Technical Advisory Committee (TAC) Meeting
Marion County – Library Headquarters, Meeting Room B
2720 E. Silver Springs Blvd., Ocala, FL 34470

February 8, 2022
3:30 PM
AGENDA

1. **CALL TO ORDER AND ROLL CALL**

2. **PROOF OF PUBLICATION**

3. **PRESENTATIONS**
   - **A. Transportation Resilience Guidance Paper**
     Franco Saraceno, Kittelson and Associates, will present the guidance paper.

4. **ACTION ITEMS**
   - **A. Performance Management Safety Targets**
     Staff is seeking review and approval of Safety Performance Targets for 2022.

5. **CONSENT AGENDA**
   - **A. January 11, 2021 Meeting Minutes**

6. **COMMENTS BY FDOT**
   - A. Construction Report Update

7. **COMMENTS BY TPO STAFF**
   - **A. 2021 TPO Annual Report**
   - **B. Commitment to Zero Safety Action Plan Update**

8. **COMMENTS BY TAC MEMBERS**

9. **PUBLIC COMMENT (Limited to 2 minutes)**

10. **ADJOURNMENT**

All meetings are open to the public, the TPO does not discriminate on the basis of race, color, national origin, sex, age, religion, disability and family status. Anyone requiring special assistance under the Americans with Disabilities Act (ADA), or requiring language assistance (free of charge) should contact Liz Mitchell, Title VI/Nondiscrimination Coordinator at (352) 438-2634 or liz.mitchell@marioncountyfl.org forty-eight (48) hours in advance, so proper accommodations can be made.

Pursuant to Chapter 286.0105, Florida Statutes, please be advised that if any person wishes to appeal any decision made by the Board with respect to any matter considered at the above meeting, they will need a record of the proceedings, and that, for such purpose, they may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

The next regular meeting of the Technical Advisory Committee meeting will be held on February 8, 2022

TO: **Committee Members**

FROM: **Rob Balmes, Director**

RE: **Transportation Resilience Guidance Paper**

Summary

Transportation Resiliency is the ability to adapt to changing conditions and recovery from disruptions, such as major weather events. The impacts from both natural and human-related events can have significant and unexpected impacts to the Ocala/Marion transportation system.

The TPO has been supported by Kittelson and Associates to complete a guidance paper on transportation resilience. The main purpose of the paper is to help better educate and inform the TPO about transportation resilience. This also includes consideration for how to integrate resilience into future transportation planning, and opportunities at the state and federal levels of government for grants and funding.

Franco Saraceno, Kittelson and Associates, will provide a presentation at the meeting to share highlights from the guidance paper and considerations for next steps.

Attachment(s)

- Transportation Resilience Guidance Paper

Recommendation(s)

Feedback and comments by committee members.

Action Requested

None.

If you have any questions, please contact me at: 438-2631.

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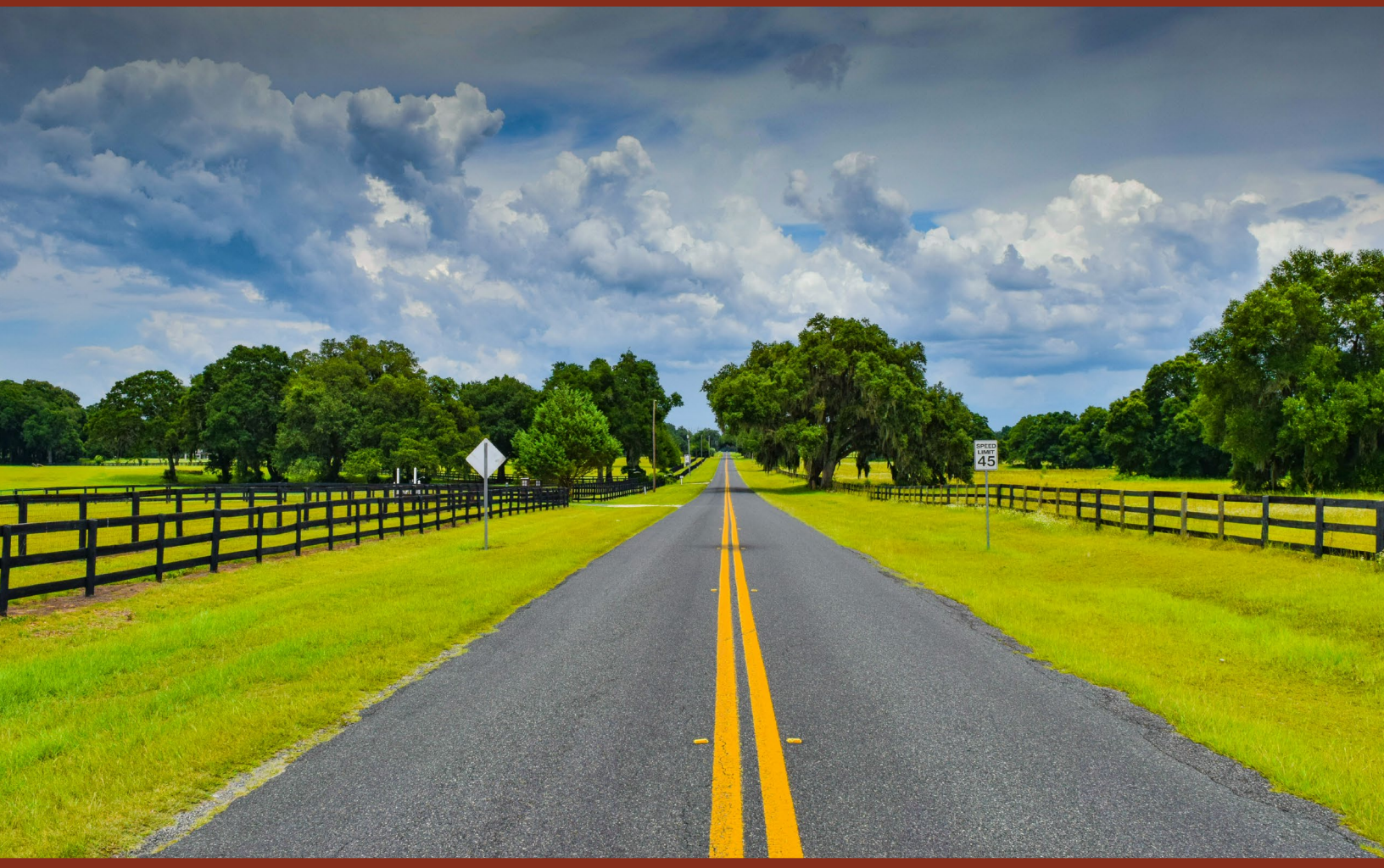
OCALA MARION TRANSPORTATION PLANNING ORGANIZATION

TRANSPORTATION RESILIENCE GUIDANCE



January 2022

CONTENTS

INTRODUCTION

The purpose of this guidance paper is to provide the Ocala/Marion County Transportation Planning Organization (TPO) and the residents of Marion County with a clear definition of Transportation Resilience, and an understanding of the opportunities and challenges of integrating resiliency into the transportation planning process. Specifically, this paper includes a review of federal policy, funding opportunities and peer area resiliency activities. The paper also explores at a cursory level some of the vulnerabilities to hazards present in Marion County, the exposure of the federal-aid transportation system to those vulnerabilities, and some potential mitigation strategies.

> FHWA defines resiliency as "the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions."

Resiliency is defined by the Federal Highway Administration (FHWA) as "the ability to anticipate, prepare for, and adapt to changing conditions and withtstand, respond to, and recover rapidly from disruptions."[1] In the broadly referenced sense of the term in transportation planning, "changing conditions" and "disruptions" are generally conceptualized more narrowly as sea level rise (SLR). There are, however, many potential disruptors, including both natural and man-made disasters, many of which are relevant to inland areas like Marion County. Some examples include:

- Flooding
- Sinkholes
- Wildfires
- Tornados
- Traffic crashes
- HazMat incidents

> I-75 FRAME makes the transportation system resilient to crashes, enabling it to function effectively when such incidents occur.

An example of a resiliency improvement recently implemented in Marion County is the Florida Department of Transportation (FDOT) I-75 FRAME project, which is designed to improve the resiliency and reliability of north/south travel in Marion County in the face of unpredictable traffic incidents by providing travelers real time information about incidents and facilitating detours. I-75 FRAME makes the transportation system resilient to crashes, enabling it to function effectively when such incidents occur.

1 *Integration of Resilient Infrastructure in the Emergency Relief Program - ER - Federal-aid Programs - Federal-aid Programs and Special Funding - Federal Highway Administration (dot.gov)*

US DEPARTMENT OF TRANSPORTATION (USDOT)

USDOT is the federal agency responsible for implementation of federal transportation policy, which includes working toward national goals established in legislation. TPOs are required to adhere to the guidelines set by USDOT in its rule making process, including consideration of a number of planning factors. Since passage of the FAST Act, resiliency is one of the planning factors that must be considered by TPOs in planning for transportation improvements. The Florida Department of Transportation, charged with implementing state transportation policy, maintains Planning Emphasis Areas that highlight key areas of specific importance to the State of Florida. Resilience is one of four emphasis areas established by FDOT in 2021.

This section focuses on the USDOT's guiding principles designed to inform and guide TPOs in future resiliency planning and a clearly defined series of steps to assess the vulnerability of the transportation system and address vulnerabilities with mitigation strategies.

US Department of Transportation Guidance

A more resilient transportation system is consistent with the USDOT Guiding Principles for Climate Change Adaptation set forth in June 2011. The USDOT's Guiding Principles for Climate Change Adaptations include the following:

- Integrate adaptation strategies to core policies, planning, practices and programs
- Prioritize vulnerable people, places, and infrastructure; implement meaningful involvement from "all parts of society" and address issues of inequality and environmental justice
- Use best available science and not be delayed waiting for complete understanding of climate change impacts; adjust plans/actions as better understanding becomes available
- Coordinate across multiple sectors, geographies, levels of govt; build on existing efforts/knowledge of wide range of stakeholders
- Apply risk management methods and tools because timing, likelihood, nature of climate risks difficult to predict; can aid in understanding potential consequences of inaction and risk reduction
- Apply eco-system based approaches to integrate biodiversity and ecosystem services into adaptation strategies which will increase resilience of human and natural systems to climate and non-climate risks, providing benefits to society and the environment
- Maximize mutual benefits by using strategies that complement, support other related climate/env. Initiatives
- Continuously evaluate performance through measure goals and performance metrics to assess whether adaptive actives are achieving desired outcomes (qualitatively and quantitatively)

Prior to passage of the Infrastructure Investment & Jobs (II&J) Act, US DOT guidance, and FEMA funding requirements for emergency operations, the Federal Highway Administration (FHWA) established FHWA Order 5520 – Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events in 2014. It is a directive to establish policy on preparedness and resilience to climate change and extreme weather events to comply with Executive Order 13653, Preparing the United States for the Impacts of Climate Change (EO 13653)(2013), and advance the U.S. Department of Transportation (DOT) Policy Statement on Climate Change Adaptation. The directive considers the transportation-specific impacts of climate change, such as:

- SLR/storm surge inundates coastal roads not historically inundated, necessitate more evacuations, require costly, recurring repairs
- Inland flooding from precipitation disrupts traffic, damage culverts, reduce service life
- Heat degrades materials costing more in maintenance and frequent replacement cycles

FHWA's policy is to identify risk of climate change and extreme weather events on existing and planned transportation systems, and it expands the scope beyond coastal areas and water-related resiliency efforts to include various hazards and impacts on inland areas.

FHWA's policy is to identify risk of climate change and extreme weather events on existing and planned transportation systems, and it expands the scope beyond coastal areas and water-related resiliency efforts to include various hazards and impacts on inland areas. FHWA managers are responsible for encouraging State departments of transportation (DOT), metropolitan/transportation planning organizations (MPO/TPO), Federal land management agencies (FLMAs), tribal governments, and others to practice resiliency planning. Recommended resiliency practices are to develop, prioritize, implement and evaluate risk-based and cost-effective strategies to minimize climate and extreme weather risks and protect critical infrastructure using the best available science, technology and information. Under this directive, FHWA managers are responsible for developing and providing technical assistance, research, and outreach, and encouraging the development and use of transportation-specific vulnerability assessment and adaptation tools. They must report on progress through the US DOT Adaptation Plan and internal FHWA strategic planning activities.

Furthermore, existing funding streams through the Federal-Aid and Federal Lands Highway Program describes the eligibility of activities to adapt to climate change and future weather events. Generally, activities to plan, design, and construct highways to adapt to current and future climate change and extreme weather events are eligible for reimbursement under the Federal-aid program and for funding under the Federal Lands program.

The Hillsborough TPO included climate resilience analysis in their transportation plan, finding that adaptation actions would cost $31M, but avoid $265M in losses.

The FHWA allows DOTs, MPOs, local agencies, and Federal land management agencies to use aid and funds to consider impacts and apply adaptation strategies at project and system levels. Eligible activities include:

- Vulnerability and risk assessments of Federal aid-eligible highways related to climate change and extreme weather events
- Consideration of climate change and extreme weather events in highway project development, environmental review and design work
- Construction of projects or features to protect existing eligible assets from impacts and damage associated with climate change and extreme weather events
- Evaluation of potential impacts of climate change and extreme weather events on asset management cycles, life cycle costs, etc.

Under the FHWA's overall sustainability initiative, the Building Resilient Transportation law passed in 2015 requires inclusion of resilience as a planning factor and for metropolitan areas to develop resilience strategies. As one specific outcome of this, the Hillsborough TPO included climate resilience analysis in their transportation plan, finding that adaptation actions would cost $31M, but avoid $265M in losses. As part of building resilient transportation, the FHWA provides guidance to incorporate climate risks into design and asset management, which identifies sequence of actions to manage and preserve assets over the long-term, including asset inventory, evaluation of risks to assets, and prioritization of capital improvements to make them more resilient to future environmental conditions.

In August 2021, USDOT developed a Climate Action Plan establishing a policy statement to address climate change through a science based approach. The plan also recognizes the need to use an equity lens to ensure the most vulnerable populations are protected and that both community and global planning are critical to mitigating the impacts of climate change. The plan advances a range of actions, including infrastructure improvements, long range planning, research and education.

FHWA Vulnerability Assessment and Adaptation Framework

In an effort to assist DOTs, MPOs, tribal governments, and land management agencies plan for a more resilient transportation system, the FHWA has developed a Vulnerability Assessment and Adaptation Framework (Framework) detailing key steps to assessing the resiliency vulnerability of an area. The Framework describes primary steps to conduct a vulnerability assessment under seven key steps:

1. **Articulate objectives and define scope** — includes recognizing which hazards and specific assets will be analyzed in light of time and financial constraints.

2. **Obtain asset data** — major assets like roadways and bridges are typically available at the transportation agencies, but other smaller assets such as culverts might require interagency/interorganizational collaboration to obtain or collect.

3. **Obtain climate data** — data on current and future climate conditions can be obtained for commonly studied climate variables like temperature, sea level, hydrology, storm surge; starting with basic projections.

4. **Assess vulnerability** — through exposure which refers to whether an asset or system is located in an area experiencing direct effects of climate change; sensitivity refers to how the asset or system fares when exposed to a climate variable; and adaptive capacity refers to the system's ability to cope with existing climate variability or future climate impacts. Risk is a measure that considers both the probability that an asset will experience a particular impact and the severity or consequence of the impact.

5. **Identify, analyze, and prioritize adaptation options** — adaptation solutions can be natural, structural, or policy-based and can range from site-specific to regional. The multi-criteria analysis (MCA) and economic analysis. MCA involves comparing adaptation options across a range of qualitative and quantitative criteria.

6. **Incorporate assessment results in decision making** — the Framework provides options to include strategies into transportation planning, projects development and environmental review, project-level design and engineering, transportation systems management, and asset management.

7. **Lastly, monitor and revisit** — as new climate science becomes available, it may be necessary to revisit assumptions, underlying data, and approaches used in the original vulnerability assessment; overall, understanding climate risks changes over time and an iterative process to monitor and evaluate is standard practice.

As part of the Ocala-Marion TPO Transportation Resiliency Guidance Paper, the vulnerability of the Federal-aid transportation system to select natural hazards are identified, building upon past data and findings from the LMS.

PEER STUDIES AND CURRENT TRANSPORTATION RESILIENCY PRACTICES

DOTs and TPOs/MPOs throughout the United States have completed resiliency planning efforts to identify vulnerabilities in their regional transportation systems and develop adaptation and mitigation strategies for hazards including storms, wildfire, flooding, and sea level rise, to name a few. The generalized steps in the resiliency planning process include the Identification of hazards and vulnerable infrastructure, assessment of vulnerabilities, and identification and programming of mitigation strategies.

Table 4 lists peer agencies that have completed vulnerability analyses and implemented resiliency planning approaches to varying extents. In addition to MPO/TPO peers, it includes state DOTs and other transportation agencies' works in transportation resiliency. Five of the peer areas reviewed represent landlocked regions or states, emphasizing the relevance of resiliency planning for non-coastal areas.

As the peer agencies and case studies demonstrate, there are different ways to develop resiliency plans and mitigation strategies beyond identifying the hazards currently or potentially impacting a region. Various agencies in the state of Florida and across the country are at different stages in their resiliency planning efforts, and in the types of mitigation strategies that have been employed. These range from policy and programmatic approaches to hardening infrastructure or developing green infrastructure. Of the peer areas reviewed, three have completed the full spectrum of resiliency planning from hazard definition through funding strategies, and an additional five agencies are completing the majority of the steps, short of identifying funding and programming improvements. As rule-making to implement the new federal infrastructure law takes shape, more will likely advance their resiliency planning activities to meet federal requirements and compete for grant funding opportunities. More detailed information about selected peer areas with distinct features of their resiliency planning efforts are detailed in Appendix A.

FIGURE 1. AREAS REVIEWED FOR RESILIENCY

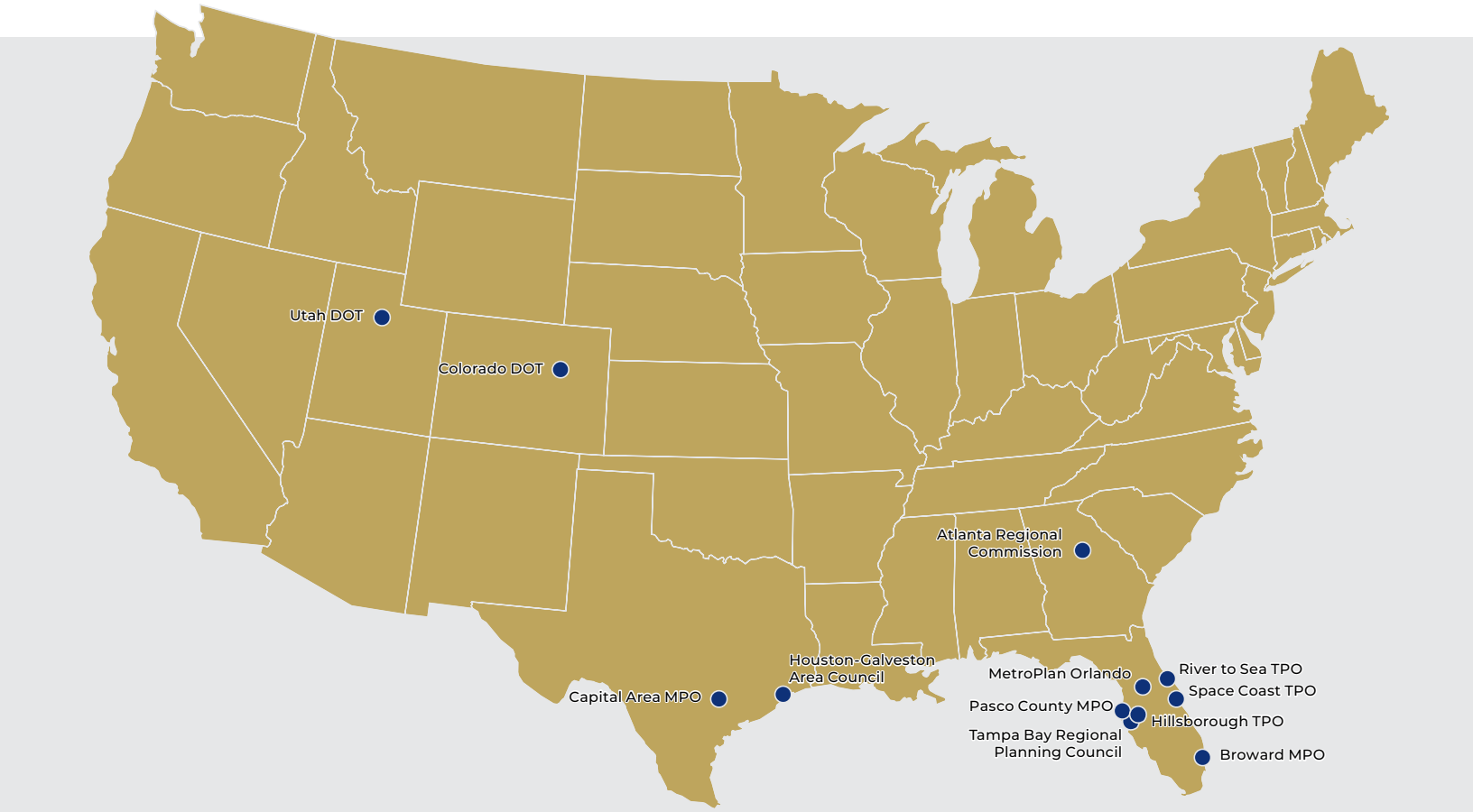


TABLE 1. PEER AGENCIES RESILIENCY EFFORTS

Agency/ Location	Plan	Description	Resiliency Actions				
			Defines Hazards	Identifies Critical Roadways	Assesses Vulnerabilities/ Exposure	Develops Mitigation Strategies	Specifies Funding Sources
Space Coast TPO Brevard County, FL	Transportation Resiliency Master Plan	Defines six unique shocks/stressors and their impact on roadways critical to the communities in Brevard County; develops mitigation strategies.	●	●	●	●	●
River to Sea TPO	SLR Vulnerability Assessment	Identified exposure/vulnerability to evacuation routes, major roadways, trails, and stormwater storage assets.	●		●		
MetroPlan Orlando	2045 Long Range Transportation Plan	Used scenario planning to identify potential risks and how they can impact the region. MetroPlan Orlando chose six key drivers of change: Population, Economy, Visitation, Development & Land Use, Technology, and Climate. These drivers were used to form four scenarios, to help guide the planning and needs assessment.	●				

Agency/ Location	Plan	Description	Resiliency Actions				
			Defines Hazards	Identifies Critical Roadways	Assesses Vulnerablities/ Exposure	Develops Mitigation Strategies	Specifies Funding Sources
Broward MPO Broward County, FL	South Florida Climate Change Vulnerability Assessment and Adaptation Pilot Project	Examined SLR, inundation, storm surge flooding, and heavy precipitation induced flooding. Identify adaptation analysis capability, identify adaptation projects and strategies, apply a vulnerability framework and provide feedback to the planning process. Recommends formalization of proposed performance measures.	●	●	●	●	
Broward MPO Broward County, FL	Extreme Weather and Climate Change Risk to the Transportation System in Broward County, FL	Second study led by Broward MPO, that provides more detail about long-term effects of climate change on transportation based on existing scenario/projections data. Develops actions to refine understanding of risks over time.	●	●	●	●	
Hillsborough TPO Tampa, FL	Resilient Tampa Bay: Transportation Pilot Program Project	Tampa Bay region's exposure/ vulnerability to storms/surge, SLR, and flooding challenges and provides mitigation/adaptation strategies for inclusion in LRTP updates; provides high-level per-mile costs of adaptation strategies.	●	●	●	●	●
Pasco County MPO Pasco County, FL	Scope for Resilient PASCO Vulnerability Assessment and Sustainability & Resiliency Plan	Defines resiliency through continuation of fundamental services, or "community lifelines". Seeks to complete a vulnerability assessment and action items.	●	●	●	●	●
Tampa Bay Regional Planning Council Tampa, FL	Tampa Regional Resiliency Action Plan	Five-year roadmap focused on risk reduction and adaptation actions to anticipate and prepare for sea lever rise, storms, flooding, and extreme heat. Defines goals and objectives for resiliency.	●				

Agency/ Location	Plan	Description	Resiliency Actions				
			Defines Hazards	Identifies Critical Roadways	Assesses Vulnerablities/ Exposure	Develops Mitigation Strategies	Specifies Funding Sources
Capital Area MPO Austin, TX	2040 Regional Transportation Plan/ Extreme Weather and Climate Change Vulnerability Assessment of Central Texas Transportation Infrastructure	Summarizes climate related risks to the region's transportation system and identifies potential measures that can be implemented to increase resiliency.	●	●	●		
Colorado DOT Colorado	2020 Risk and Resiliency Analyis Procedure	Defines a criticality model to assess risk of flooding, rockfall, and fire; create a criticality index and develops calculations to assess partial and full road closures and other user costs.	●	●	●	●	
Atlanta Regional Commission Atlanta, GA	Vulnerability and Resiliency Framework for the Atlanta Region	Developed a vulnerability and resiliency framework that can be used as part of a system vulnerability assessment to track over time; suggested performance measures are defined.	●	●	●	●	
Utah DOT Utah	UDOT's Risk and Resiliency Initiative	Created a weighted system for criticality based on AADT, freight AADT, AASHTO Road Classification, Tourism $2015, and Maintenance Crew Miles. Developed a risk management process to assess critical corridors. Incorporates risk & resiliency in corridor planning process.	●			●	
Houston-Galveston Area Council Texas	Resilience and Durability to Extreme Weather in the H-GAC Region Pilot Program Report	To address threats posed by extreme flood events, storm surge, and sea level rise in the region, the Houston-Galveston MPO assessed the criticality and vulnerability of regional transportation assets to extreme weather events, developed strategies to make the transportation more resilient, and identified project criteria based on past work.	●	●	●	●	

FEDERAL GUIDANCE & FUNDING

The Ocala-Marion Transportation Planning Organization (TPO) reviews and administers policies for state and federal transportation funding. The 2021 Infrastructure Investment & Jobs (II&J) Act provides funding for surface transportation infrastructure planning and investment. The II&J Act requires consideration of a number of national goals and emphasis areas in TPO plans and programs. Beyond safety, mobility, and infrastructure condition provisions and guidance, the II&J Act expands the planning focus on resiliency planning. The resiliency provisions in the II&J Act include almost $50 billion for resiliency planning and mitigation, including the Promoting Resilient Operations for Transformative, Efficient, and Cost-saving Transportation (PROTECT) grant program, which provides $8.7 billion in grants to states and local communities for transportation infrastructure resilience projects. The new law also allocates $3.5 billion for FEMA's Flood Mitigation Assistance (FMA) program and $1 billion to FEMA's Building Resilient Infrastructure and Communities (BRIC) program, to assist local communities with hazard mitigation improvements.

