



**TPO Board Meeting**

Marion County Commission Auditorium  
601 SE 25th Avenue, Ocala, FL 34471

**February 22, 2022**

**4:00 PM**

**AGENDA**

1. **CALL TO ORDER AND PLEDGE OF ALLEGIANCE**
2. **ROLL CALL**
3. **PROOF OF PUBLICATION**
4. **CONSENT AGENDA**
  - A. **[TPO Meeting Minutes – January 25, 2022](#)** (Page 3)
  - B. **[TPO Director Travel](#)** (Page 25)
5. **ACTION ITEMS**
  - A. **[Performance Management Safety Targets](#)** (Page 48)  
*Staff is seeking review and approval of Safety Performance Targets for 2022.*
  - B. **[TPO Travel Policy Updates](#)** (Page 83)  
*Staff is seeking approval of updates to the Travel Policy.*
  - C. **[Citizens Advisory Committee \(CAC\) Application](#)** (Page 93)  
*Staff is seeking approval of an applicant for the CAC.*
6. **PRESENTATIONS**
  - A. **[Transportation Resilience Guidance Paper](#)** (Page 96)  
*Franco Saraceno, Kittelson and Associates, will present the guidance paper.*
7. **COMMENTS BY FDOT**
  - B. **[Construction Report](#)** (Page 149)
8. **COMMENTS BY TPO STAFF**
  - A. **Commitment to Zero Safety Action Plan Update**
9. **COMMENTS BY TPO MEMBERS**

## **10. PUBLIC COMMENT (Limited to 2 minutes)**

## **11. 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](mailto: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 Ocala Marion Transportation Planning Organization will be held on March 22, 2022.*



**TPO Board Meeting**

Marion County Commission Auditorium  
601 SE 25<sup>th</sup> Avenue, Ocala, FL 34471  
January 25, 2022  
4:00 PM

**MINUTES**

**Members Present:**

Councilman Ire Bethea  
Commissioner Kathy Bryant  
Commissioner Jeff Gold  
Commissioner Ron Livsey  
Councilmember Barry Mansfield  
Commissioner Michelle Stone  
Mayor Bill White

**Members Not Present:**

Commissioner Craig Curry  
Councilmember Kristen Dryer  
Mayor Kent Guinn  
Councilmember James Hilty  
Commissioner Carl Zalak

**Others Present:**

Rob Balmes, TPO  
Shakayla Irby, TPO  
Liz Mitchell, TPO  
Anna Taylor, FDOT  
Sarah McNamara, FDOT  
Jack Adkins, FDOT  
Mike McCammon, FDOT  
Bonny Richland  
Annette Stutzman  
Stephen Day  
Nancy Reich  
Lynnda Butler  
Marty Williams  
Thor Siegfried

Jazmon Lovenguth

Michelle Shearer

Other members of the public not signed in.

### **Item 1. Call to Order and Pledge of Allegiance**

Chairman Ire Bethea called the meeting to order at 4:00pm and led the board in the Pledge of Allegiance.

### **Item 2. Roll Call**

Shakayla Irby, Administrative Assistant called the roll and a quorum was present.

### **Item 3. Proof of Publication**

Shakayla Irby, Administrative Assistant stated the meeting was published online at the TPO website and the City of Ocala, Belleview and Dunnellon and Marion County meeting calendars on January 18, 2022. The meeting was also published to the TPO's Facebook and Twitter pages.

### **Item 4. Consent Agenda**

*Ms. Stone made a motion to approve the Consent Agenda. Ms. Bryant seconded, and the motion passed unanimously.*

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

Ms. Anna Taylor 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>.

Ms. Taylor 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.

Ms. Taylor 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

Ms. Taylor 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

Ms. Taylor 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.

Ms. Taylor 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.

Contact information for Ms. Katherine Alexander, Program Manager Administrator was provided to the board for further information and questions.

Mayor White inquired about S.R. 45 (U.S. 41), from SW 110th Street to North of S.R. 40.

Ms. Taylor responded that at the time there was no funding for the project within the current work program. In 2027 during the new work program development cycle opportunities would be looked at if it was an option.

Mayor White asked if the project would be at least five years out.

Ms. Taylor said at the current time, yes.

### **Item 6A. Vice Chair Election**

Per Board Bylaws, members must elect a Chair and Vice-Chair to serve one-year terms at the last board meeting of the calendar year. At the October 26, 2021 meeting, the TPO Board elected officers to serve their respective terms as Chair and Vice-Chair. The officers include:

- Chair, City of Ocala Councilmember and President, Ire Bethea
- Vice-Chair, City of Dunnellon Vice-Mayor, Valerie Hanchar

On December 14, 2021, the TPO Director was notified by the City of Dunnellon regarding a decision made by City Council to select Mayor Bill White as the new representative in 2022 to the TPO Board, replacing Vice-Mayor Hanchar. Consequently, the Vice-Chair of the TPO Board is vacant. The TPO Board was required to act at the next regular meeting and elect a new Vice-Chair.

*Ms. Stone made a motion to nominate Commissioner Craig Curry as Vice-Chair. Mr. Gold seconded, and the motion passed unanimously.*

### **Item 6B. Alternate Appointment to the Florida Metropolitan Planning Organization Advisory Council (MPOAC)**

At the October 26, 2021 meeting, the TPO Board elected two representatives to serve the Florida Metropolitan Planning Organization Advisory Council (MPOAC) Governing Board for a one-year term in calendar year 2022.

The MPOAC representatives included:

- Member, Marion County Commissioner Craig Curry
- Alternate, City of Dunnellon Vice-Mayor, Valerie Hanchar

On December 14, 2021, the TPO Director was notified by the City of Dunnellon regarding a decision made by City Council to select Mayor Bill White as the new representative in 2022 to the TPO Board, replacing Vice-Mayor Hanchar. Consequently, the TPO's Alternate Membership role of the MPOAC was vacant.

*Mr. Gold made a motion to nominate Councilmember Kristen Dryer as Alternate Appointment to the Florida MPOAC. Ms. Stone seconded, and the motion passed unanimously.*

### **Item 6C. Fiscal Years 2021/22 to 2025/26 Transportation Improvement Program (TIP) Amendment, Annual Listing of Obligated Projects**

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 have 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 detailed 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 net 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 the case was 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.

The annual listing of Federally Obligated Projects for Federal Fiscal Year 2021 was provided to the board and attached on pages 12 and 13 of this set of minutes.

Ms. Stone made a motion to approve the Fiscal Years 2021/22 to 2025/26 TIP Amendment, Annual Listing of Obligated Projects. Mr. Mansfield seconded and the motion passed unanimously.

#### **Item 6D. 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. Stone made a motion to approve the Scope of Services, List of Priority Projects (LOPP) Process. Ms. Bryant seconded and the motion passed unanimously.

#### **Item 6E. Fiscal Years 20/21 to 21/22 Unified Planning Work Program (UPWP) Amendment**

##### Federal Transit Administration (FTA) 5305(d) Funding

In November 2021, the TPO coordinated with the Florida Department of Transportation (FDOT) regarding Federal Transit Administration (FTA) 5305d grant contract funding balances. Part of the process was tied to a future change involving the consolidation of FTA 5305d grant funding with Federal Highway Administration (FHWA) PL-112 grant funding.

As part of the coordination, FDOT notified the TPO that a prior year 5305d grant balance of \$60,086 remains available. This balance was tied to prior year contracts and not to any current active grant contracts. FDOT requested the TPO utilize the funding and apply to active tasks.

The funding would remain available for one calendar year once amended into the current FY 2020/21 to 2021/22 UPWP and a revised contract was approved by both parties. TPO staff also

coordinated with FDOT to apply the full 20 percent required match with toll revenue credits (soft match) to eliminate a state (FDOT) and local (Marion County) cash match contribution.

TPO staff proposed to immediately apply the \$60,086 in grant funding to **Task 1E. Marion County Cost Allocation (\$19,243)** and **Task 7B. Consultants (\$40,843)** in support of the Commitment to Zero Safety Action Plan – two active tasks in Fiscal Year 2021/22.

#### SunTran Transit Development Plan

FDOT required transit agencies to complete a major update to their transit development plan (TDP) every five years as a prerequisite to receiving Public Transit Block Grant funds

SunTran was required to complete a major update to their TDP in 2022 and would be directing more resources to long-range planning in 2022 than they would in a typical year. SunTran staff had budgeted \$200,000 for the TDP update in their 2021 American Rescue Plan Section 5307 grant application and were requesting an amendment to the UPWP to reflect that planning expenditure. The funding change was budget neutral to the TPO, and was reflected in the UPWP for purposes of supporting SunTran planning activities.

Ms. Bryant asked for clarification if the American Rescue Plan funding for the SunTran was coming directly from the American Rescue Plan and not the municipality or the County.

Mr. Balmes said that the American Rescue Plan was 100% federal funding.

Mr. Balmes also mentioned that the 5305(d) grant was one of the three grants that required a local and state match of 10 percent. However, since it was an old balance, Mr. Balmes emphasized with FDOT that he would like to see a soft match applied with toll revenue credits so no impact came to the county or state budget while in the middle of the fiscal year. FDOT agreed to apply the soft match.

*Ms. Stone made a motion to approve the Fiscal Years 20/21 to 21/22 UPWP Amendment.*

*Ms. Bryant seconded and the motion passed unanimously.*

#### **Item 6F. 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.

*The Scope of Services outline has been attached to pages 14-18 of this set of minutes for reference.*

*Ms. Bryant made a motion to approve the 2045 LRTP Modification. Ms. Stone seconded, and the motion passed unanimously.*

### **Item 7A. 2021 TPO Annual Report**

Mr. Balmes provided the board with a copy of the 2021 TPO Annual Report and said that the Annual Report summarized the TPO program accomplishments in Ocala/Marion County in calendar year 2021. The report also included 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 had also been published to the TPO's website.

### **Item 7B. 2022 Major TPO Activities**

In 2022, the TPO would be involved with a variety of program and project activities to meet the organizations goals and state and federal requirements. A summary of the planned activities was provided to the board along with a brief presentation that shared with Board members how to get involved throughout the calendar year in providing guidance, recommendations and approvals.

*The 2022 Major TPO activities has been attached to pages 19-21 of this set of minutes for reference.*

### **Item 7C. TPO Budget Snapshot**

Ms. Liz Mitchell provided the quarterly TPO updates on the budget to the TPO Board to ensure they remain informed of funding status and the financial outlook throughout the year.

*The TPO Budget Snapshot has been attached to page 22 of this set of minutes for reference.*

### **Item 8. Comments by FDOT**

Ms. Anna Taylor provided the latest construction report to the board.

### **Item 9. Comments by TPO Staff**

Mr. Balmes mentioned that the Commitment to Zero: Safety Action Plan had a great Kick-Off meeting that was held on January 12, 2022 at the Board of County Commissioners Auditorium led by Commissioner Stone. A Commitment to Zero: Safety Action Plan fact sheet was provided to the board. The TPO was still seeking comments and feedback from the public and also provided information on the online map to mark areas of concern. Also the website <https://ocalamariontpo.org/safety-plan/> was provided for more information.

Mr. Balmes also gave a TPO staffing update and said the TPO was still receiving applications for planners and was looking to conduct interviews within the coming week.

### **Item 10. Comments by TPO Members**

Ms. Bryant asked if the MPOAC Weekend Institute for new TPO board members was still being provided.

Mr. Balmes said that it was still offered and he would forward the invitation to the board members. As part of the TPO travel and training budget reimbursement was available.

Ms. Bryant said she had attended the MPOAC Weekend Institute and it was very informative and she highly recommended for the new board members to attend.

Ms. Stone made a comment that is was “Move over Month” and that whenever a police officer has someone pulled over and their lights are flashing drivers are required by law to get out of the closest lane to them and if unable to move over then speed had to be reduced by 20mph less than the posted speed limit.

Mayor White made a comment that he was very excited to apart of the TPO board and that Dunnellon was working very hard to connect and become involved with Marion County and actively working with the Commissioners and specifically Commissioner Bryant, Dunnellon representative. He mentioned that Councilwoman Hanchar would be the TPO board alternate and that she would still be very involved and he would lean on her background and information of the TPO in his new position on the TPO board.

Ms. Bryant gave notice that she had a speaking engagement that would take place at 6pm and may have to leave the meeting early depending on the length of public comment.

### **Item 11. Public Comment**

Chair Bethea opened the public comment period of the meeting. He asked the members of the public to please refrain from applauding after public comments and addressed comments focused on the Florida Turnpike Enterprise extension project saying that he understood the compassion about the project and the TPO was willing to listen to each comment however the TPO board was not in charge of the project. He urged the audience to send their comments concerning the project to the FDOT: I-75 Master Plan and the Florida Turnpike Office. Contact information for the project managers was provided at the entrance of the meeting.

Ms. Bryant gave apologies to the board and audience that she had to leave the meeting at 5:03pm to prepare for a speaking engagement. Before leaving Ms. Bryant gave a comment that the toll road project had been discussed at the Marion County Board of County Commissioners meeting at that everyone knew her stance on the project.

The following members of the public gave comments to the TPO Board in opposition to the Florida Turnpike Enterprise extension project.

Jazmon Lovenguth, 14051 SE 8<sup>th</sup> Street, Williston, FL 32696

Nancy Reich, 9801 Unit C SW 8<sup>th</sup> Terrace, Ocala, FL 34481 *(on behalf of Charles Lee of the Audubon Society)*

Jo Harder, 7791 SE 128<sup>th</sup> Terrace, Morriston, FL 32668

Thor Siegfried, 18337 SW 102<sup>nd</sup> Street Road, Dunnellon, FL 34432

Lynnda Butler, 12820 SW 48<sup>th</sup> Lane Road, Ocala, FL 34481

Annette Stuzman, 204 SW 192<sup>nd</sup> Court, Dunnellon, FL 34431

Martin Williams, 7951 SE 196<sup>th</sup> Ave, Morriston, FL 32668

Ash Marwah, 534 Thistledown Way, The Villages, FL 32162

Stephen Day, 5185 NW 21<sup>st</sup> Loop, Ocala, FL 34482

Mr. Michael McCammon, local operations engineer with FDOT gave a comment that the FDOT District 5 liaisons to the Ocala Marion TPO that were present at the board meeting and left out early were not representatives of the Turnpike and were a part of District 5 that oversaw District 5 counties and did not have any involvement with the project. He explained that the referenced project was a Turnpike project and that District 5 would have no impact on the project.

Chairman Bethea thanked the audience for attending the TPO meeting and giving comments and reiterated that contact information for the project managers had been provided and urged the audience again to share their comments with the accurate contacts.

Ms. Stone gave a comment that Senate Bill 100 was really educational for everyone to read and it did tell exactly what the Turnpike authority was charged to do. The study had to go forward according to the Senate Bill 100 which made it law. She said that the study was a law and that no letter could stop the law in the State of Florida. She again urged everyone to read Senate Bill 100. She also asked that the letter that Marion County provided be reviewed along with Senate Bill 100 to see the protections that were there and it had been asked not to go through neighborhoods.

Ms. Stone also said that all would be done as possible to protect neighborhoods and wanted to make sure Marion County had influence “if” the road was to be approved. However, there was no approved road and only a study was being conducted at the time. She said when there was a reason to fight there would be a fight that would take place “if” there was a reason to but reiterated that the study had to take place because it was a law and no letter would change the law. She thanked everyone for coming to the meeting and urged everyone to get educated about the process.

Mr. Balmes mentioned that Mr. Jared Purdue gave an update that a Masterplan was being conducted for I-75 from the Turnpike north into Alachua County and a public process was planned to be conducted over the summer and the TPO would share the information.

Approved –

Mayor White gave a comment on the misunderstanding of the representation of FDOT at the board meeting saying that there would be no way for the audience to distinguish if the FDOT representatives that attended the board meeting had nothing to do with the project when it had been said that the project was not a local project but a state project and he was also surprised when the FDOT representatives left. He also mentioned that looking at the FDOT schedule that was published there was no opportunity to publicly speak to FDOT and that people wanted an audience with FDOT. He also said it had appeared that FDOT would have chosen a road before a public opportunity to speak was given.

Mayor White said he understood the frustrations and that he would appreciate the opportunity to give his opinion to FDOT in a public forum. He said when the kick-off studies were given in Hernando and Chiefland that the people were told to fill out a card and they are now being told the same thing. He said that he could appreciate the emotions in the audience.

### **Item 12. Adjournment**

The meeting was adjourned by Chairman Bethea at 5:29pm.

