4	0.3864	Low	Moderate	3
	211.2	CR 581 (PLEASANT GROVE RD) from URBAN BOUNDARY to ANNA JO DR, E	0.47	0.0	0.0	0.0	0.0	0.0000	0	0	0	1	2	0	3	2	0	0	0	2	0.2614	Low	Moderate	3
	211.3	CR 581 (PLEASANT GROVE RD) from CR 480, E to CR 581 CONNECTOR	4.20	0.0	0.0	0.0	39.7	0.0134	0	0	0	1	2	0	3	1	0	0	0	1	0.1989	Low	Low	3
	211.4	CR 581 (PLEASANT GROVE RD) from CR 581 CONNECTOR to URBAN BOUNDARY	1.25	0.0	0.0	0.0	73.4	0.0248	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	221	CR 581 (PLEASANT GROVE RD) from HERNANDO CO. LINE to CR 480, E	2.58	0.0	0.0	0.0	48.2	0.0163	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	1024	CR 581 (PLEASANT GROVE RD) from ANNA JO DR, E to ARBOR ST, E	0.90	0.0	0.0	0.0	84.4	0.0285	0	0	0	1	2	0	3	2	0	1	0	3	0.3239	Low	Moderate	3
	1025	CR 581 (PLEASANT GROVE RD) from ARBOR ST, E to CITY LIMITS	1.52	0.0	0.0	0.0	31.4	0.0106	0	0	0	1	2	0	3	2	1	1	0	4	0.3864	Low	Moderate	3
	123	CR 581 (TURNER CAMP RD) from HUNTING LODGE DR to URBAN BOUNDARY	0.93	0.0	0.0	0.0	14.1	0.0048	0	0	0	0	0	0	0	2	1	0	0	3	0.1875	Low	Low	3
	10025	CR 581 (TURNER CAMP RD) from US 41, N to HUNTING LODGE DR	1.51	0.0	0.0	0.0	0.1	0.0000	0	0	0	0	0	0	0	2	2	2	0	6	0.3750	Low	Moderate	3
	10030	CR 581 (TURNER CAMP RD) from URBAN BOUNDARY to POINT LONESOME RD, N	1.22	0.0	0.0	8.4	10.0	0.0091	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	10035	CR 581 (TURNER CAMP RD) from POINT LONESOME RD, N to TURNER CAMP BOAT RAMP	3.41	0.0	0.0	14.2	38.6	0.0226	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	10390.1	CR 581 EXTENSION from SR 44 to FOREST DR	0.43	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	2	0	0	4	0.2500	Low	Low	3
	10390.2	CR 581 EXTENSION from FOREST DR to US 41	1.39	0.0	0.0	4.1	20.2	0.0096	0	0	0	0	0	0	0	2	2	0	0	4	0.2500	Low	Low	3
	71.1	CROFT AVE from STEVENS ST, E to HAYES RD	0.72	0.0	0.0	0.0	36.4	0.0123	0	0	0	1	0	0	1	2	1	1	0	4	0.2955	Low	Moderate	3
	71.2	CROFT AVE from HAYES RD to CR 486, W	0.41	0.0	0.0	0.0	100.0	0.0338	0	0	0	1	0	0	1	2	1	1	0	4	0.2955	Low	Moderate	3
	101	CROFT AVE from SR 44, E to STEVENS ST, E	2.00	0.0	0.0	0.0	21.1	0.0071	0	0	0	1	0	0	1	2	1	0	0	3	0.2330	Low	Low	3
	1050	CRYSTAL OAKS DR from ROCK CRUSHER RD, S to URBAN BOUNDARY	1.37	0.0	18.3	0.0	0.0	0.0407	0	0	0	1	0	0	1	2	1	1	0	4	0.2955	Low	Moderate	3

Hernando/Citrus MPO
Vulnerability Resiliency Assessment
Citrus County Roadways

Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)								
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
	1051	CRYSTAL OAKS DR from URBAN BOUNDARY to SR 44, W	0.39	0.0	0.0	0.0	0.0	0.0000	0	0	0	1	0	0	1	2	0	0	0	2	0.1705	Low	Low	3
	3012	DELTONA BLVD from CR 491, N to CITRUS SPRINGS BLVD, W	0.96	0.0	0.0	0.1	1.3	0.0005	0	1	0	0	0	0	1	2	2	0	0	4	0.2955	Low	Moderate	3
	3013	DELTONA BLVD from CITRUS SPRINGS BLVD, W to COUNRTY CLUB BLVD, W	1.69	0.0	0.0	0.0	20.3	0.0069	0	0	0	0	0	0	0	2	2	1	0	5	0.3125	Low	Moderate	3
	3025	DELTONA BLVD from COUNRTY CLUB BLVD, W to CITRUS SPRINGS BLVD, N	1.01	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	3026	DELTONA BLVD from CITRUS SPRINGS BLVD, N to RUTLAND DR, W	0.57	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	3028	DELTONA BLVD from RUTLAND DR, W to ELKCAM BLVD, N	0.86	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	3002	DUNKENFIELD AVE from SR 44, W to VENABLE ST, W	2.10	79.6	20.4	31.6	13.5	0.6093	0	0	0	0	0	0	0	2	0	1	1	4	0.2500	High	Low	2
	3005	DUNKLIN ST from CR 495, N to HUSKY AV,E, N	2.98	0.0	37.2	0.0	4.1	0.0843	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Moderate	Low	3
	3021	DUNKLIN ST from HUSKY AV,E, N to CITRUS SPRINGS BLVD	1.12	0.0	0.0	0.0	27.6	0.0093	0	0	0	0	0	0	0	0	1	0	0	1	0.0625	Low	Low	3
	170	EDEN DR from US 41, S to CARNEGIE DR, S	0.77	0.0	0.0	0.0	61.2	0.0207	0	1	0	0	0	0	1	2	0	1	1	4	0.2955	Low	Moderate	3
	89	ELKCAM BLVD from PINE RIDGE BLVD, W to HAMPSHIRE BLVD, W	1.47	0.0	0.0	0.0	0.0	0.0000	0	1	0	0	0	0	1	0	0	1	0	1	0.1080	Low	Low	3
	3008	ELKCAM BLVD from MUSTANG BLVD, W to PINE RIDGE BLVD, W	0.86	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	1	0	1	0	2	0.1250	Low	Low	3
	3015	ELKCAM BLVD from HAMPSHIRE BLVD, W to CITRUS SPRINGS BLVD, W	1.02	0.0	0.0	0.0	0.0	0.0000	0	1	0	0	0	0	1	0	0	0	0	0	0.0455	Low	Low	3
	3017	ELKCAM BLVD from CITRUS SPRINGS BLVD, W to CENTURY BLVD, W	1.23	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	0	1	0	0	1	0.0625	Low	Low	3
	3023	ELKCAM BLVD from CENTURY BLVD, W to CITRUS SPRINGS BLVD, N	0.87	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	1	1	0	0	2	0.1250	Low	Low	3
	3027	ELKCAM BLVD from CITRUS SPRINGS BLVD, N to DELTONA BLVD, N	1.19	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	3029	ELKCAM BLVD from DELTONA BLVD, N to CSX TRANSPORTATION RR	0.91	0.0	0.0	0.0	36.5	0.0123	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Low	Low	3
	10360	ELKCAM BLVD from CSX TRANSPORTATION RR to CR 488	1.23	0.0	0.0	0.0	13.9	0.0047	0	0	0	0	0	0	0	1	0	2	0	3	0.1875	Low	Low	3
4	3003	EMERALD OAKS DR from US 19, N to HOSPITAL ENTRANCE, E	0.20	100.0	0.0	100.0	0.0	0.7430	0	0	0	1	0	0	1	2	0	1	0	3	0.2330	High	Low	2
4	3004	EMERALD OAKS DR from HOSPITAL ENTRANCE, E to CR 495	2.68	74.9	25.1	13.7	8.0	0.5739	0	0	0	1	2	0	3	2	0	1	0	3	0.3239	High	Moderate	1
	63	ESSEX AVE from KELLER ST, W to CR 486, W	1.33	0.0	0.0	0.0	0.0	0.0000	0	0	0	1	0	0	1	1	1	0	0	2	0.1705	Low	Low	3
6	297	FISHBOWL DR from CR 490, S to CR 490A	2.03	100.0	0.0	100.0	0.0	0.7433	0	1	0	0	0	2	3	2	0	2	0	4	0.3864	High	Moderate	1
	10420	FOREST DR from CR 581 EXTENSION to INDEPENDENCE	0.83	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	2	0	0	4	0.2500	Low	Low	3
	93	FOREST RIDGE BLVD from CR 486, W to ROOSEVELT BLVD, W	0.87	0.0	0.0	0.0	0.0	0.0000	1	1	0	1	0	0	3	2	1	0	0	3	0.3239	Low	Moderate	3
	95.1	FOREST RIDGE BLVD from ROOSEVELT BLVD, W to URBAN BOUNDARY	0.92	0.0	0.0	4.0	22.8	0.0104	1	1	0	1	0	0	3	2	1	0	0	3	0.3239	Low	Moderate	3
	95.2	FOREST RIDGE BLVD from URBAN BOUNDARY to CR 491, N	1.28	0.0	0.0	0.0	43.5	0.0147	1	0	0	1	0	0	2	2	0	0	0	2	0.2159	Low	Low	3
	10500	FRESNO ST from QUINCE ST to KELLER ST	0.94	0.0	0.0	0.0	0.0	0.0000	0	0	0	1	0	0	1	2	0	0	0	2	0.1705	Low	Low	3
	10410	HAMPSHIRE BLVD from ELKCAM BLVD to CR 491	2.25	0.0	0.0	0.2	0.0	0.0001	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	10415	HAMPSHIRE BLVD from HAZELWOOD DR to ELKCAM BLVD	1.51	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Low	Low	3
	10145	HARTFORD ST from ESSEX AVE, N to CITRUS HILLS BLVD, N	0.41	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	10150	HARTFORD ST from CITRUS HILLS BLVD, N to ANNAPOLIS AVE, N	0.43	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	10155	HARTFORD ST from ANNAPOLIS AVE, N to STEVENS ST, E	1.14	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	10475	HIGHLAND BLVD from US 41 (FLORIDA AVE) to MONTGOMERY AVE	1.14	0.0	0.0	6.9	0.0	0.0046	0	1	0	0	0	0	1	2	2	2	0	6	0.4205	Low	Moderate	3
	10480	HIGHLAND BLVD from MONTGOMERY AVE to SOUTH BLVD	0.25	0.0	0.0	0.0	0.0	0.0000	0	1	0	0	0	0	1	2	2	2	0	6	0.4205	Low	Moderate	3
	10285	HIGHVIEW AVE from SR 44, W to QUINCE ST, W	1.13	0.0	0.0	0.0	71.5	0.0241	0	0	0	1	0	0	1	2	0	0	0	2	0.1705	Low	Low	3
	3037	HORACE ALLEN ST from MAYLEN AVE, S to CR 491	1.02	0.0	0.0	0.9	0.0	0.0006	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Low	Low	3
	10510	HOSKINS LN from CR 490 (HOMOSASSA TRAIL) to CR 491 (LECANTO HWY)	2.31	0.0	0.0	5.9	51.1	0.0212	0	0	0	0	0	0	0	2	2	2	0	6	0.3750	Low	Moderate	3
	1035	INDEPENDENCE HWY from SR 44, W to DAWSON DR, E	1.01	0.0	0.0	0.0	0.0	0.0000	0	0	0	1	0	0	1	2	0	0	0	2	0.1705	Low	Low	3
	1036	INDEPENDENCE HWY from ARLINGTON ST to PERRY ST, E	0.33	0.0	0.0	2.8	43.1	0.0164	0	0	0	1	0	0	1	1	0	0	0	1	0.1080	Low	Low	3
	1037	INDEPENDENCE HWY from DAWSON DR, E to ARLINGTON ST	0.74	0.0	0.0	0.0	0.0	0.0000	0	0	0	1	0	0	1	2	0	0	0	2	0.1705	Low	Low	3
	1038	INDEPENDENCE HWY from PERRY ST, E to US 41, N	0.32	0.0	0.0	0.0	26.3	0.0089	0	0	0	1	0	0	1	0	0	0	0	0	0.0455	Low	Low	3
	10160	KENSINGTON AVE from SR 44, W to REEHILL ST, E	1.39	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	10165	LEISURE BLVD from WHIPPOORWILL ST, W to CR 491, S	0.31	0.0	0.0	0.0	2.4	0.0008	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	10430	LEISURE BLVD from CARDINAL ST to WHIPPOORWILL ST, W	2.15	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	3036	MAYLEN AVE from LEE ANN LN to C.R. 486	2.07	0.0	0.0	4.4	0.0	0.0030	0	0	0	0	0	0	0	1	0	1	0	2	0.1250	Low	Low	3

Hernando/Citrus MPO
Vulnerability Resiliency Assessment
Citrus County Roadways

Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)								
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
	3001	MISS MAGGIE DR from US 19, S to HALO POINT, S	1.62	98.2	1.8	71.3	2.1	0.7164	0	1	0	0	2	0	3	0	0	1	0	1	0.1989	High	Low	2
	10425	MONTGOMERY from SR 44 to US 41	0.31	0.0	0.0	2.2	0.0	0.0015	1	1	0	0	0	0	2	2	2	2	0	6	0.4659	Low	Moderate	3
	3006.1	MUSTANG BLVD from ELKCAM BLVD, N to BONANZA DR, W	1.43	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	1	0	1	0	2	0.1250	Low	Low	3
	3006.2	MUSTANG BLVD from BONANZA DR, W to PINE RIDGE BLVD, W	1.68	0.0	0.0	0.0	26.0	0.0088	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Low	Low	3
	3007.1	MUSTANG BLVD from CR 491, N to AXELWOOD DR, W	0.75	0.0	0.0	2.6	0.0	0.0017	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
	3007.2	MUSTANG BLVD from AXELWOOD DR, W to ELKCAM BLVD, N	0.58	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	1	0	2	0	3	0.1875	Low	Low	3
	10175	NORTHCUT AVE from RIVERWOOD DR, W to CR 488, W	1.34	0.0	100.0	0.0	13.2	0.2274	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Moderate	Low	3
	10050	OLD FLORAL CITY RD from CR 48, E to CR 39A, E	2.22	0.0	0.0	10.6	2.4	0.0080	0	1	0	0	0	0	1	2	1	0	0	3	0.2330	Low	Low	3
	10055	OLD FLORAL CITY RD from CR 39A, E to SANDPIPER DR, E	1.98	0.0	0.0	22.7	31.7	0.0261	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	10060	OLD FLORAL CITY RD from SANDPIPER DR, E to CARNEGIE DR, S	0.83	0.0	0.0	33.6	87.8	0.0524	0	0	0	0	0	0	0	2	0	1	1	4	0.2500	Moderate	Low	3
	10065	OLD FLORAL CITY RD from CARNEGIE DR, S to EDEN DR, E	0.88	0.0	0.0	3.3	60.6	0.0227	0	0	0	0	0	0	0	2	0	1	1	4	0.2500	Low	Low	3
	10195	OTTAWA AVE from NORWAY LN, W to CR 486	1.19	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	10395	OTTAWA AVE/QUARTZ/OTIS from SR 44 to NORWAY LN, W	1.67	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	10465	OVERDRIVE CIR from ANTHONY AVE to US 41	1.70	0.0	0.0	1.8	52.2	0.0189	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Low	Low	3
	83	PINE RIDGE BLVD from CR 491, N to ELKCAM BLVD, N	2.08	0.0	0.0	2.9	0.0	0.0019	0	1	0	0	0	0	1	2	0	2	0	4	0.2955	Low	Moderate	3
	343	PINE RIDGE BLVD from MUSTANG BLVD, W to CR 486, W	1.04	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	3009.1	PINE RIDGE BLVD from ELKCAM BLVD, N to MOCK ORANGE DR	0.68	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	1	0	1	0	2	0.1250	Low	Low	3
	3009.2	PINE RIDGE BLVD from MOCK ORANGE DR to MUSTANG BLVD, W	4.39	0.0	0.0	0.5	20.4	0.0072	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
1	10495	POWER LINE from US 19 to POWER PLANT	3.90	100.0	0.0	98.2	4.9	0.7436	0	0	0	0	0	2	2	2	0	1	1	4	0.3409	High	Moderate	1
	10505	REEHILL ST from KENSINGTON AVE to CITRUS HILLS BLVD	0.44	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
1	10200	RIVER RD from US 19, N to CARIBEE POINT, N	2.80	99.8	0.2	74.1	51.6	0.7423	0	0	0	0	0	2	2	2	0	2	0	4	0.3409	High	Moderate	1
	10205	RIVERBEND DR from CITRUS AVE, N to CR 488, N	3.52	0.0	29.2	0.0	14.0	0.0699	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Moderate	Low	3
	10215	RIVERWOOD RD from BASSWOOD AVE, N to NORTHCUT AVE, N	3.91	0.0	100.0	0.0	8.1	0.2257	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Moderate	Low	3
	10435	ROCK CRUSHER EXTENSION from CARDINAL ST to GROVER CLEVELAND BLVD	2.76	0.0	0.0	0.7	0.0	0.0004	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	10440	ROCK CRUSHER EXTENSION from GROVER CLEVELAND BLVD to CR 490	1.50	0.0	0.0	0.0	5.4	0.0018	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	323	ROCK CRUSHER RD from CR 490, W to VENABLE ST	2.72	2.8	61.1	0.0	8.2	0.1577	0	0	0	1	0	0	1	2	1	1	1	5	0.3580	Moderate	Moderate	2
	325	ROCK CRUSHER RD from VENABLE ST to SR 44, W	1.13	29.0	71.0	0.0	0.0	0.3541	0	0	0	1	0	0	1	2	1	1	0	4	0.2955	Moderate	Moderate	2
	10220	ROOSEVELT BLVD from CR 491, N to FOREST RIDGE BLVD, N	1.78	0.0	0.0	3.4	0.0	0.0023	0	1	0	0	0	0	1	2	1	2	0	5	0.3580	Low	Moderate	3
	10530	S LINE RD from S.R. 44 to SOUTHERN ST	0.27	0.0	0.0	0.0	40.9	0.0138	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	10485	SOUTH BLVD from HIGHLAND BLVD to TUTTLE ST	0.13	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	2	1	0	5	0.3125	Low	Moderate	3
	10535	SOUTHERN ST from S.R. 44 to S LINE RD	0.92	0.0	0.0	4.2	86.5	0.0320	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	11.1	SR 200 (CARL G ROSE HWY) from CR 491, N to CR 39, E	1.07	0.0	0.0	0.0	11.7	0.0040	1	0	0	2	2	0	5	0	0	0	1	1	0.2898	Low	Moderate	3
	11.2	SR 200 (CARL G ROSE HWY) from CR 39, E to MARION COUNTY LINE	0.18	0.0	0.0	22.0	0.0	0.0149	1	0	0	2	0	2	5	0	0	0	1	1	0.2898	Low	Moderate	3
	61.1	SR 200 (CARL G ROSE HWY) from US 41, N to PALMER WAY	4.29	0.0	0.0	0.1	41.0	0.0140	0	1	0	2	2	0	5	0	1	1	0	2	0.3523	Low	Moderate	3
	61.2	SR 200 (CARL G ROSE HWY) from PALMER WAY to CR 491, N	1.06	0.0	0.0	0.0	54.9	0.0186	0	0	0	2	2	0	4	0	0	0	1	1	0.2443	Low	Low	3
	80	SR 44 (GULF TO LAKE HWY) from COUNTY LANDFILL to KENSINGTON AVE, S	1.23	0.0	0.0	0.0	13.7	0.0046	1	1	2	2	2	0	8	2	0	1	0	3	0.5511	Low	High	2
	90	SR 44 (GULF TO LAKE HWY) from KENSINGTON AVE, S to CROFT AVE, S	2.04	0.0	0.0	0.0	45.2	0.0153	2	1	2	2	2	0	9	2	0	1	0	3	0.5966	Low	High	2
	130	SR 44 (GULF TO LAKE HWY) from US 41 to CR 470, E	3.50	0.0	0.0	0.0	31.5	0.0106	1	0	2	2	2	0	7	2	2	2	0	6	0.6932	Low	High	2
	150.1	SR 44 (GULF TO LAKE HWY) from CR 470, E to SHAD TERR, S	0.65	0.0	0.0	0.0	37.0	0.0125	1	0	2	2	2	0	7	0	0	1	0	1	0.3807	Low	Moderate	3
	150.2	SR 44 (GULF TO LAKE HWY) from SHAD TERR, S to LITTLE JOHN AVE, S	1.18	0.0	0.0	0.0	0.0	0.0000	1	0	2	2	2	0	7	0	0	1	0	1	0.3807	Low	Moderate	3
	160	SR 44 (GULF TO LAKE HWY) from LITTLE JOHN AVE, S to SUMTER COUNTY LINE	1.43	0.0	0.0	3.5	27.0	0.0115	1	0	2	2	2	2	9	0	0	0	0	0	0.4091	Low	Moderate	3
	320	SR 44 (GULF TO LAKE HWY) from CR 490, W to CR 491, N	0.49	0.0	0.0	0.0	32.2	0.0109	1	0	2	2	2	0	7	1	0	1	0	2	0.4432	Low	Moderate	3
	322	SR 44 (GULF TO LAKE HWY) from CR 491, N to COUNTY LANDFILL	2.97	0.0	0.0	0.0	47.1	0.0159	1	1	2	2	2	0	8	2	0	1	0	3	0.5511	Low	High	2
	331.1	SR 44 (GULF TO LAKE HWY) from ROCK CRUSHER RD, N to CRYSTAL OAKS	2.02	0.6	14.3	0.0	0.0	0.0360	1	0	2	2	2	0	7	2	0	1	0	3	0.5057	Low	High	2
	331.2	SR 44 (GULF TO LAKE HWY) from CRYSTAL OAKS to SUNCOAST PKWY	0.13	0.0	0.0	0.0	0.0	0.0000	1	0	2	2	2	0	7	2	0	0	0	2	0.4432	Low	Moderate	3