The FEMA BRIC program has $1B available for Fiscal Year 2021. The program aims to categorically shift the federal focus away from reactive disaster spending and toward research-supported, proactive investment in community resilience. For Fiscal Year 2020, the 22 large, competitive projects that were awarded funding were organized into seven categories of primary activity type, including: Elevation, Flood Control, Floodproofing, Relocation, Saferoom/Shelter, Utility and Infrastructure Protection, and Wildfire Management. BRIC funds can be used for capability & capacity-building activities, mitigation projects, and management costs. Capability & capacity-building activities include building code activities, partnership activities, project scoping, mitigation planning and planning-related activities. The criteria used to select BRIC funded projects include:

- Cost effectiveness
- Reduction/elimination of risk and damage from future natural hazards
- Consistency with relevant consensus-based codes, specifications and standards
- Alignment with applicable hazard mitigation plans
- Consistency with relevant environmental and historic preservation requirements

The cost share for BRIC funding is 75 percent Federal and 25 percent non-Federal, although economically disadvantaged rural communities are eligible for increased federal cost share. These are communities with 3,000 or fewer individuals

In Fiscal Year 2020 FEMA received **1,227 subapplications** that requested an estimated **$4 billion** in funding across the BRIC and FMA grant programs.

Projects selected in the FY 2020 BRIC grants included:

- **12** FLOOD CONTROL
- **1** WILDFIRE
- **4** UTILITY/ INFRASTRUCTURE
- **1** ROADWAY ELEVATION
- **2** RELOCATION
- **1** SHELTER
- **1** FLOODPROOFING

and an average per capita annual income that does not exceed 80% of the national per capita income. Projects selected in the FY 2020 BRIC grants included 12 flood control projects, 4 utility and infrastructure protection projects, 2 relocation projects, and one each of roadway elevation, floodproofing, shelters, and wildfire projects. Another part of the Hazard Mitigation Grant Program is the FEMA FMA Grant program. This program is for projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the National Flood Insurance Program. State, local, and tribal governments must develop and adopt hazard mitigation plans as a condition for receiving non-emergency disaster assistance. For Fiscal Year 2021, $160 million is available for funding.

Top five project types (by cost) funded with BRIC in 2020:

1. Flood Control **$550 million**
2. Utility/ Infrastructure Protection **$91.3 million**
3. Wildfire Management **$49.3 million**
4. Relocation **$21.9 million**
5. Safe Room/ Shelters **$15.2 million**

The FEMA HMGP offers funds for any sustainable action that reduces or eliminates long-term risk to people and property from future disasters. On August 2021, President Biden announced $3.46 billion in funding to reduce the effects of climate change. The types of projects eligible for HMGP funding include the following:

- Retrofitting existing buildings, making them less susceptible to damage from variety of natural hazards
- Purchasing hazard prone property to remove people/structures
- Utility and infrastructure retrofits
- Drainage improvements and slope stabilization
- Developing/adopting hazard mitigation plans
- Aquifer storage and recovery, floodplain and stream restoration, flood diversion and storage, or green infrastructure methods to reduce the impacts of flood and drought

There is a tiered funding system for federal assistance based on project costs, which includes up to 15% (Federal assistance) for first $2 billion; 10% for $2—$10B; up to 7.5% for $10—$35.3B; and for states with enhanced mitigation plans, up to 20% not to exceed $35.3B. To receive these funds, states, DC, US territories, and tribal governments must have a FEMA-approved Hazard Mitigation Plan in place by the application deadline.

The HGMP Post Fire Grant also exists to plan and develop projects that mitigate the risks and impacts of wildfires. Projects are required to be cost-effective (using FEMA's benefit-cost analysis software tool) or meet specific criteria deemed to be cost-effective. Pre-calculated benefits of $5,250/acre are available for post-wildfire mitigation projects, including soil stabilization, flood diversion, reforestation projects.

STATE FUNDING OPPORTUNITIES

Funding opportunities for resiliency are also available at the state level through various grant programs. In 2021, Governor DeSantis signed the first piece of legislation dedicated to resiliency planning in Florida. Senate Bill 1954 establishes the Resilient Florida Grant Program, which is administered by the Florida Department of Environmental Protection (DEP).

The Resilient Florida Grant Program establishes a statewide resiliency planning and grant program for local and regional entities to complete resiliency analyses, plans, and implement resiliency mitigation projects. The new law also establishes a research program through the University of South Florida (USF) College of Marine Science. Another feature of the new law is a requirement for the Office of Economic and Demographic Research to conduct an annual statewide assessment of water resources and conservation lands. The assessment must include analysis of the economic impacts of local, regional, and state expenditures on inland and coastal flooding mitigation.

Statewide Planning

Under the new law, the DEP will complete a comprehensive statewide flood vulnerability and SLR data set and assessment. The intent of the initial database development is to establish a baseline, which will be used to track sea level rise and will be updated every five years. The database will include SLR projections in both inland and coastal communities and flooding risk. The DEP will complete a statewide assessment using the database to identify vulnerable infrastructure and establish an inventory of critical infrastructure assets. Other requirements established by the legislation include:

- DEP will submit Statewide Flooding and Sea Level Rise Resilience Plan to governor and Legislature.
- Statewide plan will be updated and resubmitted annually on December 1st.
- Plan will include a three-year horizon with ranked projects to address flooding and sea level rise.
- DEP will assess projects based on a four-tiered scoring system specified in bill.
- Funding cannot exceed $100M in one year and is subject to review and appropriation by Florida Legislature.
- Counties, municipalities, and regional entities must submit proposed project lists to DEP for inclusion in plan (specifically related to water supplies/resources).

In 2021, Governor DeSantis signed the first piece of legislation dedicated to resiliency planning in Florida.

Research Hub

The research hub established by the bill creates the Florida Flood Hub for Applied Research and Innovation (Hub) within the University of South Florida (USF) College of Marine Science. The Hub will serve as the lead institution to coordinate efforts supporting applied research and innovation to address flooding and sea level rise across Florida. Specific activities to be conducted by the Hub include data development and modeling; coordination of research funds across participating entities; establishment of community-based programs; and assistance with training and workforce development activities. The Hub must submit a comprehensive report on the program goals and progress toward those goals on an annual basis, starting in July 2022.

Local Grants

The bill authorizes DEP to provide grants to regional resilience entities, including counties, municipalities, water management districts, flood control districts and regional resilience entities, for resilience activities. The first year of the grant program includes an allocation of $20 million. Specific types of eligible projects include the following:

- **Comprehensive plan amendments** and necessary analyses for complying with "Peril of Flood" statute (Sec. 163.3178(2)(f) F.S.) for communities with a Coastal Management Element in their comprehensive plan;

- **Vulnerability assessments**, other than that necessary for compliance with Peril of Flood, that identify or address risks of flooding and sea level rise;

- **Development of adaptation/resilience plans, projects, and policies** that allow for preparation for threats from flooding and sea level rise; and

- **Projects to adapt critical assets to the effects of flooding and sea level rise.** Critical assets are defined in the bill as follows:

1

Transportation assets and evacuation routes, including airports, bridges, bus terminals, ports, major roadways, marinas, rail facilities, and railroad bridges.

2

Critical infrastructure, including wastewater treatment facilities and lift stations, stormwater treatment facilities and pump stations, drinking water facilities, water utility conveyance systems, electric production and supply facilities, solid and hazardous waste facilities, military installations, communications facilities, and disaster debris management sites.

3

Critical community and emergency facilities, including schools, colleges, universities, community centers, correctional facilities, disaster recovery centers, emergency medical service facilities, emergency operation centers, fire stations, health care facilities, hospitals, law enforcement facilities, local government facilities, logistical staging areas, affordable public housing, risk shelter inventory, and state government facilities.

4

Natural, cultural, and historical resources, including conservation lands, parks, shorelines, surface waters, wetlands, and historical and cultural assets.

Eligible projects submitted by local agencies must have a 50% cost-share match, unless they benefit a financially disadvantaged small community.[1] Project proposals are evaluated by DEP based on a weighted tiered system of criteria and ranked from highest to lowest score. Projects with the highest scores are selected for funding up to the available funding allocation for the program. The project evaluation criteria and weighting specified in the bill include:[2]

Tier 1 criteria
(40% of total score)

- Degree to which project addresses the risks posed by flooding and sea level rise;
- Degree to which project addresses risks to regionally significant assets;
- Degree to which project mitigates risks in areas with an overall higher percentage of vulnerable critical assets; and
- Degree to which project contributes to existing flooding mitigation projects that reduce upland damage costs.

Tier 2 criteria
(30% of total score)

- Level of vulnerability of the project area to flooding and erosion;
- Project readiness, including permit/ easement status, local funding availability, and construction readiness;
- Inclusion of nature-based options for resilience, with priority given to state or federal critical habitat areas for threatened or endangered species; and
- The cost-effectiveness of the project.

Tier 3 criteria
(20% of total score)

- Availability of local, state, and federal matching funds;
- Previous state commitment and involvement in the project; and
- Exceedance of flood-resistant construction requirements of the Florida Building Code and applicable flood plain management regulations.

Tier 4 criteria
(10% of total score)

- Proposed innovative technologies designed to reduce project costs and provide regional collaboration and
- Extent to which the project assists financially disadvantaged communities.

1 Financially disadvantaged small community defined as having a separate public water system (permitted PWS) that serves a population less than 10,000 and whose per capita income is below the state average.

2 Statutes & Constitution :View Statutes : Online Sunshine (state.fl.us)

MARION COUNTY LOCAL MITIGATION STRATEGY (LMS)

Marion County developed a Local Mitigation Strategy (LMS) in 2020 to identify the natural hazards that affect one or more jurisdictions in the region and help establish the foundation for assessing risks, vulnerabilities, and identifying actions to mitigate the impacts of hazards. A Working Group composed of county and municipal agency representatives; key community groups; and some private sector organizations leads updates to the LMS on a 5 year update cycle. With consideration of the LMS, this resiliency guidance document includes a high level assessment of transportation facilities vulnerable to a variety of natural hazards and a mitigation strategy toolbox that can be used as a guiding resource for county planners and decision makers.

Structures/Infrastructure Vulnerability to Hazard Impacts

The LMS considers the impacts of hurricanes, tornados, storms, floods, wildfires, sinkholes, droughts, and man-made disasters. A complete list of hazards affecting Marion County is included below. Only the weather-related and natural hazards are included in the LMS. **The general process of the LMS is to identify and map potential hazards, identify at risk facilities, and analyze the vulnerability of those facilities.** Maps are included in the LMS showing wildfire potential, flood prone spots, FEMA Flood Zones, sinkholes, tornado risk, watersheds, and aquifer vulnerability.

TABLE 2. HAZARDS AFFECTING MARION COUNTY

Weather	Natural	Ecologial	Technological/Societal	Health
Hurricane/Tropical Storm	Wildfire	Pest Infestation	Power Failure	Epidemic
Severe Winter Storm	Flood	Animal Disease	HazMat Incidents	Aging Population
Tornado	Drought		Urban Fire	
Extreme Heat	Sinkholes		Radiological	
	Riverine Erosion		Societal/Civic Evacuation	
			Mass Casualty	
			Traffic Related	
			Civil Disturbance	

Source: Marion County Local Mitigation Strategy

The LMS includes the probability, frequency, impact area, and magnitude of impact for each natural hazard, summarized in the table below.

TABLE 3. HAZARD MATRIX: PROBABILITY, FREQUENCY, IMPACTS, AND SPATIAL EXTENT

Hazard-Natural	Probability	Impact	Frequency	Distribution
DROUGHT	Low	Minimum	N/A	Countywide
FLOOD	High	Moderate	1 event per year	Flood plains
RIVERINE EROSION	Low	Minimum	N/A	Riverine basins
TORNADO	Medium	Severe	1 event per 3 years	Countywide
HURRICANE AND TROPICAL STORM	Low	Severe	1 event per 10 years	Countywide
WILDFIRE	Medium	Severe	Several events per year	Rural areas
EXTREME HEAT	Low	Minimum	N/A	Countywide
SINKHOLES	Medium	Moderate	Several events per year	Countywide
SEVERE WINTER STORM	Low	Minimum	N/A	Countywide

Soure: National Climatic Data Center

Low: 1 event recorded per 10+ years
Moderate: 1 event recorded per 5-9 years
High: 1 event recorded per 1-4 years
N/A: No recorded events or insurffient data.

Minimum: 1-25% of the total structure/infastructure is damaged as a result of the hazard
Moderate: 25-50% of the total structure/infastructure is damaged as a result of the hazard
Severe: 50-100% of the total structure/ infastructure is damaged as a result of the hazard

Flooding is the only hazard identified in the LMS with a high level of probability. Flooding has a moderate impact in flood plains, and it would be expected that 25% to 50% of the structure/infrastructures in floodplains could be damaged. While tornados and wildfire have a moderate probability of occurring, their impact would be severe and damage 50% to 100% of the total structures/infrastructure in Marion County, including mobile homes, poorly constructed homes, non-elevated homes, telecommunications, and electrical utilities. Sinkholes have a moderate probability of occurring with a moderate impact countywide. Sinkholes can have a severe impact on Mobile Homes, Poorly Constructed Homes, and Non Elevated Homes, and a moderate impact on sewage systems, potable water, roadways, and airports. The LMS identified floods and sinkholes as having the greatest degree of impact on roadways, with an expected 25% - 50% of roadways damaged by either of these.

Vulnerable Critical Facilities

Each hazard in the LMS contains corresponding critical facilities that are vulnerable to its impact. Critical facilities are important for evacuation and sheltering purpose and typically include transportation facilities, medical facilities, communication facilities, potable water facilities, wastewater treatments plants, hospitals, and schools. Emergency operations centers, mobile home parks, childcare centers, and hazardous waste generators are also identified as critical for Marion County. Some facilities need extra evacuation support such as prisons, nursing homes, and hospitals. In Marion County, there are no critical facilities that demonstrate an overwhelming structural vulnerability to any particular hazard. Emergency management staff at Marion County maintain the Critical Facilities Inventory on an annual basis.

For a 100-year hurricane event and flooding, an estimated 4 of the 129 facilities classified as essential facilities would have at least moderate damage. It is projected that 100 facilities would have an expected loss of use greater than one day.

The Ocala National Forest is considered the area of greatest vulnerability in Marion County. There are residences within the Forest boundaries which are vulnerable to wildfires. Appropriate mitigation for wildfires can come in the form of enhanced warning systems and the establishment of defensible spaces around all structures.

Vulnerable critical facilities for sinkholes are those facilities that are near or adjacent to existing sinkhole activity. The LMS does not identify known vulnerable critical facilities, but it does reference the Florida Geological Survey's recording of 412 sinkholes or subsidence incidents in Marion County.

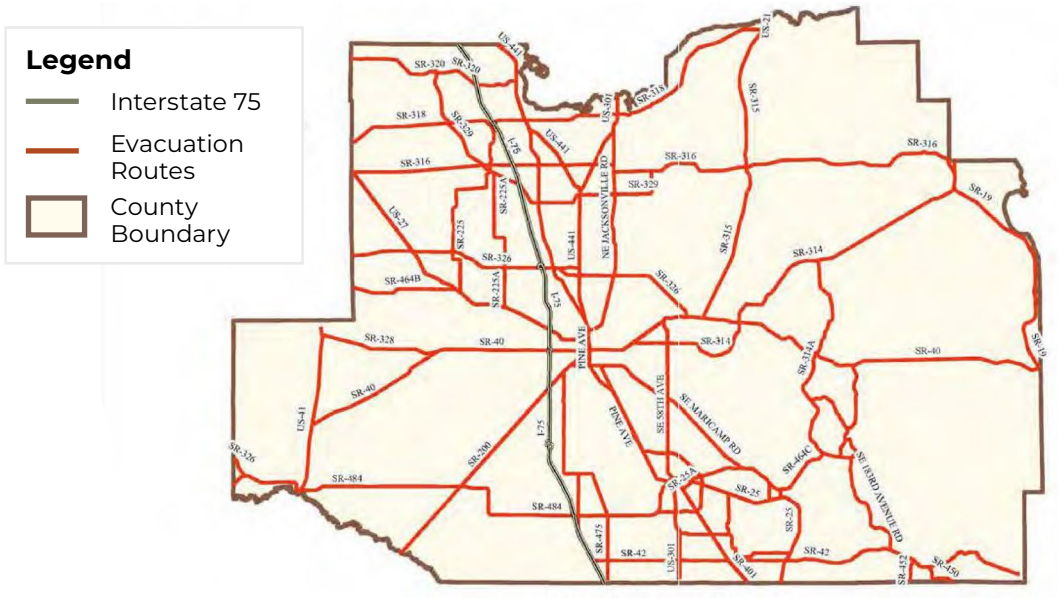
Drought and extreme heat can activate water restrictions to protect water supply. In extended periods of extreme heat, power supplies are also strained by the higher intensity of air conditioning systems usage. Appropriate mitigation for the potential loss of power is to maintain backup generators for critical facilities.

The unpredictable nature of tornados means that specific vulnerable facilities cannot be identified. Of the structures/infrastructure in Marion County, mobile homes are of the greatest concerns, along with wood frame structures and concrete block structures with wooden roof truss systems. Appropriate mitigation for tornadoes is to construct a safe room specifically engineered for such use.

While severe winter storms are not the highest hazard threat in Marion County, they pose a threat to power supply facilities and can result in power supplies needing to generate a pattern of "rolling brown-outs" that create temporary power outages in a geographic pattern.

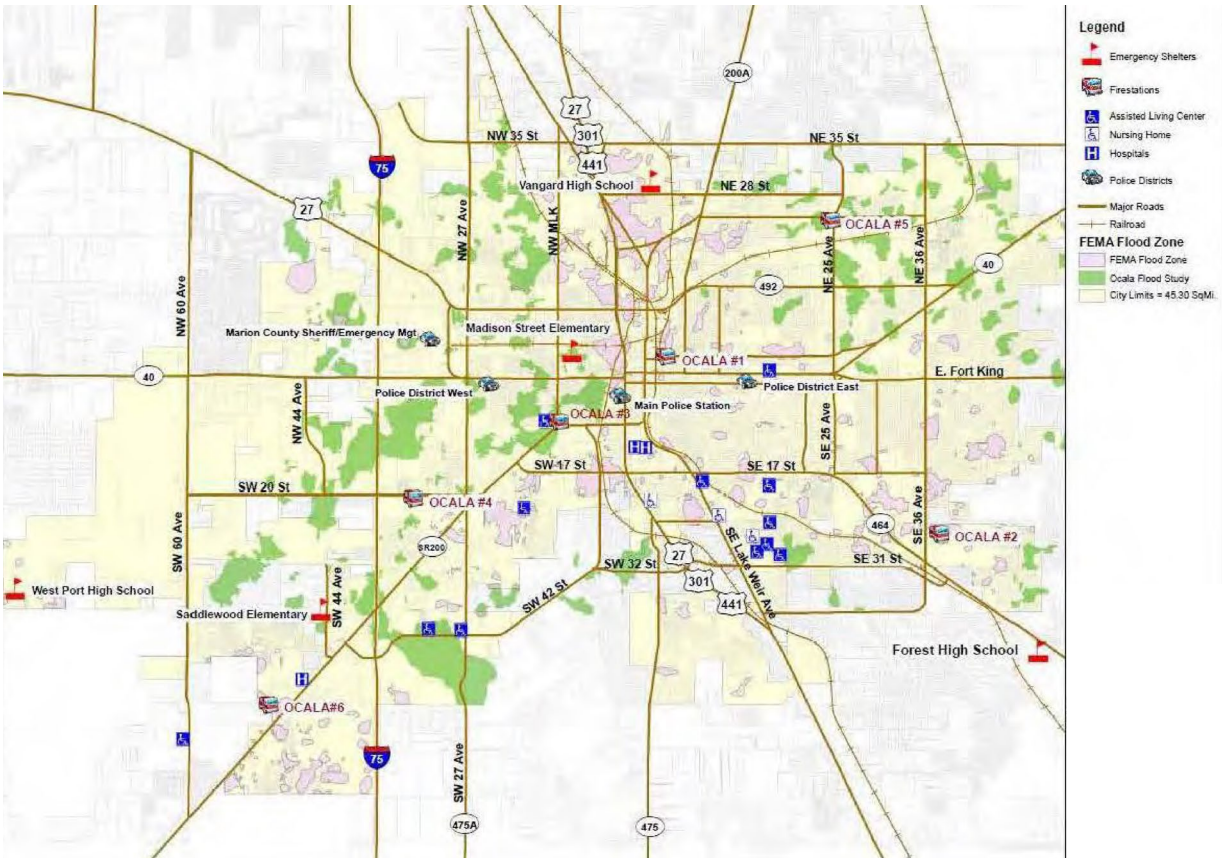
The LMS identifies the critical highway facilities in Marion County as those facilities designated as evacuation routes, including Interstate 75. The City of Ocala has an Emergency Preparation Priority Road Clearing database with major roads deemed critical for emergency preparation.

FIGURE 2. MARION COUNTY CRITICAL HIGHWAY FACILITIES



Source: Marion County Local Mitigation Strategy

FIGURE 3. CITY OF OCALA PRIOTIRY ROAD CLEARING



Source: Marion County Local Mitigation Strategy

The LMS is intended to be reviewed annually by the LMS Working Group to revise County, agency, municipal, and private business representation's roles, update the vulnerability assessment with new data, and revise mitigation initiatives. The LMS also formalizes mitigation goals to reduce the impacts of identified hazards assuming an equal level of risk throughout the county. The Working Group reviews and analyzes the existing plans, programs of County and municipal government, for mitigation programming. Any gaps in local government initiatives in addressing the hazards is determined, and the Working Group's review also determines if local government goals and mitigation initiatives will address risks posed by the impacts of future disasters. The gaps or inconsistences in analysis of existing local plans and programs result in one or more mitigation initiatives defined for incorporation into the LMS. If there is a sponsor for an initiative under consideration, then that agency or organization would include the initiative in its portion of the County Strategy.

For the mitigation initiatives developed, project scoring and prioritization procedures are detailed in the LMS to consistently evaluate, score, and prioritize projects for potential available funding sources. Funding Sources in the state are detailed in the LMS. The LMS Steering Committee evaluates ten factors for initiative prioritization:

1. **The population benefited**
2. **The percentage of the jurisdiction benefited**
3. **Health and safety considerations**
4. **The cost of implementing the project**
5. **The cost impact of the initiative**
6. **The benefit to cost / cost impact ratio**
7. **The probability of community acceptance**
8. **The probability of funding**
9. **The feasibility of implementation**
10. **Consistency with other plans and programs**

The primary mitigation activities by action item are listed in the table below. The values of High (H), Medium (M) and Low (L) have been assigned to each jurisdiction's need to focus their primary mitigation strategies on a particular action item.

TABLE 4. PRIMARY MITIGATION ACTIVITIES BY ACTION ITEM

	Belleview	Dunnellon	McIntosh	Ocala	Reddick	Unincorporated County
Actions that promote control of hazards	**M**	**M**	**L**	**H**	**L**	**H**
Stormwater controls – Stormwater management plans through grants and fees.	L	H	L	L	L	M
Structures to lessen hazard impacts – Hurricane shutters are one of the most cost-effective mitigation measures. All critical public facilities should be "hurricane hardened." New facilities should be built to current structural standards for withstanding hurricane winds.	H	H	H	H	H	H
Actions that protect public facilities and infrastructure	**M**	**M**	**L**	**H**	**L**	**H**
Adjust infrastructure location, design – Avoid building new public infrastructure that will encourage growth in high hazard areas. Design new public infrastructure to withstand disasters	M	L	L	H	L	H
Retrofit community facilities – shutters, hurricane clips, roof retrofits, door	H	H	H	H	H	H
Hazard-proof new community facilities – Assure proper elevation, backup generators, safeguard computors and communications.	M	H	L	M	L	M
Site community facilities to maintain services – Site community facilities near trunk lines for utilities and ensure that access roads don't flood.	M	M	M	M	M	M

	Belleview	Dunnellon	McIntosh	Ocala	Reddick	Unincorporated County
Actions that promote emergency preparedness and response	**M**	**M**	**L**	**H**	**M**	**H**
Preparedness plan/program – Increase communications system and warning procedures for all disasters, increase weather monitoring capabilities.	M	H	L	M	L	M
Emergency response plans – Continue ongoing efforts for planning, preparedness and training. Focus on issues identified in needs assessments.	L	L	L	L	L	L
Evacuation plan/program – Begin with population/ housing analysis possibly following the census. Perform transportation analysis using updated traffic counts and roadway capacities.	M	H	L	H	L	M
Sheltering plans – Perform structural analysis of shelters and incorporate population analysis	M	M	M	M	M	M

Source: Marion County Local Mitigation Strategy

Concept papers for the Working Group are detailed for LMS development. A proposed concept paper in the LMS specific to transportation was determined for evacuation routes threatened by hazards. All evacuation routes important to the effective evacuation of specific neighborhoods, or to supporting regional hurricane evacuation that are vulnerable to localized flooding would be defined and mitigation initiatives proposed for implementation (e.g., roadway elevation, storm drainage improvement, etc.)

VULNERABILITY ANALYSIS

Purpose of Analysis

A high level Vulnerability Analysis was completed and summarized in this paper to identify segments of the Federal-Aid Highway System exposed to three key hazards in Marion County: **sinkholes, flooding, and wildfire** hazards, based on readily available data. All three of these hazards are included in the 2020 Marion County LMS. The results of the analysis are presented below in terms of miles of roadways on the Federal-Aid Highway System impacted by each of the three hazards, broken down by functional classification. Evacuation routes were analyzed separately, to represent critical facilities in the event of a natural or man-made disaster requiring evacuation. Understanding those highway facilities impacted by hazards sheds light on where to develop resiliency strategies and prioritize resiliency funding. The TPO Board can use these results to understand the magnitude and general location of potential impacts to transportation infrastructure of these three hazards. This analysis can be built upon to further assess the most critical facilities and perform more in-depth analysis.

Methodology and Data Sources

The Federal-Aid Highway System used as the study network for this analysis includes the roadways within Marion County that are eligible for federal funding. The network database, along with functional classification data, were downloaded from the Florida Department of Transportation's (FDOT) GIS repository. Roadways designated as evacuation routes represent a subset of the Federal-Aid Highway System obtained from Marion County in 2021. Hazard data were obtained from the City of Ocala and Marion County. Flooding and sinkhole data were provided by the City of Ocala and Marion County, and wildfire hazard data created by the U.S. Department of Agriculture (USDA) Forest Service was provided by Marion County.
The following definitions were used for the three hazards:

Sinkholes. A 150-foot buffer was created around the sinkholes based on the average distance between sinkholes and the centerline of the Federal-Aid Highway System.

Flooding. The flood data represent flood prone areas based on historical tracking in Ocala and the Marion County Office of the County Engineer - Stormwater Division.

803 sinkholes in Marion County between 2015 and 2020

315 square miles in Marion County are prone to flooding

Wildfires. The Wildfire Hazard potential (WHP) data were developed by the USDA Forest Service and Fire Modeling Institute to help inform the assessment of wildfire risk and prioritization of fuels management needs across large landscapes. Only those areas identified as the highest WHP were used in the analysis.