Respectfully Submitted By:

Shakayla Irby, Administrative Assistant

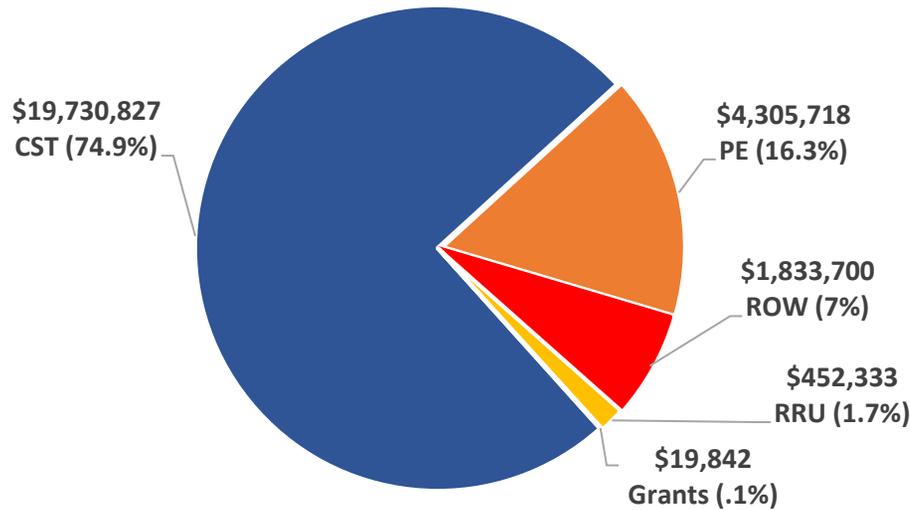
Annual Listing of Federally Obligated Projects - Marion County  
Federal Fiscal Year (FFY) 2021  
October 1, 2020 - September 30, 2021

| <b>FM NUMBER</b> | <b>PROJECT AND DESCRIPTION</b>  | <b>PHASE</b> | <b>LENGTH</b> | <b>FFY 2021 TOTAL</b> |
|------------------|---|--------------|---------------|-----------------------|
| 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 GAINESVILLE RD) | CST          | 0.2           | \$579,508             |
| 435660 2         | SR 326 FROM SR 326 RXR CROSS 627142B TO E OF CR 25A (NW GAINESVILLE RD) | RRU          | 0.2           | \$92,262              |
| 435660 2         | SR 326 FROM SR 326 RXR CROSS 627142B TO E OF CR 25A (NW GAINESVILLE RD) | PE           | 0.2           | \$27,039              |
| 435660 2         | SR 326 FROM SR 326 RXR CROSS 627142B TO E OF CR 25A (NW GAINESVILLE 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             |
| <b>30 PROJECTS/PROGRAMS</b> |   |        | <b>TOTAL:</b> | <b>\$26,342,420</b> |

**FFY 2021 Federal Obligations by Phase**



**Phase Code:**

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



## Ocala Marion County TPO List of Priority Projects (LOPP) Guidance Scope of Services

### **Introduction**

On an annual basis, the Ocala/Marion Transportation Planning Organization (TPO) works collaboratively with the cities of Belleview, Dunnellon, Ocala, Marion County and the Florida Department of Transportation to develop a List of Priority Projects (LOPP). The LOPP is 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 is a requirement per Florida Statute (339.175) to be managed and developed by each of the 27 TPO/MPO's in the state.

### **Purpose**

The purpose of this task order is for Kimley-Horn and Associates (Consultant) to support the TPO in the development of a revised LOPP process. The specific activities in this scope of services includes:

- LOPP Policy and Procedures Guidance
- Revised LOPP Ranking Methodology
- Revised LOPP Project List Templates

These activities are being conducted to aid the TPO with annual implementation of the LOPP process. This work does not include solicitation of projects or development of the actual 2022 LOPP. This task order will involve collaboration with the TPO's Technical Advisory Committee (TAC), Citizens Advisory Committee (CAC) and other local technical partners. The task order also includes delivering presentations at the TPOs' TAC, CAC and Board meetings. The task is identified in the TPO's Fiscal Years 2020/2021 to 2021/2022 Unified Planning Work Program (UPWP) Task 4, Table 4B on page 24.

### **Services**

#### **Task 1: Project Management**

The following will be completed as part of this task:

- Management of task, budget, invoicing, deliverables.
- Coordination between the TPO Project Manager and Consultant Project Manager to maintain schedule, deliverables and participation in virtual conference call meetings, as needed.

## **Task 2: LOPP Policy and Procedures Guidance**

The Consultant will develop a Policy and Procedures Guidance document to define a consistent process and provide clear direction to local government sponsors regarding submission of projects during annual LOPP solicitations. To obtain feedback for development of this Guidance and the deliverables under Tasks 3 and 4, the Consultant will coordinate and facilitate a Work Group Meeting to include staff representatives from Marion County, City of Ocala, City of Belleview, and City of Dunnellon. TPO staff will provide information, direction, and local contacts as needed to support this task. The Guidance will also be developed with consideration of District Five (Florida Department of Transportation) input and guidance regarding the most effective approach to prepare projects for intake and successful programming.

### **Deliverables**

- Draft Policy and Procedures Guidance – Narrative document (MS Word and PDF formats)
- Final Policy and Procedures Guidance – Narrative document (MS Word and PDF formats)
- Work Group Meeting Summary (MS Word format)

## **Task 3: LOPP Ranking Methodology**

The Consultant will develop a revised LOPP Ranking Methodology that is consistent with criteria identified in s. 339.175(8)(b), F.S. and reflects input from TPO staff, the Work Group meeting held under Task 2, and the TAC and CAC. The Ranking Methodology will be developed with the goal of maximizing the effectiveness of the LOPP to advance Long Range Transportation Plan objectives and improve transportation performance in the TPO area. TPO staff will provide information and direction as needed to support this task.

### **Deliverables**

- Draft Ranking Methodology – Narrative description (MS Word format) and scoring spreadsheet templates (MS Excel format)
- Final Ranking Methodology – Narrative description (MS Word format) and scoring spreadsheet templates (MS Excel format)

## **Task 4: LOPP Project List Templates**

The Consultant will develop revised LOPP Project List Templates that reflect input from TPO staff, the Work Group meeting held under Task 2, and the TAC and CAC. The Project List Templates will be developed with particular consideration of input provided by District Five (Florida Department of Transportation) regarding the most effective approach to position projects for intake and successful programming.

## Deliverables

- Draft Project List Templates – Narrative (Word) and scoring spreadsheet templates (Excel)
- Final Project List Templates – Narrative (Word) and scoring spreadsheet templates (Excel)

## **Task 5: TAC, CAC, Board Presentations**

The Consultant will develop and deliver presentations to the TPO Board, TAC, and CAC as defined below. The presentations will be developed in coordination with the TPO Project Manager. The Consultant will provide final presentation slides to the TPO to ensure sufficient time for inclusion in meeting agenda packets:

- TAC, CAC
  - March: Presentation on the concept to develop LOPP Guidance, a revised Ranking Methodology, and new Project List Templates. This will include an update on feedback from the February Work Group Meeting and a request for feedback from TAC and CAC members.
  - April: For Approval - Presentation on the LOPP Guidance, revised Ranking Methodology, and revised Project List Templates
- TPO Board
  - April: For Approval - Presentation on the LOPP Guidance, revised Ranking Methodology, and revised Project List Templates

## Deliverables

- March TAC/CAC Presentation (MS PowerPoint format)
- April TAC/CAC Presentation (MS PowerPoint format)
- April TPO Board Presentation (MS PowerPoint format)

## **Responsibilities**

The Consultant will be responsible for implementation of this full scope of work including development and timely submission of all deliverables. TPO staff will be responsible for:

- Project Management with Consultant
- Information and contacts support
- Review of all draft and final deliverables in a timely manner
- Meeting and agenda coordination for Work Group (Task 2), TAC, CAC and TPO Board
- Review of presentations and support to Consultant for meeting set-up

## **Time of Completion**

The project will begin on January 26, 2022 and be completed by May 6, 2022. Deliverables will be submitted per the following schedule:

| <b>Deliverable</b>  | <b>Date</b>                          |
|---|--------------------------------------|
| Work Group Meeting  | Target to hold no later than 2/18/21 |
| Work Group Meeting Summary  | Submit by 2/23/21                    |
| Draft Policy and Procedures Guidance (with placeholders for forthcoming Ranking Methodology and Project List Template language) | Submit by 2/25/21                    |
| March TAC/CAC Presentation for 3/8/21   | Submit final slides by 3/1/21        |
| Draft Ranking Methodology   | Submit by 3/15/21                    |
| Draft Project List Templates  | Submit by 3/22/21                    |
| Final Policy and Procedures Guidance  | Submit by 4/5/21                     |
| Final Ranking Methodology   | Submit by 4/5/21                     |
| Final Project List Templates  | Submit by 4/5/21                     |
| April TAC/CAC Presentation for 4/12/21  | Submit final slides by 4/5/21        |
| Final Guidance, Methodology, Templates revised per TAC/CAC comments (if applicable)   | Submit by 4/19/21                    |
| April TPO Board Presentation for 4/26/21  | Submit final slides by 4/19/21       |
| Final Guidance, Methodology, Templates revised per Board comments (if applicable)   | Submit by 5/3/21                     |

Any changes that are made to the project schedule will be agreed upon by both parties, including the Consultant and TPO staff.

## **Deliverables to be provided by the Consultant**

All deliverables defined under the tasks above will be provided, along with any corresponding files, in electronic format to the TPO Project Manager.

## **Budget**

The Consultant will perform the above-described tasks for the lump sum fee of \$30,470.

Invoices will be processed monthly by the Consultant based on the percent of work completed for each task. A fee sheet is included with this Scope that outlines the Consultant hours and associated cost estimates for services by task.

DRAFT

## 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**



## TPO FINANCIAL SNAPSHOT

### SECOND QUARTER

FY 21/22 (Oct. 1, 2021 to Dec. 31, 2021)

| Grant                       | Funds Available       | Funds Expended from July 1, 2020 thru Dec. 31, 2021 | Funds Remaining     | Percent Remaining |
|-----------------------------|-----------------------|---|---------------------|-------------------|
| <b>*PL 112</b>              | \$1,286,332.00        | \$598,639.30  | \$687,692.70        | 53%               |
| <b>***5305d</b>             | \$203,038.21          | \$99,986.86   | \$103,051.35        | 51%               |
| <b>**Non-Eligible Funds</b> | \$3,500.00            | \$845.99  | \$2,654.01          | 76%               |
| <b>TD</b>                   | \$27,523.00           | \$6,852.10  | \$20,670.90         | 75%               |
| <b>TOTALS</b>               | <b>\$1,520,393.21</b> | <b>\$706,324.25</b>                                 | <b>\$814,068.96</b> | <b>54%</b>        |

*\*PL Funds are allocated to the TPO in four installments over the 2-year UPWP period (July 1, 2020 to June 30, 2022) Funds reflect 2-year period*

*\*\* Funds not eligible to be paid with Federal Funds (membership dues, nameplates). These funds are currently provided by Marion County.*

*\*\*\* Local Match Funds in the amount of \$4,239.81 utilized on behalf of the TPO.*

### QUARTER 2 - EXPENDED FUNDS BREAKDOWN

|                           |                     |
|---------------------------|---------------------|
| Salaries                  | \$69,113.41         |
| Office Expenses & Travel* | \$1,238.47          |
| Cost Allocation           | \$15,053.01         |
| Website                   | \$1,005.00          |
| Computers & Software      | \$1,306.74          |
| Non Eligible Funds        | \$99.00             |
| Consultants               | \$15,469.05         |
| <b>Total</b>              | <b>\$103,284.68</b> |

*\*Office Expenses include advertising, copier contract, postage, and supplies*

### THIRD QUARTER EXPENSE ESTIMATE (Jan. 1, 2022 - March 31, 2022)

|                           |                     |
|---------------------------|---------------------|
| Salaries                  | \$75,000.00         |
| Office Expenses & Travel* | \$2,000.00          |
| Cost Allocation           | \$15,516.00         |
| Website                   | \$1,005.00          |
| Computers & Software      | \$2,000.00          |
| Consultants**             | \$80,000.00         |
| <b>Total</b>              | <b>\$175,521.00</b> |

*\*Office Expenses include advertising, copier contract, postage, and supplies*

*\*\*Consultants for the Long-Range Transportation Plan, Congestion Management Plan, Safety Plan, and Others*

### BUDGET TRACKER

|                                   |                     |
|-----------------------------------|---------------------|
| Total Revenue                     | \$1,520,393.21      |
| Funds Expended thru Dec. 31, 2021 | \$706,324.25        |
| <b>Total Revenue Remaining</b>    | <b>\$814,068.96</b> |



**TO: TPO Board Members**

**RE: Director Travel Reimbursement Approval**

---

TPO Director Rob Balmes travel reimbursement request for \$355.17, per TPO Travel Policy and current U.S. General Services Administration (GSA) rates.

1. January 24, 2022  
FDOT-TPO Meeting  
DeLand, FL  
Travel Reimbursement Requested: \$69.03
  
2. January 27, 2022  
Florida MPOAC Meetings  
Orlando, FL  
Travel Reimbursement Requested: \$103.19
  
3. February 2, 2022  
FDOT-TPO Joint Certification Meeting  
DeLand, FL  
Travel Reimbursement Requested: \$69.03
  
4. February 4, 2022  
Central Florida MPO Alliance  
Orlando, FL  
Travel Reimbursement Requested: \$113.92

**Marion County Commission  
Authorization to Incur Travel Request  
for Travel Advance and Prepayment**

Traveler: Robert Balmes Date: January 24, 2022

Employee Number: 11612 Department: \_\_\_\_\_

Travel Destination: DeLand, FL

Purpose: FDOT District Secretary Meeting

Date: January 24, 2022 Time: 11:30 AM of Departure

Date: January 24, 2022 Time: 3:15 PM of Return

**REGISTRATION INFORMATION**

*(Attach Registration Form)*

Account #: BR408549-540101 Registration Check Amount: \_\_\_\_\_

Registration Check Payable To: \_\_\_\_\_

Mail Registration Check To: \_\_\_\_\_

Registration Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: Florida Zip Code: \_\_\_\_\_

Check One:  Mail Registration Check  Traveler to Carry Registration Check  P-Card Purchase

**HOTEL INFORMATION**

Hotel Name: \_\_\_\_\_

Hotel Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: Florida Zip Code: \_\_\_\_\_

Confirmation Number: \_\_\_\_\_

Account Number: \_\_\_\_\_ Hotel Check Amount: \_\_\_\_\_

Check One:  Mail Hotel Check  Traveler to Carry Hotel Check  P-Card Purchase

### TRAVELER'S COST OF TRAVEL

Meals: B \_\_\_\_\_ Per Day x \$6.00  
 L \_\_\_\_\_ Per Day x \$11.00  
 D \_\_\_\_\_ Per Day x \$19.00 Days = \$0.00

County Vehicle Requested? YES  NO  (Gas Card Available)

Mileage Private Vehicle: 118 Miles @ \$ 0.58 <sup>1.585</sup> <sub>GSA</sub> <sub>R.B.</sub> ~~\$68.440~~

Traveler's Total Estimated Expenses ~~\$68.44~~ \$69.03 R.B.

Travel Advance Check Requested? YES  NO  \$69.03 R.B.

Requested Amount of Travel Advance (80% of total estimated expenses) \$0.00

Account #: BR407549-540101

### INFORMATION FOR ADMINISTRATION

#### ESTIMATED COST OF TRAVEL

Registration \_\_\_\_\_

Lodging \_\_\_\_\_

Traveler's Estimated Cost ~~\$68.44~~ \$69.03 R.B.

**Total Estimated Cost of Travel** ~~\$68.44~~ \$69.03 R.B.

TRAVELERS SIGNATURE: [Signature]

DATE: 1/24/22

DEPARTMENT HEAD SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

*Upon return from travel, employees must file Form T-1 including receipts within 5 work days.*

APPROVAL: \_\_\_\_\_  
 Assistant County Administrator

DATE: \_\_\_\_\_

APPROVAL: \_\_\_\_\_  
 Procurement Services

DATE: \_\_\_\_\_

APPROVAL: \_\_\_\_\_  
 County Administrator

DATE: \_\_\_\_\_

Form T1 PAYEE: Robert Balmes

**MARION COUNTY**  
VOUCHER FOR REIMBURSEMENT  
OF TRAVELING EXPENSES

EMPLOYEE ID #: 11612 ACCOUNT CODE: BR408549-540101

Department: TPO

| Date      | Travel Performed From Point of Origin To Destination | Purpose or Reason (Name of Conference) | Hour of Departure and Hour of Return | Meals | Map Mileage Claimed | Vicinity Mileage Claimed | Incidental Expenses |      |
|-----------|--|--|--------------------------------------|-------|---------------------|--------------------------|---------------------|------|
|           |  |  |                                      |       |                     |                          | Amount              | Type |
| 1/24/2022 | Ocala to DeLand                                      | FDOT District 5 Secretary Meeting      | 11:30 AM                             |       | 59                  |                          |                     |      |
| 1/24/2022 | DeLand to Ocala                                      | FDOT District 5 Secretary Meeting      | 3:15 PM                              |       | 59                  |                          |                     |      |
|           |  |  |                                      |       |                     |                          |                     |      |
|           |  |  |                                      |       |                     |                          |                     |      |
|           |  |  |                                      |       |                     |                          |                     |      |
|           |  |  |                                      |       |                     |                          |                     |      |
|           |  |  |                                      |       |                     |                          |                     |      |
|           |  |  |                                      |       |                     |                          |                     |      |
|           |  |  |                                      |       |                     |                          |                     |      |
|           |  |  |                                      |       |                     |                          |                     |      |
|           |  |  |                                      |       |                     |                          |                     |      |
|           |  |  |                                      |       |                     |                          |                     |      |
|           |  |  |                                      |       |                     |                          |                     |      |
|           |  |  |                                      |       |                     |                          |                     |      |

I certify or affirm that the above expenses were actually incurred by me as necessary traveling expenses in the performance of my official duties; attendance at a conference or convention was directly related to official duties of Marion County; any meals or lodging included in a conference or convention registration fee have been deducted from this travel claim; and that this claim is true and correct in every material matter and same conforms in every respect with the requirement of Section 112.061, Florida Statutes, and Marion County Travel Policy.

|                    |            |  |                    |
|--------------------|------------|--|--------------------|
| 118                | # Miles    |  |                    |
| <del>0.58</del>    | @ Per Mile |  |                    |
| <del>\$68.44</del> |            |  | TOTAL              |
|                    |            |  | <del>\$68.44</del> |

Payee Signature: 

Date Prepared: 1/25/2022

Less Advance Received. \$69.03 RB. RB, \$69.03

Pursuant to Section 112.061(3)(a), Florida Statutes, I hereby certify or affirm that to the best of my knowledge, the above travel was on official business of Marion County and was performed for the purposed(s) stated above.