Hernando/Citrus MPO
Vulnerability Resiliency Assessment
Citrus County Roadways

Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)								
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
	331.3	SR 44 (GULF TO LAKE HWY) from SUNCOAST PKWY to CR 490, W	1.23	0.0	0.0	0.0	15.9	0.0054	1	0	2	2	2	0	7	2	0	1	0	3	0.5057	Low	High	2
5	340	SR 44 (GULF TO LAKE HWY) from US 19, N to TURKEY OAK DR, N	0.99	100.0	0.0	100.0	0.0	0.7432	1	1	2	2	2	0	8	2	0	2	0	4	0.6136	High	High	1
5	341	SR 44 (GULF TO LAKE HWY) from CR 486, W to ROCK CRUSHER RD, N	1.06	100.0	0.0	14.3	0.0	0.6852	1	1	2	2	2	0	8	2	0	1	0	3	0.5511	High	High	1
5	351	SR 44 (GULF TO LAKE HWY) from TURKEY OAK DR, N to CR 486, W	1.39	100.0	0.0	66.8	0.0	0.7208	1	1	2	2	2	0	8	2	0	0	0	2	0.4886	High	Moderate	1
	1023	SR 44 (GULF TO LAKE HWY) from CROFT AVE, S to INDEPENDENCE HWY	1.40	0.0	0.0	0.0	14.1	0.0048	1	1	2	2	2	0	8	2	0	0	0	2	0.4886	Low	Moderate	3
	100	SR 44 (MAIN ST) from CR 581, S to US 41	0.82	0.0	0.0	0.0	0.0	0.0000	1	1	2	2	2	0	8	2	2	2	0	6	0.7386	Low	High	2
	1022	SR 44 (MAIN ST) from INDEPENDENCE HWY to CR 581, S	0.94	0.0	0.0	0.0	0.0	0.0000	1	1	2	2	2	0	8	2	2	0	0	4	0.6136	Low	High	2
	10240	STEVEN ST from HARTFORD ST, E to CROFT, ST, N	1.00	0.0	0.0	0.0	9.9	0.0034	0	0	0	0	0	0	0	2	1	0	0	3	0.1875	Low	Low	3
	10320	SUNCOAST PARKWAY 2 from US 98 to CARDINAL ST	5.17	0.0	0.0	0.0	32.2	0.0109	0	0	2	2	2	0	6	2	0	1	0	3	0.4602	Low	Moderate	3
	10325	SUNCOAST PARKWAY 2 from CARDINAL ST to SR 44	7.38	0.0	0.0	1.4	13.6	0.0056	0	0	2	2	2	0	6	2	0	0	0	2	0.3977	Low	Moderate	3
	10325	SUNCOAST PARKWAY 2 from SR 44 to CR 486	7.38	0.0	0.0	1.4	13.6	0.0056	0	0	2	2	2	0	6	2	0	0	0	2	0.3977	Low	Moderate	3
4	1046.1	TURKEY OAK DR from CRYSTAL RIVER CITY LIMITS (W) to SR 44	2.09	93.5	6.5	48.1	0.0	0.6789	0	0	0	1	0	0	1	2	0	2	0	4	0.2955	High	Moderate	1
4	1047	TURKEY OAK DR from CR 495, N to CRYSTAL RIVER CITY LIMITS (W)	0.31	100.0	0.0	100.0	0.0	0.7434	0	0	0	1	0	0	1	0	0	2	0	2	0.1705	High	Low	2
4	1048	TURKEY OAK DR from CRYSTAL RIVER CITY LIMITS (E) to CR 495, N	0.51	100.0	0.0	100.0	0.0	0.7431	0	0	0	1	0	0	1	1	0	2	0	3	0.2330	High	Low	2
4	1049	TURKEY OAK DR from US 19, N to CRYSTAL RIVER CITY LIMITS (E)	0.37	100.0	0.0	100.0	0.0	0.7433	0	0	0	0	0	0	0	1	0	1	0	2	0.1250	High	Low	2
	10490	TUTTLE ST from SOUTH BLVD to CR 581 (PLEASANT GROVE RD)	0.24	0.0	0.0	0.0	0.0	0.0000	0	0	0	0	0	0	0	2	2	1	0	5	0.3125	Low	Moderate	3
7	251	US 19 (SUNCOAST BLVD) from MERRIVALE LN, W to US 98/ MS MAGGIE DR, W	0.95	100.0	0.0	35.0	0.0	0.6994	1	1	2	2	2	0	8	0	0	1	0	1	0.4261	High	Moderate	1
7	253	US 19 (SUNCOAST BLVD) from HERNANDO CO. LINE to MERRIVALE LN, W	1.31	96.8	3.3	0.0	39.3	0.6742	1	0	2	2	2	0	7	0	0	1	0	1	0.3807	High	Moderate	1
7	261	US 19/US 98 (SUNCOAST BLVD) from US 98/ MS MAGGIE DR, W to DES MOINES LA, W	1.20	100.0	0.0	10.5	0.0	0.6828	1	1	2	2	2	0	8	0	0	0	0	0	0.3636	High	Moderate	1
7	281	US 19/US 98 (SUNCOAST BLVD) from CR 490/YULEE DR to CR 490A/G. CLEVELD BLVD, W	0.39	100.0	0.0	100.0	0.0	0.7434	1	1	0	2	2	0	6	2	0	1	0	3	0.4602	High	Moderate	1
7	291.1	US 19/US 98 (SUNCOAST BLVD) from CR 490A/G. CLEVELD BLVD, W to CR 490	0.12	100.0	0.0	100.0	0.0	0.7431	1	1	0	2	2	0	6	2	0	1	0	3	0.4602	High	Moderate	1
7	291.2	US 19/US 98 (SUNCOAST BLVD) from CR 490 to JUMP CT / STONEBROOKE DR	0.69	100.0	0.0	100.0	0.0	0.7433	1	1	0	2	2	0	6	2	0	1	0	3	0.4602	High	Moderate	1
5	361	US 19/US 98 (SUNCOAST BLVD) from CR 44, W to SR 44	1.13	100.0	0.0	100.0	0.0	0.7433	1	1	2	2	2	0	8	2	0	2	0	4	0.6136	High	High	1
5	370	US 19/US 98 (SUNCOAST BLVD) from SR 44 to CR 495, N	0.43	100.0	0.0	100.0	0.0	0.7434	1	1	2	2	2	0	8	2	0	2	0	4	0.6136	High	High	1
5	373.1	US 19/US 98 (SUNCOAST BLVD) from CR 495, N to 19TH ST/TURKEY OAK DR, N	1.39	100.0	0.0	100.0	0.0	0.7433	1	1	2	2	2	0	8	2	0	2	0	4	0.6136	High	High	1
2	373.2	US 19/US 98 (SUNCOAST BLVD) from 19TH ST/TURKEY OAK DR, N to STATE PARK ST, W	0.48	100.0	0.0	100.0	0.0	0.7431	1	0	2	2	2	0	7	1	0	0	0	1	0.3807	High	Moderate	1
2	373.3	US 19/US 98 (SUNCOAST BLVD) from STATE PARK ST, W to ASHBURN LN , W	0.26	100.0	0.0	100.0	0.0	0.7434	1	0	2	2	2	0	7	1	0	0	0	1	0.3807	High	Moderate	1
2	411	US 19/US 98 (SUNCOAST BLVD) from BASSWOOD AVE, N to LEVY COUNTY LINE	4.43	33.1	64.1	5.7	38.9	0.3838	0	0	2	2	2	2	8	2	0	1	0	3	0.5511	Moderate	High	1
7	1000	US 19/US 98 (SUNCOAST BLVD) from CYPRESS BLVD, W to BURNT RIDGE RD, W	0.17	100.0	0.0	0.0	0.0	0.6759	1	1	2	2	2	0	8	0	0	0	0	0	0.3636	High	Moderate	1
7	1001	US 19/US 98 (SUNCOAST BLVD) from DES MOINES LA, W to CYPRESS BLVD, W	0.22	100.0	0.0	0.0	0.0	0.6760	1	1	2	2	2	0	8	0	0	0	0	0	0.3636	High	Moderate	1
7	1002	US 19/US 98 (SUNCOAST BLVD) from BURNT RIDGE RD, W to CARDINAL ST, W	1.26	100.0	0.0	32.4	46.6	0.7133	1	1	2	2	2	0	8	0	0	0	0	0	0.3636	High	Moderate	1
7	1003	US 19/US 98 (SUNCOAST BLVD) from CARDINAL ST, W to SUNNY DAYS S/C	1.54	94.6	5.4	12.7	0.0	0.6600	1	1	2	2	2	0	8	1	0	0	0	1	0.4261	High	Moderate	1
7	1004.1	US 19/US 98 (SUNCOAST BLVD) from GREEN ACRES ST, W to BRADSHAW ST, W	0.33	100.0	0.0	45.2	0.0	0.7063	1	1	2	2	2	0	8	2	0	1	0	3	0.5511	High	High	1
7	1004.2	US 19/US 98 (SUNCOAST BLVD) from BRADSHAW ST, W to CR 490/YULEE DR	0.53	100.0	0.0	67.0	0.0	0.7210	1	1	2	2	2	0	8	2	0	1	0	3	0.5511	High	High	1
7	1005	US 19/US 98 (SUNCOAST BLVD) from SUNNY DAYS S/C to GREEN ACRES ST, W	0.50	100.0	0.0	53.5	0.0	0.7119	1	1	2	2	2	0	8	2	0	0	0	2	0.4886	High	Moderate	1
7	1006	US 19/US 98 (SUNCOAST BLVD) from LONGFELLOW ST, W to HIGHLAND ST, W	1.39	100.0	0.0	70.7	0.0	0.7235	1	1	2	2	2	0	8	0	0	0	0	0	0.3636	High	Moderate	1
7	1007	US 19/US 98 (SUNCOAST BLVD) from JUMP CT / STONEBROOKE DR to LONGFELLOW ST, W	0.96	100.0	0.0	100.0	0.0	0.7433	1	1	2	2	2	0	8	0	0	1	0	1	0.4261	High	Moderate	1
7	1008	US 19/US 98 (SUNCOAST BLVD) from HIGHLAND ST, W to CR 494, W	0.44	100.0	0.0	100.0	0.0	0.7434	1	1	2	2	2	0	8	0	0	1	1	2	0.4886	High	Moderate	1
7	1009	US 19/US 98 (SUNCOAST BLVD) from CR 494, W to VENABLE ST, W	0.58	100.0	0.0	100.0	0.0	0.7433	1	1	2	2	2	0	8	0	0	1	1	2	0.4886	High	Moderate	1
5	1010	US 19/US 98 (SUNCOAST BLVD) from VENABLE ST, W to LOPEZ LN	0.67	100.0	0.0	100.0	0.0	0.7432	1	1	2	2	2	0	8	1	0	1	1	3	0.5511	High	High	1
2	1011	US 19/US 98 (SUNCOAST BLVD) from EMERALD OAKS DR, W to POWERLINE ST, W	0.51	100.0	0.0	70.6	0.0	0.7233	1	0	2	2	2	0	7	2	0	1	0	3	0.5057	High	High	1
2	1012.1	US 19/US 98 (SUNCOAST BLVD) from ASHBURN LN , W to WATERGATE LN, W	0.85	100.0	0.0	100.0	0.0	0.7432	1	0	2	2	2	0	7	2	0	0	0	2	0.4432	High	Moderate	1
2	1012.2	US 19/US 98 (SUNCOAST BLVD) from WATERGATE LN, W to EMERALD OAKS DR, W	1.38	100.0	0.0	100.0	0.0	0.7432	1	0	2	2	2	0	7	2	0	1	0	3	0.5057	High	High	1
2	1013	US 19/US 98 (SUNCOAST BLVD) from CR 488, W to BASSWOOD AVE, N	0.28	100.0	0.0	0.0	50.7	0.6930	0	0	2	2	2	0	6	0	0	0	0	0	0.2727	High	Moderate	1
2	1014	US 19/US 98 (SUNCOAST BLVD) from POWERLINE ST, W to CR 488, W	0.79	100.0	0.0	0.0	0.0	0.6757	1	0	2	2	2	0	7	0	0	1	0	1	0.3807	High	Moderate	1

Hernando/Citrus MPO
Vulnerability Resiliency Assessment
Citrus County Roadways

Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)								
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
5	1010A	US 19/US 98 (SUNCOAST BLVD) from LOPEZ LN to CR 44, W	0.60	100.0	0.0	100.0	0.0	0.7431	1	1	2	2	2	0	8	2	0	1	1	4	0.6136	High	High	1
	23	US 41 (FLORIDA AVE) from CR 488, W to MARION COUNTY LINE	0.56	0.0	8.0	9.2	0.0	0.0240	1	0	0	2	2	2	7	2	0	2	0	4	0.5682	Low	High	2
	31	US 41 (FLORIDA AVE) from CR 491, N to CITRUS SPRINGS BLVD, W	1.07	0.0	0.0	0.0	0.0	0.0000	1	0	0	2	2	0	5	2	2	0	0	4	0.4773	Low	Moderate	3
	41	US 41 (FLORIDA AVE) from SR 200, N to CR 491, N	5.40	0.0	0.0	0.4	41.2	0.0142	0	0	0	2	2	0	4	1	2	1	0	4	0.4318	Low	Moderate	3
	51	US 41 (FLORIDA AVE) from CR 486, W to SR 200, N	0.33	0.0	0.0	0.0	0.0	0.0000	1	1	0	2	2	0	6	0	1	1	0	2	0.3977	Low	Moderate	3
	55	US 41 (FLORIDA AVE) from VAN NESS RD, E to CR 486, W	0.86	0.0	0.0	0.0	0.0	0.0000	1	1	0	2	2	0	6	0	1	1	0	2	0.3977	Low	Moderate	3
	121.2	US 41 (FLORIDA AVE) from CR 581 EXTENSION to ARLINGTON ST, E	0.67	0.0	0.0	0.0	0.0	0.0000	1	1	0	2	2	0	6	1	0	0	0	1	0.3352	Low	Moderate	3
	121.3	US 41 (FLORIDA AVE) from SR 44 to MONTGOMERY	0.40	0.0	0.0	12.8	0.0	0.0087	1	0	0	2	2	0	5	2	2	2	0	6	0.6023	Low	High	2
	121.4	US 41 (FLORIDA AVE) from WITHLACOOCHEE TRAIL BRIDGE to CR 581 EXTENSION	1.00	0.0	0.0	2.2	0.0	0.0015	1	1	0	2	2	0	6	2	2	2	0	6	0.6477	Low	High	2
	121.4	US 41 (FLORIDA AVE) from MONTGOMERY to WITHLACOOCHEE TRAIL BRIDGE	1.03	0.0	0.0	3.6	0.0	0.0024	1	1	0	2	2	0	6	2	2	2	0	6	0.6477	Low	High	2
	141	US 41 (FLORIDA AVE) from RELIEF ST, E to SR 44	0.39	0.0	0.0	2.5	0.0	0.0017	1	1	0	2	2	0	6	2	2	2	0	6	0.6477	Low	High	2
	151.1	US 41 (FLORIDA AVE) from CR 48, E to FLORAL CITY BYPASS (N)	1.50	0.0	0.0	0.0	0.0	0.0000	0	1	0	2	2	0	5	2	1	0	0	3	0.4148	Low	Moderate	3
	151.2	US 41 (FLORIDA AVE) from FLORAL CITY BYPASS (N) to CR 39A , E	0.72	0.0	0.0	0.0	0.0	0.0000	0	1	0	2	2	0	5	2	0	0	0	2	0.3523	Low	Moderate	3
	161	US 41 (FLORIDA AVE) from CR 480, E to CR 48, E	1.34	0.0	0.0	0.0	18.4	0.0062	0	1	0	2	2	0	5	2	1	1	0	4	0.4773	Low	Moderate	3
	171.1	US 41 (FLORIDA AVE) from OAK FOREST to FLORAL CITY BYPASS (S)	1.41	0.0	0.0	0.0	80.4	0.0272	0	0	0	2	2	0	4	2	0	0	0	2	0.3068	Low	Moderate	3
	171.2	US 41 (FLORIDA AVE) from FLORAL PARK DR, E to CR 480, E	0.52	0.0	0.0	0.0	0.0	0.0000	0	0	0	2	2	0	4	2	0	1	0	3	0.3693	Low	Moderate	3
	171.3	US 41 (FLORIDA AVE) from HERNANDO CO. LINE to OAK FOREST	1.39	0.0	0.0	0.0	54.9	0.0186	0	0	0	2	2	0	4	0	0	0	0	0	0.1818	Low	Low	3
	171.5	US 41 (FLORIDA AVE) from FLORAL CITY BYPASS (S) to FLORAL PARK DR, E	1.59	0.0	0.0	0.0	8.4	0.0028	0	0	0	2	2	0	4	2	0	1	0	3	0.3693	Low	Moderate	3
	1016.1	US 41 (FLORIDA AVE) from CITRUS SPRINGS BLVD, N to CR 39	1.29	0.0	0.0	0.0	0.0	0.0000	1	0	0	2	2	0	5	2	0	0	0	2	0.3523	Low	Moderate	3
	1016.2	US 41 (FLORIDA AVE) from CR 39 to CR 488, W	1.06	0.0	0.0	0.0	0.0	0.0000	1	0	0	2	2	0	5	2	0	2	0	4	0.4773	Low	Moderate	3
	1020	US 41 (FLORIDA AVE) from COUNTRY CLUB BLVD, W to CITRUS SPRINGS BLVD, N	1.21	0.0	0.0	0.0	3.7	0.0012	1	0	0	2	2	0	5	2	0	0	0	2	0.3523	Low	Moderate	3
	1021	US 41 (FLORIDA AVE) from CITRUS SPRINGS BLVD, W to COUNTRY CLUB BLVD, W	1.64	0.0	0.0	0.0	0.0	0.0000	1	0	0	2	2	0	5	2	2	0	0	4	0.4773	Low	Moderate	3
	1028	US 41 (FLORIDA AVE) from EDEN DR to RELIEF ST, E	0.41	0.0	0.0	15.5	0.0	0.0105	1	1	0	2	2	0	6	2	0	2	1	5	0.5852	Low	High	2
	1029	US 41 (FLORIDA AVE) from INVERNESS BLVD, E to EDEN DR	0.35	0.0	0.0	0.0	0.0	0.0000	1	1	0	2	2	0	6	2	0	1	1	4	0.5227	Low	High	2
	1030.1	US 41 (FLORIDA AVE) from STONERIDGE DR, S to FORT COOPER RD, E	1.02	0.0	0.0	0.0	53.2	0.0180	0	1	0	2	2	0	5	2	0	0	0	2	0.3523	Low	Moderate	3
	1030.2	US 41 (FLORIDA AVE) from FORT COOPER RD, E to INVERNESS BLVD, E	1.56	0.0	0.0	0.0	68.8	0.0233	0	1	0	2	2	0	5	2	0	1	1	4	0.4773	Low	Moderate	3
	1032	US 41 (FLORIDA AVE) from CR 39A , E to STONERIDGE DR, S	0.24	0.0	0.0	0.0	0.0	0.0000	0	1	0	2	2	0	5	2	0	0	0	2	0.3523	Low	Moderate	3
	1043	US 41 (FLORIDA AVE) from INDEPENDENCE HWY, N to VAN NESS RD, E	0.70	0.0	0.0	0.0	0.0	0.0000	1	1	0	2	2	0	6	0	0	1	0	1	0.3352	Low	Moderate	3
	1044	US 41 (FLORIDA AVE) from ARLINGTON ST, E to INDEPENDENCE HWY, N	0.60	0.0	0.0	0.0	0.0	0.0000	1	1	0	2	2	0	6	1	0	0	0	1	0.3352	Low	Moderate	3
	131.1	US 41/SR 44 (MAIN ST) from SR 44 to PARK AVE	0.23	0.0	0.0	0.0	0.0	0.0000	1	1	2	2	2	0	8	2	2	2	0	6	0.7386	Low	High	2
	131.2	US 41/SR 44 (MAIN ST) from PARK AVE to CR 470	0.13	0.0	0.0	22.3	0.0	0.0150	1	1	2	2	2	0	8	1	2	2	0	5	0.6761	Low	High	2
	131.3	US 41/SR 44 (MAIN ST) from CR 470 to SEMINOLE AVE, N	0.13	0.0	0.0	0.0	0.0	0.0000	2	1	2	2	2	0	9	2	2	2	0	6	0.7841	Low	High	2
	131.4	US 41/SR 44 (MAIN ST) from SEMINOLE AVE, N to US 41, N	0.41	0.0	0.0	0.8	0.0	0.0005	2	1	2	2	2	0	9	2	2	2	0	6	0.7841	Low	High	2
	260.1	US 98/SR 700 (PONCE DE LEON BLVD) from HERNANDO CO. LINE to URBAN BOUNDARY	1.23	0.0	0.0	0.0	56.4	0.0191	0	0	2	2	2	0	6	0	0	0	0	0	0.2727	Low	Moderate	3
	260.2	US 98/SR 700 (PONCE DE LEON BLVD) from URBAN BOUNDARY to OAK VILLAGE BLVD, S	1.19	0.0	2.0	0.0	0.0	0.0045	0	0	2	2	2	0	6	0	0	0	0	0	0.2727	Low	Moderate	3
	270	US 98/SR 700 (PONCE DE LEON BLVD) from OAK VILLAGE BLVD, S to US 19, S	1.41	50.7	49.3	0.0	0.0	0.4523	0	0	2	2	2	0	6	0	0	0	0	0	0.2727	Moderate	Moderate	2
4	352	VENABLE ST from US 19, S to DUNKENFIELD AVE, N	1.85	88.1	11.9	56.4	0.0	0.6598	0	0	0	1	0	0	1	2	0	1	2	5	0.3580	High	Moderate	1
4	354	VENABLE ST from DUNKENFIELD AVE, N to ROCK CRUSHER RD, S	0.75	67.2	32.8	0.0	0.0	0.5271	0	0	0	1	0	0	1	2	1	1	1	5	0.3580	High	Moderate	1
	10445.2	WATSON ST from APOPKA AVE to US 41	1.62	0.0	0.0	8.8	51.7	0.0234	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3

*Vulnerability score formula is (1*percent corridor in cat 1/2 storm surge area + 0.33*percent corridor in cat 3/4/5 storm surge area + 0.1*percent corridor in flood zone + 0.05*percent corridor in fire risk area)/148 reuslting in a possible score between 0 and 1.

**Criticality score formula is 0.5*(Critical Transportation Score/11) + 0.5*(Critical Facility Access/8) resulting in a possible score between 0 and 1.

Scores falling within the moderate range for vulnerability and criticality. Also indicates overall Tier 2 values for segements

Scores falling within the high range for vulnerability and criticality. Also indicates overall Tier 1 values for segements

Indicates non-zero values for vulnerability and criticality measures.

Hernando/Citrus MPO
Vulnerability Resiliency Assessment
Hernando County Roadways

Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)								
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
	20665	AERIAL WAY from CORPORATE BLVD to SPRING HILL DR	0.78	0.00	0.00	5.10	0.00	0.0034	0	0	0	0	0	0	0	2	2	1	0	5	0.3125	Low	Moderate	3
	10000	ANDERSON SNOW RD from COUNTY LINE RD to AMERO LN	1.75	0.00	0.00	2.53	8.87	0.0047	1	0	0	1	0	0	2	2	0	0	0	2	0.2159	Low	Low	3
	10010	ANDERSON SNOW RD from AMERO LN to INDUSTRIAL LP	1.10	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	0	0	2	2	0	0	0	2	0.2159	Low	Low	3
	10020	ANDERSON SNOW RD from INDUSTRIAL LP to SPRING HILL DR	0.35	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	0	0	2	2	0	0	0	2	0.2159	Low	Low	3
	1110	AYERS RD from BROAD ST (US41/SR45) to CULBREATH RD	4.96	0.00	0.00	0.00	0.00	0.0000	0	0	0	1	2	0	3	0	0	2	0	2	0.2614	Low	Moderate	3
	20050	AYERS RD from COUNTY LINE RD to BROAD ST (US41/SR45)	2.61	0.00	0.00	0.00	26.60	0.0090	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
	10030	BARCLAY RD from SPRING HILL DR to POWELL RD	0.97	0.00	0.00	5.06	0.00	0.0034	1	0	0	1	0	0	2	2	1	0	0	3	0.2784	Low	Moderate	3
	10040	BARCLAY RD from POWELL RD to SAN ANTONIO RD	1.04	0.00	0.00	9.22	0.00	0.0062	1	0	0	1	0	0	2	1	1	0	0	2	0.2159	Low	Low	3
	10050.1	BARCLAY RD from SAN ANTONIO RD to LUCKY LN	1.63	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	0	0	2	1	0	2	0	3	0.2784	Low	Moderate	3
	10050.2	BARCLAY RD from LUCKY LN to CORTEZ BLVD (SR50)	0.28	0.00	0.00	0.96	0.00	0.0006	1	0	0	1	0	0	2	1	0	2	0	3	0.2784	Low	Moderate	3
	20180	BARTLETT ST from NORBERT ST to TOUCAN TRL	0.12	0.00	0.00	23.33	0.00	0.0158	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
	20460.1	BOURASSA BLVD from US19 (SR55) to BLANKS ST	1.41	0.00	76.38	7.98	23.49	0.1836	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Moderate	Low	3
	20460.2	BOURASSA BLVD from BLANKS ST to WEEPING WILLOW ST	1.01	0.00	19.83	0.00	4.12	0.0456	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	20230	BREDA BLVD from ANDERSON SNOW RD to CORPORATE BLVD	0.07	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	10060	BROAD ST (US41/SR45) from COUNTY LINE RD to AYERS RD	1.37	0.00	0.00	2.94	0.00	0.0020	1	0	0	2	2	0	5	1	0	2	0	3	0.4148	Low	Moderate	3
	10070.1	BROAD ST (US41/SR45) from AYERS RD to SGT LEA MILLS BLVD	0.36	0.00	0.00	0.00	0.00	0.0000	1	0	0	2	2	0	5	0	0	2	0	2	0.3523	Low	Moderate	3
	10070.2	BROAD ST (US41/SR45) from SGT LEA MILLS BLVD to SPRING HILL DR	1.89	0.00	0.00	9.00	0.00	0.0061	1	0	0	2	2	0	5	2	0	2	1	5	0.5398	Low	High	2
	10080	BROAD ST (US41/SR45) from SPRING HILL DR to POWELL RD	0.86	0.00	0.00	17.97	0.00	0.0121	1	0	0	2	2	0	5	2	0	1	1	4	0.4773	Low	Moderate	3
	10090	BROAD ST (US41/SR45) from POWELL RD to PINE CABIN RD	1.08	0.00	0.00	64.06	0.00	0.0433	1	0	0	2	2	0	5	2	0	0	0	2	0.3523	Low	Moderate	3
	10100	BROAD ST (US41/SR45) from PINE CABIN RD to HENNES COVE	0.36	0.00	0.00	0.00	0.00	0.0000	1	0	0	2	2	0	5	2	0	0	0	2	0.3523	Low	Moderate	3
	10110.1	BROAD ST (US41/SR45) from HENNES COVE to JOHN MARTIN LN	0.20	0.00	0.00	0.00	0.00	0.0000	1	0	0	2	2	0	5	0	0	0	0	0	0.2273	Low	Low	3
	10110.2	BROAD ST (US41/SR45) from JOHN MARTIN LN to VFW RD	1.25	0.00	0.00	0.00	0.00	0.0000	1	0	0	2	2	0	5	1	0	1	0	2	0.3523	Low	Moderate	3
	10115	BROAD ST (US41/SR45) from VFW RD to WISCON RD	0.28	0.00	0.00	0.00	0.00	0.0000	1	0	0	2	2	0	5	2	0	1	0	3	0.4148	Low	Moderate	3
	10120	BROAD ST (US41/SR45) from WISCON RD to CORTEZ BLVD (SR50)	0.47	0.00	0.00	0.00	0.00	0.0000	1	1	0	2	2	0	6	2	0	2	0	4	0.5227	Low	High	2
	10130	BROAD ST (US41/SR45) from CORTEZ BLVD (SR50) to WINN DIXIE PLAZA	0.17	0.00	0.00	26.54	0.00	0.0179	1	1	0	2	2	0	6	2	0	2	0	4	0.5227	Low	High	2
	10140	BROAD ST (US41/SR45) from WINN DIXIE PLAZA to CANDLELIGHT BLVD	0.13	0.00	0.00	0.00	0.00	0.0000	1	1	0	2	2	0	6	2	0	2	0	4	0.5227	Low	High	2
	10150	BROAD ST (US41/SR45) from CANDLELIGHT BLVD to MLK BLVD	0.11	0.00	0.00	0.00	0.00	0.0000	1	1	0	2	2	0	6	2	0	2	0	4	0.5227	Low	High	2
	10160	BROAD ST (US41/SR45) from MLK BLVD to PONCE DE LEON BLVD (US98/SR700)	0.38	0.00	0.00	21.36	0.00	0.0144	1	0	0	2	2	0	5	2	0	2	0	4	0.4773	Low	Moderate	3
	10170	BROAD ST (US41/SR45) from PONCE DE LEON BLVD (US98/SR700) to BENTON AVE	0.11	0.00	0.00	0.00	0.00	0.0000	1	0	0	2	2	0	5	2	0	2	0	4	0.4773	Low	Moderate	3
	10180	BROAD ST (US41/SR45) from BENTON AVE to OLD HOSPITAL DR	0.20	0.00	0.00	0.00	0.00	0.0000	0	0	0	2	2	0	4	2	0	2	0	4	0.4318	Low	Moderate	3
	10190	BROAD ST (US41/SR45) from OLD HOSPITAL DR to MILDRED AVE	0.05	0.00	0.00	0.00	0.00	0.0000	0	0	0	2	2	0	4	2	1	2	0	5	0.4943	Low	Moderate	3
	10200	BROAD ST (US41/SR45) from MILDRED AVE to MAIN ST (CR445)	0.40	0.00	0.00	0.00	0.00	0.0000	0	0	0	2	2	0	4	2	1	2	0	5	0.4943	Low	Moderate	3
	10210	BROAD ST (US41/SR45) from MAIN ST (CR445) to JEFFERSON ST (SR50)	0.39	0.00	0.00	1.19	0.00	0.0008	0	0	0	2	2	0	4	2	1	2	0	5	0.4943	Low	Moderate	3
	10220	BROAD ST (US41/SR45) from JEFFERSON ST (SR50) to MONDON HILL RD	0.28	0.00	0.00	7.73	0.00	0.0052	1	0	0	2	2	0	5	2	1	0	0	3	0.4148	Low	Moderate	3
	10230.1	BROAD ST (US41/SR45) from MONDON HILL RD to N OF OAK ST	0.60	0.00	0.00	2.98	0.00	0.0020	0	0	0	2	2	0	4	2	1	0	0	3	0.3693	Low	Moderate	3
	10230.2	BROAD ST (US41/SR45) from N OF OAK ST to CROOM RD	0.39	0.00	0.00	30.64	0.00	0.0207	0	0	0	2	2	0	4	2	1	0	0	3	0.3693	Low	Moderate	3
	10240	BROAD ST (US41/SR45) from CROOM RD to CHATFIELD DR	0.31	0.00	0.00	100.00	0.00	0.0676	0	0	0	2	2	0	4	1	1	0	0	2	0.3068	Moderate	Moderate	2
	10250.1	BROAD ST (US41/SR45) from CHATFIELD DR to YONTZ RD	0.26	0.00	0.00	77.39	0.00	0.0523	0	0	0	2	2	0	4	0	1	0	0	1	0.2443	Moderate	Low	3
	10250.2	BROAD ST (US41/SR45) from YONTZ RD to HOWELL AVE	0.20	0.00	0.00	0.00	0.00	0.0000	0	0	0	2	2	0	4	0	0	0	0	0	0.1818	Low	Low	3
	10260.3	BROAD ST (US41/SR45) from HOWELL AVE to URBAN BOUNDARY	0.92	0.00	0.00	5.51	4.25	0.0052	1	0	0	2	2	0	5	0	0	0	0	0	0.2273	Low	Low	3
	10260.4	BROAD ST (US41/SR45) from URBAN BOUNDARY to SNOW MEMORIAL HWY	1.28	0.00	0.00	45.26	10.53	0.0341	1	0	0	2	2	0	5	0	0	0	1	1	0.2898	Low	Moderate	3
	10270	BROAD ST (US41/SR45) from SNOW MEMORIAL HWY to LAKE LINDSEY RD	2.27	0.00	0.00	3.12	13.00	0.0065	0	0	0	2	2	0	4	1	0	1	1	3	0.3693	Low	Moderate	3
	10280	BROAD ST (US41/SR45) from LAKE LINDSEY RD to CITRUS COUNTY LINE	2.31	0.00	0.00	10.18	58.06	0.0265	0	0	0	2	2	0	4	1	0	1	0	2	0.3068	Low	Moderate	3
	1410	BURWELL RD from PASCO COUNTY LINE to CORTEZ BLVD (SR50)	2.04	0.00	0.00	58.58	24.25	0.0478	0	0	0	1	0	0	1	1	0	0	0	1	0.1080	Low	Low	3
	10290	CALIFORNIA ST from SPRING HILL DR to POWELL RD	0.76	0.00	0.00	0.00	0.00	0.0000	0	1	0	1	0	0	2	0	2	2	1	5	0.4034	Low	Moderate	3
	10300	CALIFORNIA ST from POWELL RD to WISCON RD	2.94	0.00	0.00	0.00	0.00	0.0000	0	1	0	1	0	0	2	2	2	2	0	6	0.4659	Low	Moderate	3
	10310	CALIFORNIA ST from WISCON RD to CORTEZ BLVD (SR50)	0.50	0.00	0.00	0.00	0.00	0.0000	0	0	0	1	0	0	1	2	0	1	0	3	0.2330	Low	Low	3