960 square miles in Marion County are prone to wildfires

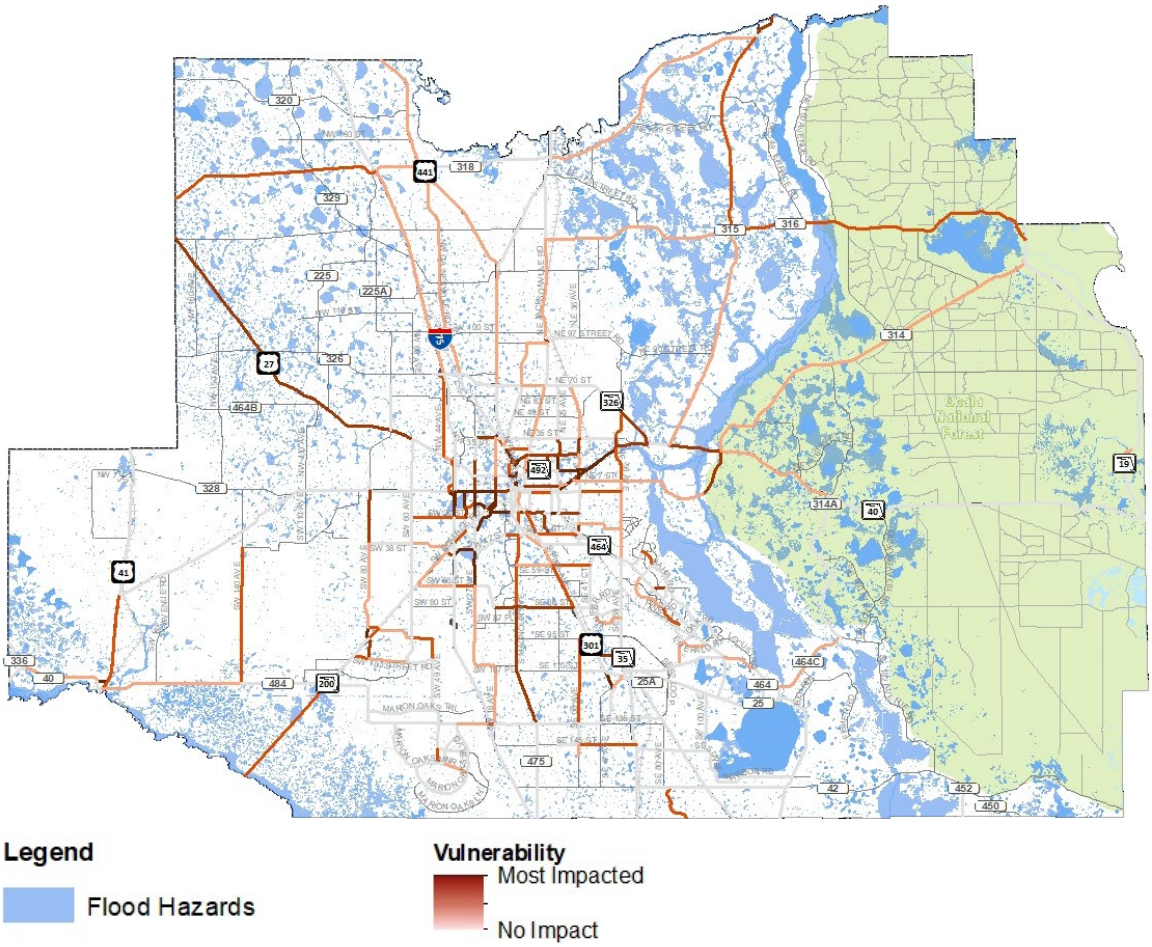
The Federal-Aid Highway System network is composed of 506 segments which were split at the boundaries of the three hazard areas: sinkholes, flooding, and high/very high wildfire hazard potential. Splitting the Federal-Aid Highway System at the hazard boundaries resulted in 3,102 segments which were joined to the hazards to determine the specific segments that were impacted by hazards.

Results

The results of the Vulnerability Analysis are presented in maps and tables on the following pages. For each hazard, the impacted roadway segments are color coded in the maps based on the impacted length of each respective roadway segment.

Flooding

61% of the centerline miles of federal-aid roadways in Marion County are prone to flooding, including 91% of the evacuation routes.



FLOODING IMPACTS
ON FEDERAL-AID SYSTEM

Functional Classification	Centerline Miles Impacted	Percent Centerline Miles Impacted
Principal Arterial	129	58%
Minor Arterial	56	44%
Major Collector	151	79%
Minor Collector (Fed Aid)	101	57%
All Road Classifications	**436**	**61%**

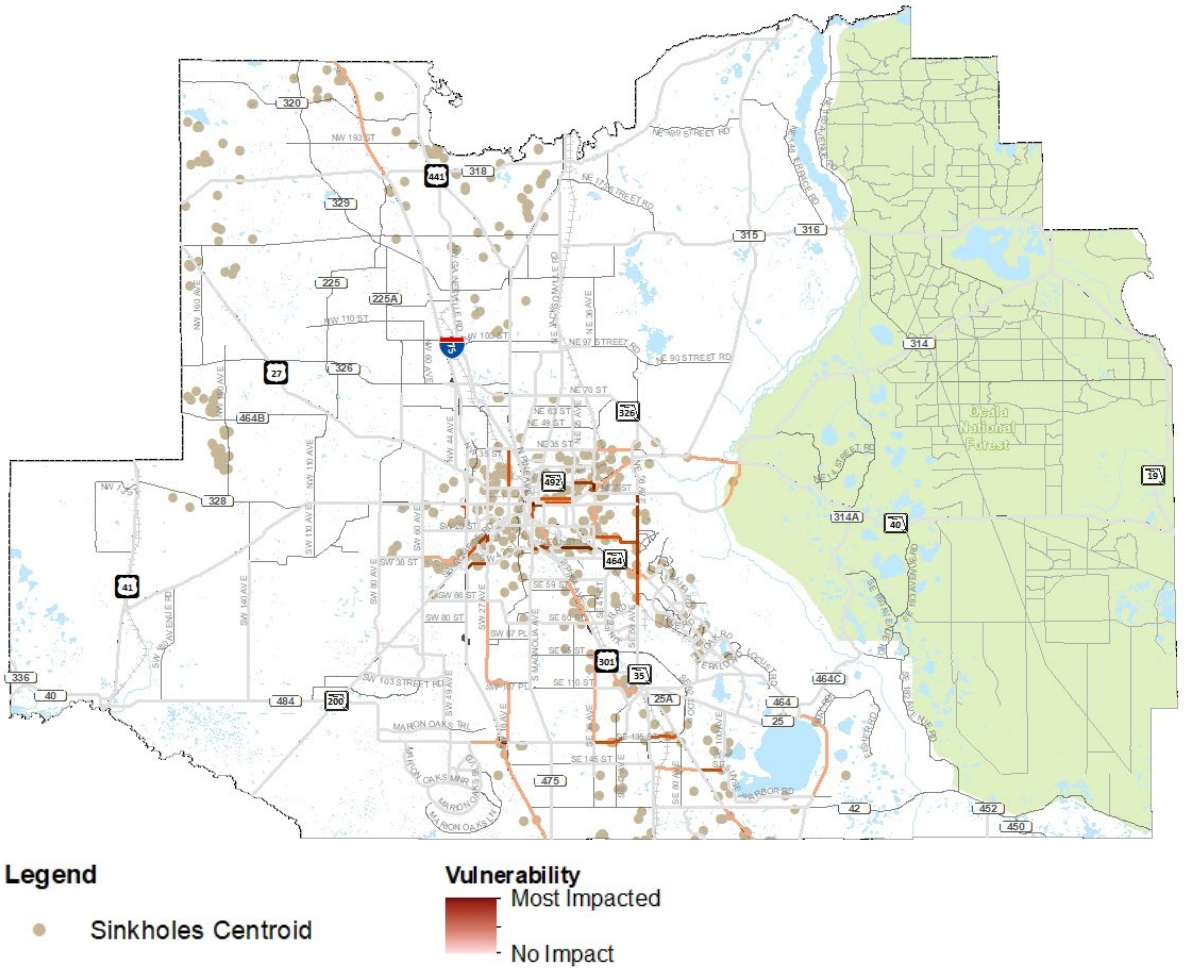
FLOODING IMPACTS
ON EVACUATION ROUTES

Functional Classification	Centerline Miles Impacted	Percent Centerline Miles Impacted
Principal Arterial	192	88%
Minor Arterial	71	97%
Major Collector	25	100%
Minor Collector (Fed Aid)	4	57%
All Road Classifications	**292**	**91%**

Source: Marion County, Florida | Flood Factor

Sinkholes

There have been more than 800 sinkholes in Marion County since 2015.



SINKHOLE IMPACTS
ON FEDERAL-AID HIGHWAY SYSTEM

Functional Classification	Centerline Miles Impacted	Percent Centerline Miles Impacted
Principal Arterial	37	17%
Minor Arterial	22	17%
Major Collector	6	3%
Minor Collector (Fed Aid)	22	12%
All Road Classifications	**86**	**12%**

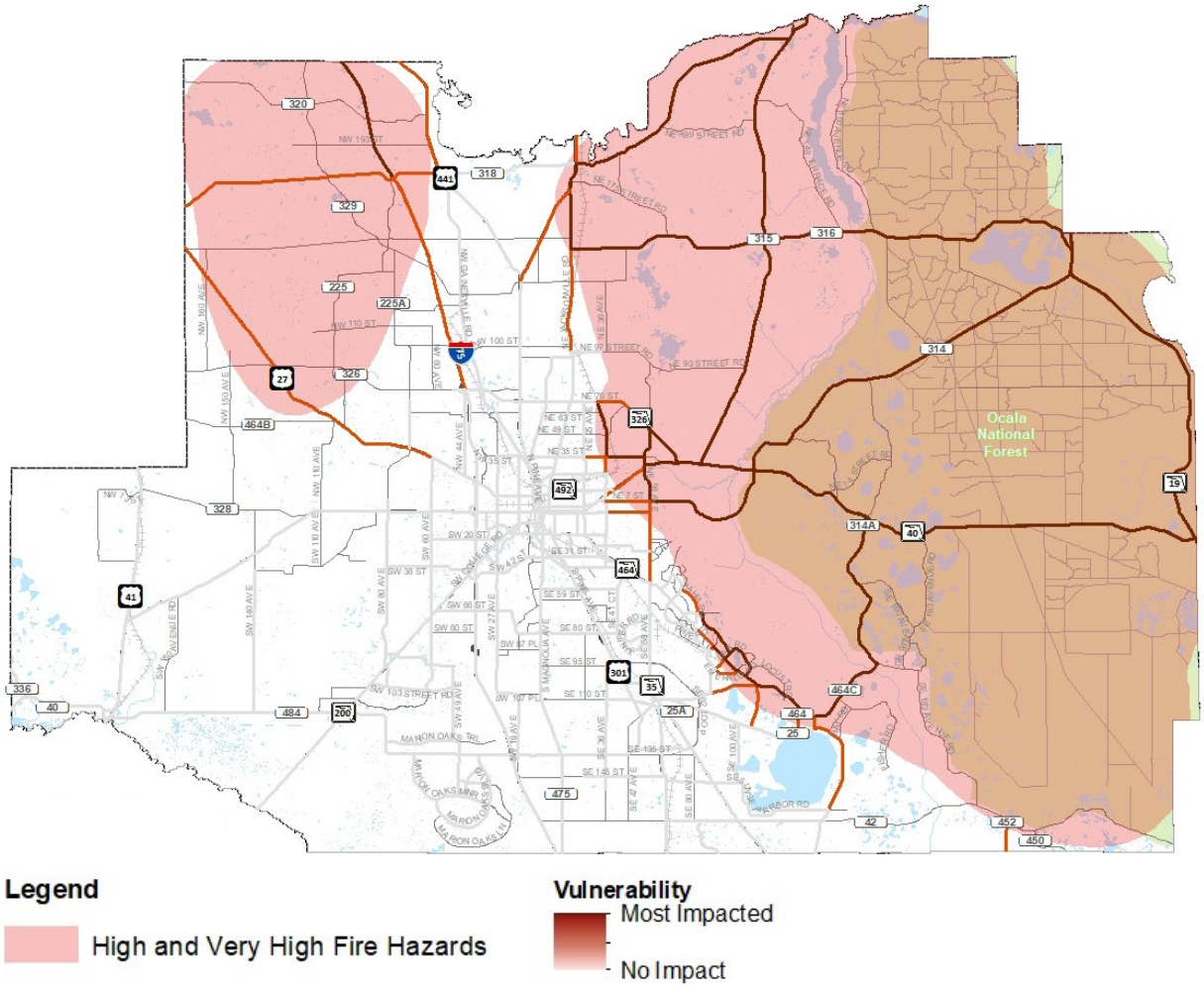
SINKHOLE IMPACTS
ON EVACUATION ROUTES

Functional Classification	Centerline Miles Impacted	Percent Centerline Miles Impacted
Principal Arterial	70	32%
Minor Arterial	41	57%
Major Collector	0	0%
Minor Collector (Fed Aid)	0	0%
All Road Classifications	**111**	**34%**

Source: Marion County, Florida

Wildfires

There were 29 wildfires in Marion County in 2019, burning 144 acres.



WILDFIRE IMPACTS ON FEDERAL-AID SYSTEM

Functional Classification	Centerline Miles Impacted	Percent Centerline Miles Impacted
Principal Arterial	78	35%
Minor Arterial	38	30%
Major Collector	116	61%
Minor Collector (Fed Aid)	23	13%
All Road Classifications	**255**	**36%**

WILDFIRE IMPACTS ON EVACUATION ROUTES

Functional Classification	Centerline Miles Impacted	Percent Centerline Miles Impacted
Principal Arterial	83	39%
Minor Arterial	33	45%
Major Collector	18	73%
Minor Collector (Fed Aid)	4	100%
All Road Classifications	**140**	**43%**

Source: Marion County, Florida

RESILIENCY STRATEGIES

There are many strategies that can be employed to prevent, mitigate, or adapt to hazards such as flooding, wildfires and others. As with any infrastructure improvement strategy, resiliency improvements range in terms of type, expense, and purpose. This section of the paper includes a description of more than thirty resiliency strategies, including relative cost, purpose, benefits, and examples of application. The strategies are presented in a matrix below, categorized in terms of four broad types of strategies.

The four categories of resiliency strategies include:

Prevention: Strategies that reduce the likelihood of a shock or stressor impacting the system. Prevention strategies are ones that address the root cause of hazards or reduce the likelihood of impact on the transportation system. Examples include fire use restriction policies to prevent wildfires and realignment of waterways to prevent flooding.

Adaptation: Strategies that change the system in ways that reduces the impacts of shocks and stressors. Adaptation strategies effectively make shocks and stressors less impactful to the normal function of the transportation system. Examples of adaptation strategies include policies limiting development in vulnerable areas or relocation of infrastructure to less vulnerable areas (e.g. move signal cabinet higher to be less prone to flooding impacts).

Absorption: Strategies that help the system experience shocks and stresses and keep functioning normally. Absorption strategies harden the transportation system to be able to withstand the impacts of shocks and stressors. Examples range from increased maintenance of drainage infrastructure to ensure that it performs optimally to more capital intensive strategies like raising roadways, rendering them less vulnerable to flooding events.

Restoration: Strategies that help the system recover quickly and return to normal functioning. A local example of a restoration strategy is the I-75 Florida's Regional Advanced Mobility Elements (FRAME), which coordinates detouring to parallel roadways in the event of traffic disruptors like crashes on I-75 using coordinated communications technologies.

One of the key considerations in any transportation infrastructure analysis is equity. Potential benefits and burdens resulting from transportation improvements must always be assessed in terms of their effects on the transportation disadvantaged populations in the region, which are defined in Florida state statute as "those persons who because of physical or mental disability, income status, or age are unable to transport themselves or to purchase transportation and are, therefore, dependent upon others to obtain access to health care, employment, education, shopping, social activities, or other life-sustaining activities". The transportation disadvantaged should be considered when prioritizing and implementing strategies, as the transportation system must provide opportunity for access to the entire community before, during, and after shocks and stressors.

1 2021 Statutes 0427.011 | Florida House of Representatives (myfloridahouse.gov)

TABLE 5. RESILIENCY STRATEGY MATRIX

Strategy	Descritpion	Hazards	Considerations	Benefits	Cost	Source
Prevention: Strategies that reduce the likelihood of a shock or stressor impacting the system.						
Reduce VMT	Reducing Vehicle Miles Travelled (VMT) reduces the strain on the network associated with rerouting trips or reducing the available route choices.			· Reduce community reliance on automobile trips · Reduce the number of vehicles that must use detour routes		
Develop a Stormwater Management Plan	Develop a plan to address existing conditions and the required capacity for new facilities.			· Determine effectiveness of centralized facilities and other regional opportunities		· Houston Galveston Resilience Pilot Program
Construct green roofs	Utilize green roofs that provide shade, reduce surrounding air temperature, and reduce runoff.			· Reduce runoff · Reduce urban heat island effect		· USFS Compendium of Adaptation Practices
Realign or reconnect water courses	Realign waterways away from critical infrastructure. Reconnect waterways to allow natural flood plains to absorb impact of storm events.			· Allow natural flooding to occur, rather than constraining waterways		· World Road Association International Climate Change Adaptation Framework for Road Infrastructure
Implement fire-use restrictions	Implement policies to reduce the likelihood of wildfire during conditions that are conducive to wildfire ignition.			· Reduce chances of wildfire		· USFS Compendium of Adaptation Practices
Use forest management techniques such as thinning, prescribed burn, and fuels removal	Reduce the likelihood for an extreme fire, with intermittent fire and other management practices.			· Maintain ecosystems that require fire		· USFS Compendium of Adaptation Practices
Adaptation: Strategies that change the system in anticipation of shocks and stressors to maintain normal functioning.						
Discourage development and growth in vulnerable areas	Create zoning requirements that encourage dense development to occur outside of impact areas, for example the flood plain.		· Consider impacts to communities living in less vulnerable areas · Consider conservation projects, especially in areas that coincide with environmentally vulnerable/valuable areas	· Reduce the amount of vulnerable infrastructure over time		· FEMA Nature-Based Solutions · Houston Galveston Resilience Pilot Program
Site new facilities outside of hazard area	When developing new assets or infrastructure, consider locating outside of the hazard area.			· Consider hazards during the planning phase to reduce the cost of relocation		· FHWA Adaptation Framework
Change the nature of access to critical facilities	Provide access to critical facilities under hazards by considering alternative accesses. For example, access through the rear of the building, provide for walking or using a mode other than automobile for a portion of the access trip.			· Provides redundant access during normal operations		· USFS Compendium of Adaptation Practices
Provide redundant routes	Maintain redundant routes in the network that are functional for all modes.		· Consider access to critical facilities and critical routes	· Reduces the consequence of segments being impacted by shocks or stressors · Offers traffic management in non-hazard times		· Resilient California

Legend General · Heat · Wildfire · Flood · Tornado · Low cost · Medium cost · High cost

Strategy	Descritpion	Hazards	Considerations	Benefits	Cost	Source
Construct green stormwater infrastructure	Combine natural landscape and vegetation with engineered solutions. Allow spaces to be used for recreation or horizontal/ vertical separation of transportation users during normal conditions and water management during severe events.		· Maintenance costs, but life cycle benefits · Community is committed to maintaining during establishment	· Filter water · Infiltrate water · Retain water		· Resilient Tampa Bay · Houston Galveston Resilience Pilot Program
Relocate assets to avoid damage	Move critical infrastructure or components to avoid or reduce the probability of impact. For example, relocate signal cabinet to higher elevation at intersection.					· FHWA Adaptation Framework · Houston Galveston Resilience Pilot Program
Install battery backups at traffic signals	Provide batteries for signal operation during power disruption. Power disruption may occur if powerlines are knocked down from wind debris.		· Battery capacity and need for replacement or installation of a generator · Prioritize signals with greatest impact	· Continue operations during shock		· Space Coast TPO Resiliency Master Plan
Absorption: Strategies that help the system function normally during events that cause shocks and stressors.						
Conduct regular maintenance of infrastructure	Maintain the working order of infrastructure, for example keeping culverts clear.			· Proactive measure to maintain flow at critical points · Maintain clear of overgrown vegetation which may spread wildfire across the roadway		· South Florida Climate Pilot · Houston Galveston Resilience Pilot Program
Construct hardened shoulders	Widen roadway structure to reduce impact to travel lanes.		· Requires clearance around roadway · Along roadways experiencing strong flows	· Limit inundation to one side of roadway · Reduce erosion from overtopping		· Resilient Tampa Bay
Use permeable pavements	Slows, filters, and cleans stormwater runoff by installing porous surfaces.		· Especially relevant in areas with large parking lots · Appropriate only for gentle slopes · Can become clogged. · Appropriate for low traffic volumes, loads, and speed	· Reduce runoff · Allow water to infiltrate · Reduced particulates in water		· Resilient Tampa Bay · Houston Galveston Resilience Pilot Program
Construct enhanced road surface	For flooding: Increase the thickness of hot mix asphalt (consider increasing 2”) and binder course using larger aggregate. For heat and wildfire: Design road with materials resistant to fire and heat.			· Resist water movement and inundation · Withstand impacts of prolonged exposure to heat or submersion		· Resilient Tampa Bay · Resilient California · Houston Galveston Resilience Pilot Program
Construct enhanced sub-surface	Increase the thickness of subbase layers to provide additional drainage, structural strength, and resistance to flow damages (consider increasing 4-6”).			· Resist water movement and inundation		· Resilient Tampa Bay · Houston Galveston Resilience Pilot Program
Construct berms or barriers	Construct a barrier to prevent water from flooding the roadway.		· Consider available right-of-way to construct barrier	· Prevent water from reaching roadway or flowing across roadway		· FHWA Adaptation Framework
Construct protected or depressed medians	Separate the roadway and potential effect of inundation with a median between the travel lanes in each direction.		· Especially effective along roadways in flat areas · Requires maintenance of vegetation and keeping drains clear	· Reduce the occurrence of floods across the full roadway · If depressed, serve as a holding area for water		· Resilient Tampa Bay · Houston Galveston Resilience Pilot Program

Legend General · Heat · Wildfire · Flood · Tornado · Low cost · Medium cost · High cost

Strategy	Descritpion	Hazards	Considerations	Benefits	Cost	Source
Harden or armor key infrastructure components	Protect key infrastructure, for example embankments, signal wires, or bridge piers, against extreme weather events.		• Consider the impact of armoring to the transportation and ecological system during shocks and stressors, but also during normal operations	• Reduce disruption to traffic flow • Maintain access during storm		• South Florida Climate Pilot
Construct swales or ditches	Drains stormwater away from infrastructure toward larger stormwater facilities.		• Requires clearance around roadway • Stability and durability of slopes and ditches • Must be maintained and cleared of debris	• Retain water prior to entering the sewer system. • Reduce standing water which may serve as insect breeding areas		• Resilient Tampa Bay • Houston Galveston Resilience Pilot Program
Construct retention/ detention ponds or rainwater harvesting	Where roadside swales are insufficient capacity, ponds may be constructed to retain water and release it at a manageable rate. Alternatively rainwater harvesting systems can collect, store, and make use of water.		• Requires a potentially large area to be availableMaintenance to ensure proper drainage is required	• Retain water prior to entering the sewer system • Reduce flooding due to overwhelmed systems • Enhance natural environment		• Resilient Tampa Bay • FEMA Nature Based Solutions • Miami Beach Stormwater Management Master Plan • Houston Galveston Resilience Pilot Program
Construct recharge wells	Directly discharge water into deep water-bearing zones.			• Reduce stormwater to be managed by other conveyance infrastructure		• Miami Beach Stormwater Management Master Plan
Reduce the gradient of slopes	Reduce the grade of slopes abutting roadways.			• Reduce the likelihood of erosion		• World Road Association International Climate Change Adaptation Framework for Road Infrastructure
Construct stormwater parks	Recreational spaces designed to flood. Brazilian city Curitiba has extensive system of wet parks, Tallahassee, Tampa parks.			• Provide recreational facilities most of the time • Relocate critical infrastructure from flood prone areas.		• FEMA Nature Based Solutions
Restore and protect wetlands and floodplains	Develop or restore facilities at the watershed level to manage severe events.			• Act as a barrier to the spread of fire • Provide water storage		• FEMA Nature Based Solutions • Houston Galveston Resilience Pilot Program
Construct raised roadways	Raise the profile of the road in critical areas.		• Requires clearance around roadway • Areas where extended inundation is expected and other drainage options are insufficient • Connection to other raised facilities. • Construct flow structures to prevent the roadway from acting as a dam • Access to adjoining properties	• Increase runoff possibilities. • Reduce damage to surface and base elements from pooling.		• Resilient Tampa Bay • Miami Beach Stormwater Management Master Plan • Houston Galveston Resilience Pilot Program

Legend General Heat Wildfire Flood Tornado Low cost Medium cost High cost

Strategy	Descritpion	Hazards	Considerations	Benefits	Cost	Source
Install tie-downs	Use tie downs for buildings at risk of high winds					· USFS Compendium of Adaptation Practices
Create and maintain defensible space around facilities	Buffer facilities with an area that is resistant to quick spreading fire, for example grass.			· Prevent fire from spreading to structures · Offer additional warning and time for evacuation		· USFS Compendium of Adaptation Practices
Restoration: Strategies that help the system recover quickly and return to normal functioning.						
Install generator connections at traffic signals	Provide built in connections on signal cabinets to connect a generator.		· Battery capacity and need for replacement or installation of a generator · Prioritize signals with greatest impact	· Quickly resume operations after shock		· Space Coast TPO Resiliency Master Plan
Prioritize roadways	Prioritize roadways based upon network effectiveness. In all response activities focus on roadways in priority order, for example send crews to clear debris from priority roadways before non-priority roadways.		· Include community input regarding critical routes and facilities	· Clear and defined plan that can be communicated to the community		· Resilient California
Develop warning systems with resilient communications	Warning system may consist of sensors, cameras, citizen reporting tool, or other means.			· Quickly alert of hazard to allow response to occur		· Houston Galveston Resilience Pilot Program
Develop a coordination plan with other agencies to respond to changes and hazards						· FHWA Adaptation Framework
Coordinate with transit providers to identify alternative routes and stops if normal infrastructure is impacted				· Continue to operate transit in a predetermined manner consistent with rider expectations.		· Resilient California
Establish stand-by contracts for damage response	Establish mechanisms to pay for rapid response to hazards.			· Proactive measure to reduce the length of impact.		· FHWA HOP-15-025
Stockpile materials (culvert pipe, fuel, components) and equipment (generators, traffic control devices) at appropriate locations	Maintain an inventory of critical materials to quickly respond to needs during and after shocks.		· Different materials will be needed at different locations to address each hazard · Consider in conjunction with prioritized roadways · Consider cost of storage and potential deterioration of materials over time	· Proactive measure to reduce the length of impact.		· FHWA HOP-15-025

Legend General · Heat · Wildfire · Flood · Tornado · Low cost · Medium cost · High cost

The relative cost estimates provided in the strategy matrix below are intended to illustrate high, medium, or low cost strategies. Actual costs vary from project to project, and for some projects strategies vary in cost-effectiveness. For example, if right-of-way width allows, implementing green stormwater infrastructure along a roadway segment may be a more cost-effective strategy than developing a stormwater park, but there may be other projects where the inverse is true.

NEXT STEPS

Transportation resiliency planning can be completed at both the system or facility level, using a variety of data and methodologies. Recommended next steps for the Ocala Marion TPO include a comprehensive transportation system analysis that builds upon Marion County's LMS, with a specific emphasis on transportation and vulnerabilities associated with all relevant hazards, including those discussed and assessed in this paper. A resiliency master plan based on the results of the analysis would provide the TPO with a guide to advance the highest priority resiliency improvements. The master plan would involve a series of steps, including:

Public and stakeholder coordination

Hazard data collection

Scenario planning analysis;

Identification of critical facilities; and

Identification and prioritization of needed resiliency improvements.