Less Class "C" Travel Meals. RB \$69.03

**Net Amount Due** \$68.44

Department Head Signature: \_\_\_\_\_

Date Signed: \_\_\_\_\_ Title: \_\_\_\_\_

Administration Approved By: \_\_\_\_\_

Date Signed: \_\_\_\_\_ Title: \_\_\_\_\_

Procurement Signature: \_\_\_\_\_

Date Signed: \_\_\_\_\_ Title: \_\_\_\_\_

Travel Advance

Check # \_\_\_\_\_

Check Date \_\_\_\_\_



## Instructions for Completing the Contractor Travel Form

**Contractor:** Name of the individual who performed travel.

**Contract or PO No.:** Number of the contract or Purchase Order on which work was performed.

**Company:** The consultant's company.

**Company's Address:** City where the consultant's company is located.

**Residence (City):** City where the consultant resides.

**Contact Person:** Person to notify for inquiries related to the travel voucher.

**Telephone No:** The telephone number of the contact person.

**E-Mail Address:** E-Mail address of the contact person.

**Date:** (MM/DD/YYYY) Dates of actual travel.

**Travel Performed From Point of Origin to Destination:** Departing location to the city or town of where business will commence. List each location. NO ABBREVIATIONS.

**Purpose or Reason for Travel:** Give reason for travel. Specify name of conference, convention, seminar, training, etc. NO ABBREVIATIONS and NO ACRONYMS

**Hour of Departure and Return:** Actual time of departure and return. Must state A.M or P.M

**Class A & B Meal Allowance:** Itemize daily using the appropriate meal allowance: \$6 for breakfast, \$11 for lunch, and \$19 dinner per F.S. 112.061. Deduct any meals included in a registration fee paid by DOT.

**Per Diem/Actual Lodging:** Itemize daily. For per diem use the rate of \$80 per day prorated on a quarterly basis. When calculating per diem Class A travel day starts at midnight and Class B travel day begins at the time of departure. For actual lodging use single occupancy rate including taxes.

**Map Mileage:** Point to point mileage calculated from the Official Department of Transportation map (in-state) available on the Internet at <http://www3.dot.state.fl.us/mileage>.

**Vicinity Mileage:** Mileage other than map mileage incurred within headquarters or destination.

**Incidental Expenses:** List the amount and the type of charge being charged (do not itemize daily).

**Column Total:** Total cost for class A & B meal allowance.

**Column Total:** Total cost for Per Diem/Actual Lodging.

**Total Miles:** Total of map and vicinity mileage at \$0.445 per mile.

**Column Total:** Total cost of incidental expenses.

**Summary Total:** Total cost to the Department of Transportation.

**Contractor:** Individual who performed the travel.

**Date:** Date the travel form was prepared.

**Job Title:** Job title of the traveler.

**Contractor's Supervisor:** Traveler's supervisor.

**Date:** Date the authorized official approved/signed the travel form.

**Typed or Printed Name:** Typed or printed name of the authorized official.

**Title:** Job title of the authorized official.

**Justification/Explanation:** Explain any unusual claims for reimbursement.

**Other Personnel in Party:** List the names of other personnel traveling with you.

### Meal Allowances and Travel Status are as follows:

Refer to Disbursement Handbook, Section 112.061, F.S. and Chapter 69I-42 F.A.C. and Department of Financial Services for complete instructions.

**CLASS A TRAVEL STATUS** - Continuous travel of 24 hours or more away from official headquarters.

**CLASS B TRAVEL STATUS** - Continuous travel of less than 24 hours requiring overnight absence from official headquarters.

### MAXIMUM ALLOWANCES FOR MEALS AS FOLLOWS:

**BREAKFAST** \$6.00 - When travel begins *before* 6 a.m. and extends *beyond* 8 a.m.

**LUNCH** \$11.00 - When travel *begins* before 12 noon and extends *beyond* 2 p.m.

**DINNER** \$19.00 - When travel *begins* before 6 p.m. and extends *beyond* 8 p.m., or when travel occurs during nighttime hours due to special assignment.

(NOTE: No allowance shall be made for meals when travel is confined to the city or town of official headquarters or immediate vicinity.)

**Marion County Commission  
Authorization to Incur Travel Request  
for Travel Advance and Prepayment**

Traveler: Robert Balmes Date: January 27, 2022

Employee Number: 11612 Department: \_\_\_\_\_

Travel Destination: Orlando, FL

Purpose: MPOAC Meetings

Date: January 27, 2022 Time: 7:00 AM of Departure

Date: January 27, 2022 Time: 6:00 PM of Return

**REGISTRATION INFORMATION**

*(Attach Registration Form)*

Account #: BR408549-540101 Registration Check Amount: \_\_\_\_\_

Registration Check Payable To: \_\_\_\_\_

Mail Registration Check To: \_\_\_\_\_

Registration Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: Florida Zip Code: \_\_\_\_\_

Check One:  Mail Registration Check  Traveler to Carry Registration Check  P-Card Purchase

**HOTEL INFORMATION**

Hotel Name: \_\_\_\_\_

Hotel Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: Florida Zip Code: \_\_\_\_\_

Confirmation Number: \_\_\_\_\_

Account Number: \_\_\_\_\_ Hotel Check Amount: \_\_\_\_\_

Check One:  Mail Hotel Check  Traveler to Carry Hotel Check  P-Card Purchase

### TRAVELER'S COST OF TRAVEL

Meals: B \_\_\_\_\_ Per Day x \$6.00  
 L \_\_\_\_\_ Per Day x \$11.00  
 D \_\_\_\_\_ Per Day x \$19.00 Days = \$0.00

County Vehicle Requested? YES  NO  (Gas Card Available)

Mileage Private Vehicle: 170 Miles @ \$ 0.58 <sup>.585</sup> <sub>GSA RB.</sub>

*RB \$99.45*  
~~\$98.60~~  
~~\$98.60~~  
*RB \$99.95*

Traveler's Total Estimated Expenses

Travel Advance Check Requested? YES  NO

Requested Amount of Travel Advance (80% of total estimated expenses) \$0.00

Account #: BR407549-540101

### INFORMATION FOR ADMINISTRATION

#### ESTIMATED COST OF TRAVEL

Registration \_\_\_\_\_

Lodging \_\_\_\_\_

Traveler's Estimated Cost ~~\$98.60~~ *\$99.45 RB*

**Total Estimated Cost of Travel** ~~\$98.60~~ *\$99.45 RB*

TRAVELERS SIGNATURE: *[Signature]*

DATE: *1/27/22*

DEPARTMENT HEAD SIGNATURE: \_\_\_\_\_

DATE: \_\_\_\_\_

*Upon return from travel, employees must file Form T-1 including receipts within 5 work days.*

APPROVAL: \_\_\_\_\_  
 Assistant County Administrator

DATE: \_\_\_\_\_

APPROVAL: \_\_\_\_\_  
 Procurement Services

DATE: \_\_\_\_\_

APPROVAL: \_\_\_\_\_  
 County Administrator

DATE: \_\_\_\_\_

Form T1  
**MARION COUNTY**  
 VOUCHER FOR REIMBURSEMENT  
 OF TRAVELING EXPENSES

PAYEE: Robert Balmes  
 EMPLOYEE ID #: 11612 ACCOUNT CODE: BR408549-540101  
 Department: TPO

| Date      | Travel Performed From Point of Origin To Destination | Purpose or Reason (Name of Conference) | Hour of Departure and Hour of Return | Meals | Map Mileage Claimed | Vicinity Mileage Claimed | Incidental Expenses |       |
|-----------|--|--|--------------------------------------|-------|---------------------|--------------------------|---------------------|-------|
|           |  |  |                                      |       |                     |                          | Amount              | Type  |
| 1/27/2022 | Ocala to Orlando                                     | MPOAC Meetings                         | 7:00 AM                              |       | 85                  |                          | \$3.74              | Tolls |
| 1/27/2022 | Orlandoto Ocala                                      | MPOAC Meetings                         | 6:00 PM                              |       | 85                  |                          |                     |       |
|           |  |  |                                      |       |                     |                          |                     |       |
|           |  |  |                                      |       |                     |                          |                     |       |
|           |  |  |                                      |       |                     |                          |                     |       |
|           |  |  |                                      |       |                     |                          |                     |       |
|           |  |  |                                      |       |                     |                          |                     |       |
|           |  |  |                                      |       |                     |                          |                     |       |
|           |  |  |                                      |       |                     |                          |                     |       |
|           |  |  |                                      |       |                     |                          |                     |       |
|           |  |  |                                      |       |                     |                          |                     |       |
|           |  |  |                                      |       |                     |                          |                     |       |
|           |  |  |                                      |       |                     |                          |                     |       |

I certify or affirm that the above expenses were actually incurred by me as necessary traveling expenses in the performance of my official duties; attendance at a conference or convention was directly related to official duties of Marion County; any meals or lodging included in a conference or convention registration fee have been deducted from this travel claim; and that this claim is true and correct in every material matter and same conforms in every respect with the requirement of Section 112.061, Florida Statutes, and Marion County Travel Policy.

|                |            |        |                       |
|----------------|------------|--------|-----------------------|
| 170            | # Miles    |        |                       |
| <i>0.58</i>    | @ Per Mile |        |                       |
| <i>.585</i>    |            |        |                       |
| <i>\$98.60</i> |            | \$3.74 | TOTAL <i>\$102.34</i> |

Payee Signature: *Robert Balmes*  
 Date Prepared: 2/9/2022

Less Advance Received. *Nil \$103.19*

Pursuant to Section 112.061(3)(a), Florida Statutes, I hereby certify or affirm that to the best of my knowledge, the above travel was on official business of Marion County and was performed for the purposed(s) stated above.

Less Class "C" Travel Meals. *Nil \$103.19*  
**Net Amount Due** **\$102.34**

Department Head Signature: \_\_\_\_\_  
 Date Signed: \_\_\_\_\_ Title: \_\_\_\_\_  
 Administration Approved By: \_\_\_\_\_  
 Date Signed: \_\_\_\_\_ Title: \_\_\_\_\_  
 Procurement Signature: \_\_\_\_\_  
 Date Signed: \_\_\_\_\_ Title: \_\_\_\_\_

Travel Advance  
 Check # \_\_\_\_\_  
 Check Date \_\_\_\_\_

**CONTRACTOR TRAVEL FORM**

|  |   |                                     |
|--|---|-------------------------------------|
| Contractor <u>Robert Balmes</u>              | Contract or PO # _____                              | Contact Person <u>Rob Balmes</u>    |
| Company <u>Ocala/Marion TPO</u>              | Company's Address <u>2710 E. Silver Spgs. Blvd.</u> | Telephone No. <u>(352) 438-2634</u> |
| Residence (City) <u>Ocala, Florida 34470</u> | _____   | E-Mail Address _____                |

| DATE      | TRAVEL PERFORMED FROM POINT OF ORIGIN TO DESTINATION | PURPOSE OR REASON FOR TRAVEL (NAME OF CONFERENCE OR CONVENTION) | HOUR OF DEPARTURE and RETURN | CLASS A & B MEAL ALLOWANCE | PER DIEM/ ACTUAL LODGING | MAP MILEAGE | VICINITY MILEAGE | INCIDENTAL EXPENSES |       |
|-----------|--|---|------------------------------|----------------------------|--------------------------|-------------|------------------|---------------------|-------|
|           |  |   |                              |                            |                          |             |                  | AMOUNT              | TYPE  |
| 1/27/2022 | Ocala to Orlando                                     | MPOAC Meetings  | 7:00 AM                      |                            |                          | 85          |                  | \$3.74              | Tolls |
| 1/22/2022 | Orlando to Ocala                                     | MPOAC Meetings  | 6:00 PM                      |                            |                          | 85          |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |
|           |  |   |                              |                            |                          |             |                  |                     |       |

**SIGNATURES**  
I hereby certify or affirm that the above expenses were actually incurred by me as necessary traveling expenses in the performance of my official duties; attendance at a conference or convention was directly related to my official duties of the agency or contract/PO; any meals or lodging included in a registration fee have been deducted from this travel claim; and that this claim is true and correct in every material matter and conforms in every respect with the requirements of Section 112.061, Florida Statutes, Chapter 69I-42 F.A.C., Department of Banking and Finance Bureau of Auditing Handbook, Department of Transportation Disbursement Handbook and the terms of the contract.

CONTRACTOR:  DATE: 2/9/2022

JOB TITLE: Tpo Director

Pursuant to Section (3)(a), Florida Statutes and the terms of the Contract, I hereby certify or affirm that to the best of my knowledge the above consultant was on official business for the State of Florida and the travel was performed for the purpose(s) stated above.

CONTRACTOR'S SUPERVISOR: \_\_\_\_\_ DATE: \_\_\_\_\_

TYPED or printed NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

|                                 |              |                                |              |                 |
|---------------------------------|--------------|--------------------------------|--------------|-----------------|
| COLUMN TOTAL                    | COLUMN TOTAL | TOTAL MILES <u>170</u>         | COLUMN TOTAL | SUMMARY TOTAL   |
|                                 |              | <u>GAX @ \$0.445 = \$75.65</u> | \$3.74       | \$79.39         |
| JUSTIFICATION/EXPLANATION       |              | <u>\$99.45</u>                 |              | <u>\$103.19</u> |
|                                 |              | <u>M.B.</u>                    |              | <u>M.B.</u>     |
| <b>OTHER PERSONNEL IN PARTY</b> |              |                                |              |                 |
|                                 |              |                                |              |                 |

## Instructions for Completing the Contractor Travel Form

**Contractor:** Name of the individual who performed travel.

**Contract or PO No.:** Number of the contract or Purchase Order on which work was performed.

**Company:** The consultant's company.

**Company's Address:** City where the consultant's company is located.

**Residence (City):** City where the consultant resides.

**Contact Person:** Person to notify for inquiries related to the travel voucher.

**Telephone No.:** The telephone number of the contact person.

**E-Mail Address:** E-Mail address of the contact person.

**Date:** (MM/DD/YYYY) Dates of actual travel.

**Travel Performed From Point of Origin to Destination:** Departing location to the city or town of where business will commence. List each location. NO ABBREVIATIONS.

**Purpose or Reason for Travel:** Give reason for travel. Specify name of conference, convention, seminar, training, etc. NO ABBREVIATIONS and NO ACRONYMS

**Hour of Departure and Return:** Actual time of departure and return. Must state A.M or P.M

**Class A & B Meal Allowance:** Itemize daily using the appropriate meal allowance: \$6 for breakfast, \$11 for lunch, and \$19 dinner per F.S. 112.061. Deduct any meals included in a registration fee paid by DOT.

**Per Diem/Actual Lodging:** Itemize daily. For per diem use the rate of \$80 per day prorated on a quarterly basis. When calculating per diem Class A travel day starts at midnight and Class B travel day begins at the time of departure. For actual lodging use single occupancy rate including taxes.

**Map Mileage:** Point to point mileage calculated from the Official Department of Transportation map (in-state) available on the Internet at <http://www3.dot.state.fl.us/mileage>.

**Vicinity Mileage:** Mileage other than map mileage incurred within headquarters or destination.

**Incidental Expenses:** List the amount and the type of charge being charged (do not itemize daily).

**Column Total:** Total cost for class A & B meal allowance.

**Column Total:** Total cost for Per Diem/Actual Lodging.

**Total Miles:** Total of map and vicinity mileage at \$0.445 per mile.

**Column Total:** Total cost of incidental expenses.

**Summary Total:** Total cost to the Department of Transportation.

**Contractor:** Individual who performed the travel.

**Date:** Date the travel form was prepared.

**Job Title:** Job title of the traveler.

**Contractor's Supervisor:** Traveler's supervisor.

**Date:** Date the authorized official approved/signed the travel form.

**Typed or Printed Name:** Typed or printed name of the authorized official.

**Title:** Job title of the authorized official.

**Justification/Explanation:** Explain any unusual claims for reimbursement.

**Other Personnel in Party:** List the names of other personnel traveling with you.

### Meal Allowances and Travel Status are as follows:

Refer to Disbursement Handbook, Section 112.061, F.S. and Chapter 69I-42 F.A.C. and Department of Financial Services for complete instructions.

**CLASS A TRAVEL STATUS** - Continuous travel of 24 hours or more away from official headquarters.

**CLASS B TRAVEL STATUS** - Continuous travel of less than 24 hours requiring overnight absence from official headquarters.

### MAXIMUM ALLOWANCES FOR MEALS AS FOLLOWS:

**BREAKFAST** \$6.00 - When travel begins *before* 6 a.m. and extends *beyond* 8 a.m.

**LUNCH** \$11.00 - When travel *begins* before 12 noon and extends *beyond* 2 p.m.

**DINNER** \$19.00 - When travel *begins* before 6 p.m. and extends *beyond* 8 p.m., or when travel occurs during nighttime hours due to special assignment.

(NOTE: No allowance shall be made for meals when travel is confined to the city or town of official headquarters or immediate vicinity.)