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Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)								
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
	20810	CALIFORNIA ST from CORTEZ BLVD (SR50) to SAM C	0.51	0.00	0.00	0.00	65.86	0.0222	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	7000	CEDAR LN from POWELL RD to CORTEZ BLVD (SR50)	2.47	0.00	0.00	19.20	22.23	0.0205	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	1610.3	CENTRALIA RD from US19 (SR55) to LELANI DR	2.12	0.00	73.48	17.24	0.00	0.1755	0	0	0	1	2	0	3	2	2	0	0	4	0.3864	Moderate	Moderate	2
	1610.4	CENTRALIA RD from LELANI DR to SUNSHINE GROVE RD	1.12	0.00	0.00	26.29	38.29	0.0307	0	0	0	1	2	0	3	2	0	0	0	2	0.2614	Low	Moderate	3
	1620	CENTRALIA RD from SUNSHINE GROVE RD to BUCZAK RD	0.63	0.00	0.00	5.28	27.02	0.0127	0	0	0	1	2	0	3	0	0	1	0	1	0.1989	Low	Low	3
	1625	CENTRALIA RD from BUCZAK RD to CITRUS WAY	1.42	0.00	0.00	30.09	0.00	0.0203	0	0	0	1	2	0	3	1	0	1	0	2	0.2614	Low	Moderate	3
	6610	CHURCH RD from SPRING LAKE HWY to MYERS RD	2.10	0.00	0.00	0.00	11.02	0.0037	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Low	Low	3
	10320	CITRUS WAY from FORT DADE AVE to CENTRALIA RD	4.23	0.00	0.00	0.00	13.23	0.0045	0	0	0	1	2	0	3	1	0	1	0	2	0.2614	Low	Moderate	3
	10330	CITRUS WAY from CENTRALIA RD to LAKE LINDSEY RD	1.45	0.00	0.00	3.53	4.75	0.0040	0	0	0	1	2	0	3	1	0	1	0	2	0.2614	Low	Moderate	3
	10340	CITRUS WAY from LAKE LINDSEY RD to PONCE DE LEON BLVD (US98/SR700)	2.04	0.00	0.00	26.55	0.00	0.0179	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	10350	CITRUS WAY from PONCE DE LEON BLVD (US98/SR700) to CITRUS COUNTY LINE	3.11	0.00	0.00	11.36	10.30	0.0112	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	10360	COBB RD (US98) from CORTEZ BLVD (SR50) to FORT DADE AVE	0.26	0.00	0.00	0.00	0.00	0.0000	0	0	0	2	2	0	4	2	0	2	0	4	0.4318	Low	Moderate	3
	10370	COBB RD (US98) from FORT DADE AVE to YONTZ RD	1.50	0.00	0.00	3.51	0.00	0.0024	0	0	0	2	2	0	4	2	0	2	0	4	0.4318	Low	Moderate	3
	10380	COBB RD (US98) from YONTZ RD to PONCE DE LEON BLVD (US98/SR700)	2.72	0.00	0.00	44.22	0.00	0.0299	0	0	0	2	2	0	4	2	1	1	0	4	0.4318	Low	Moderate	3
	20575	COBBLESTONE DR from COUNTY LINE RD to SPRING HILL DR	1.24	0.00	10.69	0.43	0.00	0.0241	0	0	0	1	0	0	1	2	0	0	0	2	0.1705	Low	Low	3
	20240.1	CORPORATE BLVD from AYERS RD to SGT LEA MILLS BLVD	0.51	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	20240.2	CORPORATE BLVD from SGT LEA MILLS BLVD to N SUNCOAST PKWY (SR589)	1.10	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	20240.3	CORPORATE BLVD from N SUNCOAST PKWY (SR589) to BREAD BLVD	0.48	0.00	0.00	0.00	5.28	0.0018	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
8	1905.1	CORTEZ BLVD (CR550) from BAYPORT PARK PIER to 1200 FT N OF AZTEC CT	0.84	100.00	0.00	100.00	0.00	0.7432	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	High	Low	2
8	1905.2	CORTEZ BLVD (CR550) from 1200 FT N OF AZTEC CT to PINE ISLAND DR	0.75	100.00	0.00	100.00	37.82	0.7560	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	High	Low	2
8	1910	CORTEZ BLVD (CR550) from PINE ISLAND DR to SHOAL LINE BLVD	1.59	100.00	0.00	100.00	7.10	0.7456	0	0	0	1	2	0	3	0	0	1	0	1	0.1989	High	Low	2
8	1920	CORTEZ BLVD (CR550) from SHOAL LINE BLVD to US19 (SR55)	3.40	57.82	37.97	41.27	0.00	0.5032	0	0	0	1	2	0	3	2	1	2	0	5	0.4489	High	Moderate	1
	2005	CORTEZ BLVD (SR50) from US19 (SR55) to DELTONA BLVD	0.46	0.00	90.01	3.65	0.00	0.2032	1	1	2	2	2	0	8	0	1	1	0	2	0.4886	Moderate	Moderate	2
	2010	CORTEZ BLVD (SR50) from DELTONA BLVD to NIGHTWALKER RD	0.91	0.00	70.34	25.79	0.00	0.1743	1	1	2	2	2	0	8	1	1	1	0	3	0.5511	Moderate	High	1
	2015	CORTEZ BLVD (SR50) from NIGHTWALKER RD to OAK HILL HOSPITAL	1.22	0.00	96.24	19.76	0.00	0.2279	2	1	2	2	2	0	9	1	0	2	1	4	0.6591	Moderate	High	1
	2020	CORTEZ BLVD (SR50) from OAK HILL HOSPITAL to HIGHPOINT BLVD	0.31	0.00	0.00	0.00	0.00	0.0000	2	1	2	2	2	0	9	0	0	2	1	3	0.5966	Low	High	2
	2025	CORTEZ BLVD (SR50) from HIGHPOINT BLVD to MARINER BLVD	0.99	0.00	0.00	0.00	0.00	0.0000	2	1	2	2	2	0	9	1	0	2	1	4	0.6591	Low	High	2
	2030.1	CORTEZ BLVD (SR50) from MARINER BLVD to CHAMBORD	0.38	0.00	0.00	0.00	0.00	0.0000	2	1	2	2	2	0	9	1	0	0	0	1	0.4716	Low	Moderate	3
	2030.2	CORTEZ BLVD (SR50) from CHAMBORD to SUNSHINE GROVE RD	0.33	0.00	0.00	0.00	0.00	0.0000	2	1	2	2	2	0	9	1	0	2	0	3	0.5966	Low	High	2
	2035	CORTEZ BLVD (SR50) from SUNSHINE GROVE RD to BARCLAY AVE	0.50	0.00	0.00	0.00	0.00	0.0000	2	1	2	2	2	0	9	1	0	2	0	3	0.5966	Low	High	2
	2040.3	CORTEZ BLVD (SR50) from BARCLAY AVE to GROVE RD	0.51	0.00	0.00	0.00	0.00	0.0000	1	1	2	2	2	0	8	2	0	2	0	4	0.6136	Low	High	2
	2040.5	CORTEZ BLVD (SR50) from GROVE RD to S SUNCOAST PKWY RAMP	0.16	0.00	0.00	0.00	0.00	0.0000	1	1	2	2	2	0	8	2	0	2	0	4	0.6136	Low	High	2
	2043	CORTEZ BLVD (SR50) from SUMMER ST to WISCON RD	0.05	0.00	0.00	0.00	0.00	0.0000	2	1	2	2	2	0	9	2	0	1	0	3	0.5966	Low	High	2
	2045.1	CORTEZ BLVD (SR50) from WISCON RD to WINTER ST	0.23	0.00	0.00	3.50	0.00	0.0024	1	1	2	2	2	0	8	2	0	1	0	3	0.5511	Low	High	2
	2045.2	CORTEZ BLVD (SR50) from WINTER ST to FORT DADE AVE	0.81	0.00	0.00	1.25	0.00	0.0008	1	1	2	2	2	0	8	2	0	1	0	3	0.5511	Low	High	2
	2050	CORTEZ BLVD (SR50) from FORT DADE AVE to CALIFORNIA ST	0.20	0.00	0.00	0.00	0.00	0.0000	1	1	2	2	2	0	8	2	0	1	0	3	0.5511	Low	High	2
	2055	CORTEZ BLVD (SR50) from CALIFORNIA ST to COBB RD	2.59	0.00	0.00	0.00	0.00	0.0000	1	1	2	2	2	0	8	2	0	2	1	5	0.6761	Low	High	2
	20565	CORTEZ BLVD (SR50) from S SUNCOAST PKWY RAMP to N SUNCOAST PKWY RAMP	0.11	0.00	0.00	0.00	0.00	0.0000	1	1	2	2	2	0	8	2	0	2	0	4	0.6136	Low	High	2
	20570	CORTEZ BLVD (SR50) from N SUNCOAST PKWY RAMP to SUMMER ST	0.11	0.00	0.00	0.00	0.00	0.0000	1	1	2	2	2	0	8	2	0	2	0	4	0.6136	Low	High	2
	8	CORTEZ BLVD (US98/SR50) from CEDAR LN to SPRING LAKE HWY	2.33	0.00	0.00	43.86	0.00	0.0296	1	0	2	2	2	0	7	2	0	0	0	2	0.4432	Low	Moderate	3
	2205	CORTEZ BLVD (US98/SR50) from JASMINE DR to CEDAR LN	1.88	0.00	0.00	5.54	0.00	0.0037	1	0	2	2	2	0	7	2	1	0	0	3	0.5057	Low	High	2
	2215	CORTEZ BLVD (US98/SR50) from SPRING LAKE HWY to LOCKHART RD	3.04	0.00	0.00	9.76	19.39	0.0131	1	0	2	2	2	0	7	2	0	0	0	2	0.4432	Low	Moderate	3
	2220.1	CORTEZ BLVD (US98/SR50) from LOCKHART RD to NEW RD C	0.45	0.00	0.00	0.00	0.00	0.0000	1	0	2	2	2	0	7	1	0	0	0	1	0.3807	Low	Moderate	3
	2220.2	CORTEZ BLVD (US98/SR50) from NEW RD C to I-75 (SR93) FRONTAGE (W)	0.36	0.00	0.00	0.00	0.00	0.0000	1	0	2	2	2	0	7	1	0	0	0	1	0.3807	Low	Moderate	3
	2223.1	CORTEZ BLVD (US98/SR50) from I-75 (SR93) FRONTAGE (W) to I-75 SB RAMPS	0.13	0.00	0.00	0.00	0.00	0.0000	1	0	2	2	2	0	7	1	0	0	0	1	0.3807	Low	Moderate	3
	2223.2	CORTEZ BLVD (US98/SR50) from I-75 SB RAMPS to I-75 (SR93)	0.04	0.00	0.00	0.00	0.00	0.0000	1	0	2	2	2	0	7	1	0	0	0	1	0.3807	Low	Moderate	3
	2225.1	CORTEZ BLVD (US98/SR50) from I-75 (SR93) to I-75 NB RAMPS	0.03	0.00	0.00	0.00	0.00	0.0000	1	0	2	2	2	0	7	1	0	0	0	1	0.3807	Low	Moderate	3

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Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)							
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
	2225.2	CORTEZ BLVD (US98/SR50) from I-75 NB RAMPS to I-75 (SR93) FRONTAGE (E)	0.02	0.00	0.00	0.00	0.00	0.0000	1	0	2	2	2	0	7	1	0	0	0	1	0.3807	Low	Moderate	3
	2228	CORTEZ BLVD (US98/SR50) from I-75 (SR93) FRONTAGE (E) to WINDMERE RD	0.15	0.00	0.00	0.00	0.00	0.0000	1	0	2	2	2	0	7	1	0	0	0	1	0.3807	Low	Moderate	3
	2230	CORTEZ BLVD (US98/SR50) from WINDMERE RD to KETTERING RD	0.87	0.00	0.00	3.23	51.41	0.0195	1	0	2	2	2	0	7	2	0	1	0	3	0.5057	Low	High	2
	2235	CORTEZ BLVD (US98/SR50) from KETTERING RD to RIDGE MANOR BLVD	1.15	0.00	0.00	22.33	0.00	0.0151	1	0	2	2	2	0	7	1	0	1	0	2	0.4432	Low	Moderate	3
	2240	CORTEZ BLVD (US98/SR50) from RIDGE MANOR BLVD to MCKETHAN RD (US98/SR700)	0.79	0.00	0.00	0.00	0.00	0.0000	1	0	2	2	2	0	7	2	0	2	0	4	0.5682	Low	High	2
	2245	CORTEZ BLVD (US98/SR50) from MCKETHAN RD (US98/SR700) to TREIMAN BLVD (US301/SR35)	1.52	0.00	0.00	46.81	0.00	0.0316	0	0	2	2	2	0	6	2	0	2	0	4	0.5227	Low	High	2
	2250	CORTEZ BLVD (US98/SR50) from TREIMAN BLVD (US301/SR35) to BURWELL RD	0.97	0.00	0.00	1.79	0.00	0.0012	0	0	2	2	2	0	6	2	0	1	0	3	0.4602	Low	Moderate	3
	2255	CORTEZ BLVD (US98/SR50) from BURWELL RD to SUMTER COUNTY LINE	4.04	0.00	0.00	35.35	21.84	0.0313	0	0	2	2	2	0	6	0	0	0	0	0	0.2727	Low	Moderate	3
	2110	CORTEZ BLVD BYPASS (SR50) from COBB RD to W OF BUCK HOPE RD	1.53	0.00	0.00	7.35	0.00	0.0050	1	1	2	2	2	0	8	2	0	2	0	4	0.6136	Low	High	2
	2120.1	CORTEZ BLVD BYPASS (SR50) from W OF BUCK HOPE RD to RAY BROWNING RD	0.61	0.00	0.00	0.00	0.00	0.0000	1	0	2	2	2	0	7	2	0	2	0	4	0.5682	Low	High	2
	2120.2	CORTEZ BLVD BYPASS (SR50) from RAY BROWNING RD to MAIN ST	0.41	0.00	0.00	0.00	0.00	0.0000	1	0	2	2	2	0	7	2	1	0	0	3	0.5057	Low	High	2
	2130	CORTEZ BLVD BYPASS (SR50) from MAIN ST to EMERSON RD	0.77	0.00	0.00	59.39	43.80	0.0549	1	0	2	2	2	0	7	2	1	0	0	3	0.5057	Moderate	High	1
	2140	CORTEZ BLVD BYPASS (SR50) from EMERSON RD to JEFFERSON ST (SR50)	0.55	0.00	0.00	83.08	0.00	0.0561	1	0	2	2	2	0	7	2	1	0	0	3	0.5057	Moderate	High	1
10	2305.1	COUNTY LINE RD from US 19 to DARTMOUTH AVE	0.76	13.35	86.65	0.00	0.00	0.2834	1	0	0	1	2	0	4	1	0	2	1	4	0.4318	Moderate	Moderate	2
10	2305.2	COUNTY LINE RD from DARTMOUTH AVE to COBBLESTONE DR	1.54	0.00	79.40	8.87	0.00	0.1830	1	0	0	1	2	0	4	2	0	2	0	4	0.4318	Moderate	Moderate	2
10	2310.1	COUNTY LINE RD from COBBLESTONE DR to EAST OF COBBLESTONE DR	0.09	0.00	33.10	0.00	0.00	0.0738	1	0	0	1	2	0	4	2	0	0	0	2	0.3068	Moderate	Moderate	2
10	2310.2	COUNTY LINE RD from EAST OF COBBLESTONE DR to WATERFALL DR	1.11	0.00	77.68	16.74	0.00	0.1845	1	0	0	1	2	0	4	2	0	0	0	2	0.3068	Moderate	Moderate	2
10	2320.3	COUNTY LINE RD from WATERFALL DR to 1/4 MI W OF MARINER	1.81	0.00	0.00	0.00	0.00	0.0000	2	0	0	1	2	0	5	2	0	1	1	4	0.4773	Low	Moderate	3
10	2320.4	COUNTY LINE RD from 1/4 MI W OF MARINER to MARINER BLVD	0.25	0.00	0.00	0.00	0.00	0.0000	2	1	0	1	2	0	6	2	0	1	1	4	0.5227	Low	High	2
	2330.2	COUNTY LINE RD from FARNSWORTH BLVD to LINDEN DR	1.45	0.00	0.00	0.41	0.00	0.0003	1	0	0	1	2	0	4	2	0	1	1	4	0.4318	Low	Moderate	3
	2330.3	COUNTY LINE RD from MARINER BLVD to 1/4 MI E OF MARINER	0.25	0.00	0.00	0.00	0.00	0.0000	1	1	0	1	2	0	5	2	0	1	1	4	0.4773	Low	Moderate	3
	2330.4	COUNTY LINE RD from 1/4 MI E OF MARINER to FARNSWORTH BLVD	0.75	0.00	0.00	0.00	0.00	0.0000	1	1	0	1	2	0	5	2	0	1	1	4	0.4773	Low	Moderate	3
	2340.1	COUNTY LINE RD from LINDEN DR to OAK CHASE BLVD	0.76	0.00	0.00	0.00	9.55	0.0032	1	0	0	1	2	0	4	2	0	0	0	2	0.3068	Low	Moderate	3
	2340.2	COUNTY LINE RD from OAK CHASE BLVD to ANDERSON SNOW RD	0.35	0.00	0.00	0.00	32.53	0.0110	1	0	0	1	2	0	4	2	0	0	0	2	0.3068	Low	Moderate	3
	2350.3	COUNTY LINE RD from ANDERSON SNOW RD to N SUNCOAST PKWY (SB RAMP)	0.26	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	2	0	4	2	0	0	0	2	0.3068	Low	Moderate	3
	2350.4	COUNTY LINE RD from N SUNCOAST PKWY (SB RAMP) to N SUNCOAST PKWY (NB RAMP)	0.10	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	2	0	4	2	0	0	0	2	0.3068	Low	Moderate	3
	2355.5	COUNTY LINE RD from BROAD ST (US41/SR45) to AYERS RD	1.06	0.00	0.00	18.97	0.00	0.0128	1	0	0	1	2	0	4	2	0	1	0	3	0.3693	Low	Moderate	3
	2355.6	COUNTY LINE RD from N SUNCOAST PKWY (NB RAMP) to AYERS RD	0.30	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	2	0	4	2	0	0	0	2	0.3068	Low	Moderate	3
	11060	CROOM RD from BROAD ST (US41/SR45) to MCINTYRE RD	0.74	0.00	0.00	22.36	16.63	0.0207	0	0	0	1	0	0	1	2	1	0	0	3	0.2330	Low	Low	3
	11070	CROOM RD from MCINTYRE RD to YONTZ RD EXT	0.42	0.00	0.00	11.28	5.06	0.0093	0	0	0	1	0	0	1	1	0	0	0	1	0.1080	Low	Low	3
	11080	CROOM RD from YONTZ RD EXT to WEATHERLY RD	2.19	0.00	0.00	5.68	0.04	0.0039	0	0	0	1	0	0	1	1	0	0	0	1	0.1080	Low	Low	3
	11090	CROOM RD from WEATHERLY RD to ALCOTT RD	0.80	0.00	0.00	9.38	38.69	0.0194	0	0	0	1	0	0	1	0	0	0	0	0	0.0455	Low	Low	3
	11100	CROOM RD from ALCOTT RD to WITHROW RD	0.18	0.00	0.00	0.00	0.00	0.0000	0	0	0	1	0	0	1	0	0	0	0	0	0.0455	Low	Low	3
	11110.1	CROOM RD from WITHROW RD to NEW ROAD	1.85	0.00	0.00	1.87	80.87	0.0286	0	0	0	1	0	0	1	0	0	0	0	0	0.0455	Low	Low	3
	11110.2	CROOM RD from NEW ROAD to CROOM RITAL RD	3.13	0.00	0.00	3.87	86.16	0.0317	0	0	0	1	0	0	1	0	0	0	0	0	0.0455	Low	Low	3
	6910.3	CROOM RITAL RD from CORTEZ BLVD (SR50) to 1200 FT S OF I-75	3.43	0.00	0.00	22.73	24.83	0.0237	0	0	0	1	0	0	1	2	0	1	0	3	0.2330	Low	Low	3
	6910.4	CROOM RITAL RD from 1200 FT S OF I-75 to CROOM RD	2.16	0.00	0.00	8.10	64.29	0.0272	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	10390	CULBREATH RD from PASCO COUNTY LINE to AYERS RD	1.25	0.00	0.00	0.00	39.42	0.0133	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	10400	CULBREATH RD from AYERS RD to POWELL RD	2.89	0.00	0.00	2.15	26.96	0.0106	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	8070	DALY RD from CROOM RD to LAKE LINDSEY RD	5.03	0.00	0.00	3.26	41.20	0.0161	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	20780	DASHBACH RD from LOCKHART RD to I-75	0.29	0.00	0.00	0.40	0.00	0.0003	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Low	Low	3
	20785	DASHBACH RD from I-75 to SPINE RD	0.72	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	20790	DASHBACH RD from SPINE RD to SUNRISE RD	0.53	0.00	0.00	0.00	74.01	0.0250	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	20795	DASHBACH RD from SUNRISE RD to KETTERING RD	0.49	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	10415	DELTONA BLVD from SPRING HILL DR to ABELINE RD	1.53	0.00	40.34	0.27	0.00	0.0901	1	1	0	1	2	0	5	2	1	2	0	5	0.5398	Moderate	High	1
	10420	DELTONA BLVD from ABELINE RD to FOREST OAKS BLVD	1.14	0.00	23.62	6.47	0.00	0.0570	1	1	0	1	2	0	5	2	1	2	0	5	0.5398	Moderate	High	1
	10430	DELTONA BLVD from FOREST OAKS BLVD to NORTHCLIFFE BLVD	1.16	0.00	67.83	4.62	0.00	0.1544	1	1	0	1	2	0	5	2	2	2	0	6	0.6023	Moderate	High	1