The master planning effort would be coordinated closely with the TPO's planning partners, including Marion County and municipalities, the Florida Department of Transportation, the East Central Florida Regional Planning Council, and others. The resulting plan would provide an important guide to implement specific improvements and resiliency analysis to consider as part of other infrastructure plans and improvement strategies.

Other recommended resiliency planning efforts include consideration of resiliency as part of all transportation improvements. Much the same way that safety is a consideration as part of any transportation infrastructure project, resiliency ought to also be a regular consideration. A framework to guide resiliency analysis at the project level could be a part of the resiliency master plan, or could be developed independently for project planning efforts.

The TPO's system planning efforts, which include the prioritization of short range improvements in the Transportation Improvement Program (TIP), and longer term projects in the Long Range Transportation Plan (LRTP), ought also consider resiliency in several ways. First, the needs assessment process can include data analysis similar to that done in this paper to highlight identify needs for facilities exposed to potential flooding or wildfires. Also important to the LRTP is the quantitative evaluation criteria used to prioritize investments. Resiliency considerations can and should be built into that evaluation process. The TPO can also access new discretionary funding for resiliency improvements through the various state and federal programs discussed in this paper. Working hand in hand with local partners like Marion County and municipal partners, the TPO can assist in the completion of grant applications to secure some of this funding.

Recommended next steps for the Ocala Marion TPO include a comprehensive transportation system analysis that builds upon Marion County's LMS, with a specific emphasis on transportation and vulnerabilities associated with all relevant hazards, including those discussed and assessed in this paper.

TO: **Committee Members**

FROM: **Rob Balmes, Director**

RE: **Performance Management 2022 Safety Targets**

Summary

The Moving Ahead for Progress in the 21st Century Act (MAP-21) requires State DOTs and TPOs/MPOs to conduct performance-based planning by tracking performance measures and setting data-driven targets to improve those measures. The first of the performance measures that became effective in 2016 was assessing the conditions of roadway safety – PM1. By May 2018, all TPO/MPO's were required to establish safety targets and approve or update on an annual basis.

Specifically, the Ocala Marion TPO is required to update and adopt **Targets** for **five** required **Safety Performance Measures** established under MAP-21. This year, the TPO must submit our Safety targets to the Florida Department of Transportation (FDOT) no later than February 25, 2022. Please refer to the following table for a summary of the five required safety performance measures.

Safety Performance Measures	**Description** (per calendar year)
1. Fatalities	Total number of fatalities involving a motor vehicle crash
2. Fatalities (Rate)	Rate of fatalities per 100 Million Vehicle Miles Traveled (VMT)
3. Serious Injuries	Total number of serious injuries involving a motor vehicle crash
4. Serious Injuries (Rate)	Rate of serious injuries per 100 Million Vehicle Miles Traveled (VMT)
5. Non-Motorized Fatalities & Serious Injuries	Number of non-motorized fatalities and number non-motorized serious injuries involving a motor vehicle crash

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On an annual basis, the TPO has the opportunity to select one of two options regarding updating and submission of safety targets.

1. Adopt the state targets established by FDOT.
2. Develop its own quantifiable safety performance targets.

If the TPO adopts state targets, it is required to annually adopt the same targets until changes are made by FDOT. Presently, the FDOT has adopted 0 for each of the five safety targets.

In 2018, when this process became a federal requirement, the TPO Board adopted its own specific safety performance targets to better track progress and reflect more accountability to the public. The targets reflect specific crash data for Marion County. For the past four years, the TPO Board has opted to follow the same approach of reviewing prior year target results, and adopting revised targets tied to a specific methodology involving five-year rolling averages and projected vehicle miles traveled (VMT). The methodology is explained in more detail in this memo packet.

On February 23, 2021, the TPO Board adopted the following 2021 safety targets.

Safety Performance Measure	2021 Targets (not to exceed)
#1 - Fatalities	97
#2 - Fatalities per 100 Million VMT	1.96
#3 - Serious Injuries	432
#4 - Serious Injuries per 100 Million VMT	8.74
#5 - Number of Non-Motorized (bicycle, pedestrian) Fatalities and Serious Injuries	61

Based on crash data collected by the TPO using Signal Four Analytics (University of Florida), the following summarizes the results of the 2021 crashes in Marion County pertaining to the TPO's adopted five safety targets.

Safety Performance Measure	2021 Targets	2021 Results	Met Target?
#1 - Fatalities	97	91	Yes
#2 - Fatalities per 100 Million VMT	1.96	1.98	No
#3 - Serious Injuries	432	263	Yes
#4 - Serious Injuries per 100 Million VMT	8.74	5.71	Yes
#5 - Number of Non-Motorized (bicycle, pedestrian) Fatalities and Serious Injuries	61	50	Yes

Proposed 2022 Safety Targets

Following the same methodology used in 2021, the TPO conducted an analysis of the five safety targets for 2022 using data and information provided by FDOT and the University of Florida Signal Four Analytics online database. The methodology of developing targets for 2022 involved calculating the average percent change of three periods of five-year rolling averages for each of the five targets, and projecting VMT based on historic trends. The three five-year rolling averages included 2015 to 2019; 2016 to 2020; and 2017 to 2021. The aggregate percent change of the three rolling averages was then applied to the third rolling average period to calculate the proposed 2022 targets. Based upon this analysis, the proposed 2022 safety targets are as follows.

Safety Performance Measure	Proposed 2022 Targets (not to exceed)
#1 - Fatalities	**98**
#2 - Fatalities per 100 Million VMT	**2.08**
#3 - Serious Injuries	**378**
#4 - Serious Injuries per 100 Million VMT	**8.02**
#5 - Number of Non-Motorized (bicycle, pedestrian) Fatalities and Serious Injuries	**57**

Attachment(s)

- 2022 Performance Management Safety Target Methodology
- Crash Summary Charts
- FDOT PM-1 Safety Fact Sheet

Recommendation(s)

Option A. Continue using the methodology for developing safety targets. Recommend to the TPO Board adoption of the safety targets for 2022. As part of the Commitment to Zero Safety Action Plan, staff recommends the consideration of crash reduction factors and corresponding strategies to improve safety in Ocala/Marion County for 2023 target setting.

Option B. Adopt 0 for all five safety targets to reflect the Commitment to Zero Safety Action Plan goal of moving toward 0 Fatalities and 0 Serious Injuries and the statewide/FDOT goal of Vision Zero.

Action Requested

Recommend to TPO Board adoption of 2022 Safety Targets for the Ocala Marion TPO.

If you have any questions, please contact me at: 438-2631.

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OCALA MARION TPO
2022 PERFORMANCE MANAGEMENT
SAFETY TARGET METHODOLOGY:

(1.) Calculate the current year's Safety Targets [Performance Measures #1, #3 and #5, as shown in *Table 1*]

(2.) Project the estimated Vehicle Miles Traveled (VMT) in Millions [Used to calculate (1.) above and Performance Measures #2 and #4, as shown in *Table 1*]. VMT growth was tied to the average annual change from years 2014 to 2019. The TPO excluded analyzing the annual average percent change in 2020 due to the pandemic and highly unusual traffic counts. Future analysis of VMT growth will require adjustments when including any traffic count information in 2020. Table 2 shows the VMT trends based on information provided by the Florida Department of Transportation and based upon projections of VMT in 2021 and 2022 tied to historic growth (average annual growth rate) (Table 2).

Table 1: Safety Targets

Safety Performance Measures	Description
1. Fatalities	Total number of fatalities
2. Fatalities (Rate)	Rate of fatalities per 100 Million Vehicle Miles Traveled (VMT)
3. Serious Injuries	Total number of serious injuries
4. Serious Injuries (Rate)	Rate of serious injuries per 100 Million Vehicle Miles Traveled (VMT)
5. Non-Motorized Fatalities & Serious Injuries	Number of non-motorized fatalities and number non-motorized serious injuries

Table 2: Vehicle Miles Traveled (VMT)

2022 Vehicle Miles Traveled (VMT) Chart
100 Million Vehicle Miles Traveled (MVMT) annually

								PROJECTIONS YEARS	
2014	2015	2016	2017	2018	2019	*2020	2014 to 2019 Average Annual % Change	2021	2022
41.3	42.5	44.7	45.1	45.9	47.0	44.9	2.5%	46.0	47.2

*Due to the 2020 anomaly year, TPO used projections from 2014 to 2019 to obtain historical VMT growth rate.
VMT data for Marion County provided by Florida Department of Transportation

The MVMT equate to an overall Billion VMT
i.e. 47.2 Million Vehicle Miles Traveled (MVMT) = 4.72 Billion VMT

(3.) In 2022, to determine the proposed Safety Targets, TPO staff continued to use 5-year rolling averages. This helps account for the possibility of drastic changes in the number of fatalities and serious injuries from year to year. The TPO utilized the three (3) most recent 5-year rolling averages to account for changes that occur from year to year. The 2022 Safety Targets were determined by using the same approach in the VMT methodology, but instead applying the "Percent Change of Three, Three-Year Rolling Averages (2015-2021)" to the most recent 5-year rolling average (2017-2021). For example, the 2017 to 2021 Rolling Average of Fatalities was 92. Applying the percent change of the three, three-year rolling averages (6.7%), the Proposed 2022 Fatalities target is 98. This methodology was used for #1, #3, #5 targets, respectfully. Targets "#2 Fatalities per 100 Million VMT" and "#4 Serious Injuries per 100 Million VMT" were then determined by dividing the proposed 2022 Targets for "#1 Fatalities", "#3 Serious Injuries" by the projected 2022 VMT as determined by the referenced methodology for VMT (Table 3).

Table 3: Performance Measures and Targets, 2022

Performance Measure	2015	2016	2017	2018	2019	2020	2021		#1	#2	#2	2022 Method	2022
							*Total Results	Targets (Set Feb. 2021)	2015-2019 Rolling Average	2016-2020 Rolling Average	2017-2021 Rolling Average	Percent Change of Three Rolling Averages	*Proposed* 2022 Targets
#1 - Fatalities	70	70	90	84	90	105	91	97	81	88	92	6.7%	98
#2 - Fatalities per 100 Million VMT	1.65	1.57	1.99	1.83	1.92	2.34	1.98	1.96					2.08
#3 - Serious Injuries	312	372	364	584	435	302	263	432	413	411	390	-2.9%	378
#4 - Serious Injuries per 100 Million VMT	7.34	8.33	8.07	12.73	9.26	6.72	5.71	8.74					8.02
#5 - Number of non-motorized (bicycle & pedestrian) fatalities and serious injuries	38	52	54	57	62	54	50	61	53	56	55	2.7%	57

Safety Performance Measure	Proposed 2022 Targets (not to exceed)
#1 - Fatalities	**98**
#2 - Fatalities per 100 Million VMT	**2.08**
#3 - Serious Injuries	**378**
#4 - Serious Injuries per 100 Million VMT	**8.02**
#5 - Number of Non-Motorized (bicycle, pedestrian) Fatalities and Serious Injuries	**57**

OCALA MARION TPO
PM-1 SAFETY TARGET CHARTS

PM-1 Safety Targets

Safety Performance Measures	**Description** (per calendar year)
1. Fatalities	Total number of fatalities involving a motor vehicle crash
2. Fatalities (Rate)	Rate of fatalities per 100 Million Vehicle Miles Traveled (VMT)
3. Serious Injuries	Total number of serious injuries involving a motor vehicle crash
4. Serious Injuries (Rate)	Rate of serious injuries per 100 Million Vehicle Miles Traveled (VMT)
5. Non-Motorized Fatalities & Serious Injuries	Number of non-motorized fatalities and number non-motorized serious injuries involving a motor vehicle crash

2020 to 2021 Safety Targets and Results

Safety Performance Measure	2021 Targets	2021 Results	Met Target?	2020 Targets	2020 Results	Met Target?
#1 - Fatalities	97	91	Yes	88	105	No
#2 - Fatalities per 100 Million VMT	1.96	1.98	No	1.86	2.34	No
#3 - Serious Injuries	432	263	Yes	433	302	Yes
#4 - Serious Injuries per 100 Million VMT	8.74	5.71	Yes	9.19	6.72	Yes
#5 - Number of Non-Motorized (bicycle, pedestrian) Fatalities and Serious Injuries	61	50	Yes	55	54	Yes

2013 to 2021 Five-Year Rolling Averages

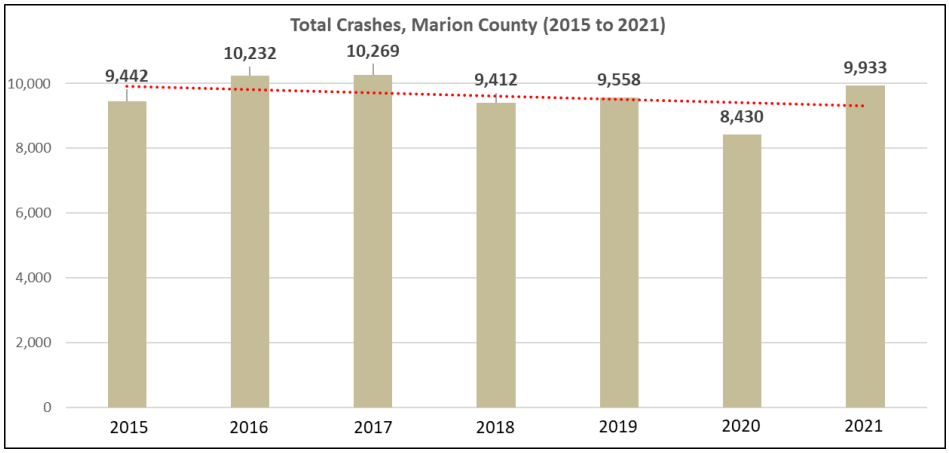
Safety Performance Measure	2013 to 2017	2014 to 2018	2015 to 2019	2016 to 2020	2017 to 2021
#1 - Fatalities	66	74	81	88	92
#3 - Serious Injuries	322	375	413	411	390
#5 - Number of Non-Motorized (bicycle, pedestrian) Fatalities and Serious Injuries	43	46	53	56	55

2022 Safety Targets (Proposed)

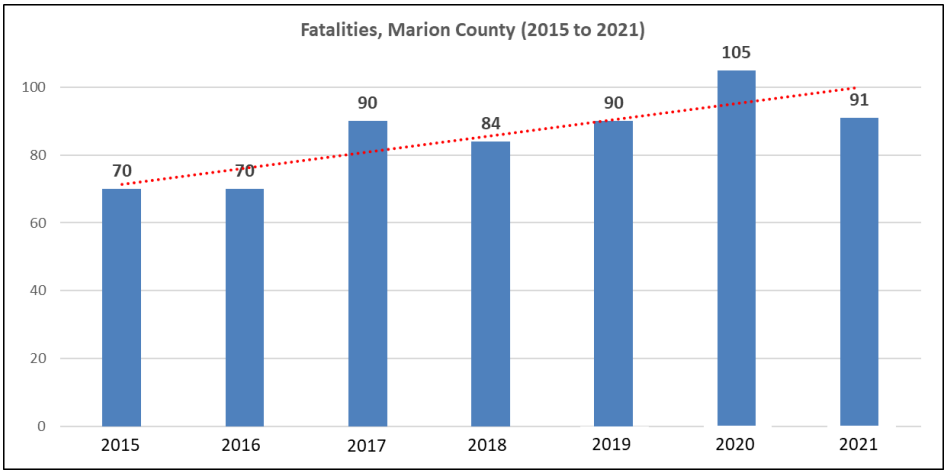
Safety Performance Measure	Proposed 2022 Targets
#1 - Fatalities	**98**
#2 - Fatalities per 100 Million VMT	**2.08**
#3 - Serious Injuries	**378**
#4 - Serious Injuries per 100 Million VMT	**8.02**
#5 - Number of Non-Motorized (bicycle, pedestrian) Fatalities and Serious Injuries	**57**

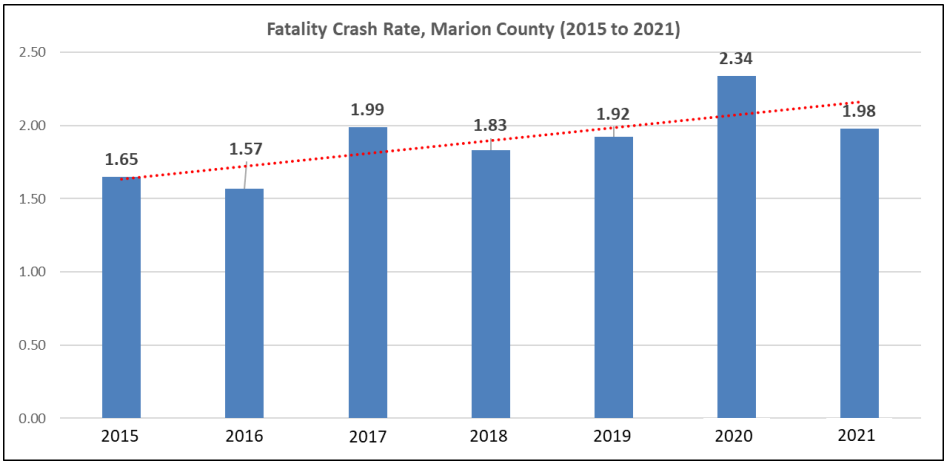
Historic Crash Summaries, 2015 to 2021

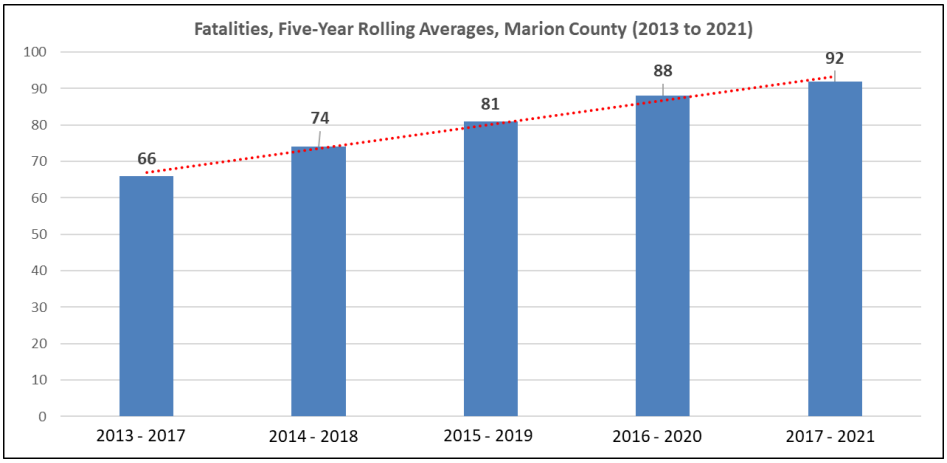
2015 to 2021 Crashes, Marion County



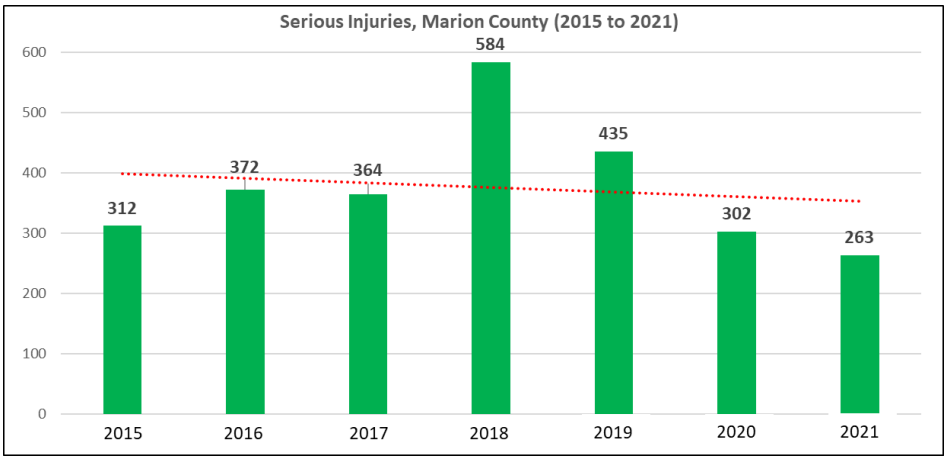
2015 to 2021 Fatality Summary, Marion County

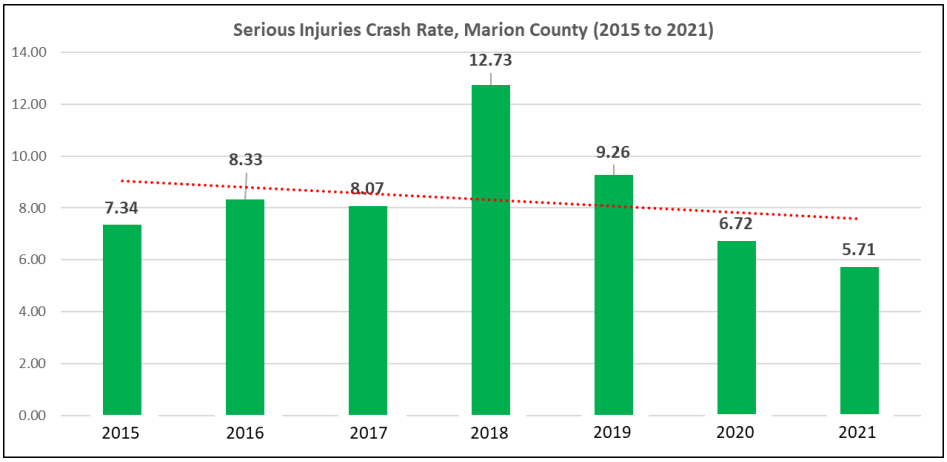


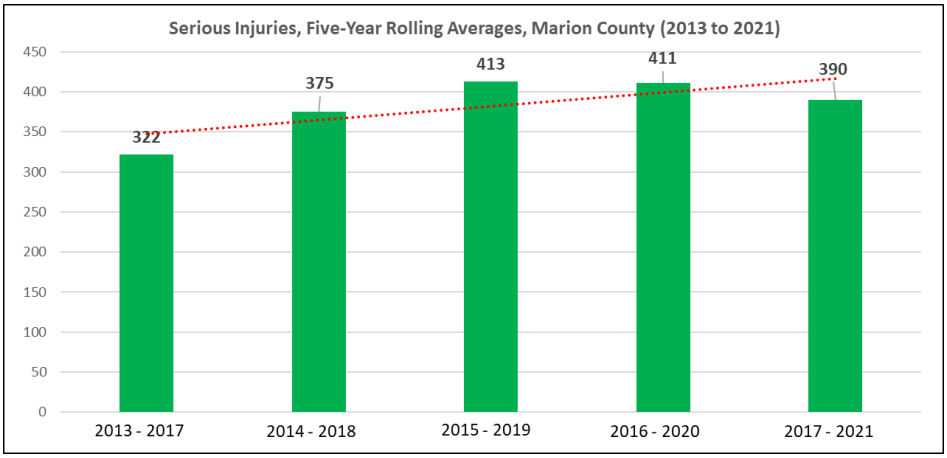




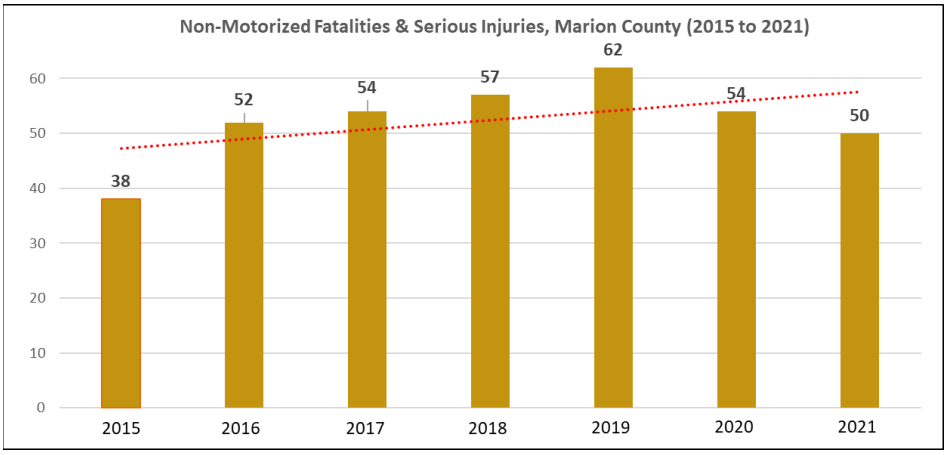
2015 to 2021 Serious Injury Summary, Marion County

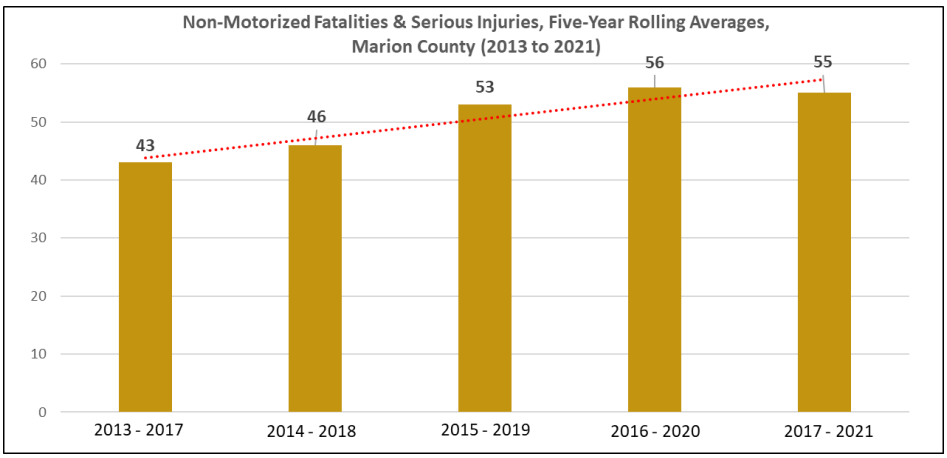






2015 to 2021 Non-Motorized Fatalities and Serious Injuries Summary, Marion County





PM1: Safety

Florida Department of Transportation Office of Policy Planning

MAP-21 Performance Management

March 2021

OVERVIEW

The first of the performance measures rules issued by Federal Highway Administration (FHWA) became effective on April 14, 2016, establishing measures to assess the condition of road safety. This fact sheet summarizes the requirements of this rule, the targets that the Florida Department of Transportation (FDOT) selected to meet them, and the role of the Metropolitan Planning Organizations (MPO) under this rule.*

PERFORMANCE MEASURES – APPLICABLE TO ALL PUBLIC ROADS

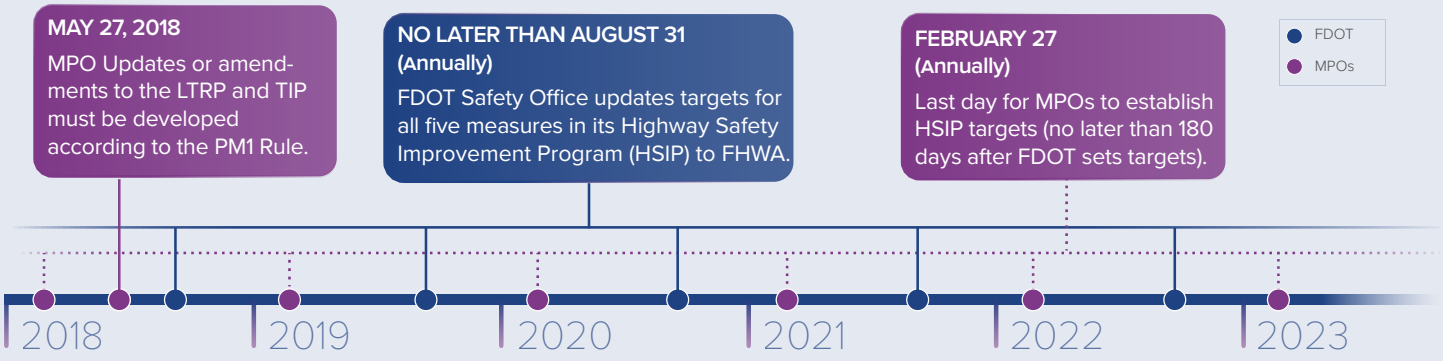
NUMBER OF FATALITIES	The total number of persons suffering fatal injuries in a motor vehicle crash during a calendar year.
RATE OF FATALITIES	The total number of fatalities per 100 million vehicle miles traveled (VMT) in a calendar year.
NUMBER OF SERIOUS INJURIES	The total number of persons suffering at least one serious injury in a motor vehicle crash during a calendar year.
RATE OF SERIOUS INJURIES	The total number of serious injuries per 100 million VMT in a calendar year.
NUMBER OF NON-MOTORIZED FATALITIES AND NON-MOTORIZED SERIOUS INJURIES	The combined total number of non-motorized fatalities and non-motorized serious injuries involving a motor vehicle during a calendar year.