**Marion County Commission  
Authorization to Incur Travel Request  
for Travel Advance and Prepayment**

Traveler: Robert Balmes Date: February 1, 2022

Employee Number: 11612 Department: \_\_\_\_\_

Travel Destination: DeLand, FL

Purpose: FDOT/TPO Certification Meeting

Date: February 2, 2022 Time: 9:45 AM of Departure

Date: February 2, 2022 Time: 1:45 PM of Return

**REGISTRATION INFORMATION**

*(Attach Registration Form)*

Account #: BR408549-540101 Registration Check Amount: Registration

Check Payable To: \_\_\_\_\_

Mail Registration Check To: \_\_\_\_\_

Registration Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: Florida Zip Code: \_\_\_\_\_

Check One:  Mail Registration Check  Traveler to Carry Registration Check  P-Card Purchase

**HOTEL INFORMATION**

Hotel Name: \_\_\_\_\_

Hotel Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: Florida Zip Code: \_\_\_\_\_

Confirmation Number: \_\_\_\_\_

Account Number: \_\_\_\_\_ Hotel Check Amount: \_\_\_\_\_

Check One:  Mail Hotel Check  Traveler to Carry Hotel Check  P-Card Purchase

**TRAVELER'S COST OF TRAVEL**

Meals: B \_\_\_\_\_ Per Day x \$6.00  
 L \_\_\_\_\_ Per Day x \$11.00  
 D \_\_\_\_\_ Per Day x \$19.00 Days = \$0.00

County Vehicle Requested? YES  NO  (Gas Card Available) NB. \$69.03

Mileage Private Vehicle: 118 Miles @ \$ 0.58 \$68.44  
.585 GSA NB.

Traveler's Total Estimated Expenses \$68.44

Travel Advance Check Requested? YES  NO  ~~\$69.03~~ NB.

Requested Amount of Travel Advance (80% of total estimated expenses) \$0.00

Account #: BR407549-540101

**INFORMATION FOR ADMINISTRATION**

**ESTIMATED COST OF TRAVEL**

Registration \_\_\_\_\_

Lodging \_\_\_\_\_

Traveler's Estimated Cost ~~\$68.44~~ \$69.03 NB.

**Total Estimated Cost of Travel** ~~\$68.44~~ \$69.03 NB.

TRAVELERS SIGNATURE:  DATE: 2/9/22

DEPARTMENT HEAD SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

*Upon return from travel, employees must file Form T-1 including receipts within 5 work days.*

APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_  
 Assistant County Administrator

APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_  
 Procurement Services

APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_  
 County Administrator

Form T1 PAYEE: Robert Balmes

**MARION COUNTY**  
VOUCHER FOR REIMBURSEMENT  
OF TRAVELING EXPENSES

EMPLOYEE ID #: 11612 ACCOUNT CODE: BR408549-540101

Department: TPO

| Date     | Travel Performed From Point of Origin To Destination | Purpose or Reason (Name of Conference) | Hour of Departure and Hour of Return | Meals | Map Mileage Claimed | Vicinity Mileage Claimed | Incidental Expenses |      |
|----------|--|--|--------------------------------------|-------|---------------------|--------------------------|---------------------|------|
|          |  |  |                                      |       |                     |                          | Amount              | Type |
| 2/2/2022 | Ocala to DeLand                                      | FDOT/TPO Certification Meeting         | 9:45 AM                              |       | 59                  |                          |                     |      |
| 2/2/2022 | DeLand to Ocala                                      | FDOT/TPO Certification Meeting         | 1:45 PM                              |       | 59                  |                          |                     |      |
|          |  |  |                                      |       |                     |                          |                     |      |
|          |  |  |                                      |       |                     |                          |                     |      |
|          |  |  |                                      |       |                     |                          |                     |      |
|          |  |  |                                      |       |                     |                          |                     |      |
|          |  |  |                                      |       |                     |                          |                     |      |
|          |  |  |                                      |       |                     |                          |                     |      |
|          |  |  |                                      |       |                     |                          |                     |      |
|          |  |  |                                      |       |                     |                          |                     |      |
|          |  |  |                                      |       |                     |                          |                     |      |
|          |  |  |                                      |       |                     |                          |                     |      |

I certify or affirm that the above expenses were actually incurred by me as necessary traveling expenses in the performance of my official duties; attendance at a conference or convention was directly related to official duties of Marion County; any meals or lodging included in a conference or convention registration fee have been deducted from this travel claim; and that this claim is true and correct in every material matter and same conforms in every respect with the requirement of Section 112.061, Florida Statutes, and Marion County Travel Policy.

Payee Signature:   
 Date Prepared: 2/9/2022

Pursuant to Section 112.061(3)(a), Florida Statutes, I hereby certify or affirm that to the best of my knowledge, the above travel was on official business of Marion County and was performed for the purposed(s) stated above.

Department Head Signature: \_\_\_\_\_  
 Date Signed: \_\_\_\_\_ Title: \_\_\_\_\_  
 Administration Approved By: \_\_\_\_\_  
 Date Signed: \_\_\_\_\_ Title: \_\_\_\_\_  
 Procurement Signature: \_\_\_\_\_  
 Date Signed: \_\_\_\_\_ Title: \_\_\_\_\_

|                              |         |   |
|------------------------------|---------|---|
| 118                          | # Miles |   |
| <u>0.18</u>                  | @ Per   |   |
| <u>5.8569</u>                | Mile    |   |
| <del>\$68.44</del>           |         |   |
| <u>\$69.03 RB.</u>           |         |   |
| Less Advance Received.       |         | <u>RB.</u>                                      |
| Less Class "C" Travel Meals. |         |   |
| <b>Net Amount Due</b>        |         | <u>RB. \$69.03</u><br><u><del>\$68.44</del></u> |
| Travel Advance               |         |   |
| Check #                      | _____   |   |
| Check Date                   | _____   |   |

**CONTRACTOR TRAVEL FORM**

|  |   |   |
|--|---|---|
| Contractor <u>Robert Balmes</u>        | Contract or PO # _____                              | Contact Person <u>Robert Balmes</u>           |
| Company <u>Ocala/Marion TPO</u>        | Company's Address <u>2710 E. Silver Springs Blv</u> | Telephone No. <u>(352) 438-2631</u>           |
| Residence (City) <u>Ocala, Florida</u> | _____   | E-Mail Address <u>rob.balmes@marionfl.org</u> |

| DATE     | TRAVEL PERFORMED FROM POINT OF ORIGIN TO DESTINATION | PURPOSE OR REASON FOR TRAVEL (NAME OF CONFERENCE OR CONVENTION) | HOUR OF DEPARTURE and RETURN | CLASS A & B MEAL ALLOWANCE | PER DIEM/ ACTUAL LODGING | MAP MILEAGE | VICINITY MILEAGE | INCIDENTAL EXPENSES |      |
|----------|--|---|------------------------------|----------------------------|--------------------------|-------------|------------------|---------------------|------|
|          |  |   |                              |                            |                          |             |                  | AMOUNT              | TYPE |
| 2/2/2022 | Ocala to DeLand                                      | FDOT/TPO Certification Meeting                                  | 9:45 AM                      |                            |                          | 59          |                  |                     |      |
| 2/2/2022 | DeLand to Ocala                                      | FDOT/TPO Certification Meeting                                  | 1:45 PM                      |                            |                          | 59          |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |
|          |  |   |                              |                            |                          |             |                  |                     |      |

**SIGNATURES**  
I hereby certify or affirm that the above expenses were actually incurred by me as necessary traveling expenses in the performance of my official duties; attendance at a conference or convention was directly related to my official duties of the agency or contract/PO; any meals or lodging included in a registration fee have been deducted from this travel claim; and that this claim is true and correct in every material matter and conforms in every respect with the requirements of Section 112.061, Florida Statutes, Chapter 69I-42 F.A.C., Department of Banking and Finance Bureau of Auditing Handbook, Department of Transportation Disbursement Handbook and the terms of the contract.

CONTRACTOR:  DATE: 2/9/2022

JOB TITLE: TPO Director

Pursuant to Section (3)(a), Florida Statutes and the terms of the Contract, I hereby certify or affirm that to the best of my knowledge the above consultant was on official business for the State of Florida and the travel was performed for the purpose(s) stated above.

CONTRACTOR'S SUPERVISOR: \_\_\_\_\_ DATE: \_\_\_\_\_

TYPED or printed NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

|                                  |              |              |                            |              |                |
|----------------------------------|--------------|--------------|----------------------------|--------------|----------------|
|                                  | COLUMN TOTAL | COLUMN TOTAL | TOTAL MILES <u>118</u>     | COLUMN TOTAL | SUMMARY TOTAL  |
|                                  |              |              | X @ \$ 0.445 <u>X .585</u> |              | \$52.51        |
|                                  |              |              | <u>\$52.51</u>             |              | <u>\$69.03</u> |
| <b>JUSTIFICATION/EXPLANATION</b> |              |              | <u>\$69.03 RB.</u>         |              | <u>RB.</u>     |
| <b>OTHER PERSONNEL IN PARTY</b>  |              |              |                            |              |                |
|                                  |              |              |                            |              |                |

## Instructions for Completing the Contractor Travel Form

**Contractor:** Name of the individual who performed travel.

**Contract or PO No.:** Number of the contract or Purchase Order on which work was performed.

**Company:** The consultant's company.

**Company's Address:** City where the consultant's company is located.

**Residence (City):** City where the consultant resides.

**Contact Person:** Person to notify for inquiries related to the travel voucher.

**Telephone No:** The telephone number of the contact person.

**E-Mail Address:** E-Mail address of the contact person.

**Date:** (MM/DD/YYYY) Dates of actual travel.

**Travel Performed From Point of Origin to Destination:** Departing location to the city or town of where business will commence. List each location. NO ABBREVIATIONS.

**Purpose or Reason for Travel:** Give reason for travel. Specify name of conference, convention, seminar, training, etc. NO ABBREVIATIONS and NO ACRONYMS

**Hour of Departure and Return:** Actual time of departure and return. Must state A.M or P.M

**Class A & B Meal Allowance:** Itemize daily using the appropriate meal allowance: \$6 for breakfast, \$11 for lunch, and \$19 dinner per F.S. 112.061. Deduct any meals included in a registration fee paid by DOT.

**Per Diem/Actual Lodging:** Itemize daily. For per diem use the rate of \$80 per day prorated on a quarterly basis. When calculating per diem Class A travel day starts at midnight and Class B travel day begins at the time of departure. For actual lodging use single occupancy rate including taxes.

**Map Mileage:** Point to point mileage calculated from the Official Department of Transportation map (in-state) available on the Internet at <http://www3.dot.state.fl.us/mileage>.

**Vicinity Mileage:** Mileage other than map mileage incurred within headquarters or destination.

**Incidental Expenses:** List the amount and the type of charge being charged (do not itemize daily).

**Column Total:** Total cost for class A & B meal allowance.

**Column Total:** Total cost for Per Diem/Actual Lodging.

**Total Miles:** Total of map and vicinity mileage at \$0.445 per mile.

**Column Total:** Total cost of incidental expenses.

**Summary Total:** Total cost to the Department of Transportation.

**Contractor:** Individual who performed the travel.

**Date:** Date the travel form was prepared.

**Job Title:** Job title of the traveler.

**Contractor's Supervisor:** Traveler's supervisor.

**Date:** Date the authorized official approved/signed the travel form.

**Typed or Printed Name:** Typed or printed name of the authorized official.

**Title:** Job title of the authorized official.

**Justification/Explanation:** Explain any unusual claims for reimbursement.

**Other Personnel in Party:** List the names of other personnel traveling with you.

### Meal Allowances and Travel Status are as follows:

Refer to Disbursement Handbook, Section 112.061, F.S. and Chapter 69I-42 F.A.C. and Department of Financial Services for complete instructions.

**CLASS A TRAVEL STATUS** - Continuous travel of 24 hours or more away from official headquarters.

**CLASS B TRAVEL STATUS** - Continuous travel of less than 24 hours requiring overnight absence from official headquarters.

### MAXIMUM ALLOWANCES FOR MEALS AS FOLLOWS:

**BREAKFAST** \$6.00 - When travel begins *before* 6 a.m. and extends *beyond* 8 a.m.

**LUNCH** \$11.00 - When travel begins before 12 noon and extends *beyond* 2 p.m.

**DINNER** \$19.00 - When travel begins before 6 p.m. and extends *beyond* 8 p.m., or when travel occurs during nighttime hours due to special assignment.

(NOTE: No allowance shall be made for meals when travel is confined to the city or town of official headquarters or immediate vicinity.)

**Marion County Commission  
Authorization to Incur Travel Request  
for Travel Advance and Prepayment**

Traveler: Robert Balmes Date: February 3, 2022

Employee Number: 11612 Department: \_\_\_\_\_

Travel Destination: Orlando, FL

Purpose: Central FL MPO Alliance Meeting

Date: February 4, 2022 Time: 8:00 AM of Departure

Date: February 4, 2022 Time: 12:30 PM of Return

**REGISTRATION INFORMATION**

*(Attach Registration Form)*

Account #: BR408549-540101 Registration Check Amount: \_\_\_\_\_

Registration Check Payable To: \_\_\_\_\_

Mail Registration Check To: \_\_\_\_\_

Registration Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: Florida Zip Code: \_\_\_\_\_

Check One:  Mail Registration Check  Traveler to Carry Registration Check  P-Card Purchase

**HOTEL INFORMATION**

Hotel Name: \_\_\_\_\_

Hotel Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: Florida Zip Code: \_\_\_\_\_

Confirmation Number: \_\_\_\_\_

Account Number: \_\_\_\_\_ Hotel Check Amount: \_\_\_\_\_

Check One:  Mail Hotel Check  Traveler to Carry Hotel Check  P-Card Purchase

**TRAVELER'S COST OF TRAVEL**

Meals: B \_\_\_\_\_ Per Day x \$6.00  
 L \_\_\_\_\_ Per Day x \$11.00  
 D \_\_\_\_\_ Per Day x \$19.00 Days = \$0.00

County Vehicle Requested? YES  NO  (Gas Card Available)

Mileage Private Vehicle: 164 Miles @ \$ 0.58 ~~\$95.120~~ <sup>585 GAS AD.</sup> \$95.120

Traveler's Total Estimated Expenses ~~\$95.12~~ \$95.99

Travel Advance Check Requested? YES  NO  \$95.99

Requested Amount of Travel Advance (80% of total estimated expenses) \$0.00

Account #: BR407549-540101

**INFORMATION FOR ADMINISTRATION**

**ESTIMATED COST OF TRAVEL**

Registration \_\_\_\_\_

Lodging \_\_\_\_\_

Traveler's Estimated Cost ~~\$95.12~~ \$95.99

**Total Estimated Cost of Travel** ~~\$95.12~~ \$95.99

TRAVELERS SIGNATURE: [Signature] DATE: 2/3/22

DEPARTMENT HEAD SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

*Upon return from travel, employees must file Form T-1 including receipts within 5 work days.*

APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_  
 Assistant County Administrator

APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_  
 Procurement Services

APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_  
 County Administrator

Form T1 PAYEE: Robert Balmes

**MARION COUNTY**  
VOUCHER FOR REIMBURSEMENT  
OF TRAVELING EXPENSES

EMPLOYEE ID #: 11612 ACCOUNT CODE: BR408549-540101

Department: TRD

| Date     | Travel Performed From Point of Origin To Destination | Purpose or Reason (Name of Conference) | Hour of Departure and Hour of Return | Meals | Map Mileage Claimed | Vicinity Mileage Claimed | Incidental Expenses |         |
|----------|--|--|--------------------------------------|-------|---------------------|--------------------------|---------------------|---------|
|          |  |  |                                      |       |                     |                          | Amount              | Type    |
| 2/4/2022 | Ocala to Orlando                                     | CF MPO Alliance                        | 8:00 AM                              |       | 82                  |                          | \$4.99              | Tolls   |
| 2/4/2022 | Orlandoto Ocala                                      | CF MPO Alliance                        | 12:30 PM                             |       | 82                  |                          | \$4.99              | Tolls   |
|          |  |  |                                      |       |                     |                          | \$8.00              | Parking |
|          |  |  |                                      |       |                     |                          |                     |         |
|          |  |  |                                      |       |                     |                          |                     |         |
|          |  |  |                                      |       |                     |                          |                     |         |
|          |  |  |                                      |       |                     |                          |                     |         |
|          |  |  |                                      |       |                     |                          |                     |         |
|          |  |  |                                      |       |                     |                          |                     |         |
|          |  |  |                                      |       |                     |                          |                     |         |
|          |  |  |                                      |       |                     |                          |                     |         |

I certify or affirm that the above expenses were actually incurred by me as necessary traveling expenses in the performance of my official duties; attendance at a conference or convention was directly related to official duties of Marion County; any meals or lodging included in a conference or convention registration fee have been deducted from this travel claim; and that this claim is true and correct in every material matter and same conforms in every respect with the requirement of Section 112.061, Florida Statutes, and Marion County Travel Policy.

|         |           |         |                |
|---------|-----------|---------|----------------|
| 164     | # Miles   |         |                |
| 0.58    | GSA @ Per |         |                |
| .585    | RB Mile   |         |                |
| \$95.12 |           | \$17.98 | TOTAL \$113.10 |

Payee Signature: 

Date Prepared: 2/9/2022

Less Advance Received. \$95.94 RB \$113.92

Pursuant to Section 112.061(3)(a), Florida Statutes, I hereby certify or affirm that to the best of my knowledge, the above travel was on official business of Marion County and was performed for the purposed(s) stated above.