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Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)								
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
	10440	DELTONA BLVD from NORTHCLIFFE BLVD to ELGIN BLVD	0.95	0.00	61.67	1.65	0.00	0.1386	1	0	0	1	2	0	4	2	2	1	0	5	0.4943	Moderate	Moderate	2
	10450	DELTONA BLVD from ELGIN BLVD to CORTEZ BLVD (SR50)	0.53	0.00	54.22	2.96	0.00	0.1229	1	0	0	1	2	0	4	1	1	1	0	3	0.3693	Moderate	Moderate	2
	20120	DOWNY WOODPECKER RD from THRASHER AVE to VELVET SCOTER AVE	0.09	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Low	Low	3
	2805	ELGIN AVE from DELTONA BLVD to MARINER BLVD	2.54	0.00	35.98	1.44	0.00	0.0812	1	0	0	1	2	0	4	2	1	2	0	5	0.4943	Moderate	Moderate	2
	2810	ELGIN BLVD/POWELL RD from MARINER BLVD to LANDOVER RD	0.35	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	2	0	4	2	0	1	0	3	0.3693	Low	Moderate	3
	2813.1	ELGIN BLVD/POWELL RD from LANDOVER RD to TANNER RD	0.24	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	2	0	4	2	1	1	0	4	0.4318	Low	Moderate	3
	2813.2	ELGIN BLVD/POWELL RD from TANNER RD to LAUREN DR	0.14	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	2	0	4	1	1	1	0	3	0.3693	Low	Moderate	3
	2816	ELGIN BLVD/POWELL RD from LAUREN DR to FENIAN DR	0.24	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	2	0	4	1	1	0	0	2	0.3068	Low	Moderate	3
	2819.1	ELGIN BLVD/POWELL RD from FENIAN DR to STERLING HILL BLVD	0.44	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	2	0	4	2	1	0	0	3	0.3693	Low	Moderate	3
	2819.2	ELGIN BLVD/POWELL RD from STERLING HILL BLVD to BARCLAY RD	1.05	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	2	0	4	2	1	0	0	3	0.3693	Low	Moderate	3
	20645	ELWOOD RD from ELGIN AVE to MARINER BLVD	1.06	0.00	0.00	3.80	0.00	0.0026	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	20650	ELWOOD RD from MARINER BLVD to LANDOVER BLVD	0.49	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	20655.1	ELWOOD RD from LANDOVER BLVD to SWALLOW NEST	0.28	0.00	0.00	42.77	0.00	0.0289	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	20655.2	ELWOOD RD from SWALLOW NEST to STERLING HILL	0.84	0.00	0.00	0.00	8.44	0.0029	0	0	0	0	0	0	0	2	1	1	0	4	0.2500	Low	Low	3
	2910.1	EMERSON RD from POWELL RD to URBAN BOUNDARY	1.82	0.00	0.00	3.77	56.88	0.0218	0	0	0	1	2	0	3	0	1	0	0	1	0.1989	Low	Low	3
	2910.2	EMERSON RD from URBAN BOUNDARY to CORTEZ BLVD (SR50)	1.05	0.00	0.00	0.77	40.36	0.0142	0	0	0	1	2	0	3	2	1	0	0	3	0.3239	Low	Moderate	3
	2920	EMERSON RD from CORTEZ BLVD (SR50) to JEFFERSON ST (SR50)	0.45	0.00	0.00	47.91	0.00	0.0324	0	0	0	1	2	0	3	2	1	0	0	3	0.3239	Low	Moderate	3
	20775.2	EMERSON RD from MONDON HILL RD to BROAD ST	0.56	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	1	0	0	3	0.1875	Low	Low	3
	20775.1	EMERSON RD EXT from JEFFERSON ST (SR50) to MONDON HILL RD	0.78	0.00	0.00	26.45	0.00	0.0179	0	0	0	0	0	0	0	2	2	0	0	4	0.2500	Low	Low	3
	20340.3	EXILE RD from CORTEZ BLVD (SR50) to FLOCK AVE	1.27	0.00	54.01	25.92	18.79	0.1443	0	0	0	0	0	0	0	2	0	2	1	5	0.3125	Moderate	Moderate	2
	20340.4	EXILE RD from FLOCK AVE to FURLEY AVE	0.34	0.00	72.02	0.00	0.00	0.1606	0	0	0	0	0	0	0	2	0	2	1	5	0.3125	Moderate	Moderate	2
	20340.2	EXILE RD EXT from FURLEY AVE to STAR RD	0.71	0.00	7.71	0.00	0.00	0.0172	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	20470	EXILE RD EXT from BOURASSA BLVD to HEXAM RD	0.50	0.00	58.37	0.00	23.40	0.1381	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Moderate	Low	3
	20670	EXILE RD EXT from STAR RD to BOURASSA BLVD	1.10	0.00	33.60	0.00	8.32	0.0777	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Moderate	Low	3
	8090.1	FOREST OAKS BLVD from US19 (SR55) to W OF FOREST VILLAS CIR	0.56	0.00	86.97	0.00	0.00	0.1939	0	1	0	0	0	0	1	2	0	2	0	4	0.2955	Moderate	Moderate	2
	8090.2	FOREST OAKS BLVD from W OF FOREST VILLAS CIR to DELTONA BLVD	1.11	0.00	56.87	3.62	0.00	0.1293	0	1	0	0	0	0	1	2	0	2	0	4	0.2955	Moderate	Moderate	2
	3010.1	FORT DADE AVE from CORTEZ BLVD (SR50) to RESTER DR	1.13	0.00	0.00	0.00	34.13	0.0115	0	0	0	1	0	0	1	2	0	0	0	2	0.1705	Low	Low	3
	3010.2	FORT DADE AVE from RESTER DR to CITRUS WAY	0.28	0.00	0.00	0.00	0.00	0.0000	0	0	0	1	0	0	1	0	0	0	0	0	0.0455	Low	Low	3
	3020.3	FORT DADE AVE from CITRUS WAY to KOCHER DR	1.15	0.00	0.00	0.00	42.09	0.0142	0	0	0	1	0	0	1	2	0	2	0	4	0.2955	Low	Moderate	3
	3020.4	FORT DADE AVE from KOCHER DR to COBB RD	0.59	0.00	0.00	0.00	0.00	0.0000	0	0	0	1	0	0	1	2	0	2	0	4	0.2955	Low	Moderate	3
	3030	FORT DADE AVE from COBB RD to PONCE DE LEON BLVD (US98/SR700)	1.41	0.00	0.00	1.57	0.00	0.0011	0	0	0	1	0	0	1	2	0	2	0	4	0.2955	Low	Moderate	3
	3040	FORT DADE AVE from PONCE DE LEON BLVD (US98/SR700) to HOWELL AVE	0.61	0.00	0.00	0.00	0.00	0.0000	0	0	0	1	2	0	3	2	1	2	0	5	0.4489	Low	Moderate	3
	20060	FORT DADE AVE from WISCON RD to CORTEZ BLVD (SR50)	0.54	0.00	0.00	0.74	0.00	0.0005	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	3060	FULTON AVE from NIGHTWALKER RD to FURLEY AVE	0.79	0.00	86.33	22.15	0.00	0.2074	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Moderate	Low	3
	20770	FURLEY AVE from FULTON AVE to EXILE RD	0.46	0.00	45.38	2.51	0.00	0.1029	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Moderate	Low	3
	20270.1	GOVERNOR BLVD from POWELL RD to JOHN MARTIN LN	1.45	0.00	0.00	15.13	0.00	0.0102	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	20270.3	GOVERNOR BLVD from JOHN MARTIN LN to URBAN BOUNDARY	0.89	0.00	0.00	9.72	0.00	0.0066	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	20270.4	GOVERNOR BLVD from URBAN BOUNDARY to CORTEZ BLVD BYPASS (SR50)	1.37	0.00	0.00	0.00	18.14	0.0061	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	1120.1	HAYMAN RD from CULBREATH RD to HAYMAN RD EXT	2.11	0.00	0.00	0.00	27.20	0.0092	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	1120.2	HAYMAN RD from HAYMAN RD EXT to FAIR FORTUNE LN	1.62	0.00	0.00	13.01	0.00	0.0088	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	1123	HAYMAN RD from FAIR FORTUNE LN to SPRING LAKE HWY	1.47	0.00	0.00	8.07	0.00	0.0055	0	0	0	1	2	0	3	1	0	0	0	1	0.1989	Low	Low	3
	3110.6	HEXAM RD from SUNSHINE GROVE RD to SUNSHINE GROVE RD (N)	0.13	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	3110.7	HEXAM RD from SUNSHINE GROVE RD (N) to US19 (SR55)	3.16	0.00	29.97	8.42	5.19	0.0743	1	0	0	0	0	0	1	2	0	0	0	2	0.1705	Moderate	Low	3
	3210	HICKORY HILL RD from SPRING LAKE HWY to BASEBALL POND RD	1.01	0.00	0.00	0.00	16.44	0.0056	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Low	Low	3
	20400.1	HIGHFIELD RD from IRVING ST to N SUNCOAST PKWY (SR589)	0.27	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
	20400.3	HIGHFIELD RD from N SUNCOAST PKWY (SR589) to ARIZONA ST	0.73	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
	20400.4	HIGHFIELD RD from ARIZONA ST to CALIFORNIA ST	0.52	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3

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Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)							
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
	20290.1	HORSE LAKE RD from BROAD ST (US41/SR45) to WISCON RD	1.06	0.00	0.00	23.60	0.00	0.0159	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
	20290.2	HORSE LAKE RD from WISCON RD to CORTEZ BLVD BYPASS (SR50)	0.73	0.00	0.00	18.33	0.00	0.0124	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
	20300.1	HOSPITAL RD from WISCON RD to CORTEZ BLVD (SR50)	0.52	0.00	0.00	7.03	0.00	0.0048	0	0	0	0	0	0	0	0	0	1	1	2	0.1250	Low	Low	3
	20300.2	HOSPITAL RD from CORTEZ BLVD (SR50) to FORT DADE AVE	1.03	0.00	0.00	0.00	45.72	0.0154	0	0	0	0	0	0	0	0	0	2	1	3	0.1875	Low	Low	3
	3310	HOWELL AVE from FORT DADE AVE to YONTZ RD	1.70	0.00	0.00	10.87	0.00	0.0073	0	1	0	1	0	0	2	2	1	2	0	5	0.4034	Low	Moderate	3
	3315	HOWELL AVE from YONTZ RD to BROAD ST (US41/SR45)	0.22	0.00	0.00	0.00	0.00	0.0000	0	0	0	1	0	0	1	0	0	0	0	0	0.0455	Low	Low	3
	20490	HURRICANE DR from CENTRALIA RD to KNUCKEY RD	1.47	0.00	90.08	0.05	16.73	0.2065	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Moderate	Low	3
	6	I-75 (SR93) from POWERLINE RD to CORTEZ BLVD (SR50)	3.29	0.00	0.00	7.44	4.25	0.0065	2	0	2	2	2	0	8	1	0	0	1	2	0.4886	Low	Moderate	3
	10460	I-75 (SR93) from PASCO COUNTY LINE to POWERLINE RD	3.79	0.00	0.00	4.86	34.21	0.0148	2	0	2	2	2	0	8	1	0	0	1	2	0.4886	Low	Moderate	3
	10480	I-75 (SR93) from CORTEZ BLVD (SR50) to 1 MILE NORTH OF CORTEZ BLVD	1.03	0.00	0.00	10.06	0.00	0.0068	2	0	2	2	2	0	8	1	0	0	0	1	0.4261	Low	Moderate	3
	10490	I-75 (SR93) from 1 MILE NORTH OF CORTEZ BLVD to SUMTER COUNTY LINE	3.50	0.00	0.00	12.65	8.34	0.0114	2	0	2	2	2	2	10	1	0	0	0	1	0.5170	Low	High	2
	20390.1	IRVING ST from SUNSHINE GROVE RD to BARCLAY RD	0.50	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
	20390.2	IRVING ST from BARCLAY RD to HIGHFIELD RD	0.51	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
	20420.1	JACQUELINE RD from WEEPING WILLOW ST to MARINER BLVD (CR587)	0.31	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	20420.2	JACQUELINE RD from MARINER BLVD (CR587) to SUNSHINE GROVE RD	0.70	0.00	0.00	0.41	0.00	0.0003	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
	3480	JASMINE DR from JEFFERSON ST (SR50) to MONDON HILL RD	0.94	0.00	0.00	43.69	21.64	0.0368	0	0	0	1	0	0	1	2	1	0	0	3	0.2330	Low	Low	3
	3510	JEFFERSON ST (SR50A) from COBB RD (CR485) to PONCE DE LEON BLVD (US98/SR700)	1.45	0.00	0.00	16.91	0.00	0.0114	0	1	0	2	2	0	5	2	0	2	0	4	0.4773	Low	Moderate	3
	3520	JEFFERSON ST (SR50A) from PONCE DE LEON BLVD (US98/SR700) to MILDRED AVE	0.21	0.00	0.00	0.00	0.00	0.0000	0	0	0	2	2	0	4	2	1	2	0	5	0.4943	Low	Moderate	3
	3530	JEFFERSON ST (SR50A) from MILDRED AVE to MAIN ST	0.40	0.00	0.00	0.00	0.00	0.0000	0	0	0	2	2	0	4	2	1	2	0	5	0.4943	Low	Moderate	3
	3540	JEFFERSON ST (SR50A) from MAIN ST to BROAD ST (US41/SR45)	0.44	0.00	0.00	0.96	0.00	0.0006	0	0	0	2	2	0	4	2	1	2	0	5	0.4943	Low	Moderate	3
	3545	JEFFERSON ST (SR50A) from BROAD ST (US41/SR45) to MLK	0.74	0.00	0.00	3.79	0.00	0.0026	0	0	0	2	2	0	4	2	2	0	0	4	0.4318	Low	Moderate	3
	3550	JEFFERSON ST (SR50A) from MLK to EMERSON RD (CR581)	0.18	0.00	0.00	0.00	0.00	0.0000	1	0	0	2	2	0	5	2	1	0	0	3	0.4148	Low	Moderate	3
	3560	JEFFERSON ST (SR50A) from EMERSON RD (CR581) to CORTEZ BLVD (SR50)	0.50	0.00	0.00	29.45	0.00	0.0199	1	0	0	2	2	0	5	2	1	0	0	3	0.4148	Low	Moderate	3
	20280	JOHN MARTIN LN from BROAD ST (US41/SR45) to GOVERNOR BLVD	0.25	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Low	Low	3
	20440	KEN AUSTIN PKWY from SUNSHINE GROVE RD to RESTER DR	1.00	0.00	0.00	5.67	0.00	0.0038	1	0	0	0	0	0	1	1	2	0	0	3	0.2330	Low	Low	3
	3570.1	KETTERING RD from POWERLINE RD to DASHBACH RD	0.99	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	3570.2	KETTERING RD from DASHBACH RD to CORTEZ BLVD (SR50)	2.04	0.00	0.00	6.35	0.00	0.0043	0	0	0	1	0	0	1	2	0	1	0	3	0.2330	Low	Low	3
	3580	KNUCKEY RD from US19 (SR55) to QUIGLEY AVE	2.27	0.00	75.04	0.00	0.00	0.1673	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Moderate	Low	3
	20480	LABRADOR DUCK RD from HEXAM RD to CENTRALIA RD	2.09	0.00	72.55	17.17	0.00	0.1734	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Moderate	Low	3
	20610	LAKE DR from US 19 to NIGHTWALKER RD	1.11	0.00	80.32	32.29	0.00	0.2009	0	0	0	0	0	0	0	0	0	1	0	1	0.0625	Moderate	Low	3
	20615	LAKE DR from NIGHTWALKER RD to EXILE RD	0.97	0.00	80.13	27.22	11.15	0.2008	0	0	0	0	0	0	0	0	0	2	1	3	0.1875	Moderate	Low	3
	3610	LAKE LINDSEY RD from CITRUS WAY to PONCE DE LEON BLVD (US98/SR700)	1.97	0.00	0.00	28.56	0.00	0.0193	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	3620	LAKE LINDSEY RD from PONCE DE LEON BLVD (US98/SR700) to OLD CRYSTAL RIVER	2.64	0.00	0.00	23.01	15.24	0.0207	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	3625	LAKE LINDSEY RD from OLD CRYSTAL RIVER to SNOW MEMORIAL HWY	1.44	0.00	0.00	19.39	15.85	0.0185	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	3630	LAKE LINDSEY RD from SNOW MEMORIAL HWY to BROAD ST (US41/SR45)	1.41	0.00	0.00	14.22	36.70	0.0220	0	0	0	1	2	0	3	1	0	1	0	2	0.2614	Low	Moderate	3
	3640	LAKE LINDSEY RD from BROAD ST (US41/SR45) to DALY RD	2.43	0.00	0.00	0.34	49.81	0.0171	0	0	0	1	2	0	3	1	0	1	0	2	0.2614	Low	Moderate	3
	3643	LAKE LINDSEY RD from DALY RD to LINGLE RD	1.45	0.00	0.00	23.11	30.02	0.0258	0	0	0	1	2	0	3	1	0	1	0	2	0.2614	Low	Moderate	3
	3650	LAKE LINDSEY RD from LINGLE RD to NOBLETON - CROOM RD	1.14	0.00	0.00	25.81	24.74	0.0258	0	0	0	1	2	0	3	1	0	1	0	2	0.2614	Low	Moderate	3
	3660	LAKE LINDSEY RD from NOBLETON - CROOM RD to SUMTER COUNTY	0.65	0.00	0.00	25.20	0.00	0.0170	0	0	0	1	2	2	5	0	0	1	0	1	0.2898	Low	Moderate	3
	20210	LANDOVER BLVD from NORTHCLIFFE BLVD to S. MARINER BLVD (CR587)	1.02	0.00	35.73	0.00	0.00	0.0797	1	0	0	0	0	0	1	2	2	0	0	4	0.2955	Moderate	Moderate	2
	20210.1	LANDOVER BLVD from ELGIN AVE to NORTHCLIFFE BLVD	1.23	0.00	51.13	8.82	0.00	0.1200	0	0	0	0	0	0	0	2	1	0	0	3	0.1875	Moderate	Low	3
	20545.1	LANDOVER BLVD from S. MARINER BLVD (CR587) to ELGIN BLVD	2.44	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	2	1	0	5	0.3125	Low	Moderate	3
	20545.2	LANDOVER BLVD from ELGIN BLVD to N. MARINER BLVD (CR587)	1.55	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	20560	LELANI DR from CENTRALIA RD to KNUCKEY RD	1.54	0.00	0.00	0.23	0.00	0.0002	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	11120	LINDEN DR from COUNTY LINE RD to ORIANA DR	0.28	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	11130	LINDEN DR from ORIANA DR to CORONADO DR	1.34	0.00	0.00	2.22	0.00	0.0015	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	11140	LINDEN DR from CORONADO DR to SPRING HILL DR	0.95	0.00	0.00	4.61	0.00	0.0031	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3

Hernando/Citrus MPO
Vulnerability Resiliency Assessment
Hernando County Roadways

Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)								
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
	11150	LINDEN DR from SPRING HILL DR to MARINER BLVD (CR587)	2.31	0.00	0.00	0.31	0.00	0.0002	0	0	0	0	0	0	0	2	1	1	0	4	0.2500	Low	Low	3
	20200	LINDEN DR from MARINER BLVD (CR587) to SPRING HILL DR (W)	1.44	0.00	0.00	5.92	0.00	0.0040	0	0	0	0	0	0	0	2	1	0	0	3	0.1875	Low	Low	3
	3810	LINGLE RD from LAKE LINDSEY RD to CITRUS COUNTY LINE	1.18	0.00	0.00	4.98	34.58	0.0150	0	0	0	1	0	0	1	1	0	1	0	2	0.1705	Low	Low	3
	11220	LOCKHART RD from MYERS RD to POWERLINE RD	1.52	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	0	0	0	1	1	0.0625	Low	Low	3
	11250.3	LOCKHART RD from I-75 (SR93) to DASHBACH RD	1.00	0.00	0.00	8.14	5.39	0.0073	0	0	0	1	0	0	1	0	0	0	1	1	0.1080	Low	Low	3
	11250.4	LOCKHART RD from DASHBACH RD to CORTEZ BLVD (SR50)	2.04	0.00	0.00	4.15	0.00	0.0028	0	0	0	1	0	0	1	0	0	0	0	0	0.0455	Low	Low	3
	10500	MAIN ST from CORTEZ BLVD (SR50) to MLK	0.48	0.00	0.00	16.37	0.00	0.0111	0	0	0	1	0	0	1	2	1	2	0	5	0.3580	Low	Moderate	3
	10510	MAIN ST from MLK to BROAD ST (US41/SR45)	0.67	0.00	0.00	2.12	0.00	0.0014	0	1	0	1	0	0	2	2	1	2	0	5	0.4034	Low	Moderate	3
	10520	MAIN ST from BROAD ST (US41/SR45) to JEFFERSON ST (SR50)	0.05	0.00	0.00	0.00	0.00	0.0000	0	1	0	1	0	0	2	2	1	2	0	5	0.4034	Low	Moderate	3
	10530	MAIN ST from JEFFERSON ST (SR50) to FORT DADE AVE	0.05	0.00	0.00	0.00	0.00	0.0000	0	1	0	1	0	0	2	2	1	2	0	5	0.4034	Low	Moderate	3
	10540.1	MARINER BLVD (CR587) from COUNTY LINE RD to QUALITY DR	0.19	0.00	0.00	0.00	0.00	0.0000	1	1	0	1	2	0	5	2	0	1	1	4	0.4773	Low	Moderate	3
	10540.3	MARINER BLVD (CR587) from QUALITY DR to FAIRCHILD RD	0.53	0.00	0.00	0.00	0.00	0.0000	1	1	0	1	2	0	5	2	0	1	1	4	0.4773	Low	Moderate	3
	10540.4	MARINER BLVD (CR587) from FAIRCHILD RD to AUDIE BROOK DR	0.61	0.00	0.00	24.19	0.00	0.0163	1	1	0	1	2	0	5	2	0	1	1	4	0.4773	Low	Moderate	3
	10550.1	MARINER BLVD (CR587) from AUDIE BROOK DR to HENDERSON ST	0.21	0.00	0.00	0.00	0.00	0.0000	1	1	0	1	2	0	5	2	0	1	1	4	0.4773	Low	Moderate	3
	10550.2	MARINER BLVD (CR587) from HENDERSON ST to SPRING HILL DR	0.55	0.00	0.00	12.71	0.00	0.0086	1	1	0	1	2	0	5	2	0	0	1	3	0.4148	Low	Moderate	3
	10560	MARINER BLVD (CR587) from SPRING HILL DR to LINDEN DR	1.03	0.00	0.00	0.08	0.00	0.0001	1	1	0	1	2	0	5	2	1	0	0	3	0.4148	Low	Moderate	3
	10570	MARINER BLVD (CR587) from LINDEN DR to LANDOVER RD	0.51	0.00	0.00	17.46	0.00	0.0118	1	1	0	1	2	0	5	2	2	0	0	4	0.4773	Low	Moderate	3
	10580	MARINER BLVD (CR587) from LANDOVER RD to NORTHCLIFFE BLVD	0.57	0.00	0.00	0.26	0.00	0.0002	1	1	0	1	2	0	5	2	2	0	0	4	0.4773	Low	Moderate	3
	10590	MARINER BLVD (CR587) from NORTHCLIFFE BLVD to AUGUSTINE RD	0.38	0.00	0.00	0.00	0.00	0.0000	1	1	0	1	2	0	5	2	2	1	0	5	0.5398	Low	High	2
	10600	MARINER BLVD (CR587) from AUGUSTINE RD to ELGIN BLVD	1.40	0.00	0.00	0.00	0.00	0.0000	1	1	0	1	2	0	5	2	1	1	0	4	0.4773	Low	Moderate	3
	10610.1	MARINER BLVD (CR587) from ELGIN BLVD to SAMS CLUB RD	1.72	0.00	0.00	1.14	0.00	0.0008	1	1	0	1	2	0	5	2	0	1	0	3	0.4148	Low	Moderate	3
	10610.2	MARINER BLVD (CR587) from SAMS CLUB RD to CORTEZ BLVD (SR50)	0.21	0.00	0.00	9.03	0.00	0.0061	1	1	0	1	2	0	5	2	0	0	0	2	0.3523	Low	Moderate	3
	10612	MARINER BLVD (CR587) from CORTEZ BLVD (SR50) to JACQUELINE RD	0.24	0.00	0.00	0.66	0.00	0.0004	0	1	0	0	0	0	1	2	0	1	0	3	0.2330	Low	Low	3
	3980	MCINTYRE RD from MONDON HILL RD to CROOM RD	1.06	0.00	0.00	6.34	3.40	0.0054	0	0	0	1	0	0	1	2	0	0	0	2	0.1705	Low	Low	3
	20595	MCINTYRE RD from CROOM RD to BROAD ST (US 41)	1.09	0.00	0.00	20.87	13.47	0.0187	1	0	0	0	0	0	1	1	0	0	0	1	0.1080	Low	Low	3
	4010	MCKETHAN RD (US98/SR700) from PASCO COUNTY LINE to CORTEZ BLVD (SR50)	2.02	0.00	0.00	31.66	0.00	0.0214	0	0	0	2	2	0	4	2	0	2	0	4	0.4318	Low	Moderate	3
	1333	MILDRED AVE (SR45/SR700/SR50A) from BROAD ST (US41/SR45) to JEFFERSON ST (SR50)	0.07	0.00	0.00	0.00	0.00	0.0000	0	0	0	2	2	0	4	2	1	2	0	5	0.4943	Low	Moderate	3
	10790	MLK from BROAD ST (US41/SR45) to MAIN ST	0.80	0.00	0.00	0.42	0.00	0.0003	0	1	0	1	0	0	2	2	0	2	0	4	0.3409	Low	Moderate	3
	10800	MLK from MAIN ST to JEFFERSON ST (SR50A)	0.59	0.00	0.00	2.82	0.00	0.0019	0	0	0	1	0	0	1	2	1	2	0	5	0.3580	Low	Moderate	3
	4100	MONDON HILL RD from BROAD ST (US41/SR45) to JASMINE DR	0.63	0.00	0.00	0.00	0.00	0.0000	0	0	0	1	0	0	1	2	1	0	0	3	0.2330	Low	Low	3
	4110	MONDON HILL RD from JASMINE DR to MCINTYRE RD	0.26	0.00	0.00	21.06	0.00	0.0142	0	0	0	1	0	0	1	2	0	0	0	2	0.1705	Low	Low	3
	4115	MONDON HILL RD from MCINTYRE RD to WEATHERLY RD	2.12	0.00	0.00	2.76	33.15	0.0131	0	0	0	1	0	0	1	1	0	0	1	2	0.1705	Low	Low	3
	4117	MONDON HILL RD from WEATHERLY RD to SOULT RD	1.81	0.00	0.00	49.35	46.16	0.0489	0	0	0	1	0	0	1	1	0	1	2	4	0.2955	Low	Moderate	3
	4120	MONDON HILL RD from SOULT RD to CORTEZ BLVD (SR50)	2.03	0.00	0.00	6.89	16.32	0.0102	0	0	0	1	0	0	1	2	0	1	1	4	0.2955	Low	Moderate	3
	20430	MONTOUR ST from WEEPING WILLOW ST to SUNSHINE GROVE RD	1.01	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	1	0	1	0	2	0.1250	Low	Low	3
	6710	MYERS RD from PASCO COUNTY LINE to CHURCH RD	1.01	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	20020	MYERS RD from CHURCH RD to LOCKHART RD	1.14	0.00	0.00	0.00	12.32	0.0042	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Low	Low	3
	20605	NEW ROAD A from BROAD ST (US 41) to HORSE LAKE RD	0.58	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	20625	NEW ROAD C from LOCKHART RD to CORTEZ BLVD (US 98/SR 50)	0.96	0.00	0.00	0.00	43.65	0.0147	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	4210	NIGHTWALKER RD from CORTEZ BLVD (SR50) to RIDGE RD	1.25	0.00	73.03	12.68	3.59	0.1726	0	0	0	0	0	0	0	1	0	1	0	2	0.1250	Moderate	Low	3
	20310	NIGHTWALKER RD from RIDGE RD to FULTON AVE	0.56	0.00	94.80	29.13	0.00	0.2311	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Moderate	Low	3
	6920	NOBLETON - CROOM RD from CROOM RD to LAKE LINDSEY RD	3.95	0.00	0.00	11.35	47.27	0.0236	0	0	0	1	0	0	1	0	0	1	0	1	0.1080	Low	Low	3
	20190	NORBERT ST from BARTLETT ST to DELTONA BLVD	0.21	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
	4310	NORTHCLIFFE BLVD from US19 (SR55) to DELTONA BLVD	1.19	0.00	82.62	4.31	0.00	0.1871	1	0	0	1	0	0	2	2	2	0	0	4	0.3409	Moderate	Moderate	2
	4320.4	NORTHCLIFFE BLVD from AZORA RD to PORTILLO RD	0.30	0.00	81.37	11.67	0.00	0.1893	1	1	0	1	0	0	3	2	2	0	0	4	0.3864	Moderate	Moderate	2
	4320.5	NORTHCLIFFE BLVD from DELTONA BLVD to CENTURY DR	0.39	0.00	75.01	0.15	0.00	0.1673	1	1	0	1	0	0	3	2	2	0	0	4	0.3864	Moderate	Moderate	2
	4320.6	NORTHCLIFFE BLVD from CENTURY DR to AZORA RD	0.43	0.00	41.24	0.00	0.00	0.0920	1	1	0	1	0	0	3	2	2	0	0	4	0.3864	Moderate	Moderate	2