COORDINATION WITH OTHER PLANS

Updates to FDOT's Florida Transportation Plan (FTP) and MPO's Long-Range Transportation Plans (LRTP) must include most recently reported safety performance data and targets.

Updates to the Statewide Transportation Improvement Program (STIP) and Transportation Improvement Programs (TIP) must include a description of how the STIP/TIP contributes to achieving safety performance targets in the FTP/LRTP.

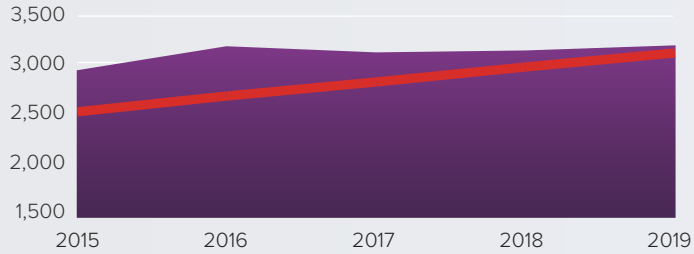
TIMELINE



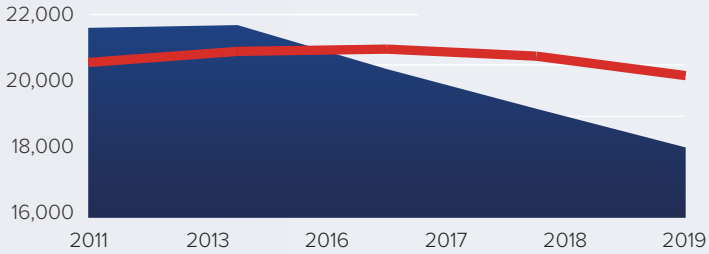
* Please refer to the fact sheet addressing *MPO Requirements* for information about MPO targets and planning processes.

EXISTING STATEWIDE CONDITIONS

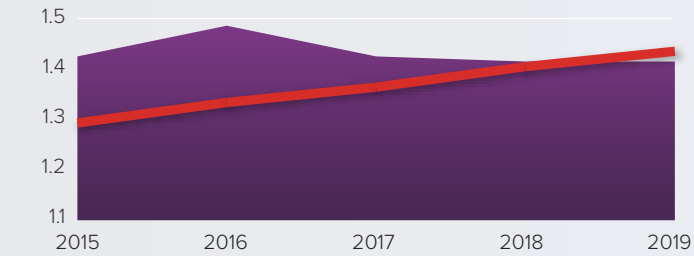
ANNUAL FATALITIES



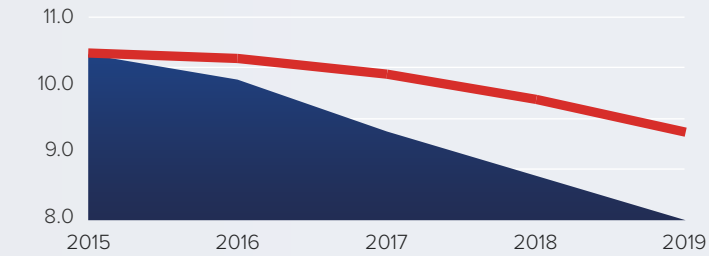
ANNUAL SERIOUS INJURIES



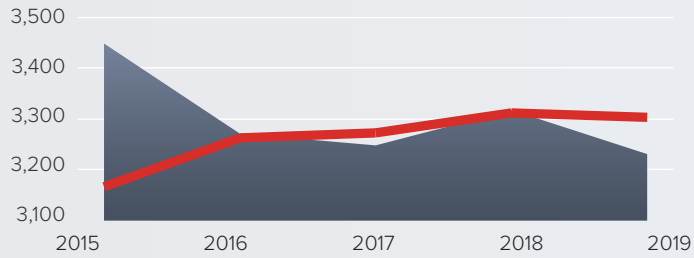
FATALITY RATE (PER HUNDRED MILLION VMT)



SERIOUS INJURY RATE (PER HUNDRED MILLION VMT)



NUMBER OF NON-MOTORIZED COMBINED



Source: FLHSMV, 2020.

STATEWIDE TARGETS

- FDOT annually establishes statewide safety targets for the following calendar year as part of the HSIP Annual Report, which must be submitted by August 31 each year.
- Targets are applicable to all public roads regardless of functional classification or ownership.

Given FDOT's firm belief that every life counts, the target set for all safety performance measures is ZERO.

MPO TARGETS

MPOs have the option of supporting the statewide targets or establishing their own targets for the MPO planning area. MPOs must set their targets within 180 days after FDOT sets the statewide targets. MPOs must annually update their targets by February 27 of each year.

ASSESSMENT OF SIGNIFICANT PROGRESS

FHWA considers a state to have met or made significant progress when at least four out of the five safety performance targets are met or the actual outcome for the safety performance target is better than baseline performance.

Based on FHWA's review, Florida is making progress towards achieving the targets established for serious injuries but not yet for fatalities or non-motorized users. As requested by FHWA, FDOT has developed an HSIP Implementation Plan to highlight additional strategies it will undertake in support of these targets.

FHWA will not assess MPO target achievement. However, FHWA and Federal Transit Administration (FTA) will review MPO adherence to performance management requirements as part of periodic transportation planning process reviews, including the Transportation Management Area (TMA) MPO certification reviews, reviews of adopted and amended LRTPs, and approval of MPO TIPs.

FOR MORE INFORMATION PLEASE CONTACT

Scott Philips, Statewide Metropolitan Planning Analyst
Florida Department of Transportation Office of Policy Planning
Scott.Philips@dot.state.fl.us | (850) 414-4801

Technical Advisory Committee (TAC) Meeting
Marion County – Green Clover Hall
319 SE 26th Terrace, Ocala, FL 34470
January 11, 2022
3:30 PM

MINUTES

Members Present:

Ji Li *(Steven Neal attended for Ji Li)*
Dave Herlihy
Tyler Burgett
Bob Titterington *(arrived at 3:39pm)*
Kenneth Odom
Mickey Thomason
Eric Smith
Loretta Shaffer *(arrived at 3:38pm)*
Elton Holland
Troy Slattery

Members Not Present:

Others Present:

Rob Balmes
Liz Mitchell
Shakayla Irby
Rakinya Hinson, FDOT
Sarah McNamara, FDOT
Kristen Dreyer, City of Ocala Councilmember
Jim Hilty, City of Ocala Councilmember

Item 1. Call to Order and Roll Call

Chairman Mickey Thomason called the meeting to order at 3:30pm and Secretary Shakayla Irby called the roll, there was a quorum present.

Item 2. Proof of Publication

Secretary Shakayla Irby stated the meeting had been published online to the TPO's website, as well as the City of Ocala, Belleview, Marion County, and Dunnellon's websites on January 4, 2022. The meeting had also been published to the Star Banner meeting calendar, and the TPOs Facebook and Twitter pages.

3A. Florida Department of Transportation (FDOT) District 5 Fiscal Years 2022/23 to 2026/27 Tentative Work Program

Mr. Tyler Burgett with the Florida Department of Transportation (FDOT) District 5 provided a presentation covering the Tentative Five-Year Work Program for fiscal years 2023 through 2027 in Marion County. The FDOT District 5 2021 Work Program Public Hearing Week took place from October 25 to 29, 2021 including a Public Hearing Workshop meeting held both virtually and at the District Headquarters in DeLand on October 28, 2021.

The Five-Year Tentative Work Program could be accessed at the following link. The Marion County portion of the Work Program was also included in the meeting packet. https://www.fdot.gov/topics/fdot-work-program/district-5-wp-public-hearings/district-5-documents.

Mr. Burgett talked about the FDOT Work Program saying it was a five-year plan that included:

- Public transit, seaport, airport and rail projects
- Transportation planning, Transportation Systems Management & Operations, engineering and design
- Right-of-Way acquisition and construction activities
- FDOT Fiscal Year: July 1st to June 30th
- Projects based on TPO Priorities and SIS/FDOT Priorities

A year in review was shown to the committee from July 2021 through July 2022 of the process that lead to the adoption of the FY 2022/23 to FY 2026/27 Work Program along with funding breakdowns over the five years *(on pages 8-37 of this set of minutes for reference).*

Mr. Burgett highlighted some key projects:

FM# 435209-1:
• TPO Priority #1
• I-75 (S.R. 93) at NW 49th Street, from end of NW 49th Street to end of NW 35th Street
• New Interchange
• Construction funded in FY 24/25
• Funding in Tentative Work Program: $42,934,270

FM# 433660-1:
• TPO Priority #4
• U.S. 441 at S.R. 464
• Operations Improvement
• Design funded in FY 24/25 and Construction funding in FYs 25/26 and 26/27
• Funding in Tentative Work Program: $3,277,299

FM# 433661-1
• TPO Priority #6
• U.S. 441, from SR 40 to SR 40A (SW Broadway)
• Construction funded in FY 22/23
• Funding in Tentative Work Program: $17,767

FM# 433652-1:
• TPO Priority #7
• S.R. 40 Intersections – at SW 40th Avenue and SW 27th Avenue
• Add Turn Lane(s)
• Right-of-Way funded in FYs 22/23 and 23/24
• Funding in Tentative Work Program: $1,399,654

FM# 450340-1:
• TPO Priority #9
• Emerald Road Extension, from SE 92nd Loop to CR 424 (SE Maricamp Road)
• New Road Construction
• Right-of-Way and Construction funded in FY 22/23
• Funding in Tentative Work Program: $9,650,000

FM# 436756-1
• TPO Priority #33
• Downtown Ocala Trail from SE Osceola Avenue to Silver Springs State Park
• Design funded in FY 24/25
• Funding in Tentative Work Program: $253,001

FM# 435484-2:
• TPO Priority #41
• Pruitt Trail, from S.R. 200 to Pruitt Trailhead
• Construction funding in FY 25/26
• Funding in Tentative Work Program: $2,158,000

FM# 433651-1:
• TPO Priority #64
• CR 484, from SW 20th Avenue to CR 475A
• Interchange Improvement
• Construction funded in FY 23/24
• Funding in Tentative Work Program: $47,520

Mr. Burgett also highlighted the Advances as follows:

FM# 445687-1:
• U.S. 41 N. / S. Williams Street, from Brittan Alexander Bridge to River Road
• Construction advanced from FY 24/25 to FY 21/22

FM# 445800-1:
• East S.R. 40 at S.R. 492
• Construction support advanced from FY 23/24 to FY 21/22 to align with construction phase

Mr. Burgett also highlighted the Deletions as follows:

FM# 445687-1-45-01:
• U.S. 41 N. / S. Williams Street, from Brittan Alexander Bridge to River Road
• Right-of-way relocation deleted from FY 22/23, as relocation services no longer anticipated.

Mr. Burgett also talked about one project that had been Moved-Out:

FM# 238648-1:
• S.R. 45 (U.S. 41), from SW 110th Street to North of S.R. 40
• Construction moved out from FY 23/24 based on availability of funding.

Mr. Odom stated that project FM# 238648-1 had been moved out four times and had been listed for over twenty years.

Mr. Burgett said that the project FM# 238648-1 had been moved several times and it was a very expensive project and the work program was actively exploring where the project could be fit within funding.

Mr. Burgett said that Kathy Alexander, Project Administrator was the point of contact for the Work Program and her information was provided to the committee. She would be able to answer questions as well as Mr. Burgett about the Work Program.

Mr. Slattery inquired about CR 484 and Pennsylvania Crossing FM# 4443821 and why it had been pulled.

Mr. Burgett said that he would follow-up with Mr. Slattery on why the project was pulled.

Mr. Balmes noted that Mr. Slattery had been referring to the Federal Obligations Report and not the Work Program which were two different reports.

Ms. Shaffer asked how Marion County could help with the vision of FDOT especially with continued growth in the county.

Ms. Hinson replied that being at the table helped the vision by working with the Planning Organization project priorities were created and then FDOT made it priority to find the funding.

Mr. Burgett added that the partnership between the county, cities, and the FDOT was very important and help with prioritizing projects.

Item 3B. 2022 TPO Major Activities

Mr. Balmes said in 2022, the TPO would be involved with a variety of program and project activities to meet organization goals and state and federal requirements. A summary and presentation of the planned activities was provided to the committee to further information and how committee members would be involved throughout the calendar year in providing guidance and recommendations.

(For reference the list of 2022 Major Activates can be found on pages 38-40 of this set of minutes)

Mr. Balmes said the Census had developed a new way of looking at how urban areas were defined. It was a possibility that the Ocala Marion TPO could be a Transportation Management Area (TMA). If the TPO became a TMA there would be more requirements from the TPO and would have to work closely with the FDOT to transition, if a TMA.

Mr. Neal asked if the TPO could lose money by becoming a TMA.

Mr. Balmes said he believed the TPO would be in a good position if part of a TMA and more opportunity for the TPO to designate money to projects and decide as a team based on the TPO priorities.

Item 4A. Fiscal Years (FY) 2021/22 to 2025/26 Transportation Improvement Program (TIP) Amendment, Annual Obligations

Mr. Balmes presented and said on an annual basis, per Title 23, United States Code (USC) 450.334, the TPO was required to provide a summary listing of projects for which federal funds had been *obligated in the preceding year. The Florida Department of Transportation (FDOT) had assisted the TPO in complying with this federal requirement by providing a summary report of federal project obligations for Marion County. An amendment of the current FY 2021/22 to 2025/26 TIP was required to include an annual obligation report.

A total of $26,342,420 of federal funds were obligated in Federal Fiscal Year (FFY) 2021 on 30 transportation projects and programs in Marion County.

*Obligation in this case is the legal commitment by the Federal government to pay or reimburse a State or other entity for the Federal share of a project's eligible cost. Obligated projects have been authorized by the federal government and funds have been approved for reimbursement.

A two page summary of projects was provided to the committee to view *(the summary of projects is included on pages 41-44 of this set of minutes for reference).*

Mr. Holland made a motion to approve the FY 2021/22 to 2025/26 TIP Amendment, Annual Obligations. Mr. Neal seconded, and the motion passed unanimously.

Item 4B. Draft Scope of Services, List of Priority Projects (LOPP) Process

Mr. Balmes said on an annual basis, the TPO worked collaboratively with the cities of Belleview, Dunnellon, Ocala, Marion County and the Florida Department of Transportation (FDOT) to develop a List of Priority Projects (LOPP). The LOPP was a process undertaken to

identify the highest priority projects in Marion County to receive consideration for federal and state funding through the Florida Department of Transportation (FDOT) Five-Year Work Program. The LOPP was a requirement per Florida Statute (339.175) to be managed and developed by the TPO and submitted annually to FDOT District 5.

The purpose of the specific task was to implement a revised methodology to help identify the highest multi-modal transportation priorities and ensure a more efficient process was undertaken to maximize opportunities for funding projects. The task would involve collaboration with the TAC and CAC and other local technical partner staff. The TPO's General Planning Consultant (GPC) Kimley-Horn and Associates would serve as the team devoted to this project.

Ms. Shaffer made a motion to accept the Draft Scope of Services, List of Priority Projects (LOPP) Process. Mr. Neal seconded, and the motion passed unanimously.

Mr. Neal said he would like to be a part of the collaborative team with Kimley-Horn and also nominated Mr. Odom to be a part of the team as well.

Mr. Balmes said that he would reach out to each of the bosses and seek appointment of staff to be a part of the collaboration.

Item 4C. 2045 Long Range Transportation Plan (LRTP) Modification

Mr. Balmes presented and said in December, the TPO worked with Kittelson and Associates (2045 LRTP consultant team) to perform a modification of the 2045 Long Range Transportation Plan (LRTP). The Federal Highway Administration (FHWA) had conducted a review of the TPO's 2045 LRTP in Fiscal Year (FY) 2022 and offered minor suggestions including formatting of tables and the need to demonstrate fiscal balance. The TPO was making modifications to ensure consistency of federal requirements, including Fiscal Constraint of the LRTP Cost Feasible element (federal/state).

The purpose of the task was to identify and update areas of the Cost Feasible element to provide more clarity and consistency for the general public and government partners that reference the LRTP for planning project development purposes.

The approach would also help ensure the upcoming review by the Federal Highway Administration (FHWA) met expectations and planning consistency. A summary presentation was provided to the committee regarding the modification updates to Chapters 6 and 7 of the 2045 LRTP.

Mr. Odom made a motion to accept the Draft Scope of Services, List of Priority Projects (LOPP) Process. Ms. Shaffer seconded, and the motion passed unanimously.

Item 5. Consent Agenda

Mr. Odom made a motion to approve the Consent Agenda. Ms. Shaffer seconded, and the motion passed unanimously.

Item 6. Comments by FDOT

Mr. Tyler Burgett provided the latest construction report to the committee.

Mr. Holland asked about the default of contactors for the corridor of 441 and asked if the work had been given to different contractors.

Mr. Burgett said that he would follow-up however, the last he had heard the process for selecting new contractors was still ongoing.

Item 7. Comments by TPO Staff

Mr. Balmes provided the committee with a 2022 Schedule and Committee member's roster, welcoming Mr. Troy Slattery and Mr. Bob Titterington to the TAC.

Mr. Balmes also mentioned that the Commitment to Zero: Safety Action Plan Kick-Off meeting would be held the following day, January 12, 2022 at the Board of County Commissioners Auditorium.

Item 7. Comments by TAC Members

There were no comments by the TAC members.

Item 8. Public Comment

There was no public comment.

Item 9. Adjournment

Chairman Holland adjourned the meeting at 4:28pm.

Respectfully Submitted By:

Shakayla Irby, TPO Administrative Assistant

Tentative Five-Year Work Program

Fiscal Year 2022/23 to Fiscal Year 2026/27

Ocala-Marion TPO
January 11, 2022

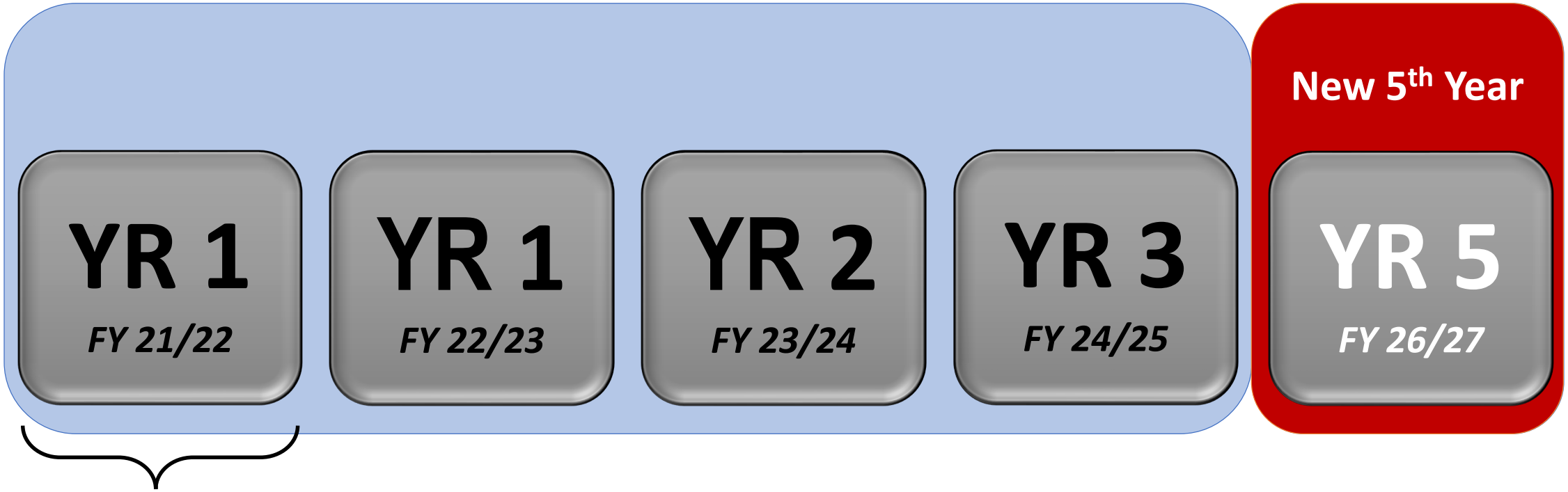
ABOUT THE FDOT WORK PROGRAM

The FDOT Work Program is a five-year plan that includes:

- Public transit, seaport, airport and rail projects
- Transportation planning, Transportation Systems Management & Operations, engineering and design
- Right-of-Way acquisition and construction activities
- FDOT Fiscal Year: July 1st to June 30th
- Projects based on TPO Priorities and SIS/FDOT Priorities

PROGRESSION OF THE WORK PROGRAM

TENTATIVE WORK PROGRAM
CURRENT ADOPTED WORK PROGRAM



A YEAR IN REVIEW OF THE WORK PROGRAM

July 2021	• TPO Submits Project Priority List to FDOT
August / October 2021	• Florida Revenue Estimating Conference
October 15, 2021	• FDOT District 5 Work Program Snapshot
October 25-29, 2021	• FDOT District 5 Virtual Work Program Public Hearing
November 12, 2021	• Deadline for Public Comments
November 19, 2021	• Deadline for TPO Written Objections
December 2021	• Central Office Submits Preliminary Tentative Work Program to Executive Office of the Governor
January 10, 2022	• Florida Transportation Commission Public Hearing
January 11, 2022	• Florida State Legislation 2022 Session Begins
March 11, 2022	• Florida State Legislation 2022 Session Ends
July 1, 2022	• Adoption of FY 2022/23 to FY 2026/27 Work Program

FIVE-YEAR WORK PROGRAM FUNDING

The Five-Year Outlook

County	FY 2022/23	FY 2023/24	FY 2024/25	FY 2025/26	FY 2026/27	TOTAL
Marion	$104,497,461	$28,197,337	$98,417,463	$25,108,857	$18,474,603	$274,695,721

Ocala-Marion TPO – Funding Breakdown

Project Type	Five-Year Estimated *(Marion)*
Safety	$7,559,950
Capacity	$52,584,270
Preservation	$82,617,963
Multi-modal	$49,353,927
Operations	$6,187,747
Bike/Ped	$10,087,629
Misc.	$66,304,235

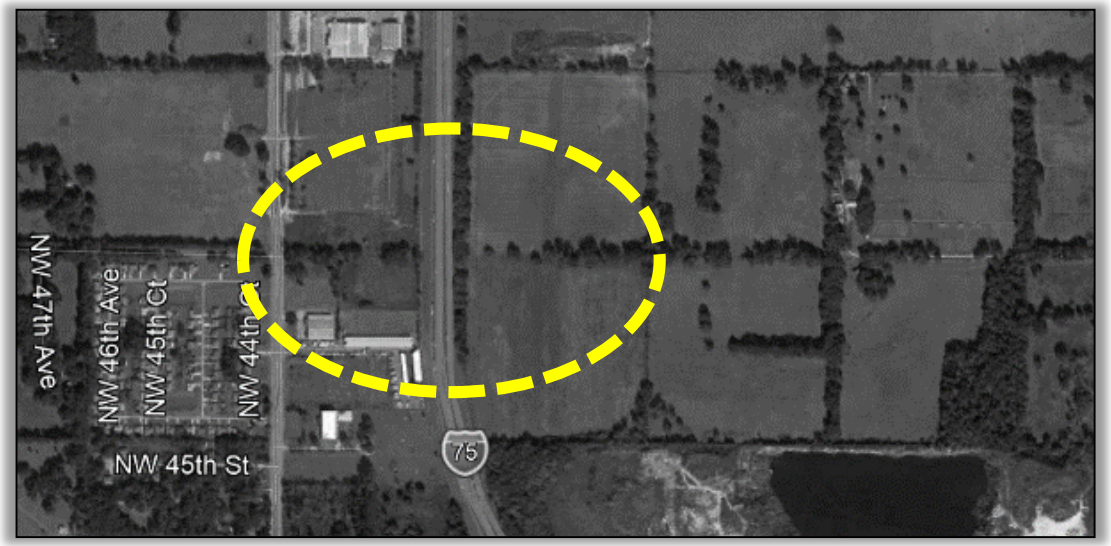
Priority Projects
8
$59,737,511

Key Projects

KEY PROJECTS -

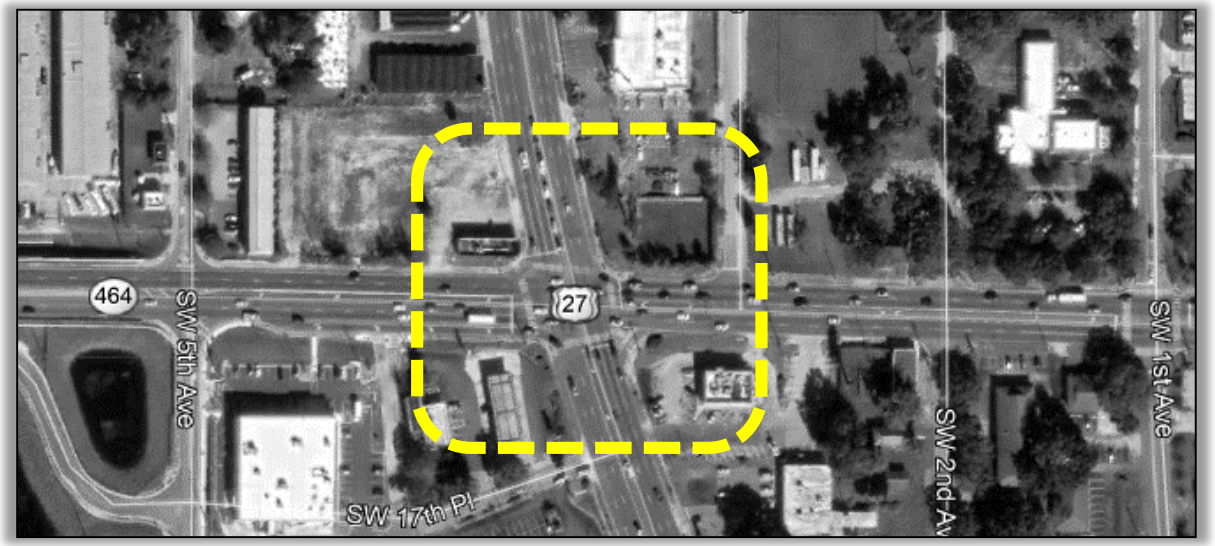
FM# 435209-1:

- TPO Priority #1
- I-75 (S.R. 93) at NW 49th Street, from end of NW 49th Street to end of NW 35th Street
- New Interchange
- Construction funded in FY 24/25
- Funding in Tentative Work Program: $42,934,270



FM# 433660-1:

- TPO Priority #4
- U.S. 441 at S.R. 464
- Operations Improvement
- Design funded in FY 24/25 and Construction funding in FYs 25/26 and 26/27
- Funding in Tentative Work Program: $3,277,299



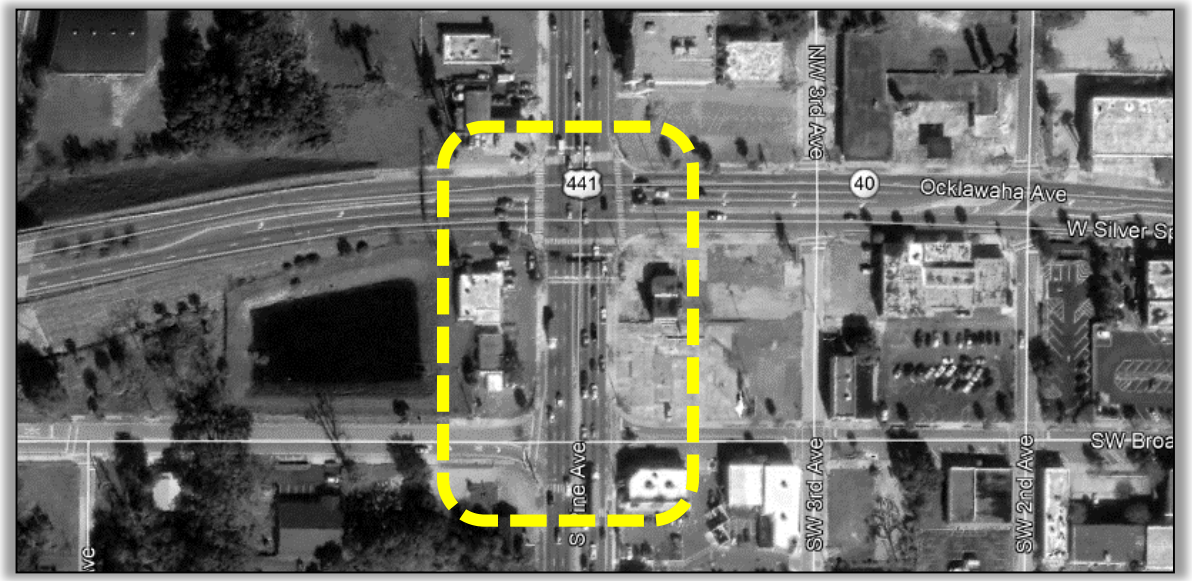
KEY PROJECTS

FM# 433661-1

- TPO Priority #6
- U.S. 441, from SR 40 to SR 40A (SW Broadway)
- Construction funded in FY 22/23
- Funding in Tentative Work Program: $17,767

FM# 433652-1:

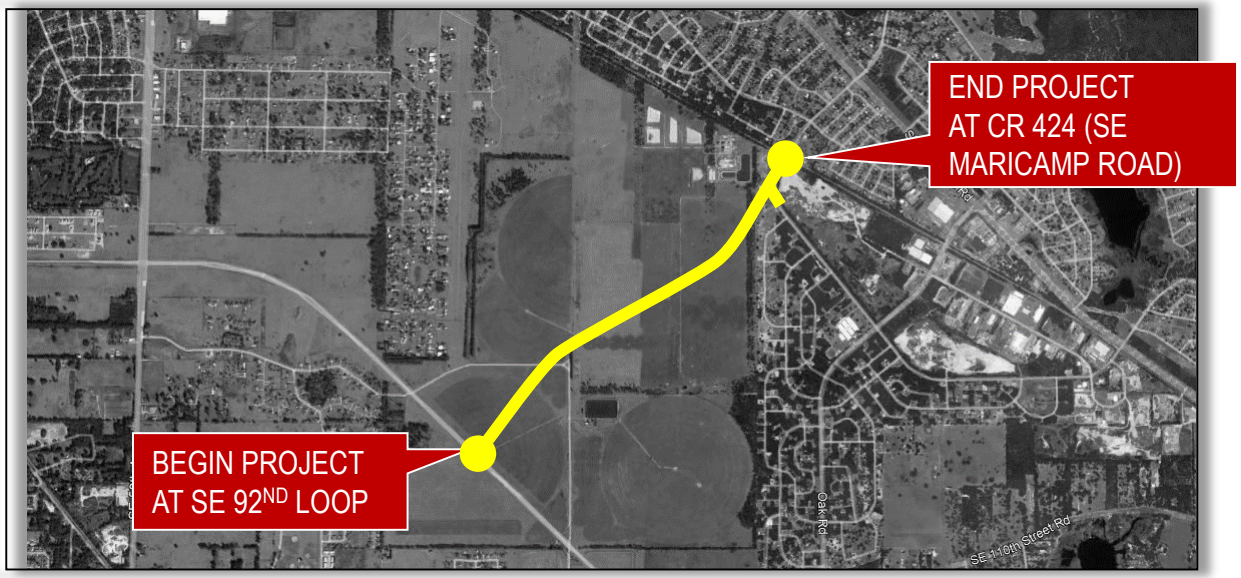
- TPO Priority #7
- S.R. 40 Intersections – at SW 40th Avenue and SW 27th Avenue
- Add Turn Lane(s)
- Right-of-Way funded in FYs 22/23 and 23/24
- Funding in Tentative Work Program: $1,399,654



KEY PROJECTS

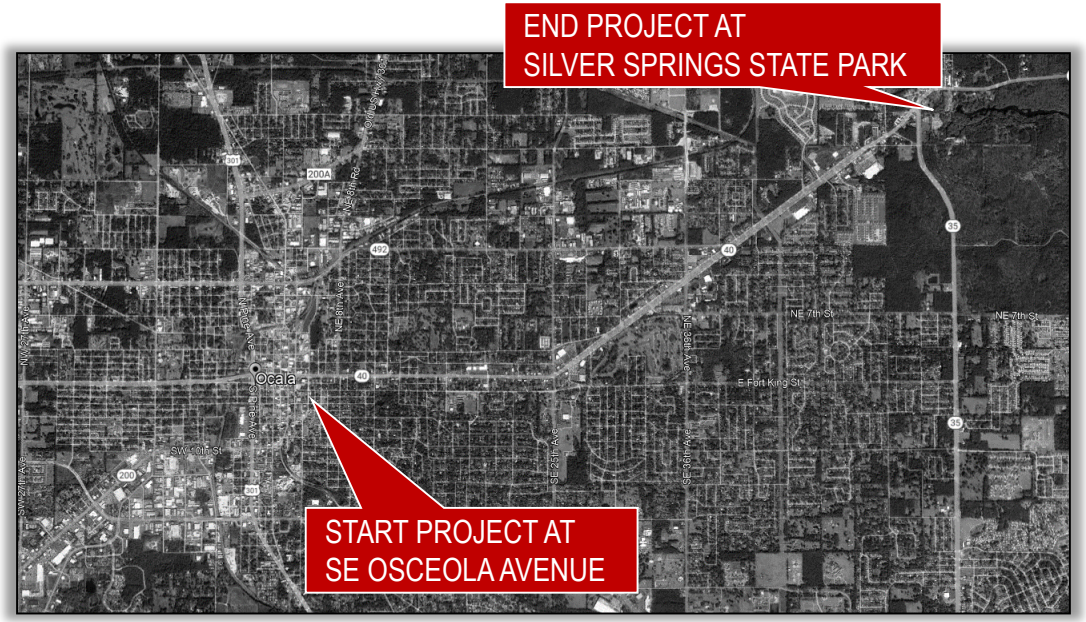
FM# 450340-1:

- TPO Priority #9
- Emerald Road Extension, from SE 92nd Loop to CR 424 (SE Maricamp Road)
- New Road Construction
- Right-of-Way and Construction funded in FY 22/23
- Funding in Tentative Work Program: $9,650,000



FM# 436756-1

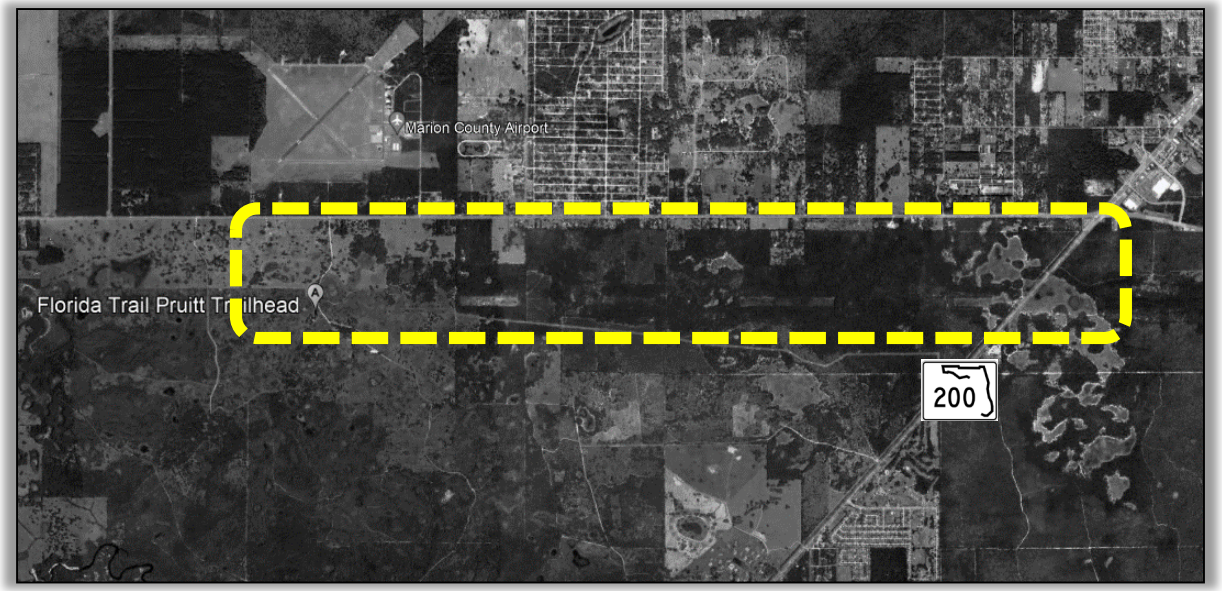
- TPO Priority #33
- Downtown Ocala Trail from SE Osceola Avenue to Silver Springs State Park
- Design funded in FY 24/25
- Funding in Tentative Work Program: $253,001



KEY PROJECTS

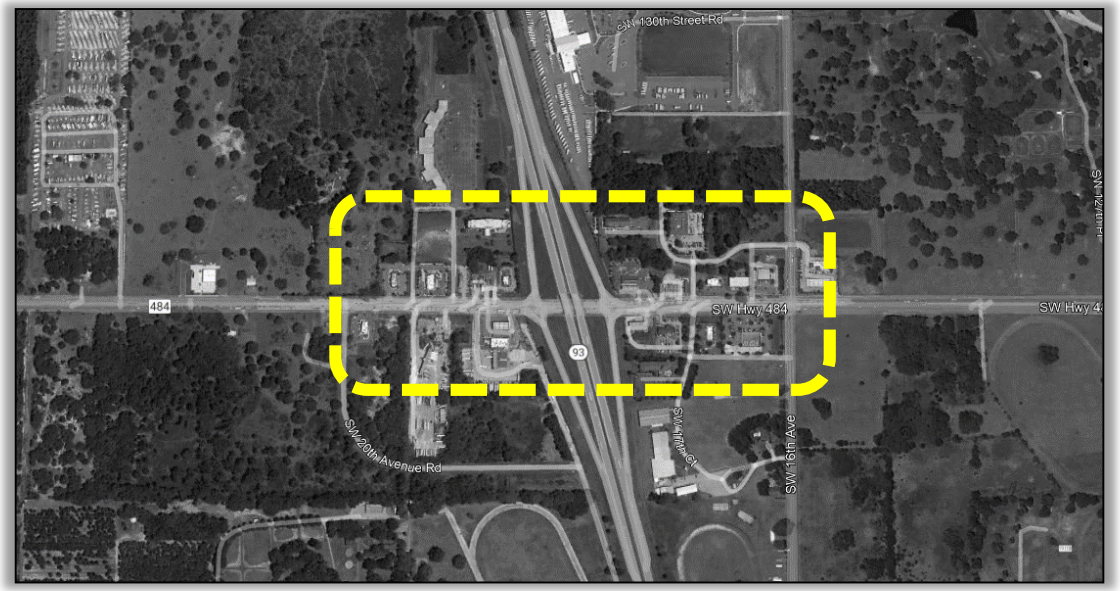
FM# 435484-2:

- TPO Priority #41
- Pruitt Trail, from S.R. 200 to Pruitt Trailhead
- Construction funding in FY 25/26
- Funding in Tentative Work Program: $2,158,000



FM# 433651-1:

- TPO Priority #64
- CR 484, from SW 20th Avenue to CR 475A
- Interchange Improvement
- Construction funded in FY 23/24
- Funding in Tentative Work Program: $47,520



ADVANCES

- **FM# 445687-1:**
  - U.S. 41 N. / S. Williams Street, from Brittan Alexander Bridge to River Road
  - Construction advanced from FY 24/25 to FY 21/22

- **FM# 445800-1:**
  - East S.R. 40 at S.R. 492
  - Construction support advanced from FY 23/24 to FY 21/22 to align with construction phase

DELETIONS

- **FM# 445687-1-45-01**:
  - U.S. 41 N. / S. Williams Street, from Brittan Alexander Bridge to River Road
  - Right-of-way relocation deleted from FY 22/23, as relocation services no longer anticipated.

MOVED-OUT

- **FM# 238648-1**:
  - S.R. 45 (U.S. 41), from SW 110th Street to North of S.R. 40
  - Construction moved out from FY 23/24 based on availability of funding.

DISTRICT 5

TENTATIVE WORK PROGRAM PUBLIC HEARING REPORT

FISCAL YEAR 2023 TO FISCAL YEAR 2027

SUMMARY REPORT - MARION COUNTY

AS OF 10/22/2021-10:48 AM SUBJECT TO CHANGE

FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT 5

PROJECTS FUNDED JULY 1, 2022 TO JUNE 30, 2027

VISIT US AT WWW.FDOT.GOV/WPPH/DISTRICT5

MARION COUNTY **Fixed Capital Outlay**

450125-1 - OCALA OPERATIONS CENTER CONSTRUCTION RENOVATION
Type of Work: FIXED CAPITAL OUTLAY

Phase	Funding Source	2023	2024	2025	2026	2027
Preliminary Engineering	State	$534,900				
Construction	State	$5,001,200				
Total for Project 450125-1		**$5,536,100**				

450168-1 - OCALA OPERATIONS CENTER SECURITY-INTEGRATED ELECTRONIC SEC SYS ON GATE
Type of Work: FIXED CAPITAL OUTLAY

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	State	$9,000				
Total for Project 450168-1		**$9,000**				

450169-1 - OCALA OPERATIONS CENTER SECURITY-FENCING/GATE UPDATES
Type of Work: FIXED CAPITAL OUTLAY

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	State	$70,000				
Total for Project 450169-1		**$70,000**				

MARION COUNTY **Freight Logistics And Passenger Operations Program: Aviation**

438417-1 - MARION-MARION CO AIRPORT RUNWAY IMPROVEMENTS
Type of Work: AVIATION PRESERVATION PROJECT

Phase	Funding Source	2023	2024	2025	2026	2027
Capital	Local		$87,500			
	State		$350,000			
Total for Project 438417-1			**$437,500**			

438427-1 - MARION AIRFIELD PAVEMENT IMPROVEMENTS
Type of Work: AVIATION PRESERVATION PROJECT

Phase	Funding Source	2023	2024	2025	2026	2027
Capital	Federal			$2,250,000		
	Local			$50,000		
	State			$200,000		
Total for Project 438427-1				**$2,500,000**		

438477-1 - MARION-OCALA INTL TAXIWAY IMPROVEMENTS
Type of Work: AVIATION PRESERVATION PROJECT

Phase	Funding Source	2023	2024	2025	2026	2027
Capital	Federal				$5,850,000	
	Local				$130,000	
	State				$520,000	
Total for Project 438477-1					**$6,500,000**	

440780-1 - MARION-OCALA INTL AIRFIELD PAVEMENT REHABILITATION
Type of Work: AVIATION PRESERVATION PROJECT

Phase	Funding Source	2023	2024	2025	2026	2027
Capital	Local		$300,000			
	State		$1,200,000			
Total for Project 440780-1			**$1,500,000**			

444877-1 - MARION-OCALA INTL HANGAR
Type of Work: AVIATION REVENUE/OPERATIONAL

Phase	Funding Source	2023	2024	2025	2026	2027
Capital	Local			$250,000		
	State			$1,000,000		
Total for Project 444877-1				**$1,250,000**		

MARION COUNTY **Freight Logistics And Passenger Operations Program: Aviation**

448575-1 - MARION-OCALA INTL ARFF BUILDING
Type of Work: AVIATION SAFETY PROJECT

Phase	Funding Source	2023	2024	2025	2026	2027
Capital	Local					$200,000
	State					$800,000
Total for Project 448575-1						**$1,000,000**

449760-1 - MARION CO AIRPORT FUEL SYSTEM
Type of Work: AVIATION REVENUE/OPERATIONAL

Phase	Funding Source	2023	2024	2025	2026	2027
Capital	Local	$62,500				
	State	$250,000				
Total for Project 449760-1		**$312,500**				

449774-1 - MARION COUNTY AIRPORT HANGAR
Type of Work: AVIATION REVENUE/OPERATIONAL

Phase	Funding Source	2023	2024	2025	2026	2027
Capital	Local			$500,000		
	State			$2,000,000		
Total for Project 449774-1				**$2,500,000**		

449858-1 - MARION / OCALA INTERNATIONAL HANGER DEVELOPMENT
Type of Work: AVIATION CAPACITY PROJECT

Phase	Funding Source	2023	2024	2025	2026	2027
Capital	Local	$375,000				
	State	$1,500,000				
Total for Project 449858-1		**$1,875,000**				

MARION COUNTY **Freight Logistics And Passenger Operations Program: Transit**

427188-2 - SUNTRAN/OCALA/MARION URB.CAP/OPER. FIXED ROUTE FTA SECTION 5307-2009
Type of Work: CAPITAL FOR FIXED ROUTE

Phase	Funding Source	2023	2024	2025	2026	2027
Capital	Federal	$2,467,181	$2,541,196	$2,617,431	$2,617,431	$2,617,431
	Local	$616,795	$635,299	$654,398	$654,398	$654,398
Total for Project 427188-2		**$3,083,976**	**$3,176,495**	**$3,271,829**	**$3,271,829**	**$3,271,829**

442455-1 - MARION-SUNTRAN BLOCK GRANT OPERATING ASSISTANCE
Type of Work: OPERATING FOR FIXED ROUTE

Phase	Funding Source	2023	2024	2025	2026	2027
Operations	Local	$733,602	$755,610	$779,279	$801,626	$825,675
	State	$733,602	$755,610	$778,278	$801,626	$825,675
Total for Project 442455-1		**$1,467,204**	**$1,511,220**	**$1,557,557**	**$1,603,252**	**$1,651,350**

442460-1 - MARION-MARION SENIOR SERVICES SECTION 5311 RURAL TRANSPORTATION
Type of Work: OPERATING/ADMIN. ASSISTANCE

Phase	Funding Source	2023	2024	2025	2026	2027
Operations	Federal		$909,849	$937,146	$965,259	$993,939
	Local		$909,849	$937,146	$965,259	$993,939
Total for Project 442460-1			**$1,819,698**	**$1,874,292**	**$1,930,518**	**$1,987,878**

MARION COUNTY **Highways**

433651-1 - CR 484 FROM SW 20TH AVENUE TO CR 475A
Type of Work: INTERCHANGE IMPROVEMENT

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal		$47,520			
Total for Project 433651-1			**$47,520**			

433651-4 - CR 484 FROM SW 20TH AVENUE TO CR 475A
Type of Work: LANDSCAPING

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal	$179,724				
Total for Project 433651-4		**$179,724**				

433652-1 - SR 40 INTERSECTIONS AT SW 40TH AVENUE AND SW 27TH AVENUE
Type of Work: ADD TURN LANE(S)

Phase	Funding Source	2023	2024	2025	2026	2027
Right of Way	Federal	$1,122,500	$247,154			
	State	$30,000				
Total for Project 433652-1		**$1,152,500**	**$247,154**			

433660-1 - US 441 @ SR 464
Type of Work: TRAFFIC OPS IMPROVEMENT

Phase	Funding Source	2023	2024	2025	2026	2027
Preliminary Engineering	State			$160,000		
Construction	State				$3,094,219	$23,080
Total for Project 433660-1				**$160,000**	**$3,094,219**	**$23,080**

433661-1 - US 441 FROM SR 40 TO SR 40A (SW BROADWAY)
Type of Work: TRAFFIC OPS IMPROVEMENT

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	State	$17,767				
Total for Project 433661-1		**$17,767**				

434844-1 - CR 42 AT SE 182ND
Type of Work: ADD LEFT TURN LANE(S)

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal	$350,000				
Total for Project 434844-1		**$350,000**				

MARION COUNTY **Highways**

434844-2 - CR 42 AT SE 182ND
Type of Work: ADD LEFT TURN LANE(S)

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal	$67,980				
Total for Project 434844-2		**$67,980**				

435209-1 - I-75(SR 93) AT NW 49TH ST FROM END OF NW 49TH ST TO END OF NW 35TH ST
Type of Work: INTERCHANGE (NEW)

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal			$12,059,788		
	Local			$7,995,735		
	State			$22,878,747		
Total for Project 435209-1				**$42,934,270**		

435484-2 - PRUITT TRAIL FROM SR 200 TO PRUITT TRAILHEAD
Type of Work: BIKE PATH/TRAIL

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal				$2,158,000	
Total for Project 435484-2					**$2,158,000**	

436756-1 - DOWNTOWN OCALA TRAIL FROM SE OSCEOLA AVE TO SILVER SPRINGS STATE PARK
Type of Work: BIKE PATH/TRAIL

Phase	Funding Source	2023	2024	2025	2026	2027
Preliminary Engineering	Federal			$253,001		
Total for Project 436756-1				**$253,001**		

437596-2 - SR 40/SILVER SPRINGS BLVD FROM NW 27TH AVE TO SW 7TH AVE
Type of Work: SIDEWALK

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal	$1,025,741				
	State	$10,270				
Total for Project 437596-2		**$1,036,011**				

437826-1 - I-75 MARION COUNTY REST AREAS LANDSCAPING
Type of Work: LANDSCAPING

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	State			$411,284		
Total for Project 437826-1				**$411,284**		

MARION COUNTY **Highways**

438562-1 - I-75 (SR 93) REST AREA MARION COUNTY FROM N OF SR 484 TO S OF SR 200
Type of Work: REST AREA

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	State	$28,060,358				
Total for Project 438562-1		**$28,060,358**				

439234-1 - SR 200 FROM I-75 TO US 301
Type of Work: RESURFACING

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal	$2,751,885				
	State	$6,119,606				
Total for Project 439234-1		**$8,871,491**				

439238-2 - SR 25/500/US441/ FROM SE 102ND PLACE TO SR 200/SW 10TH STREET
Type of Work: BIKE LANE/SIDEWALK

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	State			$2,975,178		
Total for Project 439238-2				**$2,975,178**		

441141-1 - SR 464 FROM SR 500 (US 27/301) TO SR 35
Type of Work: RESURFACING

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal	$9,541,570				
	State	$7,623,175				
Total for Project 441141-1		**$17,164,745**				

445212-1 - SR 200 (US 301) FROM SOUTH OF NE 175 ST TO THE ALACHUA COUNTY LINE
Type of Work: RESURFACING

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	State		$4,729,689			
Total for Project 445212-1			**$4,729,689**			

445217-1 - SR-326 FROM EAST OF SR-25/200 (US-441/301) TO SR-40
Type of Work: RESURFACING

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal	$10,050,044				
	State	$1,423,246				
Total for Project 445217-1		**$11,473,290**				

MARION COUNTY **Highways**

445218-1 - SR 25 FROM AVENUE I TO THE ALACHUA COUNTY LINE
Type of Work: RESURFACING

Phase	Funding Source	2023	2024	2025	2026	2027
Preliminary Engineering	State	$927,369				
Construction	State			$6,167,712		
Total for Project 445218-1		**$927,369**		**$6,167,712**		

445302-1 - SR 35/US 301 NORTH OF CR 42 TO NORTH OF SE 144 PL RD
Type of Work: RESURFACING

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	State		$3,054,497			
Total for Project 445302-1			**$3,054,497**			

445688-1 - US 27 / US 441 / ABSHIVER BLVD. @ CR 42
Type of Work: TRAFFIC SIGNALS

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal	$402,969				
	State	$5,135				
Total for Project 445688-1		**$408,104**				

445701-1 - SE ABSHIER BLVD FROM SE HAMES RD TO N OF SE AGNEW RD
Type of Work: TRAFFIC SIGNALS

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal	$1,502,129				
	State	$160,270				
Total for Project 445701-1		**$1,662,399**				

447603-1 - NW 10TH/NE 14TH ST SR 492 TO NE 25TH AVE.
Type of Work: TRAFFIC SIGNALS

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal		$647,938			
	Local		$174,240			
Total for Project 447603-1			**$822,178**			

447861-1 - I-75 WILDWOOD WEIGH STATION - INSPECTION BARN UPGRADES
Type of Work: MCCO WEIGH STATION STATIC/WIM

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	State				$532,902	
Total for Project 447861-1					**$532,902**	

MARION COUNTY **Highways**

448376-1 - I-75/SR-93 FROM SR-200 TO NORTH OF SR-500
Type of Work: RESURFACING

Phase	Funding Source	2023	2024	2025	2026	2027
Preliminary Engineering	Federal	$1,439,000				
Construction	Federal			$15,977,866		
Total for Project 448376-1		**$1,439,000**		**$15,977,866**		

448526-1 - SR-45/US-41/WILLIAMS ST FROM NORTH OF CITRUS CNTY LINE TO SW 110TH ST
Type of Work: RESURFACING

Phase	Funding Source	2023	2024	2025	2026	2027
Preliminary Engineering	State	$888,000				
Construction	Federal			$3,653,002		
	State			$396,990		
Total for Project 448526-1		**$888,000**		**$4,049,992**		