Less Class "C" Travel Meals. Net \$113.92

Department Head Signature: \_\_\_\_\_

Date Signed: \_\_\_\_\_ Title: \_\_\_\_\_

Administration Approved By: \_\_\_\_\_

Date Signed: \_\_\_\_\_ Title: \_\_\_\_\_

Procurement Signature: \_\_\_\_\_

Date Signed: \_\_\_\_\_ Title: \_\_\_\_\_

**Net Amount Due** \$113.10

Travel Advance

Check # \_\_\_\_\_

Check Date \_\_\_\_\_



## Instructions for Completing the Contractor Travel Form

**Contractor:** Name of the individual who performed travel.

**Contract or PO No.:** Number of the contract or Purchase Order on which work was performed.

**Company:** The consultant's company.

**Company's Address:** City where the consultant's company is located.

**Residence (City):** City where the consultant resides.

**Contact Person:** Person to notify for inquiries related to the travel voucher.

**Telephone No:** The telephone number of the contact person.

**E-Mail Address:** E-Mail address of the contact person.

**Date:** (MM/DD/YYYY) Dates of actual travel.

**Travel Performed From Point of Origin to Destination:** Departing location to the city or town of where business will commence. List each location. NO ABBREVIATIONS.

**Purpose or Reason for Travel:** Give reason for travel. Specify name of conference, convention, seminar, training, etc. NO ABBREVIATIONS and NO ACRONYMS

**Hour of Departure and Return:** Actual time of departure and return. Must state A.M or P.M

**Class A & B Meal Allowance:** Itemize daily using the appropriate meal allowance: \$6 for breakfast, \$11 for lunch, and \$19 dinner per F.S. 112.061. Deduct any meals included in a registration fee paid by DOT.

**Per Diem/Actual Lodging:** Itemize daily. For per diem use the rate of \$80 per day prorated on a quarterly basis. When calculating per diem Class A travel day starts at midnight and Class B travel day begins at the time of departure. For actual lodging use single occupancy rate including taxes.

**Map Mileage:** Point to point mileage calculated from the Official Department of Transportation map (in-state) available on the Internet at <http://www3.dot.state.fl.us/mileage>.

**Vicinity Mileage:** Mileage other than map mileage incurred within headquarters or destination.

**Incidental Expenses:** List the amount and the type of charge being charged (do not itemize daily).

**Column Total:** Total cost for class A & B meal allowance.

**Column Total:** Total cost for Per Diem/Actual Lodging.

**Total Miles:** Total of map and vicinity mileage at \$0.445 per mile.

**Column Total:** Total cost of incidental expenses.

**Summary Total:** Total cost to the Department of Transportation.

**Contractor:** Individual who performed the travel.

**Date:** Date the travel form was prepared.

**Job Title:** Job title of the traveler.

**Contractor's Supervisor:** Traveler's supervisor.

**Date:** Date the authorized official approved/signed the travel form.

**Typed or Printed Name:** Typed or printed name of the authorized official.

**Title:** Job title of the authorized official.

**Justification/Explanation:** Explain any unusual claims for reimbursement.

**Other Personnel in Party:** List the names of other personnel traveling with you.

### Meal Allowances and Travel Status are as follows:

Refer to Disbursement Handbook, Section 112.061, F.S. and Chapter 69I-42 F.A.C. and Department of Financial Services for complete instructions.

**CLASS A TRAVEL STATUS** - Continuous travel of 24 hours or more away from official headquarters.

**CLASS B TRAVEL STATUS** - Continuous travel of less than 24 hours requiring overnight absence from official headquarters.

### MAXIMUM ALLOWANCES FOR MEALS AS FOLLOWS:

**BREAKFAST** \$6.00 - When travel begins *before* 6 a.m. and extends *beyond* 8 a.m.

**LUNCH** \$11.00 - When travel *begins* before 12 noon and extends *beyond* 2 p.m.

**DINNER** \$19.00 - When travel *begins* before 6 p.m. and extends *beyond* 8 p.m., or when travel occurs during nighttime hours due to special assignment.

(NOTE: No allowance shall be made for meals when travel is confined to the city or town of official headquarters or immediate vicinity.)

 An official website of the United States government



# Privately Owned Vehicle (POV) Mileage Reimbursement Rates

*GSA has adjusted all POV mileage reimbursement rates effective January 1, 2022.*

## Questions

Have travel policy questions? Use our ['Have a Question?'](#) site

Find COVID-19 Vaccines Near You

Visit [Vaccines.gov](https://www.vaccines.gov)

Or Call 1-800-232-0233




| Modes of Transportation  | Effective/Applicability Date | Rate per mile |
|--|------------------------------|---------------|
| Airplane*  | January 1, 2022              | \$1.515       |
| If use of privately owned automobile is authorized or if no Government-furnished automobile is available | January 1, 2022              | \$0.585       |
| If Government-furnished automobile is available  | January 1, 2022              | \$0.18        |
| Motorcycle   | January 1, 2022              | \$0.565       |

| Relocation                                 | Effective/Applicability Date | Rate per mile |
|--|------------------------------|---------------|
| Standard mileage rates for moving purposes | January 1, 2022              | \$0.18        |

Airplane nautical miles (NMs) should be converted into statute miles (SMs) or regular miles when submitting a voucher using the formula (1 NM equals 1.15077945 SMs).

For calculating the mileage difference between airports, please visit the U.S. Department of Transportation's [Inter-Airport Distance](#) website.

QUESTIONS:

For all travel policy questions, email [travelpolicy@gsa.gov](mailto:travelpolicy@gsa.gov)

The shortcut to this page is [gsa.gov/mileage](https://gsa.gov/mileage).

Last Reviewed: 2022-01-03



**TO: Board 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.

| <b>Safety Performance Measures</b>             | <b>Description (per calendar year)</b>   |
|--|--|
| 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 |

*A transportation system that supports growth, mobility, and safety through leadership and planning  
 Marion County • City of Belleview • City of Dunnellon • City of Ocala*

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<br>(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<br>(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)

- Safety Target Methodology
- Safety Targets Presentation
- FDOT PM-1 Safety Fact Sheet
- TPO Board Safety Resolution

### Committee Recommendation(s)

On February 8, 2022, the Citizens Advisory Committee (CAC) and Technical Advisory Committee (TAC) voted to select **Option A** as the recommendation for TPO Board consideration.

**Option A.** Continue using the methodology for developing annual safety targets. Recommend to the TPO Board adoption of the proposed 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 statewide/FDOT targets, and the Commitment to Zero Safety Action Plan goal of moving toward 0 Fatalities and 0 Serious Injuries.

*A transportation system that supports growth, mobility, and safety through leadership and planning*  
Marion County • City of Belleview • City of Dunnellon • City of Ocala

**Action Requested**

Adoption of 2022 Safety Targets for the Ocala Marion TPO.

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

**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            |      |      |      |      |      |       |                                      | PROJECTIONS |      |
|--|------|------|------|------|------|-------|--------------------------------------|-------------|------|
| 100 Million Vehicle Miles Traveled (MVMT) annually |      |      |      |      |      |       |                                      | 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<br>2015-2019<br>Rolling<br>Average | #2<br>2016-2020<br>Rolling<br>Average | #2<br>2017-2021<br>Rolling<br>Average | 2022 Method<br>Percent Change of<br>Three Rolling<br>Averages | 2022<br>Proposed<br>2022<br>Targets |
|---|------|------|------|-------|------|------|-------------------|-------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---|-------------------------------------|
|   |      |      |      |       |      |      | *Total<br>Results | Targets<br>(Set Feb.<br>2021) |                                       |                                       |                                       |   |                                     |
| #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<br>Targets<br>(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                    |

# 2022 Safety Targets



- **Moving Ahead for Progress (MAP-21)  
Federal Requirement (2018 to Present)**
- **Safety Performance Measures (PM-1)**
- **Integration into TPO's LRTP, TIP, LOPP**

- **TAC and CAC review and action, February 8**
- **TPO Board review and action, February 22**
- **Submission of Safety Targets to FDOT by February 25, 2022**

# Targets for Five Performance Measures

| <b>Safety Performance Measures</b>             | <b>Description</b>   |
|--|--|
| 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 |

# Data and Information Sources

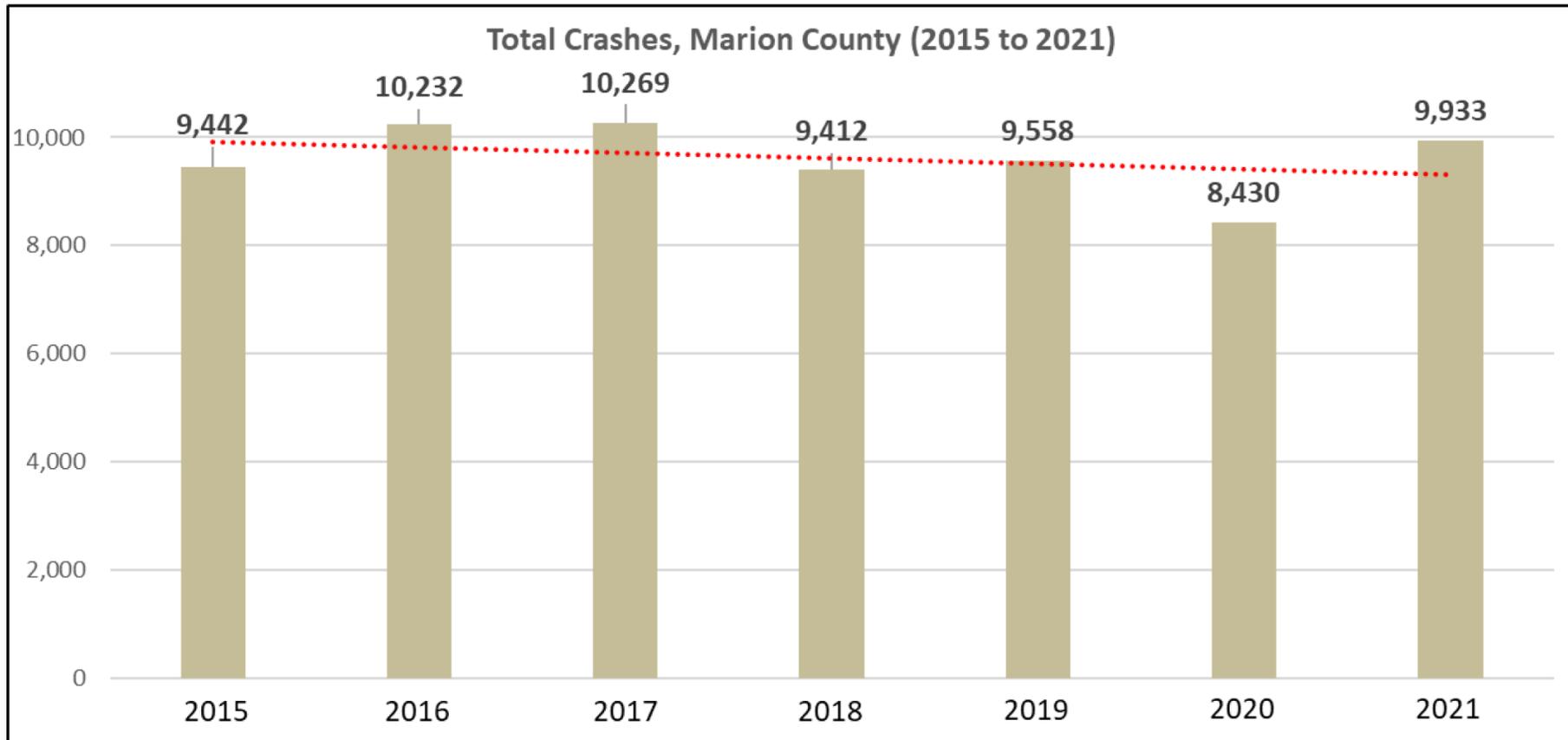
- **Florida Department of Transportation**  
Crashes (through 2020)  
Vehicle Miles Traveled (through 2020)
- **University of Florida (UF) Signal Four**  
Crashes (2021)

# 2021 Targets & Results

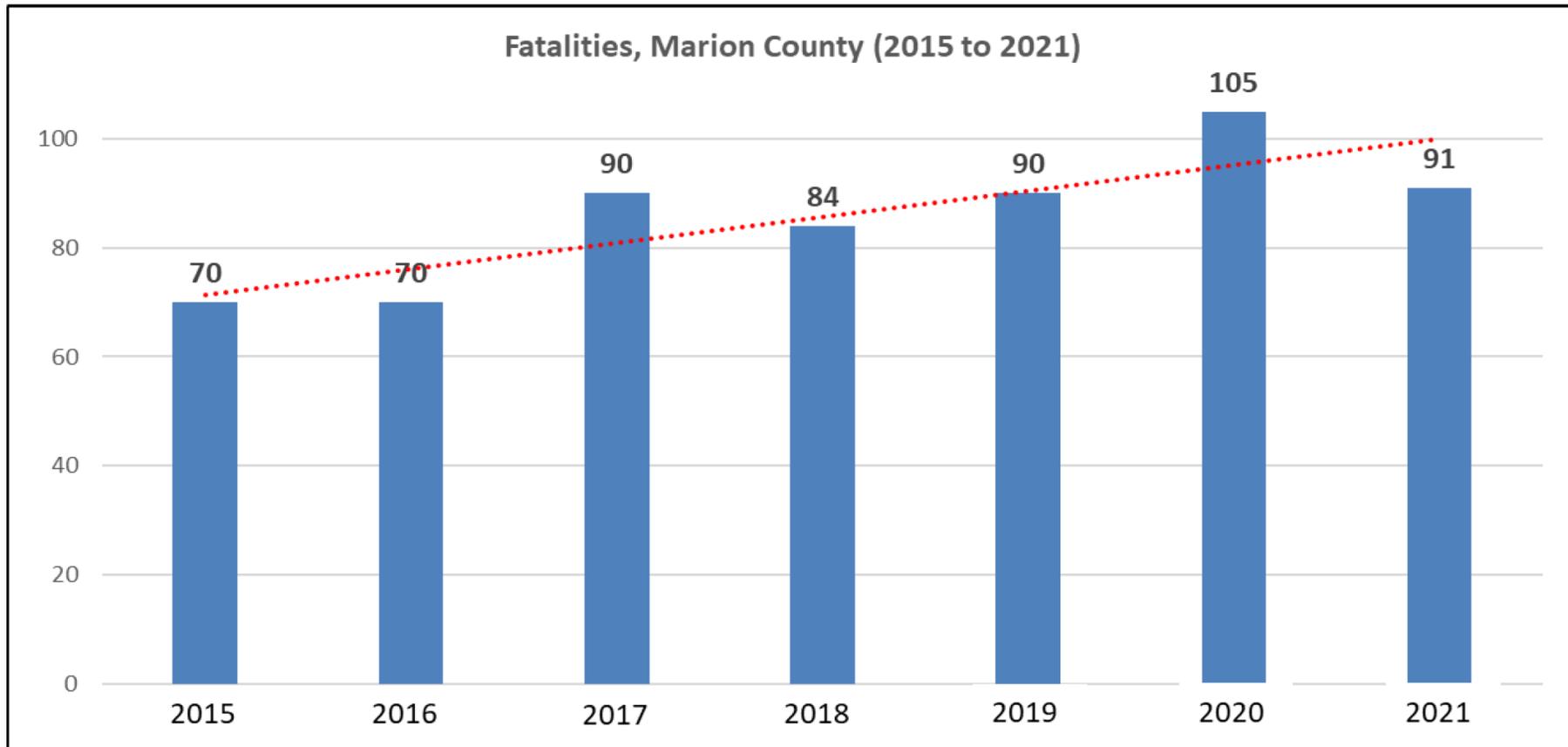
| Safety Performance Measure   | 2021 Targets | 2021 Results | Met Target? |
|--|--------------|--------------|-------------|
| #1 - Fatalities  | 97           | 91           | Yes         |
| #2 - Fatalities per 100 Million VMT  | 1.96         | 1.98         | No          |
| #3 - Serious Injuries  | 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         |