Hernando/Citrus MPO
Vulnerability Resiliency Assessment
Hernando County Roadways

Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)								
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
	4330	NORTHCLIFFE BLVD from PORTILLO RD to MARINER BLVD	0.41	0.00	74.77	34.71	0.00	0.1902	1	1	0	1	0	0	3	2	2	0	0	4	0.3864	Moderate	Moderate	2
8	4410.1	OSOWAW BLVD (CR595) from PASCO COUNTY LINE to 1600 FT N OF ALOHA LN	0.85	99.06	0.00	99.92	0.00	0.7369	0	0	0	1	2	2	5	1	0	0	0	1	0.2898	High	Moderate	1
8	4410.2	OSOWAW BLVD (CR595) from 1600 FT N OF ALOHA LN to SHOAL LINE BLVD	1.27	100.00	0.00	100.00	0.00	0.7432	0	0	0	1	2	2	5	1	0	0	0	1	0.2898	High	Moderate	1
8	4420	OSOWAW BLVD (CR595) from SHOAL LINE BLVD to US19 (SR55)	1.63	99.65	0.35	43.92	0.00	0.7038	0	0	0	1	2	0	3	2	0	2	0	4	0.3864	High	Moderate	1
8	4510.1	PINE ISLAND DR from CORTEZ BLVD (SR50) to 1500 FT S OF PALOMINO DR	1.52	100.00	0.00	100.00	18.28	0.7494	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	High	Low	2
8	4510.2	PINE ISLAND DR from 1500 FT S OF PALOMINO DR to END OF PINE ISLAND DR	1.18	100.00	0.00	100.00	26.69	0.7523	0	0	0	0	2	2	4	0	0	0	0	0	0.1818	High	Low	2
	10615	PONCE DE LEON BLVD (US98/SR700) from BROAD ST (US41/SR45) to JEFFERSON ST (SR50A)	0.36	0.00	0.00	0.00	0.00	0.0000	0	0	0	1	2	0	3	2	0	2	0	4	0.3864	Low	Moderate	3
	10620	PONCE DE LEON BLVD (US98/SR700) from JEFFERSON ST (SR50A) to FORT DADE AVE	0.05	0.00	0.00	0.00	0.00	0.0000	0	0	0	1	2	0	3	2	0	2	0	4	0.3864	Low	Moderate	3
	10630	PONCE DE LEON BLVD (US98/SR700) from FORT DADE AVE to YONTZ RD	1.55	0.00	0.00	3.66	0.00	0.0025	0	1	0	1	2	0	4	2	1	2	0	5	0.4943	Low	Moderate	3
	10640	PONCE DE LEON BLVD (US98/SR700) from YONTZ RD to COBB RD	2.54	0.00	0.00	29.68	0.00	0.0201	0	1	0	1	2	0	4	2	1	1	0	4	0.4318	Low	Moderate	3
	10650	PONCE DE LEON BLVD (US98/SR700) from COBB RD to LAKE LINDSEY RD	1.49	0.00	0.00	36.29	0.00	0.0245	0	0	0	2	2	0	4	0	0	0	0	0	0.1818	Low	Low	3
	10660	PONCE DE LEON BLVD (US98/SR700) from LAKE LINDSEY RD to CITRUS WAY	2.16	0.00	0.00	7.98	8.35	0.0082	0	0	0	2	2	0	4	0	0	0	0	0	0.1818	Low	Low	3
	10670.6	PONCE DE LEON BLVD (US98/SR700) from CITRUS WAY to LANDFILL RD	2.60	0.00	0.00	32.89	14.68	0.0272	0	0	0	2	2	0	4	1	0	0	0	1	0.2443	Low	Low	3
	10670.8	PONCE DE LEON BLVD (US98/SR700) from LANDFILL RD to SUNCOAST PKWY NB RAMP	1.00	0.00	0.00	7.92	22.85	0.0131	0	0	0	2	2	0	4	1	0	0	0	1	0.2443	Low	Low	3
	10670.9	PONCE DE LEON BLVD (US98/SR700) from SUNCOAST PKWY NB RAMP to SUNCOAST PKWY SB RAMP	0.31	0.00	0.00	0.00	31.77	0.0107	0	0	2	2	2	0	6	0	0	0	0	0	0.2727	Low	Moderate	3
	10680.3	PONCE DE LEON BLVD (US98/SR700) from SUNCOAST PKWY SB RAMP to SUNSHINE GROVE RD	0.62	0.00	0.00	0.00	43.31	0.0146	0	0	2	2	2	0	6	0	0	0	0	0	0.2727	Low	Moderate	3
	10690	PONCE DE LEON BLVD (US98/SR700) from SUNSHINE GROVE RD to CITRUS COUNTY LINE	0.24	0.00	0.00	0.00	100.00	0.0338	0	0	2	2	2	0	6	0	0	0	0	0	0.2727	Low	Moderate	3
	2820	POWELL RD from BARCLAY AVE to CALIFORNIA ST	1.67	0.00	0.00	1.98	0.00	0.0013	1	0	0	1	2	0	4	1	2	2	0	5	0.4943	Low	Moderate	3
	2830	POWELL RD from CALIFORNIA ST to BROAD ST (US41/SR45)	1.96	0.00	0.00	18.20	0.00	0.0123	1	0	0	1	2	0	4	2	2	2	0	6	0.5568	Low	High	2
	2840.4	POWELL RD from BROAD ST (US41/SR45) to URBAN BOUNDARY	0.54	0.00	0.00	42.42	0.00	0.0287	0	0	0	1	2	0	3	2	0	0	0	2	0.2614	Low	Moderate	3
	2840.5	POWELL RD from URBAN BOUNDARY to CULBREATH RD	2.83	0.00	0.00	17.94	24.68	0.0205	0	0	0	1	2	0	3	2	0	0	0	2	0.2614	Low	Moderate	3
	2850	POWELL RD from CULBREATH RD to EMERSON RD	0.51	0.00	0.00	0.00	100.00	0.0338	1	0	0	1	2	0	4	0	0	0	0	0	0.1818	Low	Low	3
	2860	POWELL RD from EMERSON RD to CEDAR LN	2.15	0.00	0.00	0.00	61.22	0.0207	0	0	0	1	2	0	3	1	0	0	0	1	0.1989	Low	Low	3
	2870	POWELL RD from CEDAR LN to SPRING LAKE HWY	2.65	0.00	0.00	0.41	29.66	0.0103	0	0	0	1	2	0	3	2	0	0	0	2	0.2614	Low	Moderate	3
	2880	POWERLINE RD from LOCKHART RD to KETTERING RD	2.02	0.00	0.00	0.55	10.66	0.0040	0	0	0	0	0	0	0	0	0	0	1	1	0.0625	Low	Low	3
	20450.1	RESTER DR from KEN AUSTIN PKWY to N SUNCOAST PKWY (SR589)	0.22	0.00	0.00	0.00	0.00	0.0000	1	0	0	0	0	0	1	0	2	0	0	2	0.1705	Low	Low	3
	20450.2	RESTER DR from N SUNCOAST PKWY (SR589) to FORT DADE AVE	1.77	0.00	0.00	3.15	14.01	0.0069	0	0	0	0	0	0	0	0	1	0	0	1	0.0625	Low	Low	3
	5010.1	RIDGE MANOR BLVD from CORTEZ BLVD (SR50) to OLANCHA RD	0.62	0.00	0.00	12.46	0.00	0.0084	0	0	0	0	0	0	0	2	0	1	0	3	0.1875	Low	Low	3
	5010.2	RIDGE MANOR BLVD from OLANCHA RD to TREIMAN BLVD (US301/SR35)	1.68	0.00	0.00	26.53	9.59	0.0212	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
	4910	RIDGE RD from US19 (SR55) to NIGHTWALKER RD	0.80	0.00	67.21	6.28	0.00	0.1541	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Moderate	Low	3
	20370.2	SAMS CLUB RD from MARINER BLVD (CR587) to SUNSHINE GROVE RD	0.71	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
	20250	SGT. LEA MILLS BLVD from CORPORATE BLVD to BROAD ST (US41/SR45)	1.27	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
8	5110.1	SHOAL LINE BLVD from OSOWAW BLVD to URBAN BOUNDARY	5.40	100.00	0.00	99.66	0.00	0.7430	0	0	0	1	2	2	5	2	0	2	0	4	0.4773	High	Moderate	1
8	5110.3	SHOAL LINE BLVD from URBAN BOUNDARY to COFER RD	1.48	100.00	0.00	100.00	0.00	0.7432	0	0	0	1	2	2	5	0	0	1	0	1	0.2898	High	Moderate	1
8	5110.4	SHOAL LINE BLVD from COFER RD to CORTEZ BLVD (SR50)	0.42	100.00	0.00	100.00	0.00	0.7432	0	0	0	1	2	0	3	0	0	1	0	1	0.1989	High	Low	2
	10700.1	SNOW MEMORIAL HWY from BROAD ST (US41/SR45) to 900 FT S OF LAKE VILLAGE LN	1.28	0.00	0.00	2.37	72.83	0.0262	0	0	0	1	2	0	3	0	0	0	1	1	0.1989	Low	Low	3
	10700.2	SNOW MEMORIAL HWY from 900 FT S OF LAKE VILLAGE LN to LAKE LINDSEY RD (S)	0.38	0.00	0.00	0.00	99.81	0.0337	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	10710	SNOW MEMORIAL HWY from LAKE LINDSEY RD (S) to LAKE LINDSEY RD (N)	0.13	0.00	0.00	0.00	0.00	0.0000	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	10720	SNOW MEMORIAL HWY from LAKE LINDSEY RD (N) to CITRUS COUNTY LINE	2.13	0.00	0.00	9.37	13.81	0.0110	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	20805	SPINE RD from POWERLINE RD to DASHBACH RD	1.01	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	5400	SPRING HILL DR from US19 (SR55) to KENLAKE AVE	0.37	0.00	70.85	0.00	0.00	0.1580	1	1	0	1	2	0	5	2	0	2	0	4	0.4773	Moderate	Moderate	2
	5402	SPRING HILL DR from KENLAKE AVE to TREE HAVEN DR	0.55	0.00	55.26	0.00	0.00	0.1232	1	1	0	1	2	0	5	2	0	2	0	4	0.4773	Moderate	Moderate	2
	5405	SPRING HILL DR from TREE HAVEN DR to PINEHURST DR (W)	0.28	0.00	84.13	0.00	0.00	0.1876	1	1	0	1	2	0	5	2	0	2	0	4	0.4773	Moderate	Moderate	2
	5407	SPRING HILL DR from PINEHURST DR (W) to PINEHURST DR (E)	0.72	0.00	49.98	0.00	0.00	0.1114	1	1	0	1	2	0	5	2	1	2	0	5	0.5398	Moderate	High	1
	5410	SPRING HILL DR from PINEHURST DR (E) to DELTONA BLVD	0.66	0.00	64.58	0.00	0.00	0.1440	1	1	0	1	2	0	5	2	1	0	0	3	0.4148	Moderate	Moderate	2
	5415	SPRING HILL DR from DELTONA BLVD to WATERFALL DR	0.41	0.00	24.91	4.61	0.00	0.0587	1	1	0	1	2	0	5	2	1	1	0	4	0.4773	Moderate	Moderate	2
	5420	SPRING HILL DR from WATERFALL DR to MARINER BLVD	2.63	0.00	0.51	2.10	0.00	0.0026	1	1	0	1	2	0	5	2	1	1	0	4	0.4773	Low	Moderate	3

Hernando/Citrus MPO
Vulnerability Resiliency Assessment
Hernando County Roadways

Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)							
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
	5425	SPRING HILL DR from MARINER BLVD to FENTRESS CT	1.09	0.00	0.00	0.03	0.00	0.0000	1	1	0	1	2	0	5	2	0	0	0	2	0.3523	Low	Moderate	3
	5430.1	SPRING HILL DR from FENTRESS CT to GLENRIDGE DR	0.24	0.00	0.00	0.00	0.00	0.0000	1	1	0	1	2	0	5	2	0	1	0	3	0.4148	Low	Moderate	3
	5430.2	SPRING HILL DR from GLENRIDGE DR to LINDEN DR (W)	0.54	0.00	0.00	1.74	0.00	0.0012	1	1	0	1	2	0	5	2	0	1	0	3	0.4148	Low	Moderate	3
	5435.1	SPRING HILL DR from LINDEN DR (W) to CORONADO DR	0.98	0.00	0.00	1.26	0.00	0.0009	1	1	0	1	2	0	5	2	0	1	0	3	0.4148	Low	Moderate	3
	5435.2	SPRING HILL DR from CORONADO DR to BARCLAY AVE	0.70	0.00	0.00	0.00	0.00	0.0000	1	1	0	1	2	0	5	2	0	1	0	3	0.4148	Low	Moderate	3
	5440.4	SPRING HILL DR from N SUNCOAST PKWY (SB RAMPS) to SPRING PARK WAY	0.27	0.00	0.00	0.00	0.00	0.0000	1	1	0	1	2	0	5	1	1	0	0	2	0.3523	Low	Moderate	3
	5440.5	SPRING HILL DR from BARCLAY AVE to N SUNCOAST PKWY (NB RAMPS)	0.34	0.00	0.00	0.00	0.00	0.0000	1	1	0	1	2	0	5	2	0	0	0	2	0.3523	Low	Moderate	3
	5440.6	SPRING HILL DR from N SUNCOAST PKWY (NB RAMPS) to N SUNCOAST PKWY (SB RAMPS)	0.10	0.00	0.00	0.00	0.00	0.0000	1	1	0	1	2	0	5	1	0	0	0	1	0.2898	Low	Moderate	3
	5443	SPRING HILL DR from SPRING PARK WAY to CALIFORNIA ST	1.01	0.00	0.00	0.00	0.00	0.0000	1	1	0	1	2	0	5	0	2	2	1	5	0.5398	Low	High	2
	5445	SPRING HILL DR from CALIFORNIA ST to BROAD ST (US41/SR45)	1.56	0.00	0.00	47.27	0.00	0.0319	1	0	0	1	2	0	4	2	2	2	1	7	0.6193	Low	High	2
	10730	SPRING LAKE HWY from PASCO COUNTY LINE to CHURCH RD	1.25	0.00	0.00	9.31	8.45	0.0091	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	10740	SPRING LAKE HWY from CHURCH RD to AYERS RD EXT	0.76	0.00	0.00	0.00	72.26	0.0244	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	10750	SPRING LAKE HWY from AYERS RD EXT to AYERS/HAYMAN RD	0.52	0.00	0.00	0.00	0.00	0.0000	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	10760	SPRING LAKE HWY from AYERS/HAYMAN RD to HICKORY HILL RD	0.51	0.00	0.00	0.00	46.96	0.0159	0	0	0	1	2	0	3	0	0	0	0	0	0.1364	Low	Low	3
	10770	SPRING LAKE HWY from HICKORY HILL RD to POWELL RD	0.75	0.00	0.00	2.42	23.52	0.0096	0	0	0	1	2	0	3	1	0	0	0	1	0.1989	Low	Low	3
	10780	SPRING LAKE HWY from POWELL RD to CORTEZ BLVD (SR50)	2.30	0.00	0.00	8.63	0.00	0.0058	0	0	0	1	2	0	3	2	0	0	0	2	0.2614	Low	Moderate	3
	20350.1	STAR RD from EXILE RD to WEEPING WILLOW ST	0.76	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	20350.2	STAR RD from WEEPING WILLOW ST to SUNSHINE GROVE RD	1.01	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	2	2	0	0	4	0.2500	Low	Low	3
	20220.1	STERLING HILLS from ELWOOD RD to ELGIN BLVD/POWELL RD	1.38	0.00	0.00	1.65	0.00	0.0011	0	0	0	0	0	0	0	2	1	0	0	3	0.1875	Low	Low	3
	20220.2	STERLING HILLS from LINDEN DR to ELWOOD RD	0.83	0.00	0.00	6.04	0.00	0.0041	0	0	0	0	0	0	0	2	1	1	0	4	0.2500	Low	Low	3
	11260	SUNCOAST PKWY (SR589) from COUNTY LINE RD to SPRING HILL DR	3.46	0.00	0.00	6.71	0.00	0.0045	1	0	2	2	2	0	7	2	0	0	0	2	0.4432	Low	Moderate	3
	11280	SUNCOAST PKWY (SR589) from SPRING HILL DR to CORTEZ BLVD (SR50)	3.74	0.00	0.00	0.00	0.00	0.0000	1	0	2	2	2	0	7	2	2	2	0	6	0.6932	Low	High	2
	11290.6	SUNCOAST PKWY (SR589) from CORTEZ BLVD (SR50) to URBAN BOUNDARY	2.04	0.00	0.00	0.00	0.00	0.0000	0	0	2	2	2	0	6	2	1	2	0	5	0.5852	Low	High	2
	11290.8	SUNCOAST PKWY (SR589) from URBAN BOUNDARY to CENTRALIA	3.71	0.00	0.00	8.74	5.80	0.0079	0	0	2	2	2	0	6	2	1	0	0	3	0.4602	Low	Moderate	3
	11290.9	SUNCOAST PKWY (SR589) from CENTRALIA to PONCE DE LEON BLVD (US98/SR700)	5.05	0.00	0.00	8.85	10.84	0.0096	0	0	2	2	2	0	6	1	0	0	0	1	0.3352	Low	Moderate	3
	20530	SUNCOAST PKWY (SR589) from PONCE DE LEON BLVD (US98/SR700) to CITRUS COUNTY LINE	0.63	0.00	0.00	0.00	100.00	0.0338	0	0	2	2	2	0	6	0	0	0	0	0	0.2727	Low	Moderate	3
	20800	SUNRISE RD from CORTEZ BLVD (US98/SR50) to DASHBACH RD	2.07	0.00	0.00	1.48	19.71	0.0077	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	2	SUNSHINE GROVE RD from SAMS CLUB RD to CORTEZ BLVD (SR50)	0.21	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	1	0	2	0	3	0.1875	Low	Low	3
	11160	SUNSHINE GROVE RD from CORTEZ BLVD (SR50) to HARRISON ST	1.50	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	0	0	2	1	2	2	0	5	0.4034	Low	Moderate	3
	11170.1	SUNSHINE GROVE RD from HARRISON ST to KEN AUSTIN PKWY	0.50	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	0	0	2	1	2	0	0	3	0.2784	Low	Moderate	3
	11170.2	SUNSHINE GROVE RD from KEN AUSTIN PKWY to HEXAM RD	1.50	0.00	0.00	0.00	0.00	0.0000	1	0	0	1	0	0	2	2	2	0	0	4	0.3409	Low	Moderate	3
	11180	SUNSHINE GROVE RD from HEXAM RD to CENTRALIA RD	2.16	0.00	0.00	0.00	6.80	0.0023	0	0	0	1	0	0	1	2	0	0	0	2	0.1705	Low	Low	3
	20380.1	SUNSHINE GROVE RD from IRVING ST to SAMS CLUB RD	0.45	0.00	0.00	6.79	0.00	0.0046	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Low	Low	3
	20080.1	SUNSHINE GROVE RD EXT from CENTRALIA RD to QUIGLEY AVE	1.54	0.00	0.00	10.37	15.36	0.0122	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	20080.2	SUNSHINE GROVE RD EXT from QUIGLEY AVE to VELVET SCOOTER AVE	1.61	0.00	0.00	2.87	0.00	0.0019	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	20140	SUNSHINE GROVE RD EXT from VELVET SCOOTER AVE to SUNSHINE GROOVE RD EXT	0.38	0.00	0.00	8.12	0.00	0.0055	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	20150.2	SUNSHINE GROVE RD EXT from SUNSHINE GROVE RD EXT to N SUNCOAST PKWY (SR589)	0.35	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	20150.3	SUNSHINE GROVE RD EXT from N SUNCOAST PKWY (SR589) to PONCE DE LEON BLVD (US98/SR700)	1.27	0.00	0.00	27.37	28.35	0.0281	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	5710	THRASHER AVE from US19 (SR55) to MT SPARROW RD	0.42	0.00	100.00	14.96	21.03	0.2402	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Moderate	Low	3
	5720	THRASHER AVE from MT SPARROW RD to DOWNY WOODPECKER RD	2.68	0.00	22.82	0.00	0.00	0.0509	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Moderate	Low	3
	20170	TOUCAN TRL from US19 (SR55) to BARTLETT ST	1.44	0.00	48.25	0.00	0.00	0.1076	0	0	0	0	0	0	0	2	0	2	0	4	0.2500	Moderate	Low	3
	10810	TREIMAN BLVD (US301/SR35) from PASCO COUNTY LINE to CORTEZ BLVD (SR50)	2.06	0.00	0.00	65.80	0.00	0.0445	0	0	0	2	2	2	6	2	0	1	0	3	0.4602	Low	Moderate	3
	10820	TREIMAN BLVD (US301/SR35) from CORTEZ BLVD (SR50) to RIDGE MANOR BLVD	0.22	0.00	0.00	17.24	0.00	0.0116	0	0	0	2	2	0	4	2	0	1	0	3	0.3693	Low	Moderate	3
	10830	TREIMAN BLVD (US301/SR35) from RIDGE MANOR BLVD to SUMTER COUNTY LINE	4.37	0.00	0.00	30.57	7.08	0.0230	0	0	0	2	2	0	4	2	0	1	0	3	0.3693	Low	Moderate	3
9	10840	US19 (SR55) from COUNTY LINE RD to APPLEGATE DR	1.60	14.31	85.69	16.41	0.00	0.2988	2	1	2	2	2	0	9	2	0	2	1	5	0.7216	Moderate	High	1
9	10850	US19 (SR55) from APPLEGATE DR to SPRING HILL DR	0.34	1.94	98.06	0.00	0.00	0.2318	2	1	2	2	2	0	9	2	0	2	0	4	0.6591	Moderate	High	1
9	10860.3	US19 (SR55) from SPRING HILL DR to TRENTON	0.65	99.77	0.23	14.27	0.00	0.6843	2	1	2	2	2	0	9	2	0	2	0	4	0.6591	High	High	1

Hernando/Citrus MPO
Vulnerability Resiliency Assessment
Hernando County Roadways

Corridor Summary				Vulnerability (Storm Surge + Flood + Fire)*					Criticality (Critical Transportation Function + Critical Facility Access)**													Road Segment Priority Status		
									Critical Transportation Function (11 possible points)							Critical Facility Access (8 possible points)								
Group Number	Corridor ID		Length (mi)	% Cat 1/2 Storm Surge	% Cat 3/4/5 Storm Surge	% Flood	% Fire	Vulnerable Score	Traffic Score (2 points)	Transit Score (1 point)	SIS Score (2 points)	Func. Class Score (2 points)	Evac. Route Score (2 points)	Primary Access/Bridge Score (2 points)	Critical Trans. Score	Utility Score (2 points)	Shelter Score (2 points)	Emerg. Score (2 points)	Airport Score (2 points)	Critical Access Score	Total Criticality Score	Vulnerable Tier	Critical Tier	Composite Tier
9	10860.4	US19 (SR55) from TRENTON to TIMBER PINES DR	0.39	99.13	0.86	17.72	0.00	0.6837	2	1	2	2	2	0	9	2	0	2	0	4	0.6591	High	High	1
9	10870.3	US19 (SR55) from TIMBER PINES DR to PINE FOREST DR	0.25	100.00	0.00	23.55	0.00	0.6916	2	1	2	2	2	0	9	2	0	2	0	4	0.6591	High	High	1
9	10870.4	US19 (SR55) from PINE FOREST DR to BRANDY DR	0.86	28.94	71.06	21.30	0.00	0.3684	2	1	2	2	2	0	9	2	0	1	0	3	0.5966	Moderate	High	1
9	10880	US19 (SR55) from BRANDY DR to FOREST OAKS BLVD	0.69	0.00	100.00	28.67	0.00	0.2423	2	1	2	2	2	0	9	2	0	1	0	3	0.5966	Moderate	High	1
9	10890.2	US19 (SR55) from PACIFIC AVE to NORTHCLIFFE BLVD	0.81	0.00	71.18	9.66	0.00	0.1652	2	1	2	2	2	0	9	0	1	1	0	2	0.5341	Moderate	High	1
9	10890.3	US19 (SR55) from FOREST OAKS BLVD to BERKELEY MANOR BLVD	0.43	0.00	100.00	2.01	0.00	0.2243	2	1	2	2	2	0	9	2	0	1	0	3	0.5966	Moderate	High	1
9	10890.4	US19 (SR55) from BERKELEY MANOR BLVD to PACIFIC AVE	0.45	0.00	84.45	0.00	0.00	0.1883	2	1	2	2	2	0	9	2	0	1	0	3	0.5966	Moderate	High	1
9	10900	US19 (SR55) from NORTHCLIFFE BLVD to CORTEZ BLVD (SR50)	0.80	0.00	52.29	1.73	0.00	0.1178	2	1	2	2	2	0	9	0	1	1	0	2	0.5341	Moderate	High	1
9	11000	US19 (SR55) from CORTEZ BLVD (SR50) to RIDGE RD	1.73	0.00	86.23	31.17	0.00	0.2133	1	0	2	2	2	0	7	2	1	1	0	4	0.5682	Moderate	High	1
	11010	US19 (SR55) from RIDGE RD to HEXAM RD	2.92	0.00	95.97	21.85	1.46	0.2292	1	0	2	2	2	0	7	1	0	0	0	1	0.3807	Moderate	Moderate	2
	11020.1	US19 (SR55) from HEXAM RD to VESPA WAY	0.96	0.00	100.00	0.00	0.00	0.2230	1	0	2	2	2	0	7	1	2	0	0	3	0.5057	Moderate	High	1
	11020.2	US19 (SR55) from VESPA WAY to CENTRALIA RD	1.11	0.00	100.00	4.38	33.80	0.2374	1	0	2	2	2	0	7	0	2	0	0	2	0.4432	Moderate	Moderate	2
	11030	US19 (SR55) from CENTRALIA RD to KNUCKEY RD	1.60	0.00	100.00	38.00	2.64	0.2495	0	0	2	2	2	0	6	2	2	0	0	4	0.5227	Moderate	High	1
	11040	US19 (SR55) from KNUCKEY RD to THRASHER RD	1.43	0.00	100.00	47.41	10.21	0.2585	0	0	2	2	2	0	6	2	0	0	0	2	0.3977	Moderate	Moderate	2
	11050	US19 (SR55) from THRASHER RD to CITRUS COUNTY LINE	2.51	28.87	71.13	22.20	10.03	0.3721	0	0	2	2	2	0	6	1	0	0	0	1	0.3352	Moderate	Moderate	2
	20130	VELVET SCOTER AVE from DOWNY WOODPECKER RD to COURLAND RD	0.14	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	1	0	0	0	1	0.0625	Low	Low	3
	6010	WATERFALL DR from COUNTY LINE RD to SPRING HILL DR	1.64	0.00	47.25	0.00	0.00	0.1054	0	0	0	0	0	0	0	2	1	1	0	4	0.2500	Moderate	Low	3
	8080	WEATHERLY RD from MONDON HILL RD to CROOM RD	2.59	0.00	0.00	6.74	20.80	0.0116	0	0	0	0	0	0	0	0	0	0	1	1	0.0625	Low	Low	3
	20360.1	WEEPING WILLOW ST from CORTEZ BLVD (SR50) to JACQUELINE RD	0.24	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	1	0	1	0	2	0.1250	Low	Low	3
	20360.2	WEEPING WILLOW ST from JACQUELINE RD to MONTOUR ST	0.75	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	1	0	1	0	2	0.1250	Low	Low	3
	20360.3	WEEPING WILLOW ST from MONTOUR ST to STAR RD	1.01	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	1	0	1	0	2	0.1250	Low	Low	3
	20365.1	WEEPING WILLOW ST from STAR RD to BOURASSA BLVD	1.00	0.00	0.00	0.75	0.00	0.0005	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	20365.2	WEEPING WILLOW ST from BOURASSA BLVD to HEXAM RD	0.50	0.00	0.00	0.16	0.00	0.0001	0	0	0	0	0	0	0	2	0	0	0	2	0.1250	Low	Low	3
	6110	WISCON RD from CORTEZ BLVD (SR50) to FORT DADE AVE	0.69	0.00	0.00	0.00	0.00	0.0000	0	0	0	1	2	0	3	2	0	1	0	3	0.3239	Low	Moderate	3
	6115	WISCON RD from FORT DADE AVE to CALIFORNIA ST	0.41	0.00	0.00	0.00	0.00	0.0000	0	0	0	1	2	0	3	2	0	1	0	3	0.3239	Low	Moderate	3
	6120	WISCON RD from CALIFORNIA ST to MOBLEY RD	2.03	0.00	0.00	37.12	8.93	0.0281	0	1	0	1	2	0	4	2	0	2	1	5	0.4943	Low	Moderate	3
	6125	WISCON RD from MOBLEY RD to BROAD ST (US41/SR45)	1.07	0.00	0.00	50.64	0.00	0.0342	0	1	0	1	2	0	4	2	0	2	0	4	0.4318	Low	Moderate	3
	6210	YONTZ RD from COBB RD to PONCE DE LEON BLVD (US98/SR700)	1.25	0.00	0.00	13.90	0.00	0.0094	0	0	0	1	0	0	1	2	1	1	0	4	0.2955	Low	Moderate	3
	6220.1	YONTZ RD from PONCE DE LEON BLVD (US98/SR700) to HOWELL AV	1.44	0.00	0.00	5.82	0.00	0.0039	0	1	0	1	0	0	2	1	1	1	0	3	0.2784	Low	Moderate	3
	6220.2	YONTZ RD from HOWELL AV to BROAD ST (US41/SR45)	0.08	0.00	0.00	0.00	0.00	0.0000	0	0	0	0	0	0	0	0	0	0	0	0	0.0000	Low	Low	3

*Vulnerability formula is (1*percent corridor in cat 1/2 storm surge area + 0.33*percent corridor in cat 3/4/5 storm surge area + 0.1*percent corridor in flood zone + 0.05*percent corridor in fire risk area)/148 resulting in a possible score between 0 and 1.
**Criticality score formula is 0.5*(Critical Transportation Score/11) + 0.5*(Critical Facility Access/8) resulting in a possible score between 0 and 1.
Scores falling within the moderate range for vulnerability and criticality. Also indicates overall Tier 2 values for segements
Scores falling within the high range for vulnerability and criticality. Also indicates overall Tier 1 values for segements
Indicates non-zero values for vulnerability and criticality measures.