448635-1 - SR-25 FROM NORTH OF CR-25A TO AVENUE I
Type of Work: RESURFACING

Phase	Funding Source	2023	2024	2025	2026	2027
Preliminary Engineering	State	$1,042,000				
Construction	Federal			$5,923,545		
	State			$606,431		
Total for Project 448635-1		**$1,042,000**		**$6,529,976**		

448924-1 - SR-492 OVER SCLRR
Type of Work: BRIDGE-REPAIR/REHABILITATION

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	State	$302,336				
Total for Project 448924-1		**$302,336**				

449261-1 - SW 60TH AVE FROM SW 54TH ST TO SECO ENERGY DRIVEWAY
Type of Work: INTERSECTION IMPROVEMENT

Phase	Funding Source	2023	2024	2025	2026	2027
Preliminary Engineering	Local	$47,818				
Construction	Federal		$199,243			
Total for Project 449261-1		**$47,818**	**$199,243**			

449277-1 - CR-484 AT THE INTERSECTION OF MARION OAKS BLVD
Type of Work: INTERSECTION IMPROVEMENT

Phase	Funding Source	2023	2024	2025	2026	2027
Preliminary Engineering	Local	$60,795				
Construction	Federal		$445,830			
	Local		$30,000			
Total for Project 449277-1		**$60,795**	**$475,830**			

MARION COUNTY **Highways**

449317-1 - CR 484 AT SW 135TH ST RD
Type of Work: ADD LEFT TURN LANE(S)

Phase	Funding Source	2023	2024	2025	2026	2027
Preliminary Engineering	Local	$88,705				
Construction	Federal		$369,605			
Total for Project 449317-1		**$88,705**	**$369,605**			

449443-1 - NE 8TH AVE FROM SR 40 TO SR 492
Type of Work: ROUNDABOUT

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal					$4,452,800
Total for Project 449443-1						**$4,452,800**

450340-1 - EMERALD ROAD EXTENSION FROM SE 92ND LOOP TO CR424(SE MARICAMP RD)
Type of Work: NEW ROAD CONSTRUCTION

Phase	Funding Source	2023	2024	2025	2026	2027
Right of Way	Local	$325,000				
	State	$325,000				
Construction	Local	$4,629,237				
	State	$4,370,763				
Total for Project 450340-1		**$9,650,000**				

MARION COUNTY **Maintenance**

413615-3 - LIGHTING AGREEMENTS
Type of Work: LIGHTING

Phase	Funding Source	2023	2024	2025	2026	2027
Bridge/Roadway/Contract Maintenance	State	$433,240	$441,220	$454,457	$468,088	$487,617
Total for Project 413615-3		**$433,240**	**$441,220**	**$454,457**	**$468,088**	**$487,617**

418107-1 - MARION PRIMARY IN-HOUSE
Type of Work: ROUTINE MAINTENANCE

Phase	Funding Source	2023	2024	2025	2026	2027
Bridge/Roadway/Contract Maintenance	State	$1,831,973	$1,831,973	$1,831,973	$1,831,973	$1,831,973
Total for Project 418107-1		**$1,831,973**	**$1,831,973**	**$1,831,973**	**$1,831,973**	**$1,831,973**

423391-2 - ASPHALT RESURFACING VARIOUS LOCATIONS
Type of Work: ROUTINE MAINTENANCE

Phase	Funding Source	2023	2024	2025	2026	2027
Bridge/Roadway/Contract Maintenance	State	$200,000				
Total for Project 423391-2		**$200,000**				

429178-1 - UNPAVED SHOULDER REPAIR
Type of Work: ROUTINE MAINTENANCE

Phase	Funding Source	2023	2024	2025	2026	2027
Bridge/Roadway/Contract Maintenance	State	$220,000				
Total for Project 429178-1		**$220,000**				

442738-1 - CITY OF OCALA MOA
Type of Work: ROUTINE MAINTENANCE

Phase	Funding Source	2023	2024	2025	2026	2027
Bridge/Roadway/Contract Maintenance	State		$50,000			$50,000
Total for Project 442738-1			**$50,000**			**$50,000**

446691-1 - AESTHETICS AREA WIDE
Type of Work: ROUTINE MAINTENANCE

Phase	Funding Source	2023	2024	2025	2026	2027
Bridge/Roadway/Contract Maintenance	State	$850,000				
Total for Project 446691-1		**$850,000**				

MARION COUNTY **Maintenance**

446910-1 - ASSET MAINTENANCE MARION COUNTY
Type of Work: ROUTINE MAINTENANCE

Phase	Funding Source	2023	2024	2025	2026	2027
Bridge/Roadway/Contract Maintenance	State	$3,132,596	$3,132,596	$3,132,596	$3,132,596	$3,132,596
Total for Project 446910-1		**$3,132,596**	**$3,132,596**	**$3,132,596**	**$3,132,596**	**$3,132,596**

450165-1 - OCALA OPERATIONS CENTER DEMO OF OLD BUILDINGS
Type of Work: FIXED CAPITAL OUTLAY

Phase	Funding Source	2023	2024	2025	2026	2027
Bridge/Roadway/Contract Maintenance	State		$100,000			
Total for Project 450165-1			**$100,000**			

MARION COUNTY **Miscellaneous**

426179-1 - SILVER SPRINGS STATE PARK PEDESTRIAN BRIDGES
Type of Work: MISCELLANEOUS CONSTRUCTION

Phase	Funding Source	2023	2024	2025	2026	2027
Construction	Federal		$3,660,159			
	State		$5,280			
Total for Project 426179-1			**$3,665,439**			

MARION COUNTY **Transportation Planning**

439331-4 - OCALA/MARION URBAN AREA FY 2022/2023-2023/2024 UPWP
Type of Work: TRANSPORTATION PLANNING

Phase	Funding Source	2023	2024	2025	2026	2027
Planning	Federal	$579,480	$579,480			
Total for Project 439331-4		**$579,480**	**$579,480**			

439331-5 - OCALA/MARION URBAN AREA FY 2024/2025-2025/2026 UPWP
Type of Work: TRANSPORTATION PLANNING

Phase	Funding Source	2023	2024	2025	2026	2027
Planning	Federal			$579,480	$579,480	
Total for Project 439331-5				**$579,480**	**$579,480**	

439331-6 - OCALA/MARION URBAN AREA FY 2026/2027-2027/2028 UPWP
Type of Work: TRANSPORTATION PLANNING

Phase	Funding Source	2023	2024	2025	2026	2027
Planning	Federal					$579,480
Total for Project 439331-6						**$579,480**

THANK YOU

Katherine Alexander
Program Management Administrator

Contact:
Phone: (386) 943-5168
Email: Katherine.Alexander@dot.state.fl.us

Alternate Email: D5-WPPH@dot.state.fl.us

Website: **www.fdot.gov/wpph/district5**

Ocala Marion TPO
2022 Major Program and Project Activities

The following provides a summary of the major program and project activities planned to be completed by the TPO in 2022 to meet goals and state and federal requirements. Each activity is accompanied by specific milestones or deadlines. The activities are listed in chronological order of TPO Board action. **Dates listed in RED require Committee and Board action to meet state and federal requirements.**

Safety Targets and Federal Performance Reporting

Annual process to set safety targets to meet federal requirements for performance reporting

Timeframe: January to February 2022
TPO Board: Presentation on February 22 for approval
Submission: Due February 28 to FDOT Central Office

Disadvantaged Business Enterprise (DBE) Program Update

Update to the TPO's DBE program document

Timeframe: January to February 2022
TPO Board: Presentation on February 22 for approval
Submission: Submit by February 28 to FDOT District 5

Transportation Resilience Guidance Paper

Guidance Paper on resilience to assess opportunities and challenges, future funding/grants

Timeframe: January 2022
Milestones: Guidance Paper
TPO Board: Presentation on February 28

Commission for Transportation Disadvantaged (CTD) Audit and Certification

Annual process by TPO staff to perform the CTD Audit and certification of the current Community Transportation Coordinator (CTC) (Marion Transit)

Timeframe: January to March 2022
Milestones: TPO presentation to TDLCB for approval on March 17
TPO Board: Presentation on March 22 for approval
Submission: Due March 31 to Commission for Transportation Disadvantaged (CTD)

Florida Department of Transportation (FDOT) Joint Certification with the TPO

Annual joint certification completed for the prior calendar year (January to December 2021)

Timeframe: January to April 2022
Milestones: FDOT/TPO Certification Meeting in February/March
FDOT Certification Package to TPO by end February
TPO Board: Presentation by FDOT on April 26 for approval
Submission: FDOT District 5 submits final Certification Package to Central Office

Ocala Marion TPO
2022 Major Program and Project Activities

Fiscal Years (FY) 2022/23 to 2023/24 Unified Planning Work Program (UPWP)

Development of the new two-year UPWP covering FY 2022/23 to FY 2023/24

Timeframe: January to April 2022
Milestones: UPWP Budget and Task Development (January to March)
Draft UPWP and begin 30-day public comment period (by March 25)
UPWP document completion (April)
Adoption of UPWP (April)
TPO Board: **Presentation of Draft UPWP on March 22**
Presentation of Final UPWP April 26 for adoption
Submission: **Due May 1 to FDOT District 5**

2045 Long Range Transportation Plan (LRTP) Amendment

Amendment of the 2045 LRTP to include new projects, funding changes

Timeframe: February to April 2022
Milestones: 30-day Public Notice by March 25
TPO Board: **Public Hearing and Presentation on April 26 for approval**
Submission: **Submit on May 1 to FDOT District 5**

Annual List of Priority Projects (LOPP) Process

Annual development of the LOPP and revised process for 2022

Timeframe: February to May 2022
Milestones: LOPP Guidance document and revised process
LOPP Policy and Procedures and New Process (April 26)
Draft LOPP Lists (May 24)
Adoption of LOPP (June)
TPO Board: **Presentation of LOPP Policy and Procedures and Revised Process (April 26) for adoption**
Presentation of Draft LOPP on May 24
Presentation of Final LOPP on June 28 for adoption
Submission: **Due June 30 to FDOT District 5**

Fiscal Years (FY) 2022/23 to 2026/27 Transportation Improvement Program (TIP)

Annual development of the TIP covering FY 2022/23 to FY 2026/27

Timeframe: February to June 2022
Milestones: Draft TIP and 30-day public comment period (May 24)
Adoption of TIP (June 28)
TPO Board: **Presentation of Draft TIP and Interactive Map on May 24**
Presentation of Final TIP and public comments for adoption on June 28
Submission: **Due June 30 to FDOT District 5**

Ocala Marion TPO
2022 Major Program and Project Activities

Traffic Counts Report and Online Map

Annual update to the Traffic Counts Report and Interactive Map

Timeframe: April to May 2022
Milestones: Revised report and interactive map to reflect most current information
TPO Board: Presentation of document and Interactive Map on May 24

Commitment to Zero Safety Action Plan

Development of the Commitment to Zero Safety Action Plan.

Timeframe: January to September 2022
Milestones: Kick-Off Meeting (January 12, 2022)
Stakeholder Workshop (March/April)
Community Workshop (May)
Presentation of Draft Plan (August)
Presentation of Final Plan (September)
TPO Board: Presentation of Action Plan on September 27 for adoption

Roll Forward TIP Amendment for Fiscal Years (FY) 2022/23 to 2026/27

Present the Roll Forward TIP Amendment based on FDOT project changes for FY 2022/23 to FY 2026/27

Timeframe: August to September 2022
Milestones: Presentation of Roll Forward TIP projects
TPO Board: Presentation of Roll Forward TIP on September 27 for approval
Submission: Due September 30 to FDOT District 5

OCALA MARION
TRANSPORTATION
PLANNING
ORGANIZATION

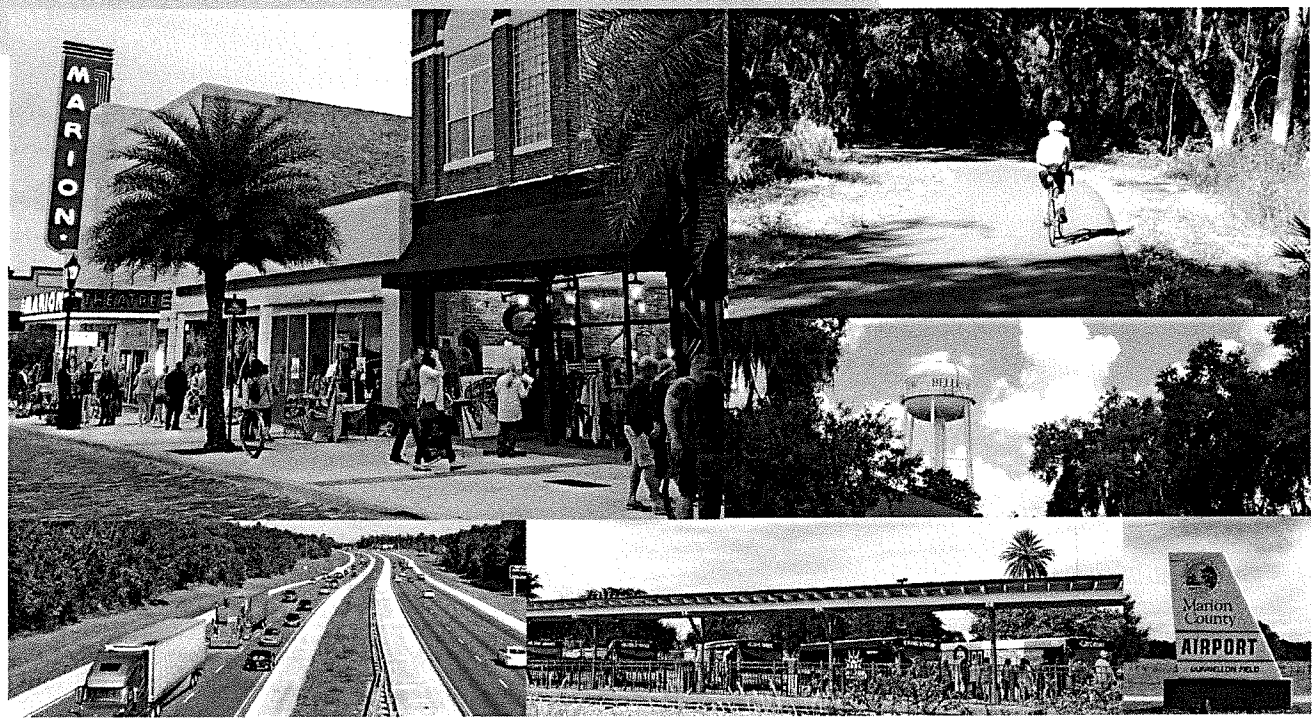
Website: Ocalamariontpo.org

Transportation Improvement Program

Fiscal Years 2021/2022 to 2025/2026

Federal Obligations Report

October 1, 2020 to September 30, 2021



Annual Listing of Federally Obligated Projects

Summary

On an annual basis, per Title 23, United States Code (USC) 450.334, the Ocala Marion Transportation Planning Organization (TPO) is required to provide a summary listing of projects for which federal funds have been *obligated in the preceding federal fiscal year (FFY) from October 1 to September 30. The Florida Department of Transportation (FDOT) assists the TPO in complying with this federal requirement by providing a detailed report of federal project obligations for Marion County. The report is included each year as an amendment to the current Transportation Improvement Program (TIP).

A net total of $26,342,420 of federal funds were obligated in FFY 2021 on 30 transportation projects and programs in Marion County. The following summary report and detailed obligation document provide a listing of the federally obligated projects by phases and funding sources.

*Obligation is the legal commitment by the Federal government to pay or reimburse a State or other entity for the Federal share of a project's eligible cost. Obligated projects have been authorized by the federal government and funds have been approved for reimbursement. Funding for projects can in some cases also be de-obligated. Funding previously obligated is removed from a project due to changes such as cost, delay or cancellation.

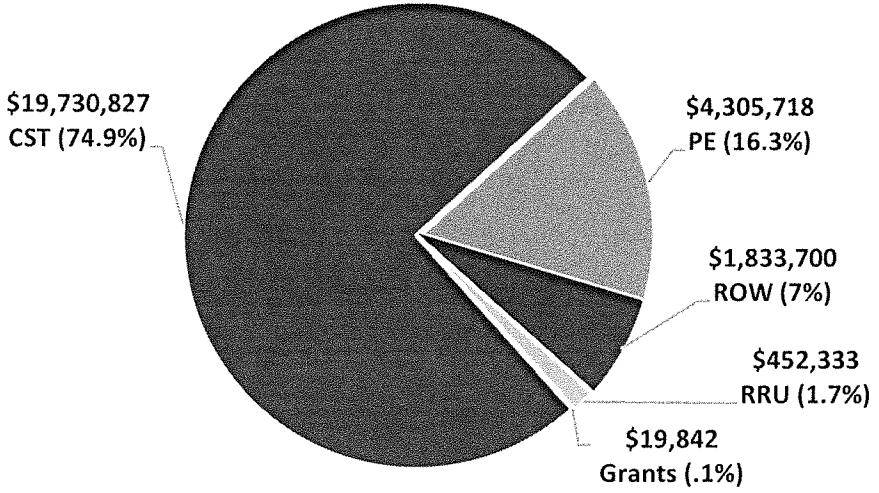
Annual Listing of Federally Obligated Projects - Marion County
Federal Fiscal Year (FFY) 2021
October 1, 2020 - September 30, 2021

FM NUMBER	PROJECT AND DESCRIPTION	PHASE	LENGTH	FFY 2021 TOTAL
238648 1	SR 45 (US 41) FROM SW 110TH ST TO NORTH OF SR 40 WIDENING	PE	4.1	$500,000
410674 2	SR 40 FROM END OF 4 LANES TO EAST OF CR 314 WIDENING	ROW	5.3	$1,815,764
		PE	5.3	$20,000
426179 1	SILVER SPRINGS STATE PARK PEDESTRIAN BRIDGES	PE	0.0	$638,457
431797 1	NE 25TH AVENUE FROM NE 14TH STREET (SR492) TO NE 35TH STREET	RRU	1.6	-$9,531
431798 1	NE 36TH AVENUE FROM SR 492 (NE 14TH ST) TO NE 35TH STREET	RRU	1.5	$384,067
431798 1	NE 36TH AVENUE FROM SR 492 (NE 14TH ST) TO NE 35TH STREET	PE	1.5	-$8,237
433651 1	CR 484 FROM SW 20TH AVENUE TO CR 475A OPERATIONS	PE	0.7	$411,863
433651 1	CR 484 FROM SW 20TH AVENUE TO CR 475A OPERATIONS	ROW	0.7	$16,347
433651 4	CR 484 FROM SW 20TH AVENUE TO CR 475A LANDSCAPING	PE	0.7	$60,000
435659 2	SR 200 @ I-75/W OF I-75 TO E OF I-75 ADDING LEFT & RIGHT TURN LANES	CST	0.4	-$268
435660 2	SR 326 FROM SR 326 RXR CROSS 627142B TO E OF CR 25A (NW GAINESVILE RD)	CST	0.2	$579,508
435660 2	SR 326 FROM SR 326 RXR CROSS 627142B TO E OF CR 25A (NW GAINESVILE RD)	RRU	0.2	$92,262
435660 2	SR 326 FROM SR 326 RXR CROSS 627142B TO E OF CR 25A (NW GAINESVILE RD)	PE	0.2	$27,039
435660 2	SR 326 FROM SR 326 RXR CROSS 627142B TO E OF CR 25A (NW GAINESVILE RD)	ROW	0.2	$1,589
436361 1	ITS OPERATIONAL SUPPORT- MARION COUNTY CMGC CONTRACT	PE	N/A	$160,000
436361 2	ITS OPERATIONAL SUPPORT- CITY OF OCALA	PE	N/A	$110,000
436879 1	SR 200 FROM S OF CR 484 TO S OF SW 60TH AVE.	CST	6.2	-$140
439310 1	OSCEOLA AVENUE TRAIL FROM SE 3RD STREET TO NE 5TH STREET	CST	0.0	-$6,083
439331 2	OCALA/MARION URBAN AREA FY 2018/2019-2019/2020 UPWP	PE	N/A	-$107,327
439331 3	OCALA/MARION URBAN AREA FY 2020/2021-2021/2022 UPWP	PE	N/A	$687,026
439887 1	MARION COUNTY PEDESTRIAN LIGHTING BUNDLE A	PE	1.2	-$9,085
439887 1	MARION COUNTY PEDESTRIAN LIGHTING BUNDLE A	CST	1.2	-$139,164
440880 1	MAR OAKS-SUNRISE/HORIZON-MAR OAKS GOLF WAY TO MAR OAKS MANOR	PE	0.8	$99,659
440900 2	I-75 FRAME - ARTERIALS	CST	0.0	$285,450
440900 2	I-75 FRAME - ARTERIALS	PE	0.0	$43,012
441136 1	SR25/SR200/US301/US441 FROM CR 25A TO US 301/US441 INTERCHANGE	CST	8.8	$19,011,524
441366 1	SR 40 FROM SW 27TH AVE TO MLK JR. AVE	PE	0.8	$272,546
442203 4	SIGNAL REPAIR AND GENERATOR - MARION COUNTY - HURRICANE IRMA	GRANTS	N/A	$7,651

Annual Listing of Federally Obligated Projects - Marion County
Federal Fiscal Year (FFY) 2021
October 1, 2020 - September 30, 2021

FM NUMBER	PROJECT AND DESCRIPTION	PHASE	LENGTH	FFY 2021 TOTAL
442211 4	MAINTENANCE OF TRAFFIC - MARION COUNTY - HURRICANE IRMA	GRANTS	N/A	$12,191
443170 1	SR 93 (I-75) FROM SUMTER COUNTY TO SR 200 RESURFACING	PE	14.0	$574,435
444382 1	CR 484 / PENNSYLVANIA AVE @ CROSSING # 622599-D	RRU	0.0	-$51,130
445687 1	US 41 N / S WILLIAMS ST FROM BRITTAN ALEXANDER BRIDGE TO RIVER RD	PE	0.1	$363,000
445688 1	US 27 / US 441 / ABSHIVER BLVD. @ CR 42	PE	0.1	$79,788
445701 1	SE ABSHIER BLVD FROM SE HAMES RD TO N OF SE AGNEW RD	PE	0.2	$113,542
445800 1	E SR 40 @ SR 492	PE	0.1	$270,000
446791 1	LED EQUIPMENT UPGRADES FOR 14 CROSSINGS IN MARION COUNTY	RRU	0.0	$33,077
448854 1	NE 40TH ST AT RR CROSSING #627890X	RRU	0.0	$3,588
	30 PROJECTS/PROGRAMS		**TOTAL:**	**$26,342,420**

FFY 2021 Federal Obligations by Phase



Phase Code:
CST - Construction
PE - Preliminary Engineering
ROW - Right-of-Way
RRU - Railroad Utilities

TO: **Committee Members**

FROM: **Rob Balmes, Director**

RE: **2021 TPO Annual Report**

Summary

The 2021 TPO Annual Report has been published. The Annual Report summarizes TPO program accomplishments in Ocala/Marion County in calendar year 2021. The report also includes boards and committee leadership, along with major projects funded through the TPO process. To honor the TPO's 40th anniversary, a special timeline section was developed to highlight some of the major organizational milestones from 1981 to 2021. The Annual Report is included with the meeting memo and may also be found on the TPO's website.

https://ocalamariontpo.org/about-us/annual-report

Attachment(s)

- 2021 TPO Annual Report

If you have any questions, please contact me at: 438-2631.

2710 E. Silver Springs Blvd. • Ocala, Florida 34470
Telephone: (352) 438 - 2630 • www.ocalamariontpo.org

CELEBRATING 40 YEARS OF SERVICE

OCALA MARION TRANSPORTATION PLANNING ORGANIZATION

2021 ANNUAL REPORT

A MESSAGE FROM THE TPO CHAIR

In 2021, the Ocala/Marion County Transportation Planning Organization (TPO) celebrated our 40th anniversary as a metropolitan planning organization. Over the past four decades, the TPO has been instrumental in planning, prioritizing and managing the funding of transportation projects throughout Marion County.

To honor our past, the 2021 Annual Report recognizes several organizational milestones in the Ocala/Marion County community. We also adopted new Mission and Vision statements to reflect our organization today.

As a great place to live, work and play, Ocala/Marion County continues to experience significant growth. From a transportation perspective that means more challenges like additional infrastructure needs and traffic congestion. To address these issues, the TPO completed or began a number of important programs in 2021, including:

- Transportation Improvement Program (TIP) - $361.7 Million investment over 5 years
- Public Participation Plan (PPP) Update
- Congestion Management Plan Major Update
- Commitment to Zero Safety Action Plan

The TPO was also featured nationally by our partners at the Association of Metropolitan Planning Organizations (AMPO), and continued to strengthen our relationships with federal, state and local governments.

It was my honor to serve as TPO Board Chair in 2021. I look forward to continuing to serve the TPO and building a more prosperous future in Marion County.

Sincerely,

Michelle Stone, Marion County Board of County Commissioners
2021 TPO Board Chair

WHAT IS THE OCALA MARION TPO?

OCALA MARION TRANSPORTATION PLANNING ORGANIZATION

Established in 1981, the **Ocala/Marion County Transportation Planning Organization (TPO)** is a federally-mandated agency responsible for allocating state and federal funds to roadway, freight, transit, aviation, bicycle and pedestrian projects. The TPO serves an area of over 1,600 square miles with a population of 375,000 and includes the cities of Belleview, Dunnellon, Ocala and Marion County.

Mission

To plan for a future transportation system that is safe and accessible for the residents and visitors of our community.

Vision

A transportation system that supports growth, mobility and safety through leadership and planning.

TPO BOARDS AND COMMITTEES

OCALA MARION TRANSPORTATION PLANNING ORGANIZATION

TPO GOVERNING BOARD

The **Ocala Marion TPO Board** is the governing body responsible for the overall guidance of the transportation planning process in Marion County. This includes providing leadership and oversight for the development of transportation policies, plans, programs and strategies.

The TPO Board is comprised of 12 voting members including the City of Ocala Mayor and four members of the City Council; all five Marion County Commissioners; and one representative each from the Belleview City Commission and the Dunnellon City Council. The Florida Department of Transportation District V Secretary serves as a non-voting member.