# **Review of Recent Crashes in Ocala/Marion County**

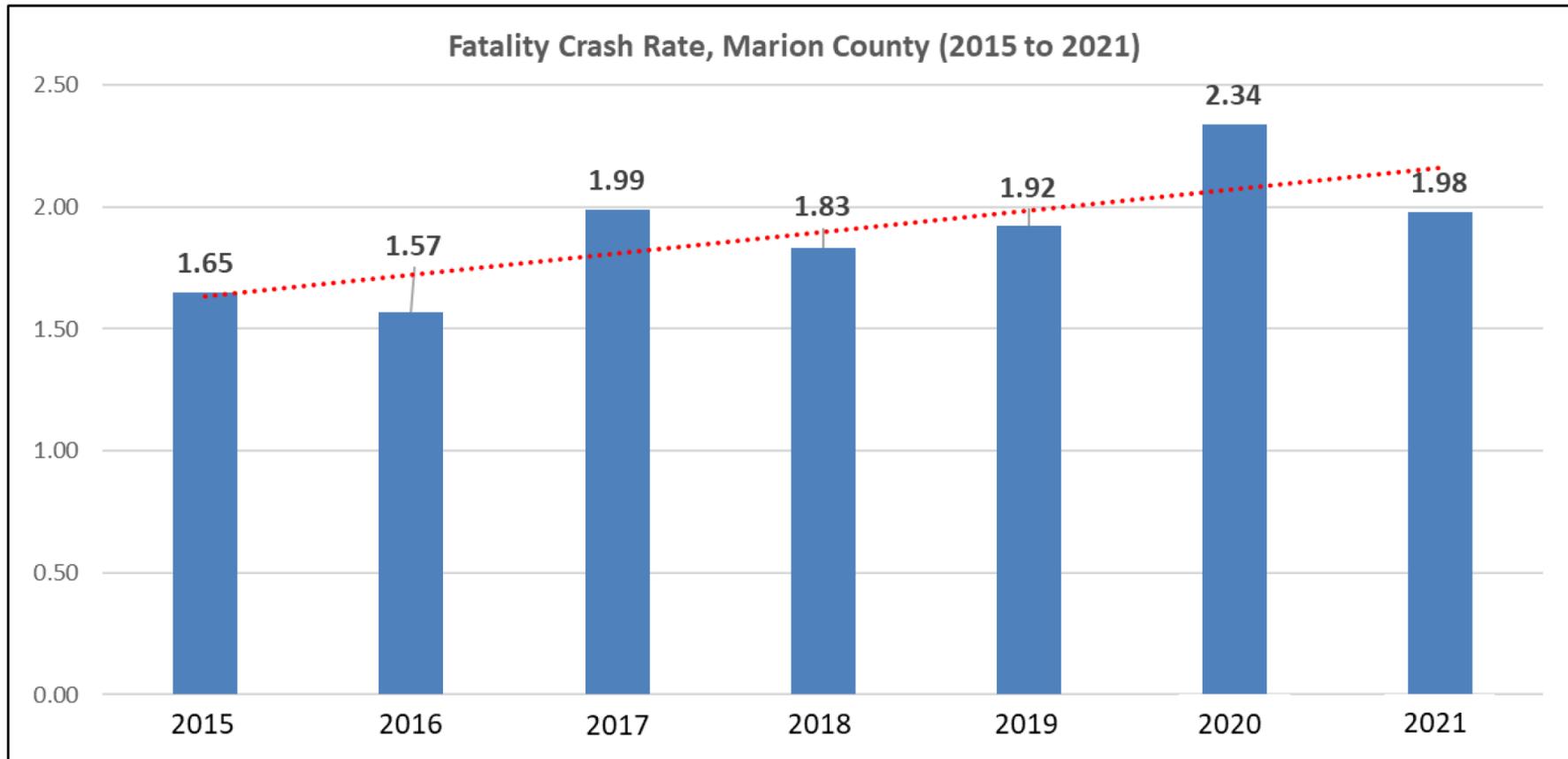
# 2015 to 2021 Total Crashes



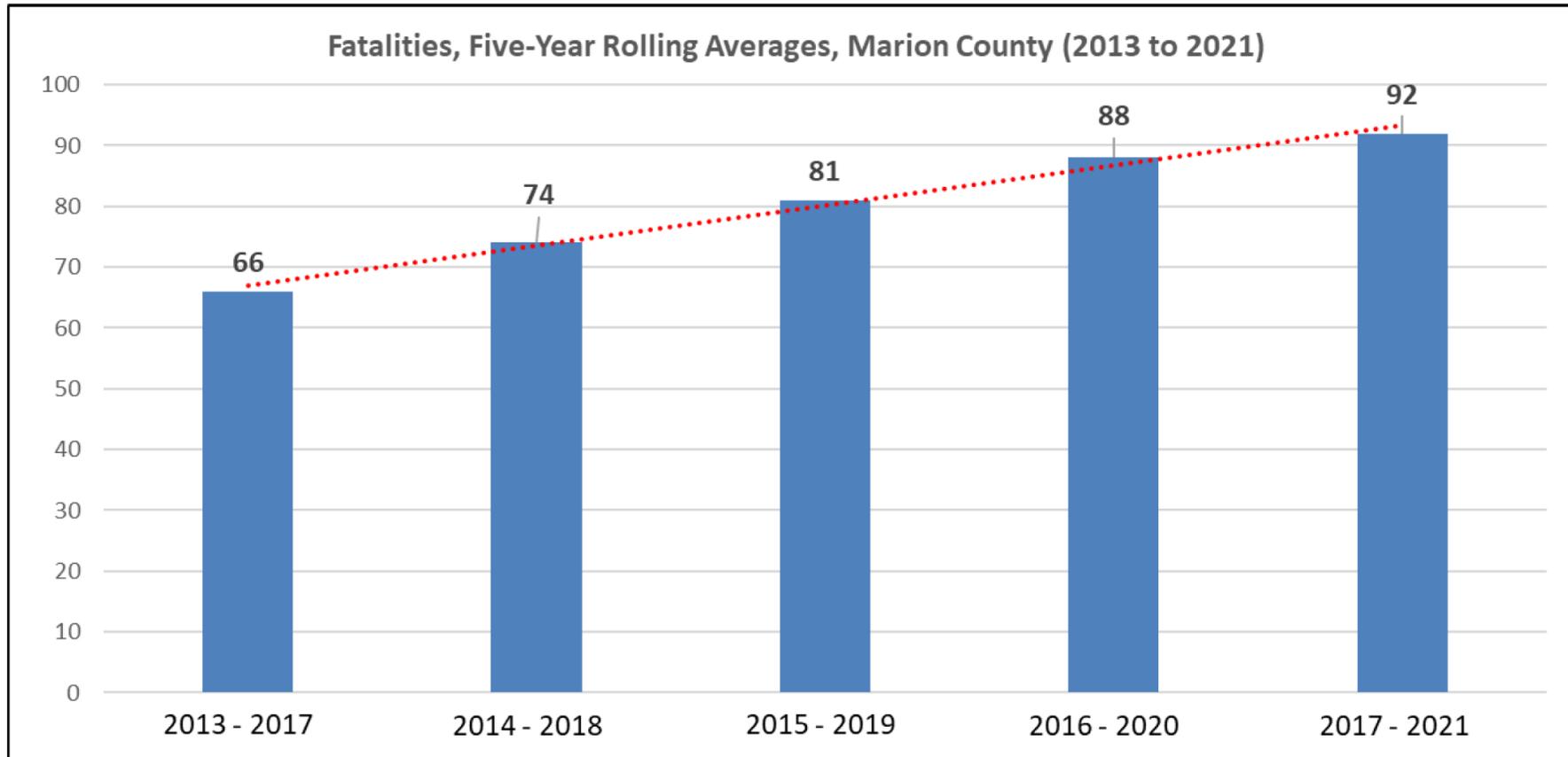
# 2015 to 2021 Fatalities



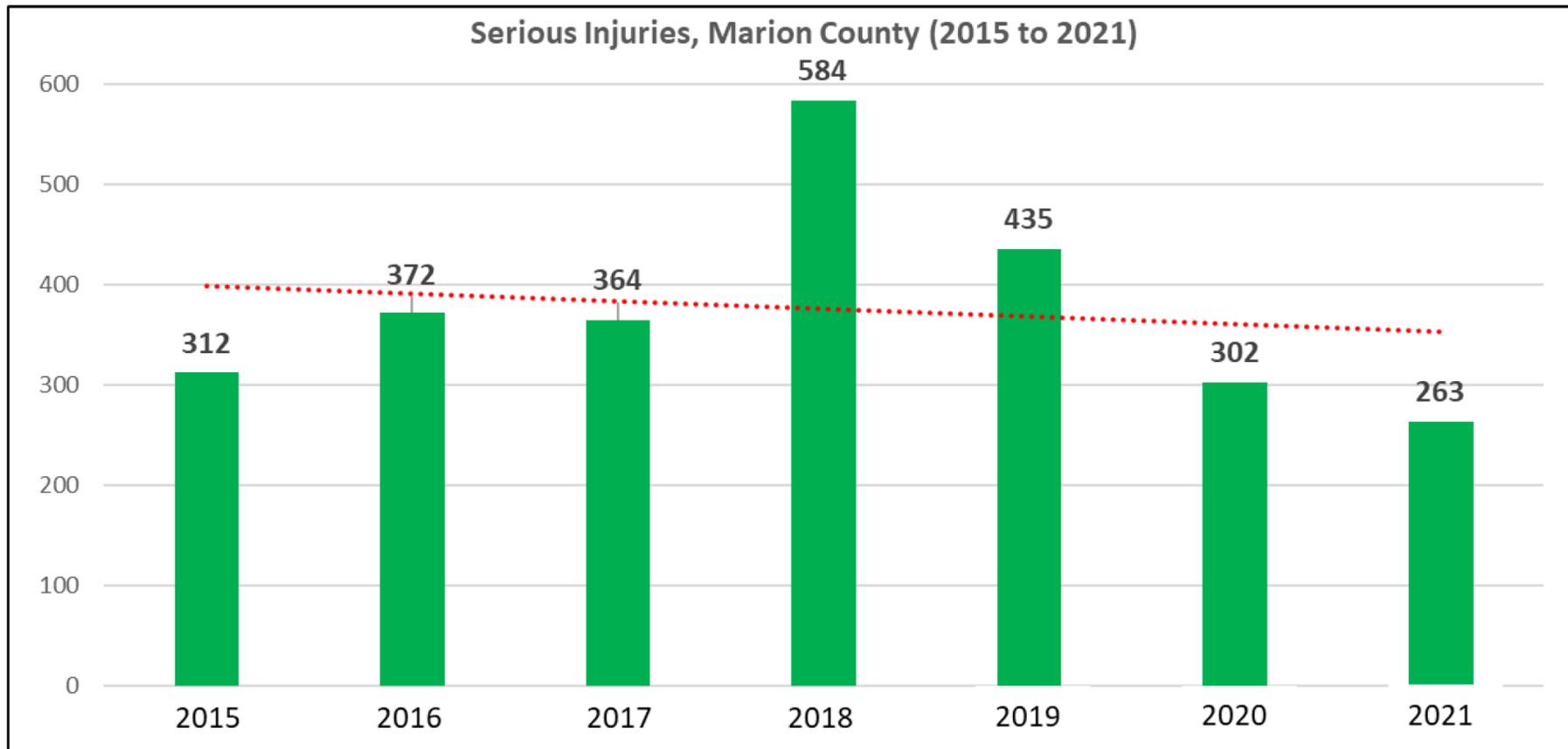
# 2015 to 2021 Fatality Rate



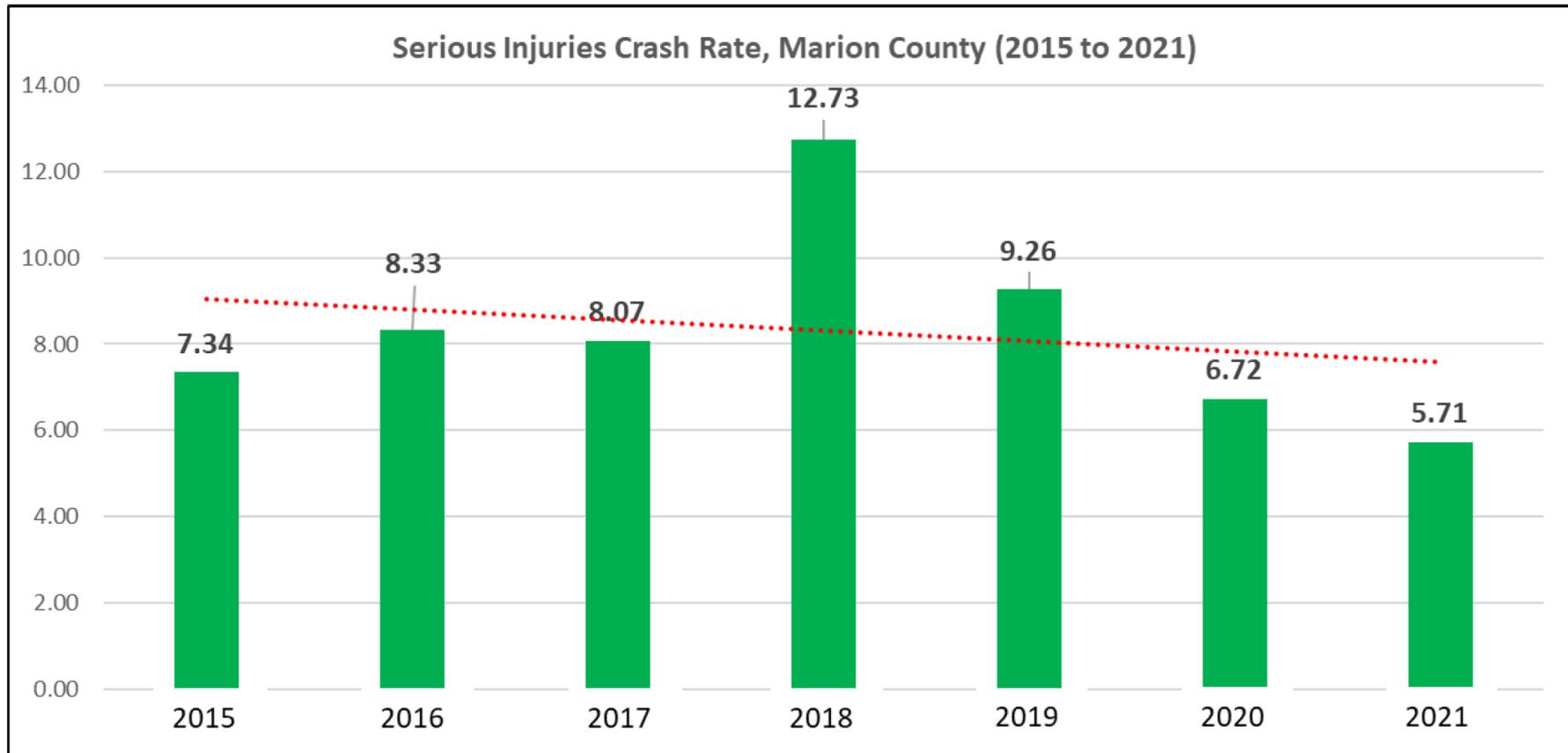
# Fatalities Five-Year Rolling Averages



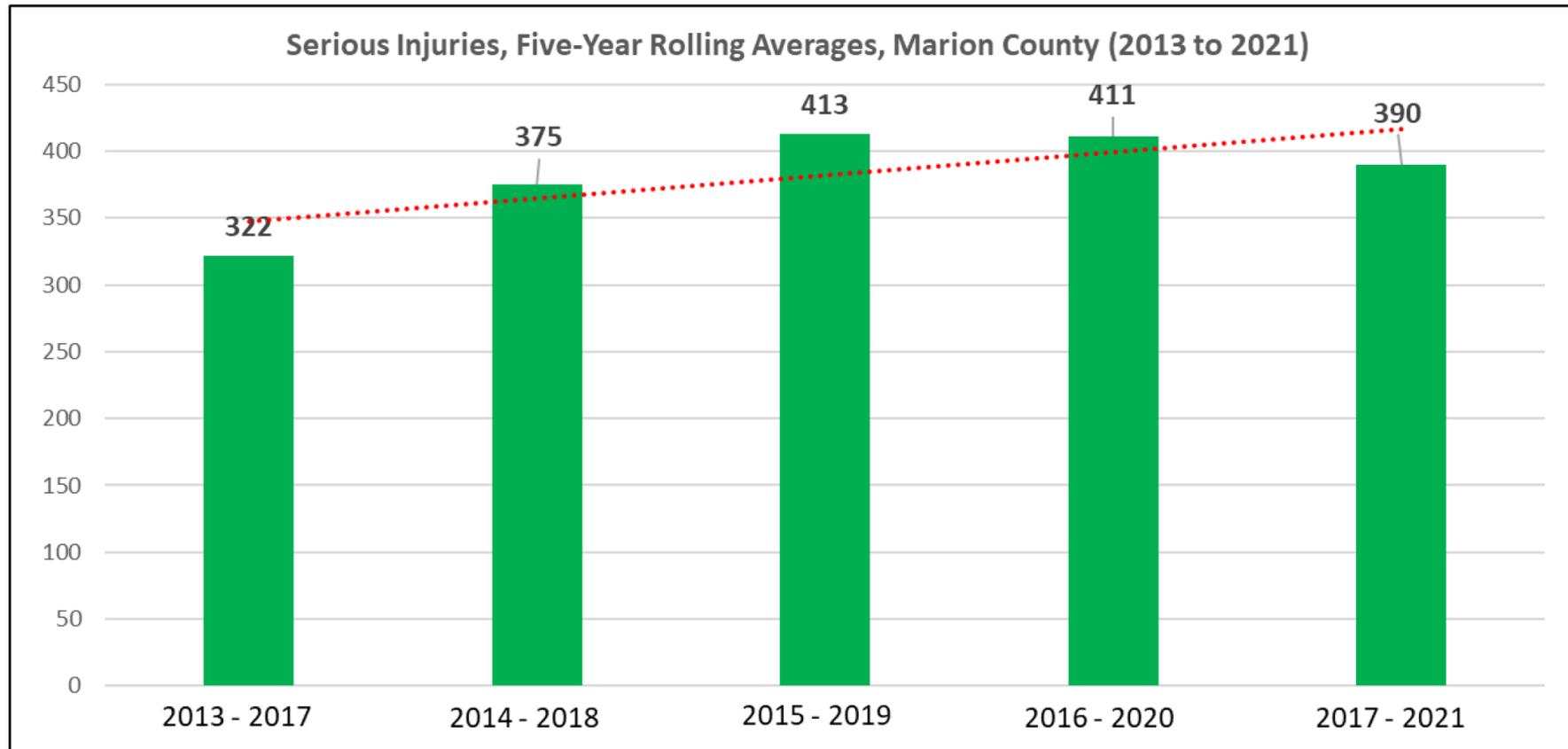
# 2015 to 2021 Serious Injuries



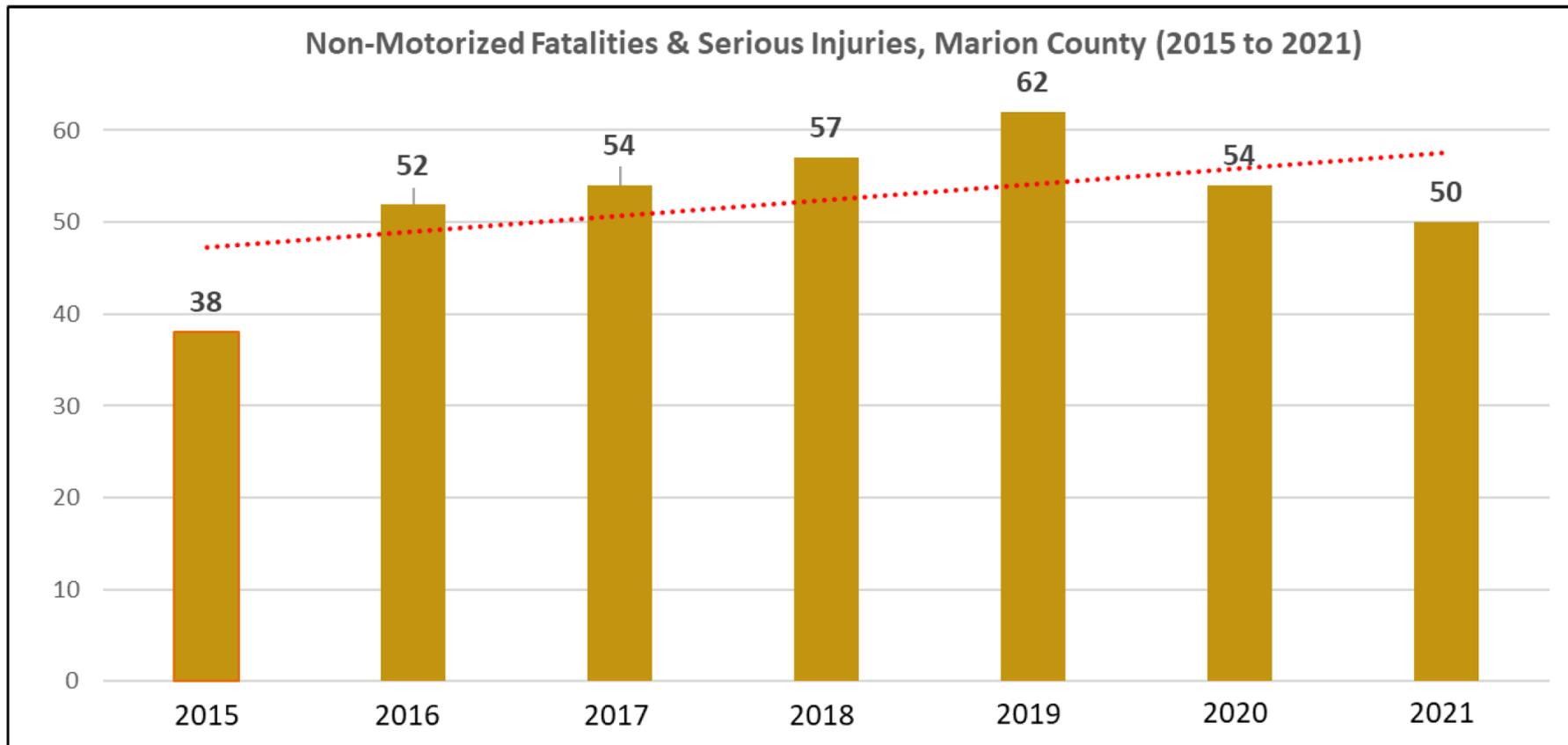
# 2015 to 2021 Serious Injury Rate



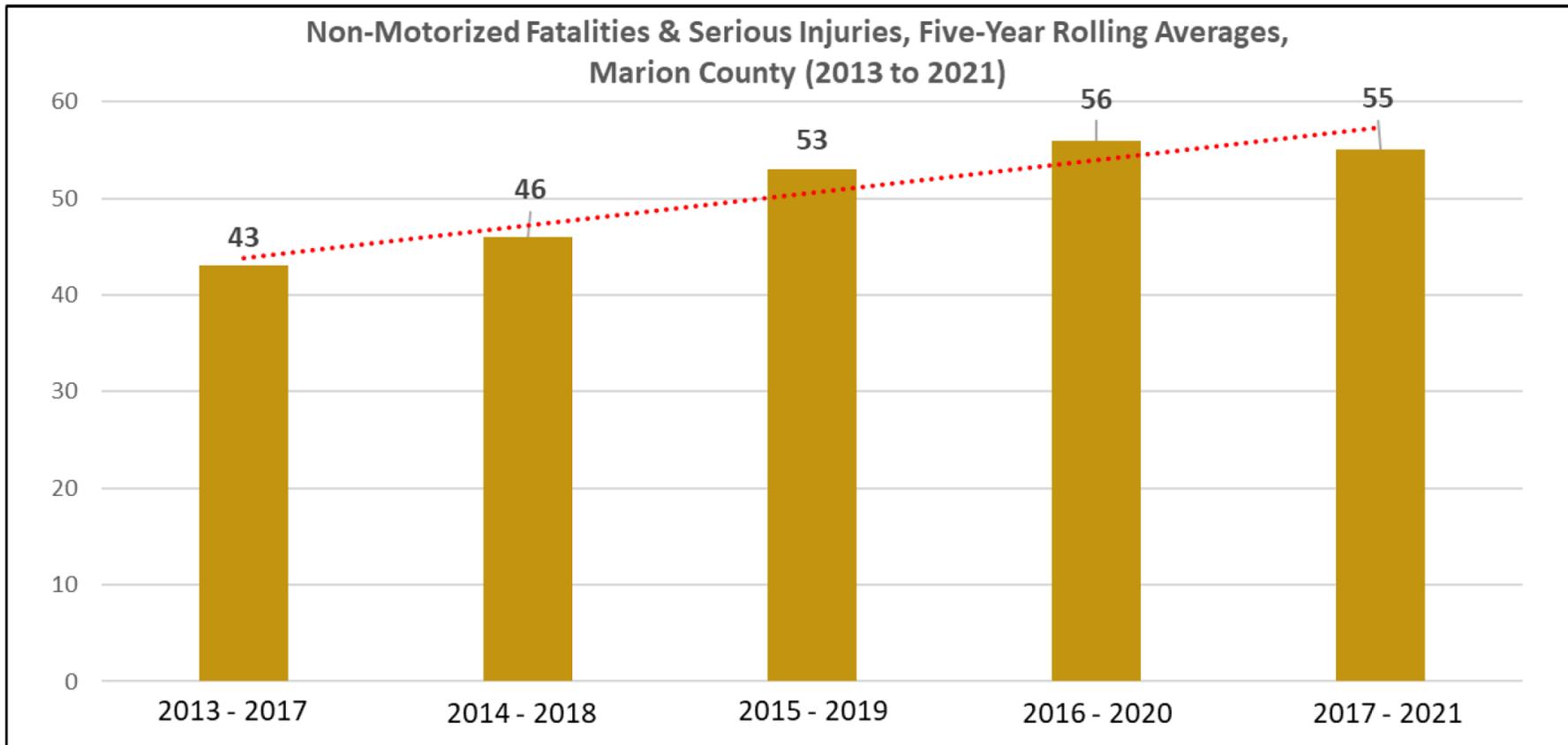
# Serious Injuries Five-Year Rolling Averages



# 2015 to 2021 Non-Motorized Serious Injuries & Fatalities



# Non-Motorized Serious Injuries & Fatalities Five-Year Rolling Averages



# Targets for Five Performance Measures

| <b>Safety Performance Measures</b>             | <b>Description</b>   |
|--|--|
| 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 |

# TPO's Target Setting Methodology

1. Calculate **Average Percent Change** of the three most recent five-year rolling averages
  - #1. Fatalities
  - #3. Serious Injuries
  - #5. Non-Motorized Fatalities and Serious Injuries

**Calculate average %  
Change of 3 most recent  
5-Year Rolling Averages**

| Performance Measure   | 2015 | 2016 | 2017 | 2018  | 2019 | 2020 | 2021              |                               | #1<br>2015-2019<br>Rolling<br>Average | #2<br>2016-2020<br>Rolling<br>Average | #2<br>2017-2021<br>Rolling<br>Average | 2022 Method<br>Percent Change of<br>Three Rolling<br>Averages | 2022<br><i>Proposed</i><br>2022<br>Targets |
|---|------|------|------|-------|------|------|-------------------|-------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---|--|
|   |      |      |      |       |      |      | *Total<br>Results | Targets<br>(Set Feb.<br>2021) |                                       |                                       |                                       |   |  |
| #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   |

# Target Setting Methodology

2. Project the **Vehicle Miles Traveled (VMT)** in 2021 and 2022 to calculate:

#2 Fatality rate per 100 Million VMT

#4 Serious Injury rate per 100 Million VMT

### 2022 Vehicle Miles Traveled (VMT) Chart

100 Million Vehicle Miles Traveled (MVMT) annually

| 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | *2020 | 2014 to 2019 Average Annual % Change |
|------|------|------|------|------|------|-------|--------------------------------------|
| 41.3 | 42.5 | 44.7 | 45.1 | 45.9 | 47.0 | 44.9  | 2.5%                                 |



| PROJECTIONS YEARS |      |
|-------------------|------|
| 2021              | 2022 |
| 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

# Proposed 2022 Targets

| Safety Performance Measure   | Proposed 2022<br>Targets<br>(not to exceed) | 2021 Targets |
|--|---|--------------|
| #1 - Fatalities  | <b>98</b>                                   | 97           |
| #2 - Fatalities per 100 Million VMT  | <b>2.08</b>                                 | 1.96         |
| #3 - Serious Injuries  | <b>378</b>                                  | 432          |
| #4 - Serious Injuries per 100 Million VMT  | <b>8.02</b>                                 | 8.74         |
| #5 - Number of Non-Motorized (bicycle, pedestrian) Fatalities and Serious Injuries | <b>57</b>                                   | 61           |

## **Option A – CAC and TAC Recommendation**

- Adopt 2022 Targets based on current methodology.
- Staff explore crash reduction factors for 2023 targets as part of Commitment to Zero.

## Option B

- Adopt 0 for all five targets to reflect State Targets and Commitment to Zero.
- Staff explore crash reduction factors for 2023 targets as part of Commitment to Zero.

Note: When an MPO/TPO adopts State Targets, no changes can be made unless FDOT changes the State Targets.

# 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

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

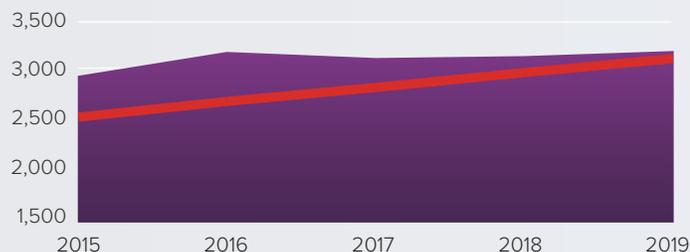
### TIMELINE



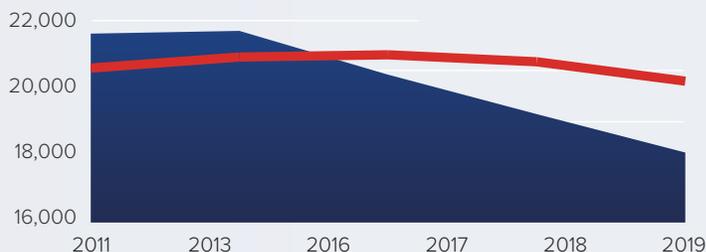
\* Please refer to the fact sheet addressing *MPO Requirements* for information about MPO targets and planning processes.

# EXISTING STATEWIDE CONDITIONS

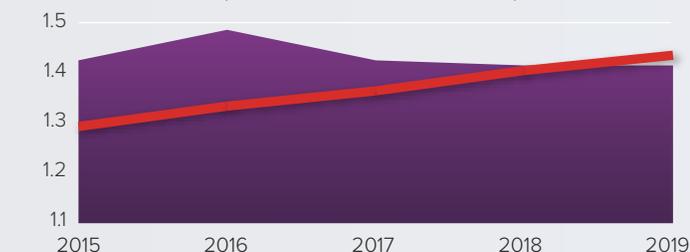