APPENDIX C PRESENTATIONS AT STAKEHOLDER MEETINGS

Hernando Citrus MPO Vulnerability and Risk Assessment

Stakeholder Group Meeting #1

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1

Outline

- Introductions
- Review of Project Schedule and Objectives
- Identification of Vulnerable Areas
- Interactive Mapping Exercise
- Next Steps and Weighting/Prioritization

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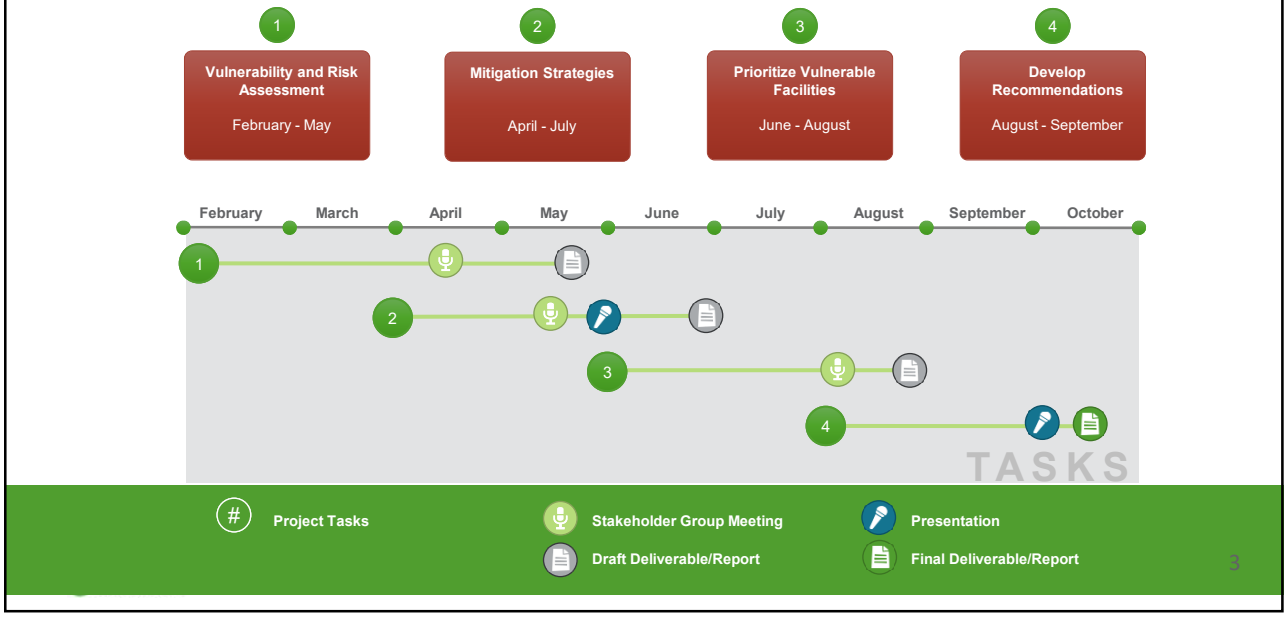
Review of Project Schedule



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Review of Study Objectives

- Identify Vulnerable Transportation Infrastructure
- Develop Resilient Mitigation Strategies
- Prioritize Vulnerable Locations
- Create a Tiered List of Strategies / Locations for Long Range Transportation Plan & Transportation Improvement Program

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Review of Study Objectives

- 2045 LRTP Goals
- Preservation Goal is aligned with MPO Planning Factors in Federal Transportation Bill.

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Identification of Vulnerable Areas

- Storm Surge / Inundation
  - Data Source: Sea, Lake, and Overland Surges from Hurricanes (SLOSH)
  - Data Provider: National Hurricane Center
  - Data Analysis: Included all 5 hurricane levels
- Flood Hazard
  - Data Source: Digital Flood Insurance Rate Map
  - Data Provider: Federal Emergency Management Agency
  - Data Analysis: Included areas listed as High Risk and Very High Risk
- Fire Hazard
  - Data Source: Wildfire Hazard Probability
  - Data Provider: US Department Agriculture Forest Service
  - Data Analysis: Used two highest categories of High and Very High

21% of MPO roads at storm surge risk

15% of MPO roads at flood risk

14% of MPO roads at wildfire risk

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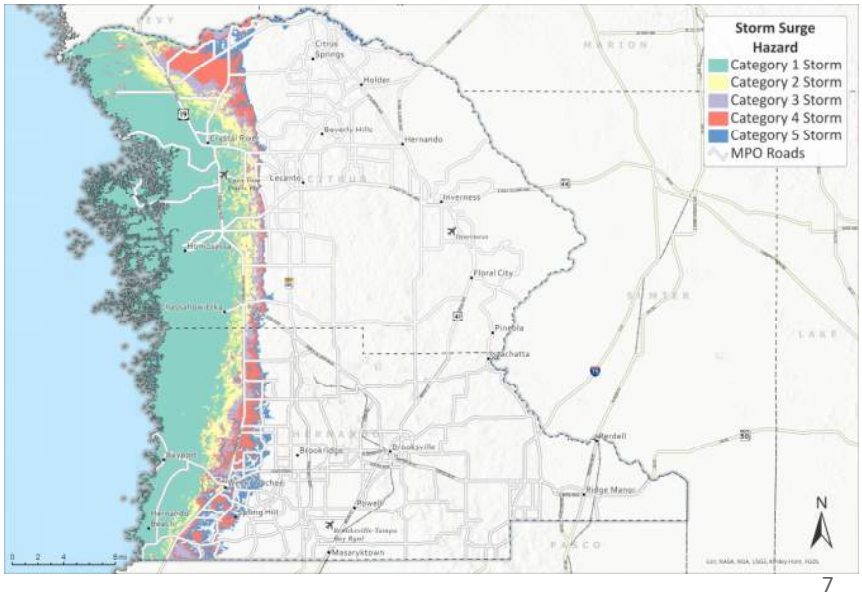
Storm Surge / Inundation

- This dataset is created by computing the maximum storm surge of storms simulated the SLOSH Model (Sea, Lake, and Overland Surges from Hurricanes)
- Model variables considered:
  - Forward speed
  - Radius of maximum wind
  - Intensity
  - Landfall location
  - Tide level
  - Storm direction.



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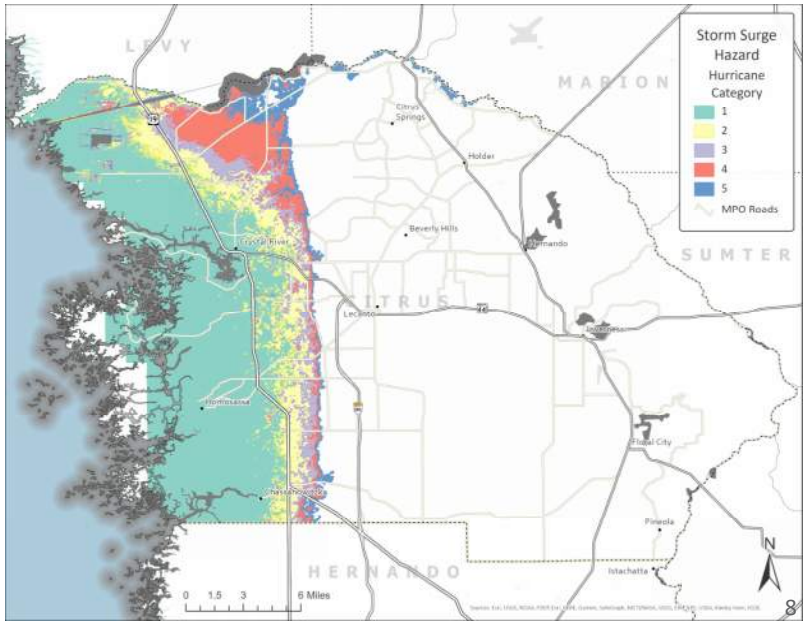
Storm Surge / Inundation – Citrus County, FL

- For planning purposes, the National Hurricane Center uses a representative sample of hypothetical storms to estimate the near worst–case scenario of flooding for each hurricane category.



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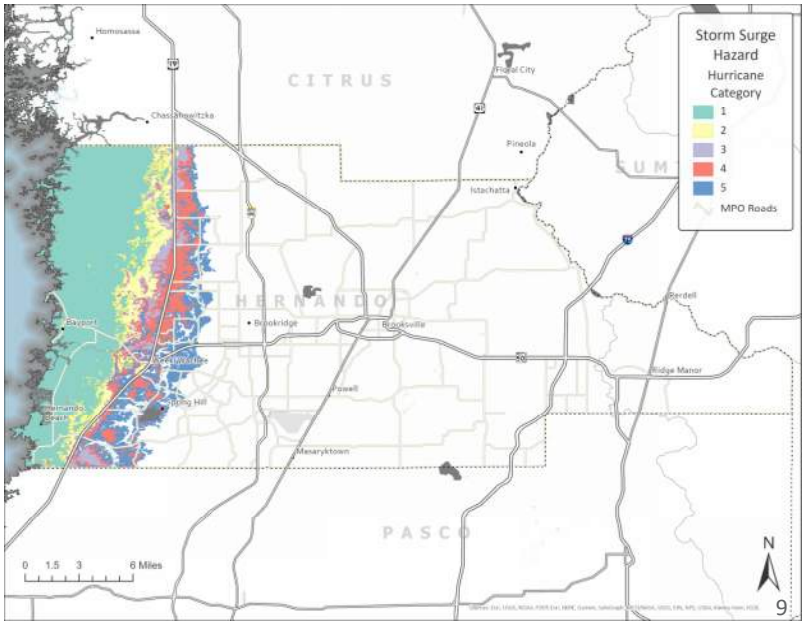
Storm Surge / Inundation – Hernando County, FL

- For planning purposes, the National Hurricane Center uses a representative sample of hypothetical storms to estimate the near worst–case scenario of flooding for each hurricane category.



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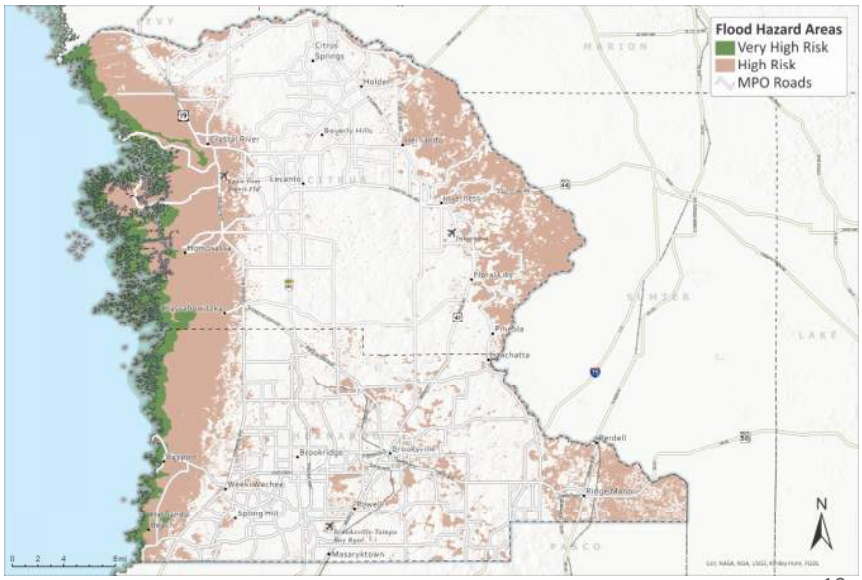
Flood Hazard

- Primarily shows the 100-year flood, or a flood that has a 1% chance of occurring during any given year.
- Areas within the 100-year floodplain are designated as Special Flood Hazard Areas, those not within are designated as Other Areas.



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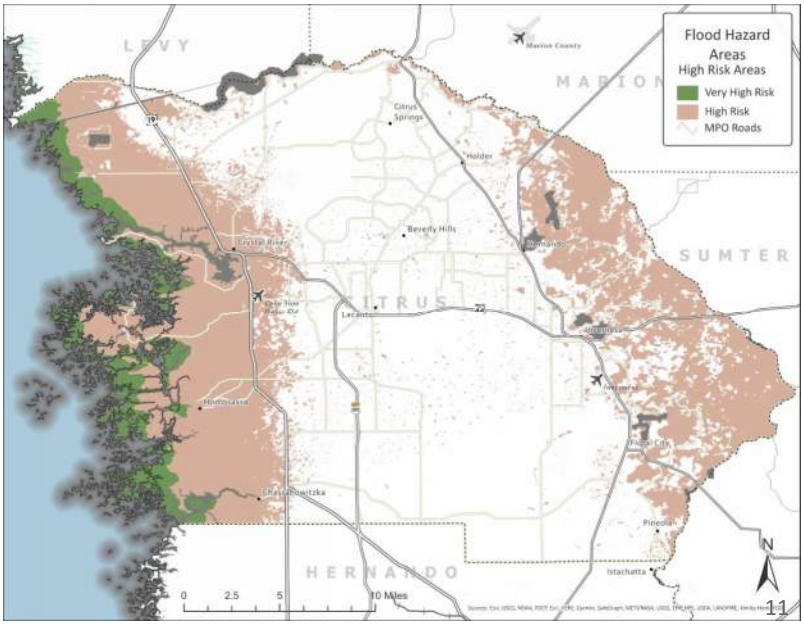
Flood Hazard Areas – Citrus County, FL

- Based on canal and stream flows, storm tides, hydrologic/hydraulic analyses, and rainfall and topographic surveys.



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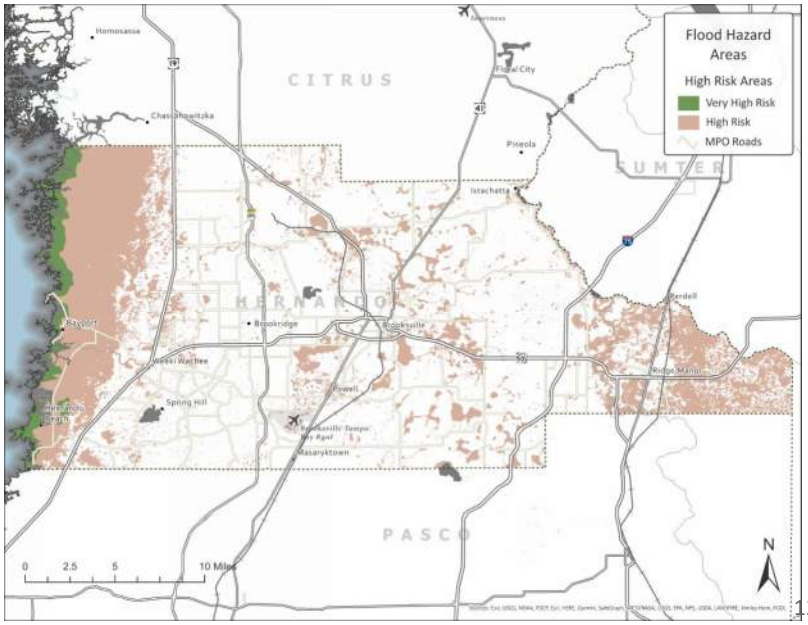
Flood Hazard Areas – Hernando County, FL

- Based on canal and stream flows, storm tides, hydrologic/hydraulic analyses, and rainfall and topographic surveys.



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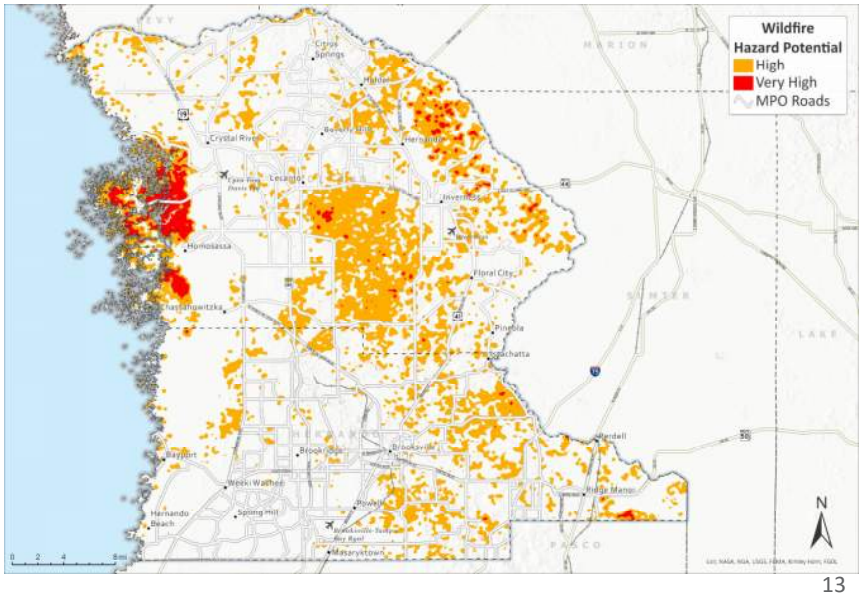
Fire Hazard

- Five classifications (Very Low to Very High)
- Areas with higher values represent higher probability of extreme fire behavior Analysis
- High and Very High values were isolated for the study.



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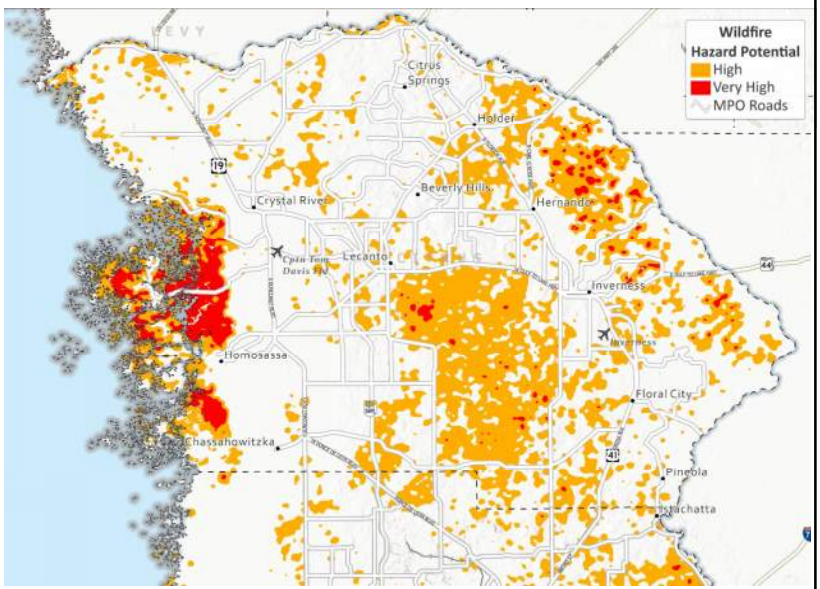
Fire Hazard – Citrus County, FL



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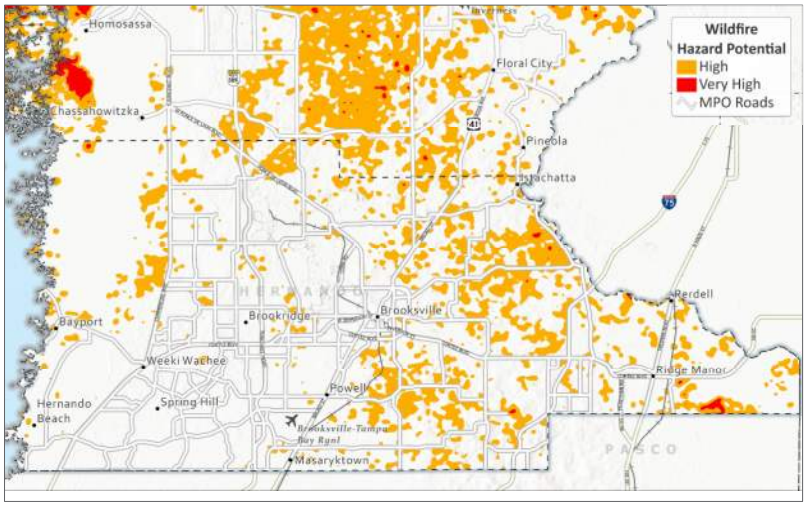
Fire Hazard – Hernando County, FL



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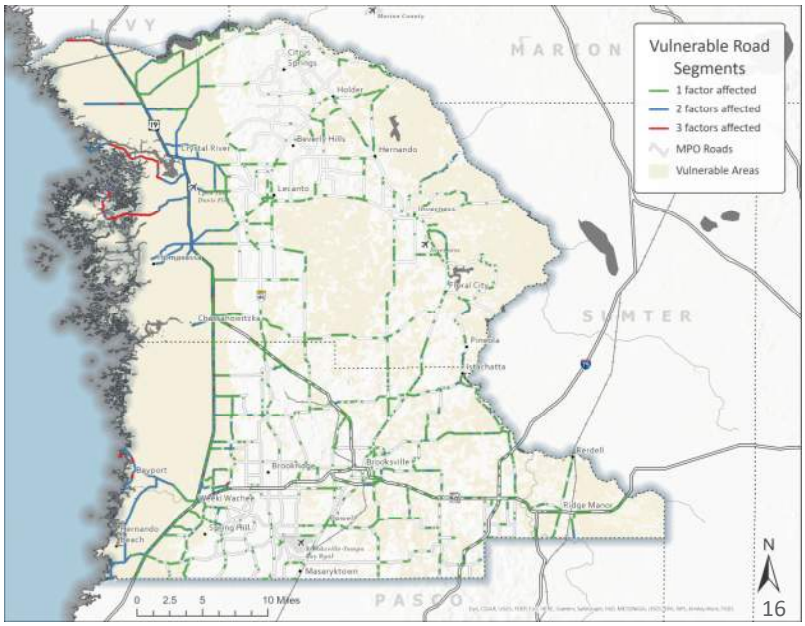
Identification of Vulnerable Areas

- 37% of roadway miles are vulnerable.
  - 26% vulnerable to one factor
  - 10% vulnerable to two factors
  - 1% vulnerable to all three.



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Identification of Vulnerable Areas

- Review of Prior Plans
  - Hernando County Coastal Management Plan
  - Citrus County Coastal Management Plan
  - Tampa Bay Regional Planning Council Regional Resiliency Action Plan
  - Hernando County Local Mitigation Strategy
  - Citrus County Local Mitigation Strategy

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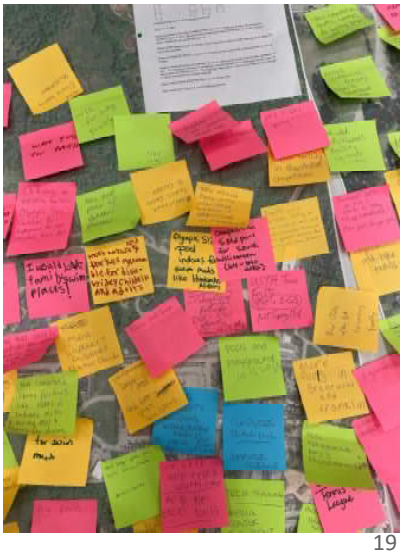
Map Review

- Maps of each vulnerability factor
- Tabular listing of vulnerable roadway segments



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Next Steps

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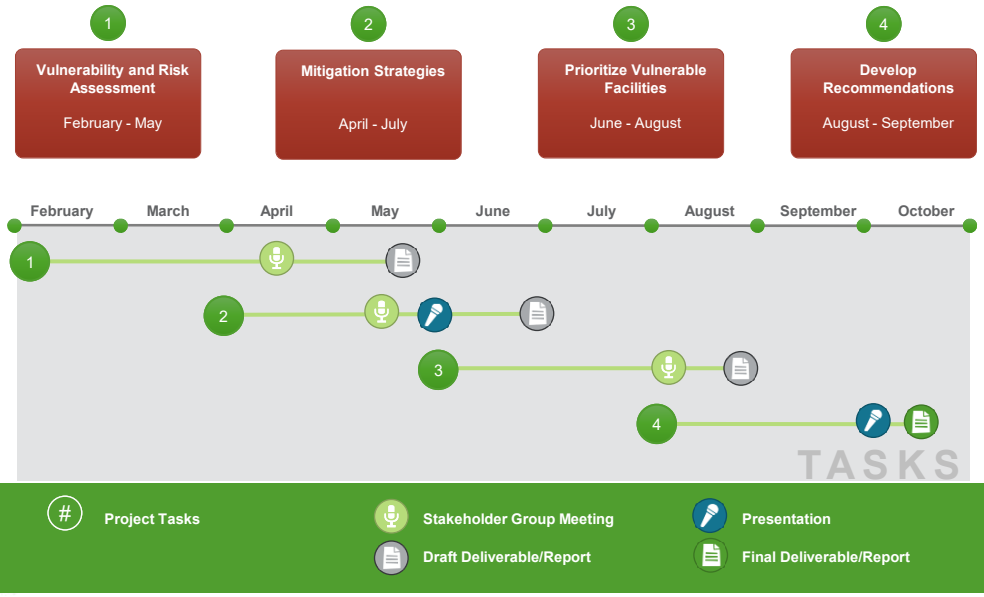
Next Steps



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Next Steps

- Mitigation Strategies
  - Pre-event
  - Post-event
- Prioritization / Weighting Factors
- Next Stakeholder Group meeting
  - May 17th 10:00 am
  - Location: TBD; potentially virtual option.