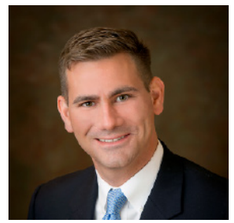
Michelle Stone, Chair
Marion County

Ire Bethea, Vice-Chair
City of Ocala

Kathy Bryant
Marion County

Craig Curry
Marion County

Jeff Gold
Marion County



Justin Grabelle
City of Ocala

Kent Guinn
City of Ocala

Valerie Hanchar
City of Dunnellon

Ronald Livsey
City of Belleview

Brent Malever
City of Ocala

Jay Musleh
City of Ocala

Carl Zalak
Marion County

TPO BOARDS AND COMMITTEES

OCALA MARION TRANSPORTATION PLANNING ORGANIZATION

TRANSPORTATION DISADVANTAGED LOCAL COORDINATING BOARD (TDLCB)

The **Transportation Disadvantaged Local Coordinating Board (TDLCB)** coordinates transportation needs of the disadvantaged, including individuals with physical and economic challenges and senior citizens facing mobility issues. Members in 2021 included:

Commissioner Michelle Stone (Chair)
Jeffrey Askew (Vice-Chair)
Jeff Aboumrad
Tracey Alesiani
Charmaine Anderson
Carlos Colon
Susan Hanley
James Haynes
Carissa Hutchinson
Andrea Melvin
Steven Neal
Ivonne Perez
Anissa Pieriboni
Iris Pozo
Tracey Sapp

REGIONAL AND STATE LEADERSHIP

Central Florida MPO Alliance

Marion County Commissioner Michelle Stone, Vice Chair (2022 Chair-Elect)
City of Ocala Councilman Ire Bethea
Marion County Commissioner Craig Curry

Metropolitan Planning Organization Advisory Council (MPOAC)

Marion County Commissioner Craig Curry
Dunnellon Councilwoman Valerie Hanchar, Alternate

TPO BOARDS AND COMMITTEES

CITIZENS ADVISORY COMMITTEE (CAC)

The **Citizens Advisory Committee (CAC)** is comprised of citizens from Marion County and its municipalities. The CAC members advise the TPO on a wide variety of transportation issues. Recommendations by the CAC are presented to the TPO Board. Members in 2021 included:

Steve Rudnianyn (Chair)
Richard McGinley (Vice-Chair)
Davis Dinkins
Richard Howard
Travis Magamoll
Suzanne Mangram
Paul Marraffino
Michelle Shearer
Phyllis Silverman
Clark Yandle

TECHNICAL ADVISORY COMMITTEE (TAC)

The **Technical Advisory Committee (TAC)** is comprised of professional staff that review transportation plans, programs and projects primarily from a technical standpoint. Recommendations by the TAC are presented to the TPO Board. Members in 2021 included:

Elton Holland, Marion County (Chair)
Nancy Smith, City of Ocala (Vice-Chair)
David Herlihy, Marion County Schools
Ji Li, SunTran
Kenneth Odom, Marion County
Loretta Shaffer, Marion County Tourism
Eric Smith, City of Ocala
Anna Taylor, FDOT (Non-Voting)
Mickey Thomason, FL Office of Greenways
Bob Titterington, City of Belleview
Vacant, City of Dunnellon

THE TPO CELEBRATES 40 YEARS

OCALA MARION TRANSPORTATION PLANNING ORGANIZATION

To honor **40 years of service** to the Ocala/Marion County community, several organizational milestones are highlighted. Thank you to all past and present board and committee members, staff, partner agencies, and the citizens of Marion County for your contributions to the MPO and TPO.

1980

The Ocala Area Transportation Study (OATS) was initiated. Planning efforts produce a Transportation Improvement Plan for 1995.

1980 Marion County Population: 122,488

1981

MPO Designation

1981

The 1980 U.S. Census Results reveal the Ocala urbanized area exceeds 50,000. The Ocala/Marion County Metropolitan Planning Organization (MPO) is designated to carry out the federally mandated Continuing, Cooperative and Comprehensive (3C) process.

1990 Marion County Population: 194,835

Paul Nugent serves as MPO Administrator within the City of Ocala

1991

Adoption of the OATS 2015 Plan Update to support transportation for all of Marion County.

1997

The MPO becomes a separate organization at the City of Ocala. Greg Slay serves as first MPO Director.

Ocala/Marion County Metropolitan Planning Organization
Marion County City of Belleview City of Dunnellon City of Ocala

1998

SunTran begins operations of fixed route bus service on December 15. An Interlocal Agreement is established for the MPO to serve as Policy Board and Manager.

2000 Marion County Population: 258,916

"If we're going to be a metropolitan area, we need a bus system to serve our citizens."
Ocala Councilman Michael Finn
(MPO Board 1985 - 2001)

Source: SunTran

THE TPO CELEBRATES 40 YEARS

2004

In May, the Ocala/Marion County Metropolitan Planning Organization (MPO) officially changes to the Ocala/Marion County Transportation Planning Organization (TPO).

Source: City of Ocala

2010 Marion County Population: 331,298

2008

In December, SunTran celebrates its 10th Anniversary of service to the Ocala/Marion County community.

OCALA/MARION COUNTY
TRANSPORTATION PLANNING ORGANIZATION
Marion County • City of Belleview • City of Dunnellon • City of Ocala

TPO
Ocala • Marion County

2018

The TPO moves offices from the historic house on 121 Watula Avenue to the City of Ocala Service Center.

2019

On July 1, the TPO Governing Board approves a revised Interlocal Agreement to separate SunTran and TPO metropolitan planning responsibilities. SunTran begins operations and administration at the City of Ocala. The TPO changes host governments from the City of Ocala to Marion County.

The TPO Office relocates from the City of Ocala to Marion County on July 1, 2019

2021

The TPO Celebrates 40 years of service to the Ocala/Marion community. The Board adopts Mission and Vision Statements.

2020 Marion County Population: 375,908

OCALA MARION TRANSPORTATION PLANNING ORGANIZATION

"The TPO in coordination with the MPOAC has changed the culture of Transportation Planning from reactive to proactive, which improves our lives and saves taxpayers money."
Marion County Commissioner David Moore
(TPO Board and Chair 2012 - 2020)

PROJECT HIGHLIGHTS 2021

OCALA MARION TRANSPORTATION PLANNING ORGANIZATION

In 2021, several projects funded through the TPO process were completed or underway in Marion County. Major project highlights include:

SunTran Bus Route Redesign

On October 18, SunTran began a revamped transit system to better serve the community. The new system consists of seven (7) routes and was re-designed to provide greater coverage and reduce ride time by approximately 50 percent. Future improvements will include more bus shelters, bus stops and a downtown public restroom.

Source: SunTran

SunTran Bus Redesign

US 301/US 441 from NW 20th Street to US 301/441 Split

Resurfacing of 8.8 miles of roadway and median improvements. The "Split" at US 301/441 will be improved to allow vehicles traveling northbound in both lanes to turn right onto US 301 toward Starke, while vehicles in the left (inside) lane will be able to continue northbound on US 441 toward Gainesville. Completion in 2022.

SR 40/Silver Springs Boulevard from SW 27th to MLK Jr. Avenue

Conversion of full median openings in some locations to directional median openings to improve safety and access control along the corridor. Completed in 2021.

NE 36th Avenue Project

NE 36th Avenue Widening and Bridge from NE 20th to NE 25th

Widening of the two-lane road to a four-lane road with bike lanes, six-foot sidewalks, a 20-foot median, drainage improvements, traffic signals and bridge separation at the CSX railroad crossing. Completed in 2021.

SR 40/Silver Springs Boulevard Project

US 441/US 301 from Baseline Road (SR 35) to SR 200

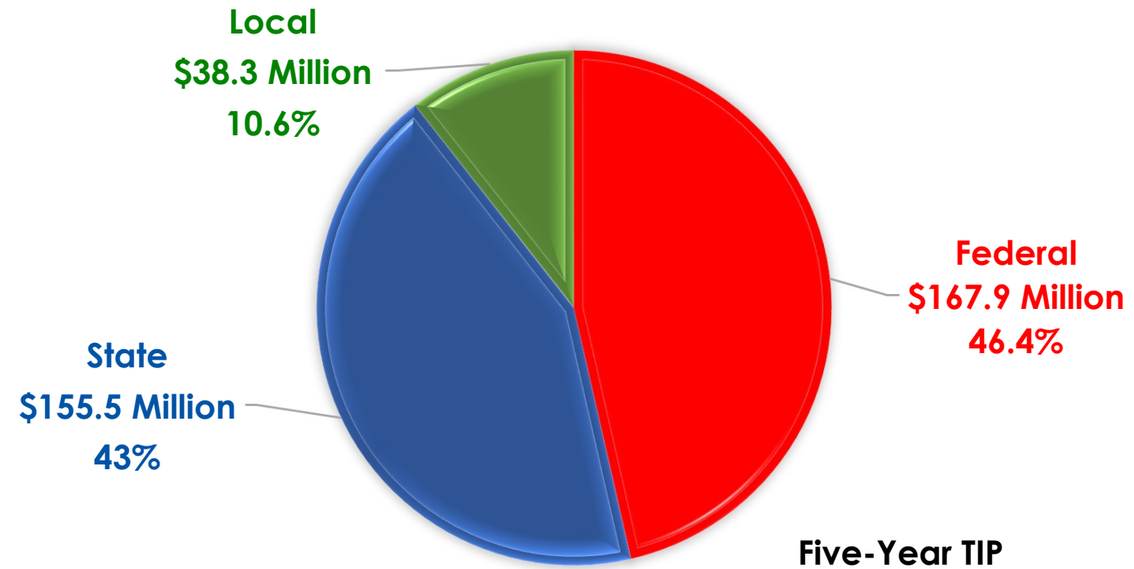
Resurfacing of 10.6 miles, extension of left and right turn lanes, on street parking reductions and addition of bike lanes. Project delayed in 2021. Completion in 2022.

SHORT-RANGE PLANNING

OCALA MARION TRANSPORTATION PLANNING ORGANIZATION

On June 22, the TPO adopted its short-range plan, the **Transportation Improvement Program (TIP)**. The TIP is adopted on an annual basis and outlines the projects planned to receive federal, state and local match funding over the next five years.

The Fiscal Years (FY) 2021/2022 to 2025/2026 TIP reflects a total investment of **$361.7 million** to over 90 projects and grant programs across all modes of transportation in Marion County. The complete TIP document is available at: **https://ocalamariontpo.org/plans-and-programs/transportation-improvement-program-tip**



Five-Year TIP Funding by Source

I-75 Projects
$115,533,666

U.S. Route Projects
$63,169,672

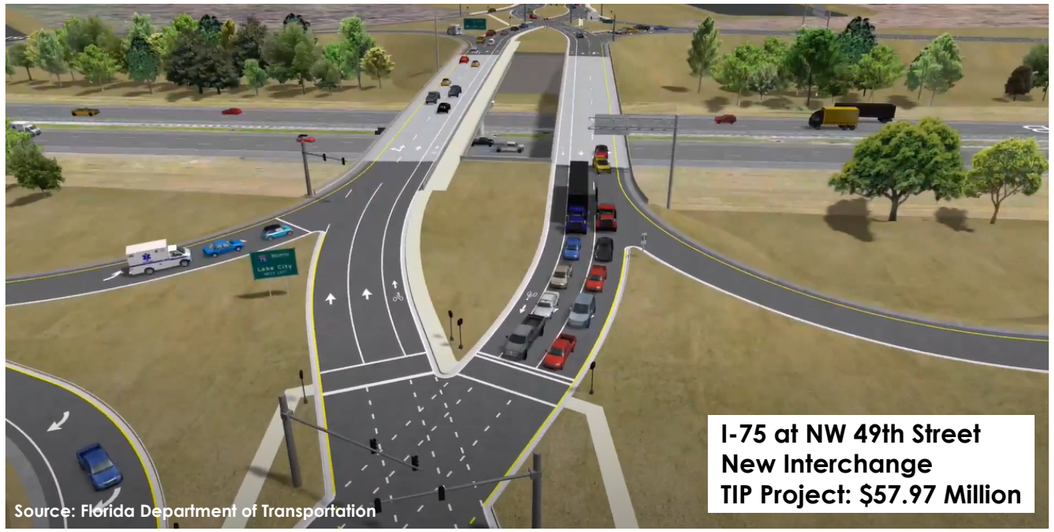
State and Local Projects
$58,175,462

Bicycle/Ped. Projects
$13,699,624

Aviation Projects
$19,452,936

Transit, Funding and Grants
$53,249,368

ITS and Maintenance
$32,764,410



Source: Florida Department of Transportation

I-75 at NW 49th Street New Interchange TIP Project: $57.97 Million

TPO MAJOR STUDIES IN 2021

Congestion Management Plan

On October 26, the TPO Board adopted a major update to the **Congestion Management Plan (CMP)**. The CMP outlines the policies and procedures, and state of the system for traffic congestion in Ocala/Marion County.

The CMP network consists of all the major roadway corridors in Marion County. Roadways are classified as Not Congested, Approaching Congestion, Congested or Extremely Congested.

The CMP identifies a set of improvement strategies to address congestion at specific locations. These recommendations will be incorporated into the TPO's annual List of Priority Projects (LOPP) process for future funding and implementation. To learn more about the CMP, visit the TPO's website:
https://ocalamariontpo.org/congestion-management-process-cmp

COMMITMENT TO ZERO

An Action Plan for Safer Streets in Ocala Marion

Commitment to Zero

On October 26, the TPO Board approved the launch of **Commitment to Zero: An Action Plan for Safer Streets in Ocala Marion**. Commitment to Zero will serve as a guiding document to help propel community partners and stakeholders toward the vision of zero traffic-related fatalities and serious injuries in Marion County. A formal Kick-off of the project was held on January 12, 2022.

The Commitment to Zero Safety Action Plan will focus on four cornerstones:

- Education and Awareness;
- Public and Partner Engagement;
- Safety Analysis; and
- Action Planning.

Resilience Guidance Paper

In August, the TPO began a process to develop a guidance paper on **Transportation Resilience,** which is the ability to adapt to changing conditions and properly recover. This includes disruptions, such as major storms or human-related events. The Guidance Paper was presented to the TPO Board and TAC/CAC committees in February 2022.

TRANSPORTATION DISADVANTAGED

OCALA MARION TRANSPORTATION PLANNING ORGANIZATION

Public Opinion Survey

In 2021, the TPO went directly to the riders of Marion Transit and the general public for feedback on the disadvantaged transportation needs of the community. With the increase in population and pandemic issues still lingering, getting input from the community and riders themselves was essential. In August, the TPO conducted a 30-day public survey titled ***"What do you think? Let your voice make a difference!"*** 80 percent of the 77 participants answered that the current service being provided for the disadvantaged population is necessary, efficient and safe. The results from the survey will assist the TPO in updating the Transportation Disadvantaged Service Plan (TDSP) in 2022.

Did you know that "disadvantaged" doesn't just mean blind or a person in a wheelchair?

It also includes low income, person(s) that have no access to transprtation, or person(s) dependent upon others for health care, education, employment, social activities, groceries and other life-sustaining services.

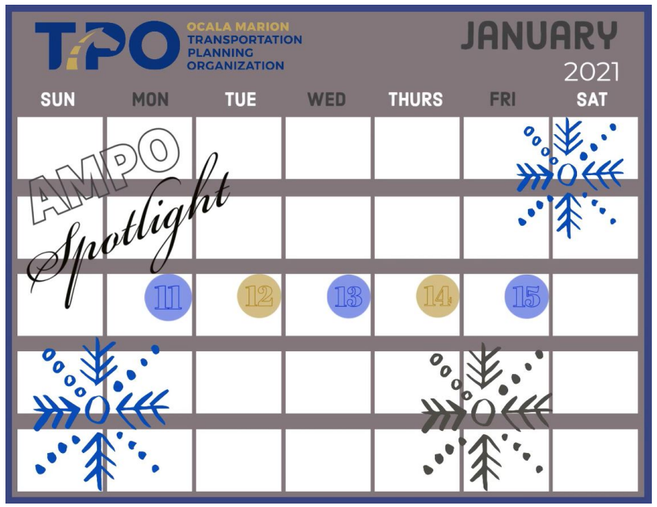
CTC Responsibilities and Evaluation

Throughout the months of January and February, TPO staff conducted an annual evaluation of the **Community Transportation Coordiator (CTC)** - **Marion Transit**. This consisted of an anlysis of all operational elements, such as policies/procedures, vehicle maintenance, budget, training and performance standards, quality assurance and safety, within the operation of Marion Transit Services. This was accomplished through an audit, series of interviews, quality checks, rider surveys and ride-alongs for observation. The results were...a job well done!

The Community Transportation Coordinator (CTC) of Marion Transit is responsible for providing and/or contracting for transportation services within a county or multi-county area. Services provided to qualified riders may include paratransit trips (usually pre-scheduled), door-to-door services on a multi-passenger vehicle, and/or on-demand trips.

SOCIAL MEDIA ENGAGEMENT

At the start of 2021, The Association of Metropolitan Planning Organizations (AMPO) launched their **"aMPO Spotlight"** social media campaign and the Ocala Marion TPO was scheduled for the first quarter **January 11th-15th!** The aMPO Spotlight highlighted a different member each week by using AMPO's social media accounts on Twitter, Facebook and Instagram to retweet/repost content; boosting the TPO's social media outreach. It was a great way to show off the work of the TPO and bring new eyes to our social media platforms.



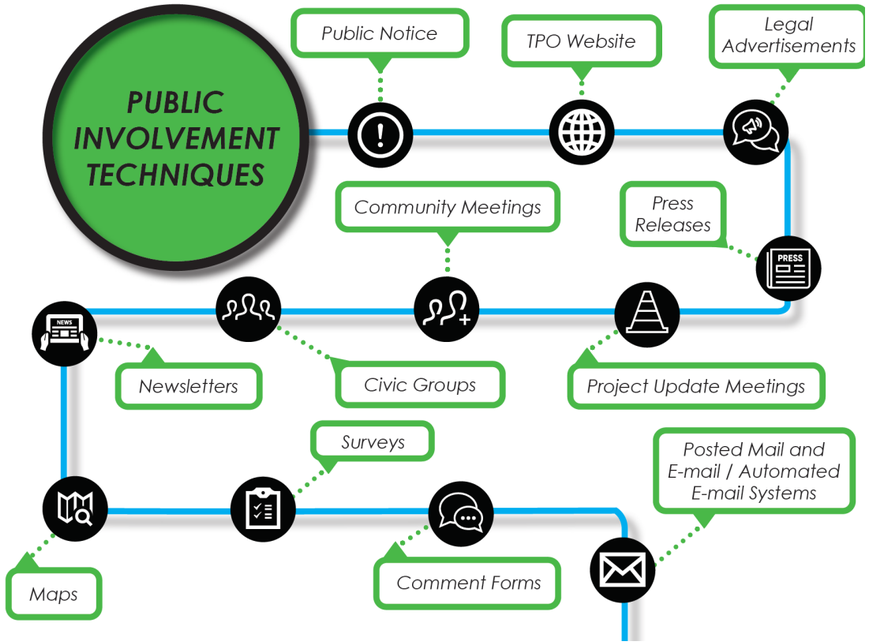
The week of May 17 to 23 the TPO celebrated **Bike Week** with a focus on bicycle safety. We encouraged everyone to Bike Safe wherever that may be. During the week, the TPO hosted a virtual Bicycle Safety Course taught by ReThink Your Commute, highlighted some beautiful trails in Marion County, partnered with local bicycle shops to provide discounts to bicyclists the entire week, and shared bike safety information via our social media platforms with the hashtag **#BikeSafeOcalaMarion**

PUBLIC PARTICIPATION

The TPO engages with the citizens and partner agencies in Marion County throughout the year involving board and committee meetings, workshops, surveys, partner events and planning projects.

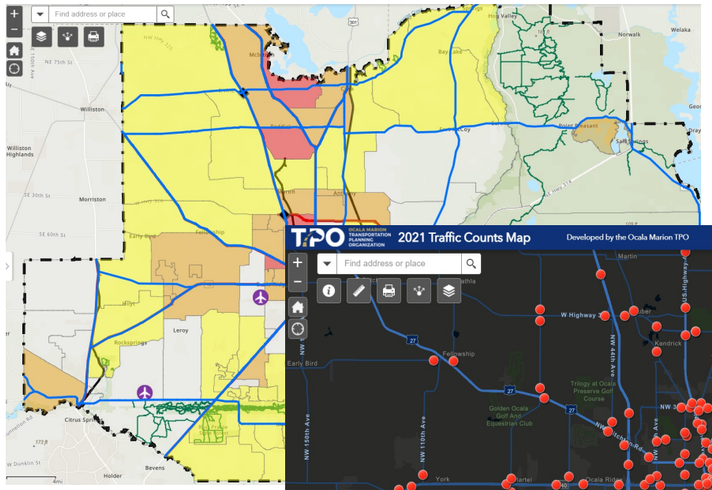
A centerpiece of the TPO's public involvement is the **Public Participation Plan (PPP)**. In 2021, the TPO Board adopted an update to the PPP document, which outlines the goals, objectives and strategies for ensuring all citizens have the opportunity to participate in the transportation planning process. To learn more about the TPO's Public Participation Plan, visit the website at:

https://ocalamariontpo.org/plans-and-programs/public-participation-plan-ppp

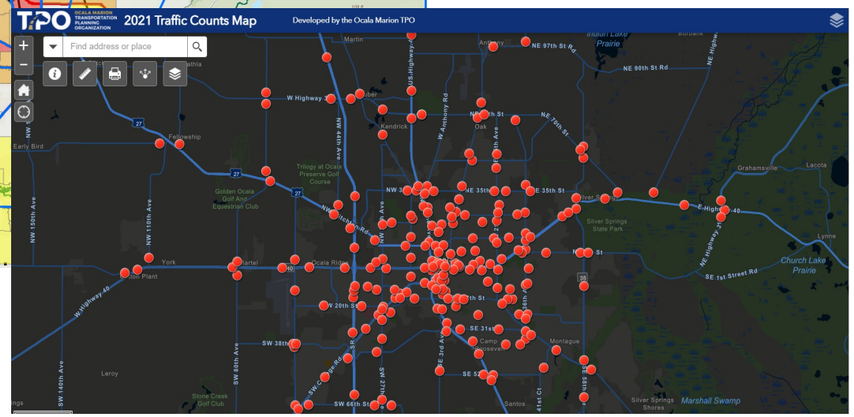


2021 Public Participation Highlights

- 258 participants in the Congestion Management Plan public survey
- 77 participants in the Transportation Disadvantaged public survey
- 26 in-person and virtual board and committee meetings
- Over 360 social media posts on Facebook and Twitter
- Over 24,500 pageviews and 8,700 users on the TPO website
- New Online Interactive Maps (https://ocalamariontpo.org/maps)
- Safety Action Plan TPO Board Workshop



Transportation and Community Features



2020 Traffic Counts

TITLE VI AND CIVIL RIGHTS ASSURANCES

Pursuant to Title VI of the Civil Rights Act of 1964 and nondiscrimination statutes, regulations and authorities, the Ocala Marion Transportation Planning Organization (TPO) is committed to ensuring that no person is excluded from the transportation planning process and welcomes input from all interested parties, regardless of background, income level or cultural identity.

Anyone requiring special assistance under the Americans with Disabilities Act (ADA) or requiring language assistance (free of charge) should contact Liz Mitchell, Title VI/Nondiscrimination Coordinator.

TPO STAFF

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40th ANNIVERSARY
2021

OCALA MARION
TRANSPORTATION
PLANNING
ORGANIZATION

2710 E. SILVER SPRINGS BLVD. • OCALA, FL 34470
(352) 438-2630 • OCALAMARIONTPO.ORG

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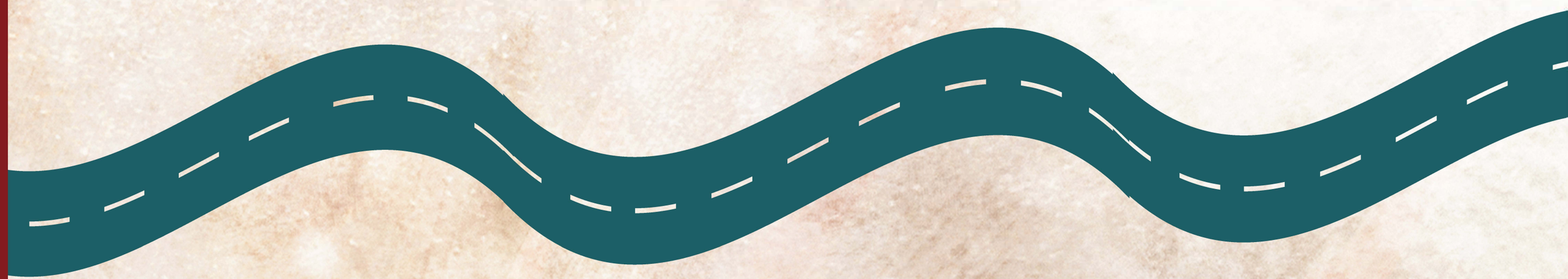

TO: **Committee Members**

FROM: **Rob Balmes, Director**

RE: **Commitment to Zero Update**

Summary

On January 12, 2022, the TPO kicked-off **Commitment to Zero: An Action Plan for Safer Streets in Ocala Marion**. Commissioner Stone led the meeting, which included participation by Mayor Guinn as a speaker. Several local safety leaders also participated as speakers at the meeting, including Lieutenant Eades and Sergeant McDonald of the Ocala Police Department, Battalion Chief Driggers of Marion County Fire Rescue and Ken Odom, Chair of the Community Traffic Safety Team. Loreen Bobo, Administrator of the FDOT Office of Safety also presented.

The TPO and consultant team (Benesch, Inc.) presented an overview of the Commitment to Zero project, including the schedule and how the public can get involved throughout the process. This includes both an **online public survey** and **comment map** regarding safety concerns in Marion County. The meeting was video-recorded. The online public tools and link to the kick-off meeting recording are available at the Commitment to Zero project page:

https://ocalamariontpo.org/safety-plan

As committee members, if you could please share the project page and opportunities for public comment with your constituents, it will be greatly appreciated and help generate the diversity of feedback critical to the success of the project. If you have any questions about the project, please contact me any time at: 438-2631.

COMMITMENT TO ZERO

An Action Plan for Safer Streets in Ocala Marion

What Is the Commitment to Zero Action Plan?

In the last decade, there were **739 deaths** on our roads. Those killed were our neighbors, friends, and family, and their deaths were both unacceptable and avoidable. In response, the TPO is developing the Commitment to Zero Action Plan. Commitment to Zero is based on Safe Systems Approach, which says:

1. No death or serious injury is acceptable on our roads.
2. Human bodies aren't meant to travel at high speeds and are vulnerable to injury or death.
3. Humans will inevitably make mistakes, but those mistakes shouldn't result in dying.
4. Redundancy in our transportation system is crucial, and there should be multiple "fail safes" to prevent death.
5. Responsibility for safer streets is shared by all road users and those involved in designing our roads.
6. Proactive approaches to safe streets are sought instead of reaction to individual issues.

What will the Action Plan Do?

The Action Plan will…

- Guide Ocala/Marion County towards the goal of ZERO traffic-related deaths and serious injuries.
- Establish a framework for education and engagement
- Identify implementable and actionable strategies
- Define performance measures to monitor progress

How to Get Involved?

Visit the Action Plan's website: ***ocalamariontpo.org/safety-plan***

Here, you can participate in an Online Survey, Interactive Comment Map, learn about upcoming meetings, and review project documents as they become available.

Project Timeline

Fall 2021
- Begin Action Plan (Nov.) Development
- Data Collection and Analysis (Nov. – Dec.)
- Communications Plan (Dec.)

Winter 2022
- Project Kick-Off Meeting (Jan.)
- Begin Online Survey and Interactive Map (Jan.)
- Crash Assessment and High Injury Network Identification (Feb.)
- Working Group Meeting #1 (Feb.)

Spring 2022
- Working Group Meeting #2 (Apr.)
- Stakeholder Group Meeting (Apr.)
- Public Engagement (May)
- Development of Actionable Strategies (Mar. – Jun.)

Summer 2022
- Close Online Survey and Map Comments (Jul.)
- Working Group Meeting #3 (Jul.)
- TPO Committee and Board Presentations (Sep.)
- Finalize and Adopt Action Plan (Sep.)

Contact Information

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TPO OCALA MARION TRANSPORTATION PLANNING ORGANIZATION