## ANNUAL FATALITIES



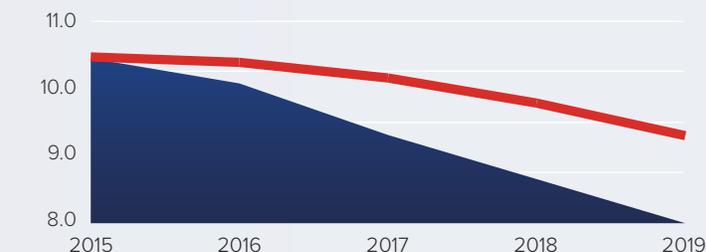
## ANNUAL SERIOUS INJURIES



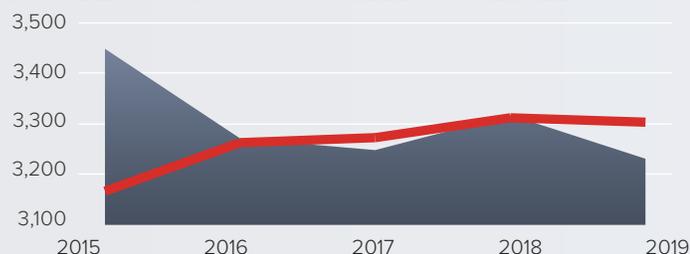
## FATALITY RATE (PER HUNDRED MILLION VMT)



## 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

**RESOLUTION OF THE OCALA/MARION COUNTY TRANSPORTATION PLANNING ORGANIZATION (TPO) ADOPTING TRANSPORTATION SAFETY TARGETS**

**WHEREAS**, the Ocala/Marion County TPO is the duly designated and constituted body responsible for carrying out the urban transportation planning and programming process for the Ocala/Marion County; and

**WHEREAS**, Florida Statutes 339.175; 23 U.S.C. 134; and 49 U.S.C. 5303 require that the urbanized area, as a condition to the receipt of federal capital or operating assistance, have a continuing, cooperative, and comprehensive transportation planning process that results in plans and programs consistent with the comprehensively planned development of the urbanized area; and

**WHEREAS**, the FHWA issued a final rule based on section 1203 of the Moving Ahead for Progress in the 21st Century Act (MAP-21) and with consideration to provisions in the Fixing America's Surface Transportation Act (FAST Act), which identified national transportation goals, outlined standards for measuring and reporting safety data and established five safety performance measures; and

**WHEREAS**, in accordance with 23 C.F.R. 490.209(a), the Florida Department for Transportation (FDOT), as part of the annual development of the State Highway Safety Improvement Plan (HSIP), has developed safety targets for each of the five safety performance measures; and

**WHEREAS**, 23 C.F.R. 490.209(c), requires that each Metropolitan Planning Organization establish safety targets and report progress over time in reaching the adopted targets; and

**NOW, THEREFORE, BE IT RESOLVED**, by the Ocala/Marion County TPO that the:

Ocala/Marion County TPO supports the safety performance measures and targets shown in Exhibit A; and

The Director of the Ocala/Marion County TPO (or his/her designee) is hereby authorized and directed to submit these targets to the Florida Department of Transportation (FDOT) no later than February 28, 2022.

**DONE AND RESOLVED** at the regularly convened meeting of the Ocala/Marion County TPO held on the 22nd day of February 2022.

**OCALA/MARION COUNTY TRANSPORTATION  
PLANNING ORGANIZATION**

---

**Ire Bethea**  
**CHAIR, OCALA/MARION COUNTY TPO**

**CERTIFICATE:**

The undersigned duly qualified and acting Chairman of the Ocala/Marion County Transportation Planning Organization certified that the foregoing is a true and correct copy of a Resolution, adopted at a legally convened meeting of the Ocala/Marion County Transportation Planning Organization held on February 22, 2022.

**ATTEST:**

**ROB BALMES, TPO DIRECTOR**  
**OCALA/MARION COUNTY TRANSPORTATION PLANNING ORGANIZATION**



**TO: Board Members**

**FROM: Rob Balmes, Director**

**RE: Travel Policy Update**

---

**Summary**

The TPO maintains a Travel Policy to establish formal procedures for the reimbursement or payment of expenses incurred when staff and board members are on official TPO business.

Based on a recent internal review of the Travel Policy, the following changes are proposed as updates or clarifications. All proposed changes are highlighted in red underlined and yellow tracked changes. The proposed Travel Policy revision is included in the agenda.

- **Page 3: 1.7 Letter of Agreement.** This section was updated to match the current Marion County Human Resources advanced-level training policy and threshold (\$2,000). The prior amount of \$1,000 had corresponded to the City of Ocala Human Resources policy when the TPO was hosted by the City.
- **Page 4: 2.1 General Principles.** An updated reference to the new sub-section 2.4.3 was made, which provides more clarification regarding same-day travel meals.
- **Page 7: 2.4 Meals and Incidentals.** Sub-section 2.4.4 was created to provide clarification regarding General Service Administration (GSA) Allowable Travel Expenses. When a staff or board member is on TPO business, he/she can claim a meal allowance at an event/conference/meeting when a meal(s) is included as part of registration, if special conditions or circumstances are warranted. These conditions are highlighted on page 7.