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Questions?

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Hernando Citrus MPO Vulnerability and Risk Assessment

Stakeholder Group Meeting #2

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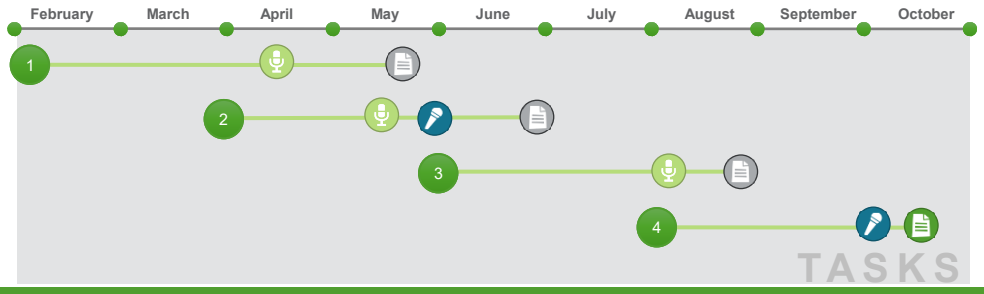
1

Review of Project Schedule

1	2	3	4
Vulnerability and Risk Assessment February - May	Mitigation Strategies April - July	Prioritize Vulnerable Facilities June - August	Develop Recommendations August - September



Project Tasks
Stakeholder Group Meeting
Presentation
Draft Deliverable/Report
Final Deliverable/Report

2

2

Outline

- Introductions
- FDOT Guidance for Incorporating Resiliency into the 2050 LRTP
- Vulnerable Area Update
- Best Practices Review
- Determining Risk/Exposure
- Defining Critical Transportation Facilities
- Strategy Development

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FDOT Guidance

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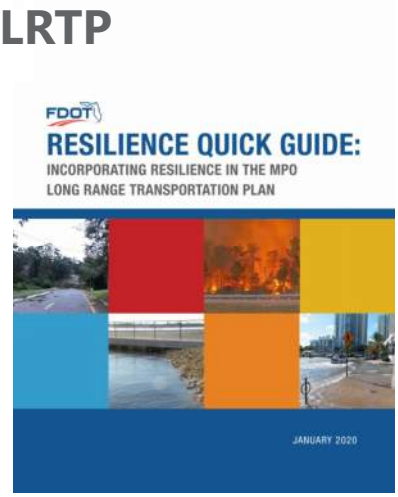
Incorporating Resilience in the LRTP

"Resilience is the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions." **FHWA Order 5220**

- Guidelines to incorporate resilience when developing transportation plans:
  1. Review the plan goals and objectives to address resilience.
  2. Identify performance measures and targets
  3. Complete risk and vulnerability assessment
  4. Find and assess strategies in a "Needs Plan".
  5. Integrate projects and actions that will enhance resiliency in the cost-feasible plan.



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Resilience Incorporation Steps

Goals and Objectives

- Form the foundation of the LRTP by guiding recommendations
- "**Preserve and maintain a resilient transportation infrastructure and transit assets for the future.**" HC MPO 2045 LRTP Planning Factor

Performance Measures and Targets

- MPOs can include measures that address preparing for extreme weather events, anticipating abrupt or prolonged environmental changes, shifting economic patterns, or maintaining connectivity and mobility in order to incorporate resiliency.

Risk and Vulnerability Assessment

- A risk is a measure of the probability that an asset will experience a particular impact and the severity of that impact.
- Cultivating an accurate inventory of assets and conditions helps identify susceptible infrastructure and plan for potential adverse environmental, weather, economic, or operational conditions.

Needs Plan

- The Needs Plan is an opportunity to directly assess how projects would strengthen the planning area against identified risks and vulnerabilities.

Coast Feasible Plan

- Lists the projects that are realistically achievable through the planning horizon due to anticipated funding availability at local, state, and federal levels.

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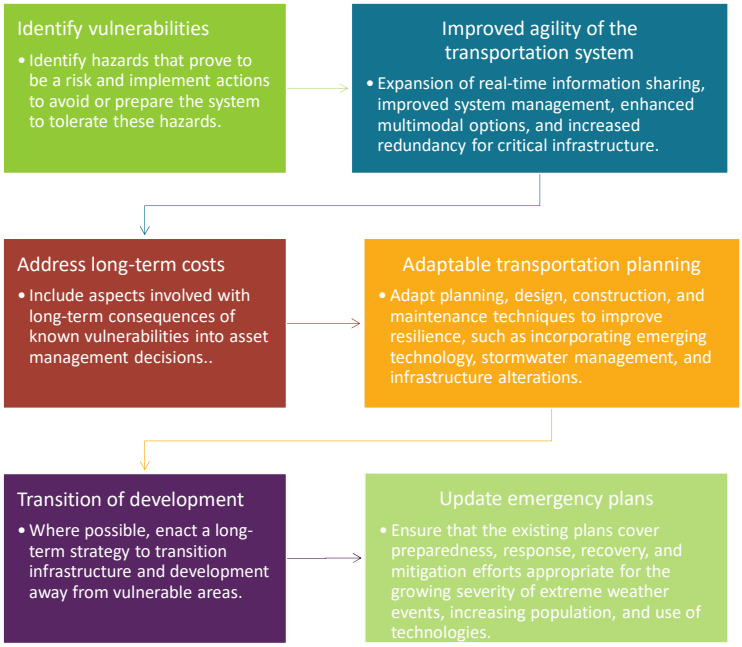
Florida Transportation Plan

- One of the key strategies introduced in the FTP report is to identify and mitigate risks to Florida's transportation system.
- To do so, it was stated that Florida plans to act on the following related initiatives:



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Vulnerable Area Update

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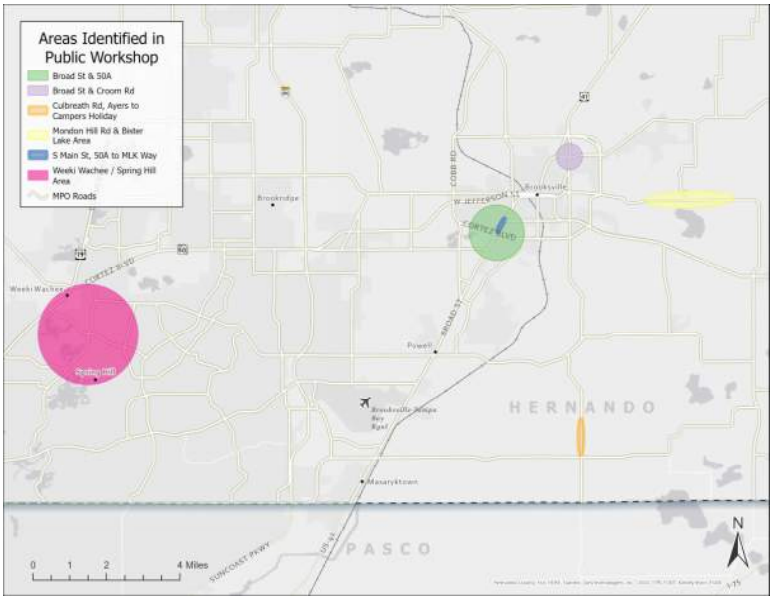
Stakeholder Group Meeting #1 Feedback

- Areas identified for assessing vulnerability to flooding.
  - Broad St. and 50A
  - S Main St. between 50A and MLK Way
  - US 41 and Croom Rd.
  - Mondon Hill Rd. and Bister Lake Area
  - Culbreath Rd. North of Ayers Rd to Campers Holiday
  - Weeki Wachee / Spring HIll



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Best Practices Review

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Regional and Local Plans

- Tampa Bay Regional Planning Council Regional Resiliency Action Plan
  - Goal 7: "*The Region will have a connected multimodal transportation network that is resilient to extreme weather, reduces local emissions, reduces automobile congestion, and enhances equitable mobility and public safety*."
- Hernando and Citrus County CEMP
  - Both plans include goals, objectives, and policies to discourage capital expenditure on infrastructure in the coastal area, as well as encourage the maintenance of evacuation routes and evacuation clearance time.
- Hernando and Citrus County CEMP
  - The CEMPs identify tropical cyclones, extreme weather events (severe storms, tornados, winter storms), and environmental events (flooding, wildfire, drought, extreme temperatures, and sinkholes), as all being high probability with potential major impact.
- Hernando and Citrus County LMS
  - Through the hazard assessment process, floods, tropical cyclones, and wildfires were the highest-rated risks for both Hernando County and Citrus County.

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MPO Resiliency Studies

- Sarasota/Manatee MPO
- Exposure Score and Criticality Score
- Exposure based on combining individual risk factors
- Weighting factors applied to each risk factor

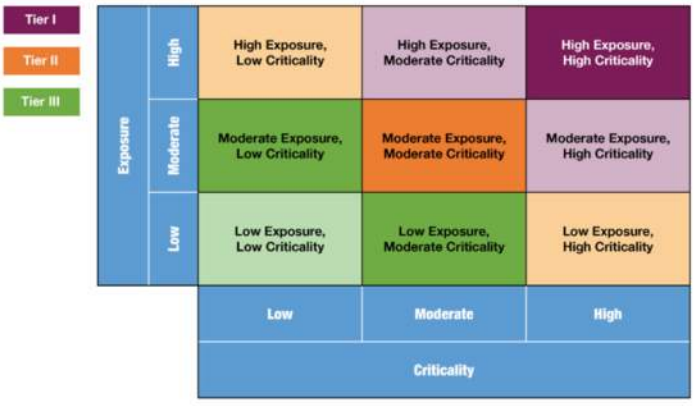

Figure 44. Exposure/Criticality Tier Matrix

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MPO Resiliency Studies

- Sarasota/Manatee MPO
- Criticality based on
  - AADT
  - Evacuation Route
  - Connection to Facilities / Community Services

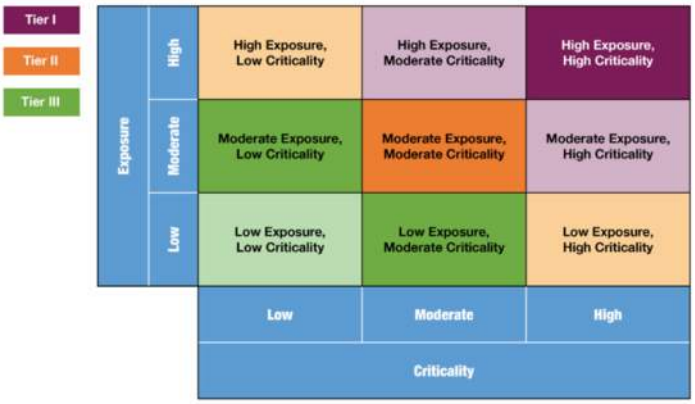

Figure 44. Exposure/Criticality Tier Matrix

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MPO Resiliency Studies

- Space Coast TPO
- Identified 'Vulnerable' and 'Most Vulnerable' for each risk factor
- Most Vulnerable = 2 points
- Vulnerable = 1 point
- Added scores together for overall vulnerability

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

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MPO Resiliency Studies

- Space Coast TPO
- Identified 'Vulnerable' and 'Most Vulnerable' Population
- Most Vulnerable = 2 points
- Vulnerable = 1 point

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

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MPO Resiliency Studies

- Space Coast TPO
- Identified 'Critical' and 'Most Critical'
  - Roadway Function
  - Access to Destinations
  - Populations
- Most Vulnerable = 2 points
- Vulnerable = 1 point

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

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

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MPO Resiliency Studies

- Space Coast TPO

(Vulnerability Score + Vulnerable Population) × Critical Score

- Ranked list of Vulnerable and Critical Corridors by Score

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Determining Risk/ Exposure

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Defining Critical Transportation Facilities

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Criticality Analysis

Critical Population

- Transportation Disadvantaged and Socially Vulnerable Populations
  - Low income
  - Zero car
  - Disabled
  - Youth and Senior
  - Minority
- Others?

Critical Function

- Functional classification
- AADT
- Evacuation Route
- Transit Route
- Others?

Critical Destinations

- Hospitals
- Port/Airports
- Large employers
- Schools
- Government centers
- Others?

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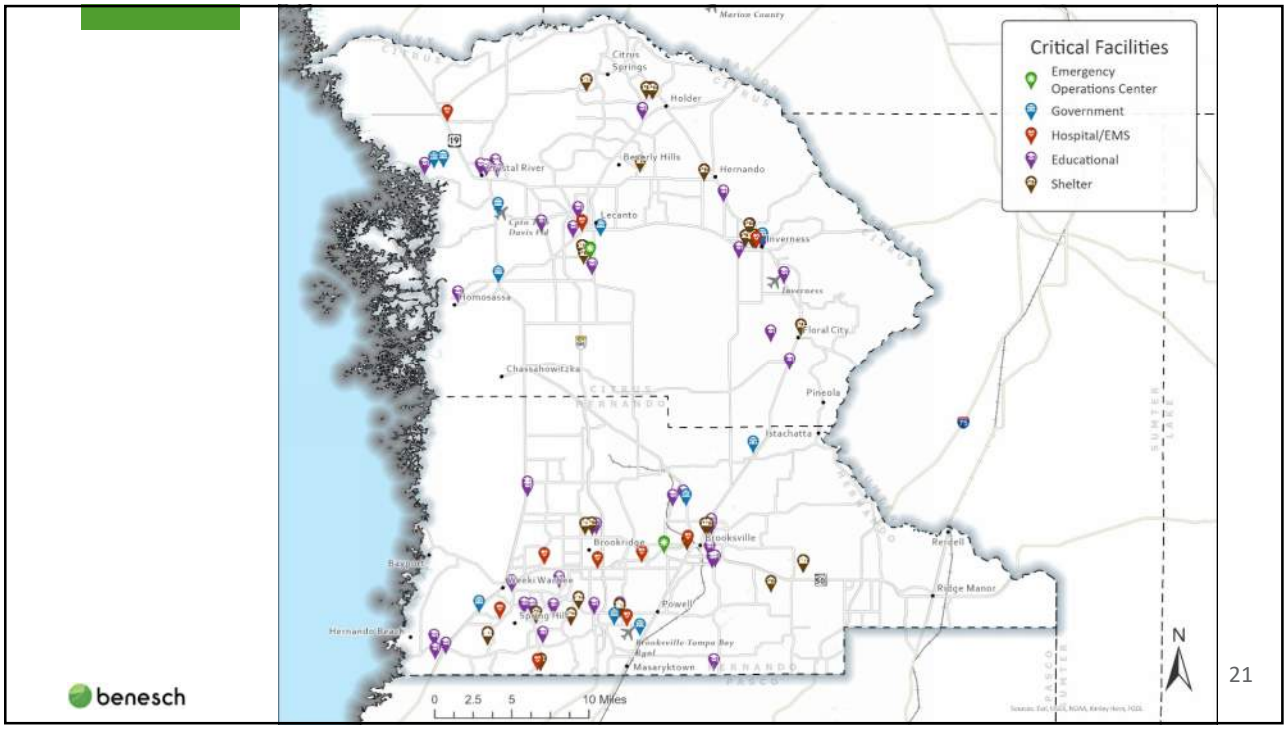
Critical Facilities
Emergency Operations Center
Government
Hospital/EMS
Educational
Shelter
Citrus Springs
Holder
Beverly Hills
Crystal River
Hernando
Lecanto
Inverness
Homosassa
Floral City
Chassahowitzka
Pineola
Istachatta
Brooksville
Brookridge
Weeki Wachee
Powell
Ridge Manor
Hernando Beach
Masaryktown
Brooksville-Tampa Bay Rgnl
0 2.5 5 10 Miles
N
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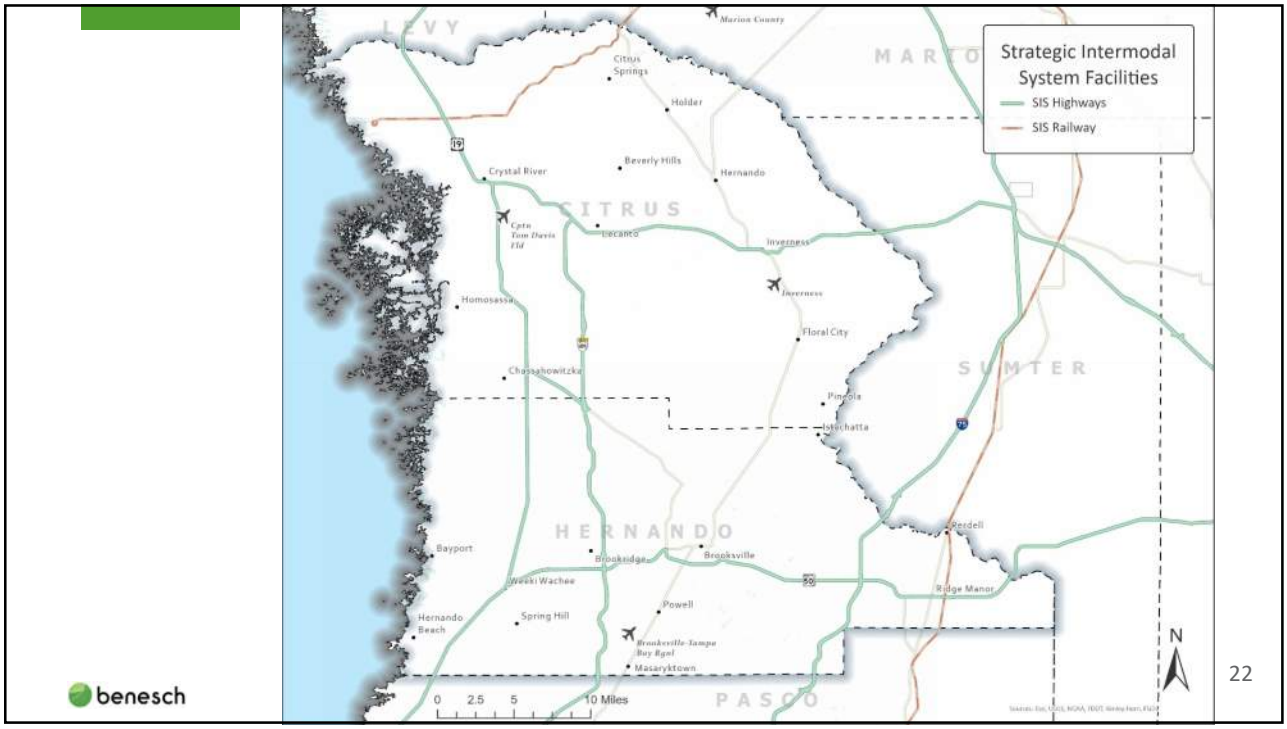
21

21


Strategic Intermodal System Facilities
SIS Highways
SIS Railway
Marion County
Citrus Springs
Holder
Beverly Hills
Crystal River
Hernando
Lecanto
Inverness
Homosassa
Floral City
Chassahowitzka
Pineola
Istachatta
Brooksville
Brookridge
Weeki Wachee
Powell
Ridge Manor
Hernando Beach
Spring Hill
Bayport
Masaryktown
Brooksville-Tampa Bay Rgnl
0 2.5 5 10 Miles
N
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22

22

23

Strategy Development

- Categories
  - Hardening of Infrastructure
  - Policy and Planning Strategies
  - Green and Sustainable Strategies
  - Public Education and Preparedness
  - Technology Enhancements
- Types
  - Attenuate
  - Data Collection
  - Education
  - Plan
  - Reroute & Recover
  - Relocation
  - Stabilize & Recover

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Infrastructure Hardening Strategies

Mitigation Strategy	Mitigation Type	Actions	Risk Factor
Infrastructure Hardening	Attenuate	Retrofit critical or vulnerable coastal roadways with a **seawall or raised profile**.	
	Stabilize & recover	**Drainage Improvements** such as culverts, grates, catch basins, and increased capacity for underground stormwater pipelines.	
	Relocation	**Relocate at-risk** critical transportation assets and facilities.	
	Strengthen	**Replace** existing vulnerable infrastructure based on priority such as bridges, critical roadways, rail lines, and transportation facilities.	
	Reroute & recover	**Redundancy** of critical transportation corridors or links.	

Legend			
	Flooding		Fire or Extreme Heat
	Severe Storm (Including Hurricanes)		Wind

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Planning and Policy Strategies

Mitigation Strategy	Mitigation Type	Actions	Risk Factor
Planning and Policy Solutions	Attenuate	Use **zoning and development codes** to deter additional development in coastal high hazard or in locations deemed vulnerable.	
	Attenuate	Create **minimum roadway elevation standards** for future design and development, particularly those adjacent to tidal areas.	
	Plan	Utilize **After Action Reports** or and improvement plans for increased ability for post-disaster response and planning.	
	Strengthen	Strict **enforcements on transportation infrastructure development maintenance**, and fire codes and standards.	
	Plan	**Regional and local collaboration efforts** to define best practices, funding mechanisms, and incorporating transportation resiliency strategies into community planning resilience improvements.	

Legend			
	Flooding		Fire or Extreme Heat
	Severe Storm (Including Hurricanes)		Wind

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Green Strategies

Mitigation Strategy	Mitigation Type	Actions	Risk Factor
Green and Sustainable Solutions	Attenuate	Utilize **natural features that improve drainage and water storage** adjacent to transportation infrastructure to reduce flooding (ex. Retention ponds, bioswales, and permeable pavement).	
	Attenuate	Installation of **wetlands** for inland roadways or **natural coastlines** along key coastal corridors.	
	Attenuate	Utilize **native tree species** with strong wind and fire-resistance along urban corridors to prevent blockage of fallen trees.	
	Attenuate	**Clear brush** and small unhealthy trees or conduct controlled burns to prepare forests along key corridors to withstand extreme heat and fire.	

Legend			
	Flooding		Fire or Extreme Heat
	Severe Storm (Including Hurricanes)		Wind

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Education Strategies

Mitigation Strategy	Mitigation Type	Actions	Risk Factor
Public Education and Preparedness	Education	Solicit **area-specific** mitigation involvement to educate residents about mitigation opportunities.	
	Education	Conduct **public awareness campaigns** about mitigation efforts, shelters, and evacuation routes via social media, print media, television, and radio.	
	Plan	**Update transportation and emergency plans regularly** with up-to-date data from various established regional and local studies.	
	Attenuate	Institute **financial incentives for property owners** insured by NFIP and promote funding sources for structural hardening projects.	
	Attenuate	**Stockpile or ensure access** to critical resources and facilities.	

Legend			
	Flooding		Fire or Extreme Heat
	Severe Storm (Including Hurricanes)		Wind

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Technology Strategies

Mitigation Strategy	Mitigation Type	Actions	Risk Factor
Technology Enhancements	Data Collection	Installing **High Water Detection System** on roadways prone to flooding	
	Reroute	Utilize **Intelligent Transportation Systems** (ITS) to reroute traffic during emergencies or disruptions	
	Attenuate	**Install Wave Attenuation Devices** (WAD) to minimize incidence and severity of flooding sensitivity	
	Data Collection	Institute a **citizen reporting system** for reporting hazardous road conditions and providing real-time updates	

Legend			
	Flooding		Fire or Extreme Heat
	Severe Storm (Including Hurricanes)		Wind

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Next Steps

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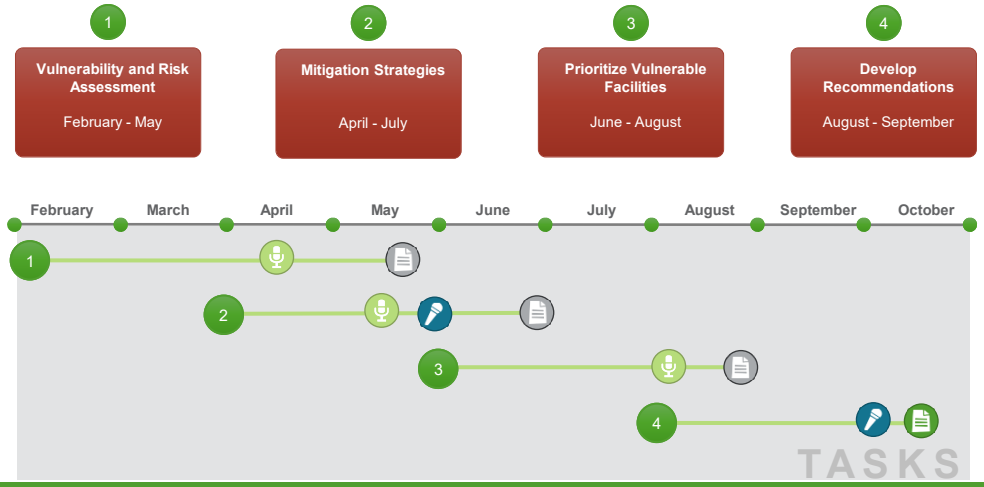
Review of Project Schedule



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Next Steps

- Apply methodology discussed today
- Provide updates to Staff and Stakeholder Group
- Present progress to TAC
- Next Stakeholder Group meeting
  - TBD: likely late August
- Final Presentation to TAC and MPO Board (September / October)

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Questions?

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Hernando Citrus MPO Vulnerability and Risk Assessment

Stakeholder Working Group Meeting #3

8/23/2023

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Topic Areas

- Prioritization Process - Approach, Criteria, and Scoring
- Prioritized Facility Results
  - Vulnerability and Criticality Ratings
  - Grouped into 3 Priority Tiers
- Mitigation Strategies Matrix
- Recommendations for Tier 1 Locations
  - Segment Groupings
  - Development of Location-Specific Strategies

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2

Prioritization Process Overview

- Based on a combination of each roadway segment's level of **vulnerability** and **criticality**
- Additional considerations included to
  - Satisfy federal requirements,
  - Account for local context, and
  - Incorporate Stakeholder feedback
- Scoring based on multiple evaluation criteria and translated into low, moderate, or high rating
- Priority determined by combination of the two independent ratings

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Vulnerability Assessment – Criteria & Scoring

- Measured by evaluating the roadway segment's exposure to and likelihood/severity of being impacted by the three event types considered.
- Scores calculated by multiplying the percentage of each roadway segment located within each impact area by the following factors:

Event Type	Multiplier	Impact Area Vulnerability Criteria
Storm Surge	x 1	Segments in Category 1 & Category 2 Areas
Storm Surge	x 0.33	Segments in Category 3, Category 4, & Category 5 Areas
Inland Flooding	x 0.1	Segments in 100-Year Floodplain Area (*1% Annual Chance of Flooding*)
Wildfire	x 0.05	Segments in High & Very High Wildfire Risk Areas

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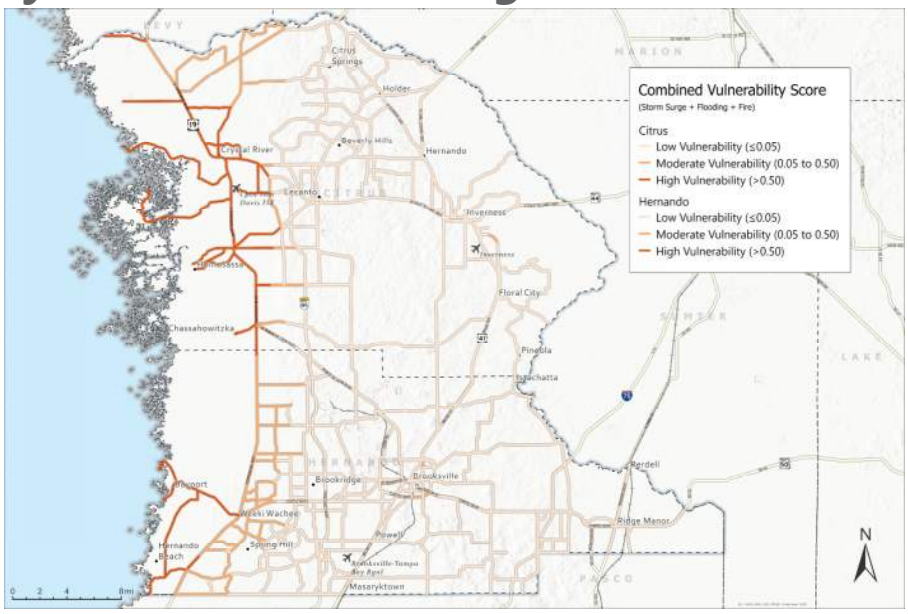
Vulnerability Assessment – Rating Results

- Segments closer to coastal areas rate higher in overall vulnerability due to potential storm surge impacts.
- This is especially relevant for the western part of Citrus County



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Criticality Assessment (Transportation Function)

- Measured by evaluating the roadway segment's transportation function and the access it provides to critical destinations or critical facility locations – 11 possible points.

	Evacuation Route	Primary Access or Bridge	Traffic Volumes	Transit Services	Functional Class	FDOT SIS Facility
0 Points	No	No	AADT < 12,000	No Transit Routes	Local or Minor Collector	No
1 Points	*Not Possible*	*Not Possible*	AADT ≥ 12,000 but < 35,000	At Least One Transit Route	Major Collector or Minor Arterial	*Not Possible*
2 Points	Yes	Yes	AADT ≥ 35,000	*Not Possible*	Principal Arterial	Yes

AADT = Annual Average Daily Traffic

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Criticality Assessment (Access to Destinations)

- Measured by evaluating the roadway segment's transportation function and the access it provides to critical destinations or critical facility locations – 8 possible points.

Criteria
Medical & Emergency Response - Hospital, EMS, Police, Fire
Evacuation Shelters - Listed on Hurricane Evacuation Maps
Airports - Public, Private, Heliport
Utility Services & Emergency Resources - Water, Electric, Debris Removal

Scoring	
0 Points	Per category with zero critical facilities within one mile
1 Point	Per category with at least one critical facility within one mile
2 Points	Per category with two or more critical facilities within one mile

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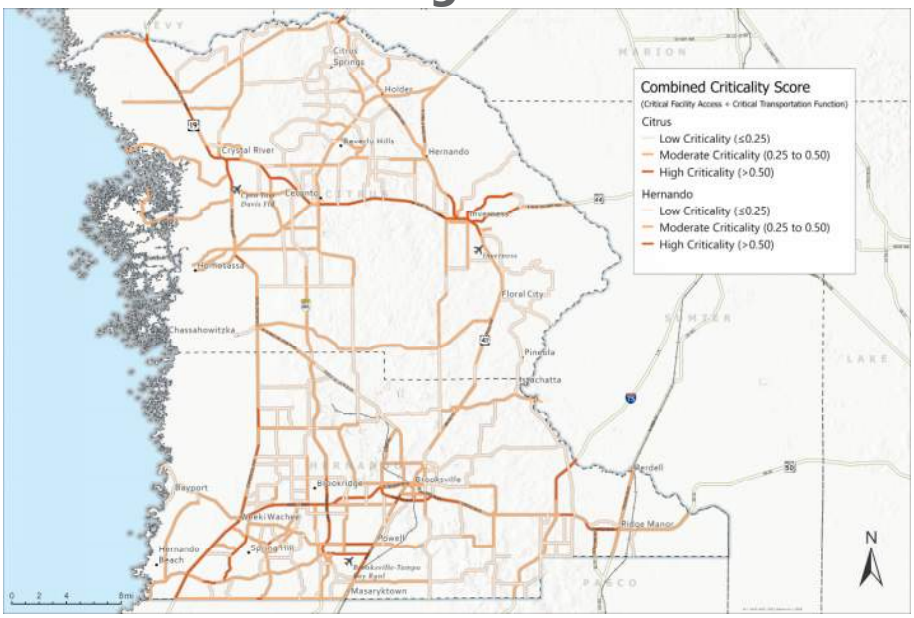
Criticality Assessment – Rating Results

- Several areas where adjacent segments form long continuous sections of major roadways that rate as highly critical
- Criticality levels are more evenly distributed across the roadway network within each county



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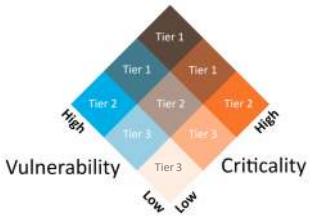
Approach for Determining Priority

Vulnerability	Criticality: Low	Criticality: Mod.	Criticality: High
High	High Vulnerability Low Criticality	High Vulnerability Moderate Criticality	High Vulnerability High Criticality
Mod.	Moderate Vulnerability Low Criticality	Moderate Vulnerability Moderate Criticality	Moderate Vulnerability High Criticality
Low	Low Vulnerability Low Criticality	Low Vulnerability Moderate Criticality	Low Vulnerability High Criticality

Segments are grouped into three tiers with Tier 1 being the highest priority:



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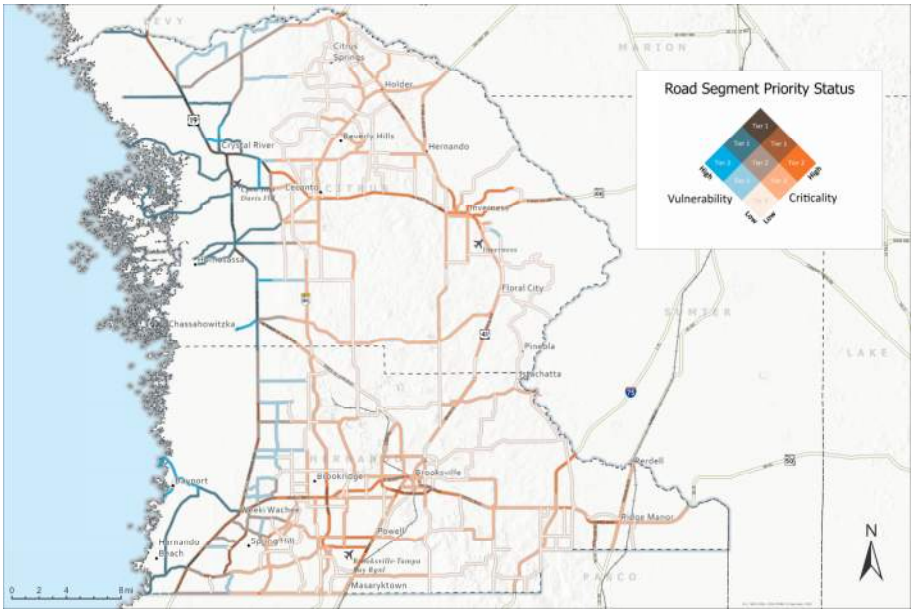
Criticality + Vulnerability – Rating Results

- Combined factors:
  - Show a more complete picture of where and how the two sets of ratings intersect
  - Provide the basis for assigning a priority level to each segment



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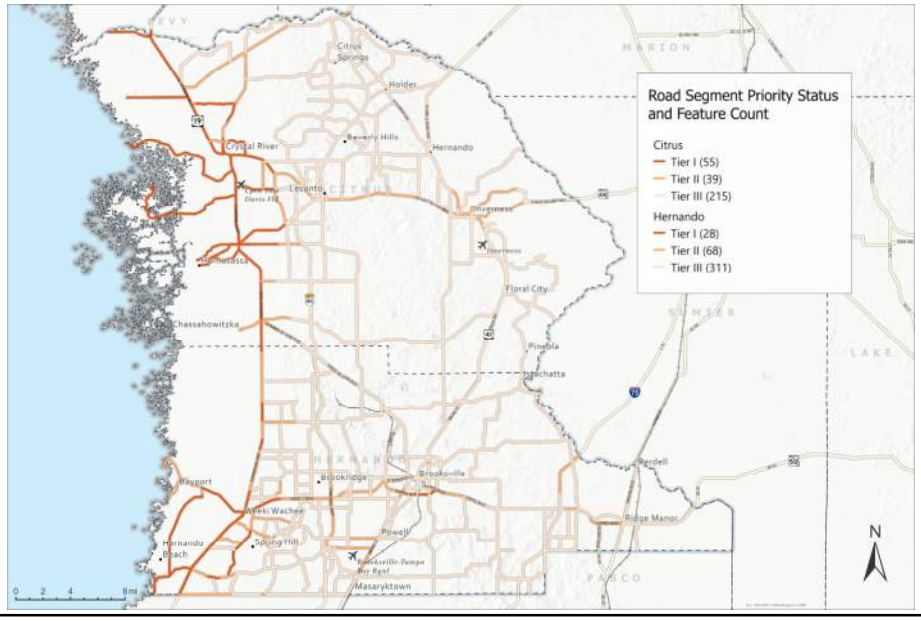
Tier Group Results

- Tier 1 segment count and coverage is highest in NW Citrus County and SW Hernando County
- Tier 2 segments have a wider distribution pattern that includes large portions of major east-west state roads, proximity to airports, primary routes in/out of each county



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Priority Recommendations

- Tier 1 roadways are basis for identifying locations
- Develop corridors/sub-areas for grouping facilities based on a combination of:
  - Roadway size and characteristics
  - Location/context
  - Adjacent land use
  - Vulnerability and criticality conditions
- Include bridges crossing Withlacoochee River and Florida Barge Canal

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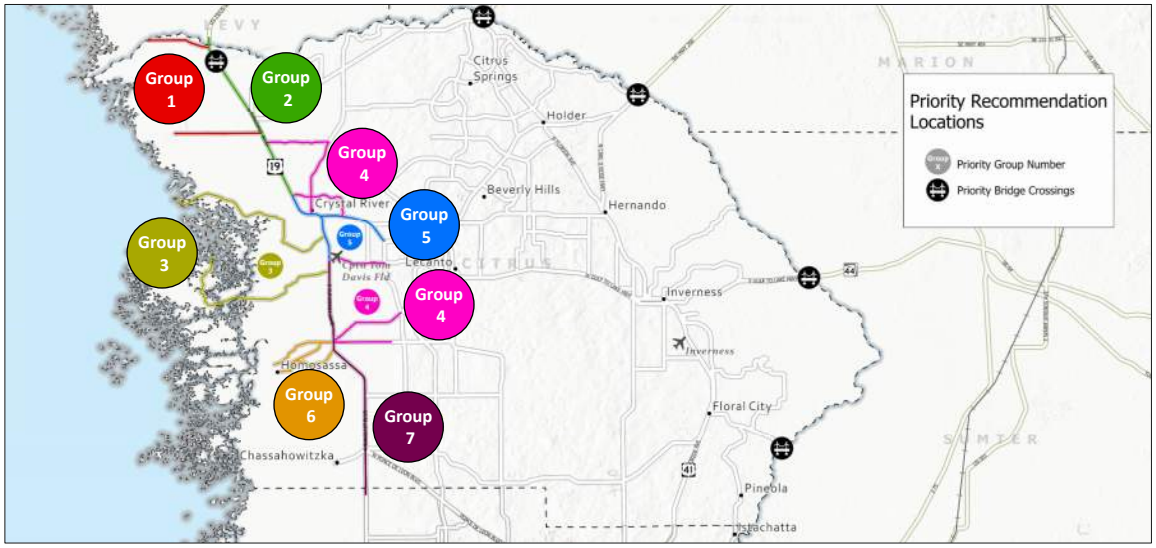
Priority Recommendations – Citrus County



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Priority Recommendations – Citrus County

Group	Roadway Segment	From	To	Length
1	Power Line St	Power Plant	US 19	3.9 miles
	River Rd	US 19	Caribee Point	2.8 miles
2	US 19	Turkey Oak Dr	Levy County	9.0 miles
3	CR 44 (Ft. Island Trail)	Fort Island Park	US 19	9.2 miles
	CR 494 (Ozello Trail)	Sanddollar Lane	US 19	9.4 miles
4	CR 490 (Homosassa Trail)	US 19	Rock Crusher Rd	3.6 miles
	CR 490A (Grover Cleveland Blvd)	US 19	Claridge Avenue	2.6 miles
	CR 495 (Citrus Ave)	US 19	Emerald Oaks Dr	3.9 miles
	Emerald Oaks Dr	US 19	CR 495	2.9 miles
	Turkey Oak Dr	US 19	SR 44	3.3 miles
	Venable St	US 19	Rock Crusher Rd	2.6 miles
5	SR 44 (Gulf to Lake Hwy)	US 19	Rock Crusher Rd	3.4 miles
	US 19	Venable St	Turkey Oak Dr	4.2 miles
6	CR 490 (Yulee Dr)	Woodland Place	US 19	3.2 miles
	CR 490A (Halls River Rd)	Riverview Circle	US 19	3.1 miles
	Fishbowl Dr	CR 490	CR 490A	2.0 miles
7	US 19	Hernando County	Venable St	12.6 miles

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Priority Recommendations – Hernando County

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Priority Recommendations - Hernando County

Group	Roadway	From	To	Length
8	Cortez Blvd (CR 550)	Bayport Park Pier	US 19 (SR 55)	6.6 miles
	Osowaw Blvd (CR 595)	Pasco County	US 19 (SR 55)	3.8 miles
	Pine Island Drive	Pine Island Park	Cortez Blvd	2.7 miles
	Shoal Line Blvd	Osowaw Blvd	Cortez Blvd	7.3 miles
9	US19 (SR55)	County Line Rd	Ridge Rd	9.0 miles
10	County Line Road	US 19	Mariner Blvd	2.16 miles

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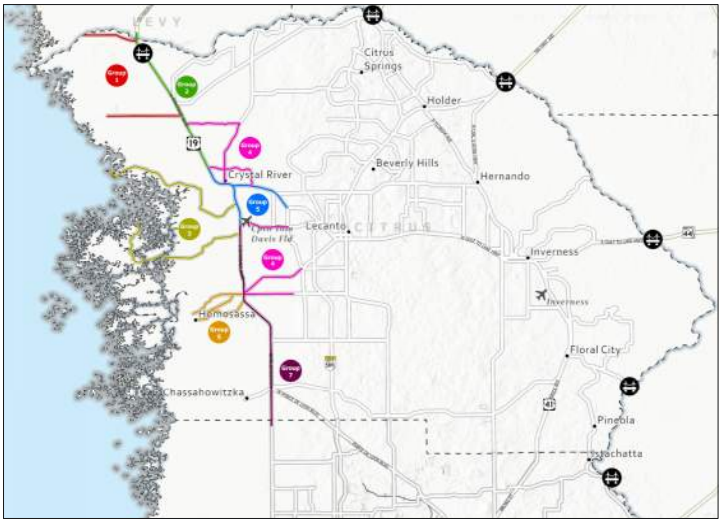
Priority Recommendations – Bridge Crossings

- CR 476 / Lake Lindsay Road
- SR 48 / Bushnell Rd
- SR 44 / Gulf to Lake Hwy
- SR 200 / Carl G Rose Hwy
- US 41 / Florida Ave
- US 19 / US 98



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Menu of Mitigation Strategies

Pre-Event Capital Improvement Strategies

- Changes to Landscaping or Tree Species
- Construction of Natural Features (Dunes, Barrier Islands, etc.)
- Drainage Improvements, Backflow Preventers, or Pumps
- Retrofitting or Hardening Infrastructure
- Coastal Wave Attenuation
- Relocating Infrastructure
- Implementing Strategic Redundancy
- Replacing Aging Infrastructure
- Elevation Changes in Key Locations
- Moving Prioritized Utilities Underground
- Technology-Based Solutions (Sensors/Warning Devices, HALT, etc.)
- Changes to Construction Materials/Features (Enhanced Median/Shoulder Areas, Permeable Pavement, etc.)

Pre-Event Planning or Policy Strategies

- Grant Funding for Resiliency Planning Studies or Construction Projects
- Land Use or Zoning Code Modifications
- Design Standards or Building Code Changes
- Public Awareness Campaigns or Education Programs
- Maintenance & Operations Best Practices

Post-Event Response or Evaluation Strategies

- After-Action Evaluation Processes with Performance Measures
- Emergency Operations Planning & Procedures (Distribution Logistics, Real-Time Information Sharing, etc.)
- Technology-Based Solutions (Citizen Reporting Systems)
- Maintenance & Operations Best Practices

Additional details about these will be developed as part of the recommendations for priority locations.

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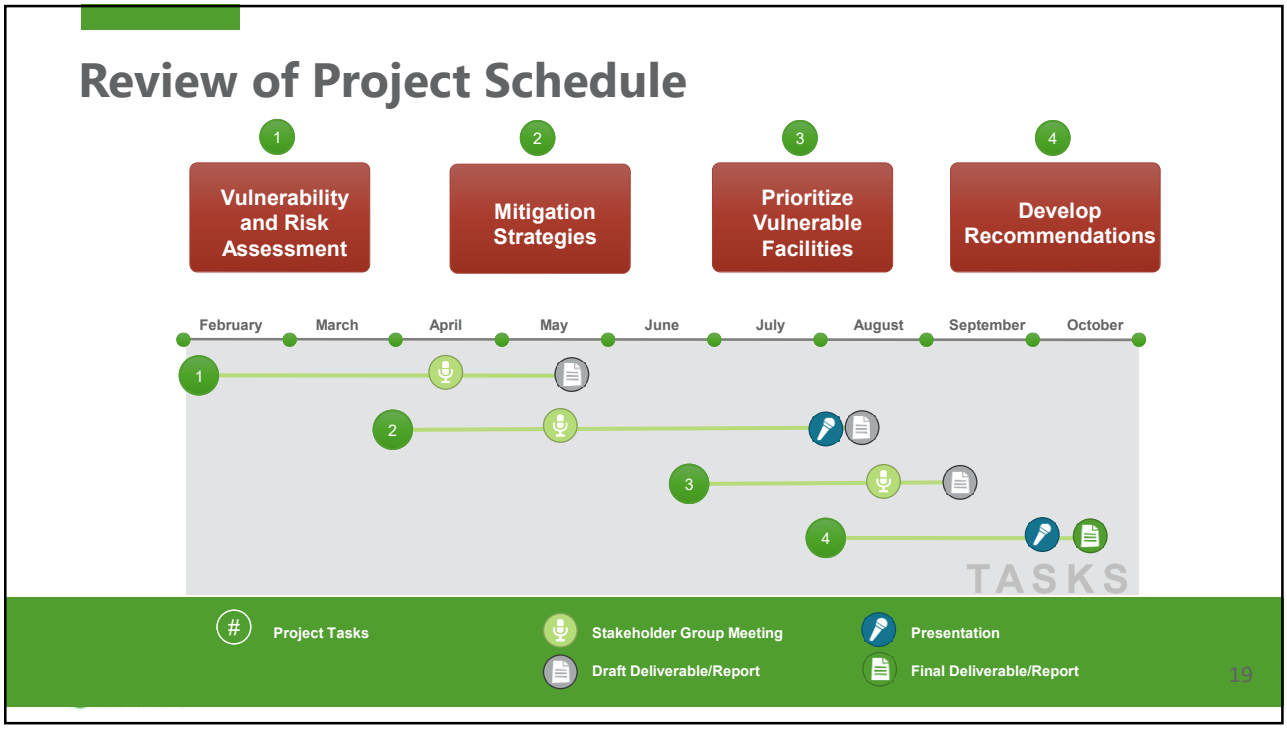
Review of Project Schedule
1
Vulnerability and Risk Assessment
2
Mitigation Strategies
3
Prioritize Vulnerable Facilities
4
Develop Recommendations
February
March
April
May
June
July
August
September
October
TASKS
Project Tasks
Stakeholder Group Meeting
Presentation
Draft Deliverable/Report
Final Deliverable/Report
19

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Map Review

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Questions?

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APPENDIX D MITIGATION STRATEGY MATRIX

Hernando/Citrus MPO Vulnerability Study Mitigation Strategy Matrix

	Strategy/Approach	Examples of Actions or Improvements	Event Type (Wildfire / Storm Surge / Flooding)	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9	Group 10	Bridge Group
				Recommendations for Priority Groups										
Infrastructure & Capital Improvements	Incorporate Natural Features into the Built Environment	Use or change to native varieties of landscaping and tree species that are more resistant to threats and can help minimize impacts to the built environment.	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Construct or replicate natural features for coastal wave attenuation such as beach nourishment, sand dunes, barrier islands, breakwaters, revetments, or wetlands to buffer/absorb storm surge impacts.	Storm Surge	✓	✓	✓	-	✓	✓	✓	✓	✓	-	-
	Improve Drainage Conditions	Prioritize drainage improvements in higher-risk flood areas.	Storm Surge, Flooding	✓	✓	✓	-	✓	✓	✓	✓	✓	-	✓
		Identify opportunities to install backflow preventers or pumps for strategic drainage canals or facilities.	Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Reinforce or add fail-safe measures to coastal outfalls to prevent upstream flooding when structures fail during storm events.	Storm Surge, Flooding	✓	✓	✓	-	✓	✓	✓	✓	✓	-	✓
	Protect Existing Infrastructure	Construct concrete flood walls or revetment structures in higher-risk areas to reduce likelihood of impacts.	Storm Surge, Flooding	✓	✓	✓	-	-	✓	-	✓	-	-	✓
		Construct additional retention areas/bioswales or restore floodplains.	Storm Surge, Flooding	-	✓	✓	✓	-	-	✓	-	✓	✓	✓
	Relocate Facilities or Key Components	Relocate strategic infrastructure or facilities based on long-term vision and cost-benefit determinations.	Wildfire, Storm Surge, Flooding	✓	-	✓	-	-	✓	-	✓	-	-	-
		Move prioritized utilities underground or implement other means of protection where subsurface relocation is not feasible.	Wildfire, Storm Surge	✓	✓	-	✓	✓	-	✓	-	✓	✓	-
		Raise foundation and bridge deck elevation of vital facilities in key locations based on long-term vision and cost-benefit determinations.	Storm Surge, Flooding	✓	✓	✓	-	✓	✓	✓	✓	-	-	✓
	Upgrade/Strengthen Facilities or Key Components	Replace aging infrastructure or facilities that are more likely to fail or become damaged under predicted conditions.	Wildfire, Storm Surge, Flooding	✓	-	✓	-	-	✓	-	✓	-	-	✓
		Retrofit existing infrastructure or facilities that are not ready for replacement, but located in high-risk areas and have sensitive components such as traffic signal wires or lighting fixtures to be more resistant to damage.	Wildfire, Storm Surge, Flooding	-	✓	-	-	✓	-	✓	✓	✓	-	✓
		Construct roundabouts in high-risk areas so that traffic functions can be maintained without signals or signage.	Wildfire, Storm Surge, Flooding	✓	-	✓	✓	-	✓	-	✓	-	✓	-
		Upgrade traffic signals at coastal intersections from strain poles to mast arms to provide more stability.	Storm Surge	✓	✓	-	✓	✓	-	✓	✓	✓	-	-
		Add roadway shoulder and median protection to stabilize pavement/foundation and reduce the likelihood of washout during flooding events.	Storm Surge, Flooding	✓	✓	✓	-	✓	✓	✓	✓	✓	-	-
		Re-enforce roadway or bridge foundations with gabion mats, rip rap, or sheet-pile walls with toe scour protection to strengthen against moving water.	Storm Surge, Flooding	✓	-	✓	-	-	✓	-	✓	-	-	✓

Hernando/Citrus MPO Vulnerability Study Mitigation Strategy Matrix

	Strategy/Approach	Examples of Actions or Improvements	Event Type (Wildfire, Storm Surge, Flooding)	Recommendations for Priority Groups: Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9	Group 10	Bridge Group
Technology	Increase Public Awareness with Outreach and Education Campaigns	Citizen Reporting Systems (ex. Cell phone application/website for reporting unsafe conditions or damage)	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Open Source Mapping Applications for Evacuation, Rescue, or Recovery Efforts	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Prioritize Resiliency and Recovery Planning or Preparation Activities	Predictive Modeling for Scenario Testing, Visualization, and Big Data Analytics (ex. Digital Twin)	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Integrate, Share, and Protect Data Resources or Applications	Off-Site Data Storage or Access for Critical IT Infrastructure	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Emergency Operations/Partner Agency Data Integration (ex. Real-time information sharing during and immediately after emergency events)	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Install Warning Systems or Dynamic Messaging Technology	Sensors/Warning Systems/Traffic Control Devices (ex. High Water Alert Lifesaving Technology)	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Intelligent Transportation Systems (ITS) Signage for Dynamic Real-Time Message Alerts and Updates	Wildfire, Storm Surge, Flooding	-	✓	-	✓	✓	-	✓	✓	✓	✓	✓
	Upgrade/Strengthen Facilities or Key Components	Solar-Powered Backup Components for Critical Items (ex. Water pumps or traffic signal controllers)	Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Planning & Policy	Adjust Operating, Maintenance, Inspection, or Regular Repair Cycles	Operations & Maintenance Best Practices (ex. Regular brush/debris clearance for roadways or cleaning/inspection cycles for sewer, storm drain, or bridge facilities)	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Increase Public Awareness with Outreach and Education Campaigns	Public Awareness Campaigns or Education Programs	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Prioritize Resiliency and Recovery Planning or Preparation Activities	Pre-emptively evaluate and establish detour routes for major roadways in emergency situations.	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Coordinate with utility providers regularly to ensure adequate access and other needs related to maintaining and repairing services during and after emergency events.	Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Work with private-sector partners to develop plans, identify needs, or leverage funding opportunities for upgrades near major facilities/developments	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		After-Action Evaluation Processes with Performance Measures	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Changes to Project Programming or Design/Construction Procurement Process to Encourage Resiliency	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Long-Term Life Cycle Cost-Benefit Analyses for Potential Resiliency Investments	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Emergency Distribution/Logistics Planning	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Strategic Redundancy Considerations	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Pursue Grant Funding Intended for Resiliency Upgrades or Infrastructure Repair Efforts	Grant Funding for Specific Repairs or Improvements (ex. IIJA Bridge Investment Program)	Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Grant Funding for Resiliency Planning Studies or Baseline Evaluation Efforts	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Revise Land Use Policies, Zoning Code Requirements, or Minimum Design Standards	Increased Code Inspection/Enforcement for Threat-Related Violations	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
		Planned/Preserved Open or Green Spaces in Areas with Higher Development Density	Wildfire, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Higher Minimum Design Standards	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Land Use or Zoning Code Modifications (ex. Development boundaries or exclusionary zoning areas)	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
		Change specifications and building code requirements for construction materials/features used for public or private-sector projects where appropriate. (ex. permeable pavement or Class A roofing materials)	Wildfire, Storm Surge, Flooding	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