**Attachment(s)**

- Revised Travel Policy

**Action Requested**

Recommend approval of the revisions to the TPO Travel Policy.

# Ocala Marion County Transportation Planning Organization



## Travel Policy

Updated—February 22, 2022

# TABLE OF CONTENTS

|  |   |
|--|---|
| <b>Section 1: General</b> .....  | 2 |
| 1.1 Purpose .....  | 2 |
| 1.2 Scope and Applicability .....  | 2 |
| 1.3 Roles and Responsibility .....   | 2 |
| 1.4 Authorizations .....   | 3 |
| 1.5 Procurement Card Use.....  | 3 |
| 1.6 Missing Receipts .....   | 3 |
| 1.7 Letter of Agreement .....  | 3 |
| <b>Section 2: Travel Expense Requirements/Guidelines</b> .....             | 4 |
| 2.1 General Principles.....  | 4 |
| 2.2 Registration Fees .....  | 5 |
| 2.3 Transportation.....  | 5 |
| 2.4 Meals and Incidentals .....  | 6 |
| 2.5 Lodging .....  | 7 |
| 2.6 Miscellaneous Expenses .....   | 7 |
| 2.7 Nonrefundable Travel Expenses in Connection with Canceled Travel ..... | 8 |
| 2.8 Same Day Travel – Out of County .....                                  | 8 |
| 2.9 Intra-County Travel .....  | 8 |

# **Section 1: General**

## **1.1 Purpose**

To establish policies and procedures for the payment and/or reimbursement of expenses incurred while traveling on official TPO business.

## **1.2 Scope and Applicability**

These regulations apply to all travel for TPO employees, elected and appointed officials, advisory board members, volunteers, and all others who are authorized to travel on official TPO business.

## **1.3 Roles and Responsibility**

### 1) Director

- a) Ensure all travel expenditures have been budgeted.
- b) Ensure that travel is related to TPO business and expenses are reasonable and necessary in accordance with this policy.
- c) Ensure that travelers understand their responsibilities and initiate the appropriate action when procedures are not followed.
- d) Review travel related documentation to ensure that travelers have adhered to the travel policy.
- e) Ensure that accurate and complete Travel Expense Reports are submitted in accordance with the schedule established in this policy.
- f) Authorize travel and approve the Travel Expense Report.
- g) Retain Travel Expense Report and backup information subject to audit.

### 2) Travelers

- a) Exercise the same care in incurring expenses that a prudent person would exercise if traveling on personal business.
- b) Be knowledgeable of and adhere to the requirements set forth in this policy.
- c) Submit Travel Expense Report within 15 business days after the completion of travel that documents all expenses related to the total cost of travel.

## 1.4 Authorizations

- 1) Every traveler should seek approval from the Director prior to incurring any expenses.
- 2) Travel must be necessary for the proper execution of official TPO business. Meetings and conferences must be of a professional nature that will increase the attending individual's value to the TPO.
- 3) Upon the completion of travel, a Travel Expense Report will be completed and the following will review the request for compliance with the TPO's travel policy.
  - a) Director will be approved by the TPO Board.
- 4) Travel Advances are considered the exception, not the rule. If a travel advance is necessary, it must be approved by the Director. The traveler is responsible to submit this request the Friday prior to the scheduled payroll run.
- 5) A payroll deduction will automatically be made if a travel advance is outstanding for more than 30 days, and is directly attributed to the traveler's failure to properly file the Travel Expense Report.

## 1.5 Procurement Card Use

- 1) The procurement card (P-card) shall be used to pay for airline tickets, lodging, car rental, and registration fees whenever possible. If the traveler does not possess a P-card and someone else within their department does, the cardholder may elect to authorize these charges on their P-card.
- 2) The P-card SHALL NOT BE used for expenses that are reimbursed to the traveler at a flat rate, e.g. meals and mileage.
- 3) The P-card may be used to purchase gas when the traveler is using a Marion County or rental vehicle for out-of-town travel.
- 4) The traveler is responsible for documenting and submitting copies of these receipts on the Travel Expense Report.

## 1.6 Missing Receipts

If travel expense receipts are lost or stolen, a reasonable attempt to obtain duplicate receipts must be made. If duplicates cannot be secured, a statement of the facts explaining the incident must accompany the completed Travel Expense Report.

## 1.7 Letter of Agreement

When an employee attends advanced-level training that exceeds ~~\$1,000~~ \$2,000 and leaves the TPO before the end of one year after completion of training, the traveler will be required to enter into a

contractual agreement to reimburse the TPO on a pro-rated basis for travel expenses as defined in the Marion County Employee Handbook and the Marion County Training Reimbursement Policy and Agreement. ~~The reimbursement amount is payable immediately upon separation from employment. No reimbursement will be required should the employee terminate employment with the TPO due to illness or retirement.~~

~~No reimbursement will be required should the employee terminate employment with the TPO due to illness or retirement.~~

Advanced-level training is training that is not required by the Director and will enhance an employee's abilities and/or advance their career.

## **Section 2: Travel Expense Requirements/Guidelines**

### **2.1 General Principles**

- 1) The traveler shall be reimbursed for authorized expenses that are in compliance with the requirements of this policy and are associated with an approved trip.
- 2) Travel arrangements should be made as early as possible to take advantage of early discounts and advance purchase prices.
- 3) When online travel is available, unless otherwise approved by Director, travel will not be permitted. Arrangements associated with the travel shall be the most economical available and result in the shortest "time-away".
- 4) Reimbursement is limited to the traveler only. The TPO will not reimburse any expenses for a traveler's spouse and family.
- 5) The TPO is exempt from the Florida Sales Tax. The traveler must print a copy of the tax exemption certificate prior to traveling in order to obtain the exemption. The traveler is responsible for taxes charged unless there is a written justifiable explanation of the facts.
- 6) Any travel associated with grants or other funding sources must comply with all provisions stipulated by the sponsoring agency or with all provisions of this travel policy if more restrictive. If the sponsoring agency's provisions are more restrictive than this policy, TPO policy will take precedence and the TPO will compensate for the difference.
- 7) Any advance or reimbursement due to the employee will be paid through the employee's payroll direct deposit as a non-taxable reimbursement. Same day travel meals described in Section ~~2.8.3~~ 2.4.3 will be processed through payroll also, but as a taxable fringe benefit (per IRS regulations). IRS rules will prevail over the taxability of reimbursements.
- 8) Travelers must submit a complete Travel Expense Report that includes all travel related expenses such as, registration, gas, mileage, lodging, meals, tolls, parking fees, or rental car for trips outside of Marion County.

## **2.2 Registration Fees**

- 1) Fees should only be paid after the proper travel authorization is secured.
- 2) Fees for registration, including meals and other programmed affairs sponsored by a conference or convention organization, shall be prepaid whenever possible. The use of the P-card for this expense is the preferred method of payment. A traveler can be reimbursed if a paid receipt is presented.
- 3) Payment for registration fees will be written directly to the sponsoring organization. The traveler is responsible to disburse backup documentation to the organization.
- 4) The TPO will not pay fees associated with entertainment events/dinners that are optional and not included as a part of the registration fee. These fees should not be charged to the P-card.
- 5) For payment to be advanced or reimbursed, a traveler must submit a copy of the agenda, or a certificate of attendance.

## **2.3 Transportation**

- 1) Commercial Air Travel
  - a) Coach fare class shall be taken for all travel by air.
  - b) If air travel is booked via the Internet, the confirmation notice that states the amount shall be submitted to verify the cost.
  - c) Ticket insurance and additional accident or life insurance for persons traveling by commercial air travel will not be reimbursed.
  - d) The actual cost incurred for parking a private vehicle at the airport while the traveler is away shall be reimbursed. A receipt is required.
- 2) TPO Vehicle
  - a) The use of TPO-owned vehicles must be authorized by the Director.
  - b) When transportation is by a TPO-owned vehicle, reimbursable expenses will be limited to actual costs incurred for fuel, oil, and necessary vehicular maintenance and repairs supported by receipt or invoice; however, the P-card is the preferred method of payment for these expenses.
  - c) Parking tickets and moving vehicle citations are the responsibility of the traveler.
- 3) Privately Owned Automobile
  - a) The use of a privately-owned vehicle requires Director approval. Mileage reimbursement for use of a privately-owned vehicle will not be authorized without Director approval.
  - b) The traveler is entitled to a mileage allowance not to exceed IRS guidelines.
  - c) The individual operating the privately owned vehicle must possess a valid driver's license and the

vehicle must be insured with the minimum required insurance for the State of Florida.

- d) The mileage reimbursed shall be reasonable and comparable to other methods of travel. If MapQuest or another similar source is used, a printout substantiating the mileage claim should be attached to the Travel Expense Report.
- e) The mileage allowable will be from the traveler's official headquarters or point of origin, whichever is less, to the destination point. The official headquarters is defined as the traveler's normal work place or if there is no normal work place, the departmental headquarters location.
- f) A reasonable amount of vicinity travel is reimbursable to the traveler. Reasonable vicinity mileage is considered less than 25 miles per travel period. Requests for vicinity mileage exceeding 25 miles should be accompanied by a written explanation from the traveler substantiating the mileage claim.
- g) If there are multiple travelers going to the same destination, carpooling is required unless specifically authorized by the Director. If there are multiple travelers riding in the same privately owned vehicle, only one individual will be reimbursed for mileage.
- h) Employees receiving a vehicle allowance as part of their salary package are entitled to reimbursement for mileage when using their personal vehicle outside of Marion County.
- i) Parking tickets and moving vehicle citations are the responsibility of the traveler.

#### 4) Rental Vehicle

- a) A vehicle may be rented when deemed appropriate by the Director. The use of rental vehicles should be limited to those instances where Marion County, privately owned vehicles or reasonable public transportation is unavailable.
- b) Whenever possible, the State contract for rental cars should be utilized.
- c) Maximum reimbursement for rental cars will be limited to the mid-size sedan rate or a vehicle with a comparable rate.
- d) Travelers utilizing rental cars will be reimbursed for gasoline if receipts are provided; however, the P-card is the preferred method of payment.
- e) Collision-damage waivers are recommended to be purchased when obtaining a rental vehicle. Marion County also has a self-insured program to cover claims.
- f) If a rental vehicle is booked via the Internet, the confirmation notice that states the amount shall be submitted to verify the cost. A receipt shall also be submitted upon return.

## 2.4 Meals and Incidentals

- 1) Employees shall be paid per diem for TPO related travel in accordance with U.S. General Services Administration (GSA). The most current meal and incidental allowances for standard and specified rates are provided at: [www.GSA.gov/travel-resources](http://www.GSA.gov/travel-resources).
- 2) No receipts for meals are required.

- 3) Meals for same day travel, which do not require an overnight stay, are allowed as provided in section 2.8.3 of this policy. Reimbursements granted will be a taxable fringe benefit (per IRS regulations) and will be included in your payroll direct deposit as taxable.
- 4) \*\*The TPO, at its discretion, may allow employees to claim a meal allowance at an event with a meal(s) included as part of the registration fee if:
  - a. You are unable to consume the furnished meal(s) because of medical requirements or religious beliefs.
  - b. You requested specific approval to claim the full meal allowance prior to your travel.
  - c. You have made a reasonable effort to make alternative meal arrangements, but were unable to do so.
  - d. You purchased substitute meals in order to satisfy your medical or religious requirements.
- 5) At the TPO's discretion, you may also claim the full meal allowance if you were unable to take part in an event furnished meal due to the conduct of official business.

## 2.5 Lodging

- 1) The use of the P-card for this expense is the preferred method of payment.
- 2) The lodging expense is limited to single occupancy or occupancy shared with another TPO traveler.
- 3) Lodging costs in excess of the single room rate will not be reimbursed except when the additional occupant is an authorized TPO traveler.
- 4) If a hotel is booked via the Internet, the confirmation notice that states the amount shall be submitted to verify the cost.
- 5) Requests for reimbursement for lodging must be accompanied by an itemized paid receipt from the hotel, motel, etc. Extended stays must be paid by the traveler.

\*\*Source: General Services Administration (GSA) Subchapter B-Allowable Travel Expenses- <https://www.gsa.gov/policy-regulations/regulations/federal-travel-regulation-ftr/i1206091#i1204040>

## 2.6 Miscellaneous Expenses

- 1) Communication expenses, including charges for telephone, facsimile, and internet access, to conduct official TPO business with the traveler are reimbursable if a receipt is provided.
- 2) Bridge, road, and tunnel tolls will be reimbursed when receipts are provided.
- 3) Parking charges will be reimbursed. Receipts for all parking charges must be provided. Parking meter charges will be paid without receipts if reasonable and approved by the Director.
- 4) Any other reasonable expense not otherwise provided for but incurred for the benefit of the TPO, will be reimbursed if receipts are provided and approved by the Director.

## **2.7 Nonrefundable Travel Expenses in Connection with Canceled Travel**

- 1) Reimbursement for prepaid travel expenses may be allowed when the travel is canceled for legitimate reasons. Only the portion of the prepaid expenses that is nonrefundable is reimbursable.
- 2) The originating department shall be responsible for requesting a refund (full or partial) of expenses paid in advance by the TPO when the traveler does not attend the function.
- 3) A memo justifying the cancellation of travel, a paid receipt and certification that the expense is nonrefundable should be included with the Travel Expense Report.
- 4) The traveler shall be personally responsible for reimbursement of any expenses paid by the TPO when the traveler does not attend the function due to their own negligence.

## **2.8 Same Day Travel – Out of County**

- 1) If the use of a privately owned vehicle is approved by the Director, mileage will be reimbursed in accordance with IRS guidelines.
- 2) Travelers must submit a Travel Expense Report if there are any travel related expenses such as registration, gas, mileage, lodging, meals, or rental vehicles. One report can be used if several travelers register for the same conference, travel in one vehicle and do not have a reimbursement due.
- 3) For same day travel which does not require an overnight stay, the standard meal allowance will be granted, but it will be a taxable fringe benefit (per IRS regulations) This reimbursement will be included in your payroll direct deposit as taxable.

## **2.9 Intra-County Travel**

- 1) Employees that have a need to travel within the boundaries of Marion County shall use a Marion County vehicle, when possible. The use of a privately-owned vehicle for Intra-County travel must be approved by the Director.
- 2) Employees who utilize their personal vehicle and are not receiving an auto allowance are entitled to a mileage allowance equal to the standard mileage rate established annually by the IRS.
- 3) Employees receiving an auto allowance shall use their personal vehicles and will not be reimbursed for mileage for Intra-County Travel.
- 4) Reimbursement for Intra-County mileage will be submitted on the Intra-County Reimbursement form.
- 5) Parking tickets and moving vehicle citations are the responsibility of the traveler.
- 6) Travel Expense Reports are NOT required for travel within Marion County.



**TO: Board Members**

**FROM: Rob Balmes, Director**

**RE: Citizen Advisory Committee (CAC) Application**

---

**Summary**

Per the Bylaws of the Citizens Advisory Committee (CAC), all membership nominations require TPO Board review and approval. TPO staff received an application for membership to the CAC by Matt Fabian. Mr. Fabian is an active member of the community and currently serves as a professional developer in Ocala. He has expressed an interest in transportation issues in the Ocala/Marion County area, and serving on the CAC.

**Attachment(s)**

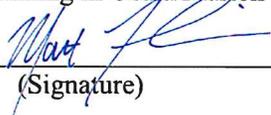
- Citizen Advisory Committee (CAC) Member Application

**Action Requested**

Based on a review of Mr. Fabian's application and follow up conversation/interview, TPO staff recommends approval of his membership appointment to the CAC. Per CAC Bylaws, membership shall be for a two-year period with an opportunity for reappointment for additional term(s).

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

1. Name: MATT FABIAN
2. Home Address: [REDACTED]
3. Business Address: [REDACTED]
4. Home Phone Number: \_\_\_\_\_ Business Phone Number: 352-239-0683
5. Occupation: DEVELOPER
6. Brief Resume of Education and Experience: FINANCE DEGREE FROM UNIV OF FLORIDA  
OWNED FINANCIAL CONSULTING COMPANY FOR 12 YEARS BEFORE BEING A  
FULL TIME DEVELOPER
7. Are you a resident of Ocala/Marion County? Yes  No \_\_\_\_\_  
If so, how long? Number of years: 33
8. Are you a registered voter? Yes  No \_\_\_\_\_
9. Do you hold a public office? Yes \_\_\_\_\_ No
10. At the present time, do you serve on a City/County Board,  
Commission, Authority, and/or Committee? Yes  No \_\_\_\_\_
11. Are you familiar with the Transportation Planning  
Organization and its function? Yes  No \_\_\_\_\_
12. Are you familiar with current transportation needs  
of the Marion County transportation disadvantaged? Yes  No \_\_\_\_\_
13. Why are you interested in serving on the CAC? AS A DEVELOPER I AM CONSTANTLY  
EVALUATING THE TRANSPORTION NEEDS AND OPPORTUNITIES IN OUR COUNTY
14. I hereby confirm that I have read and understand this application and that all information furnished  
by me is true and accurate. I understand that to be considered for this committee, I must be a  
resident of Marion County and cannot be an elected official and/or a technical person involved in  
transportation planning in Ocala/Marion County.

  
(Signature)

1-27-22

(Date)



## **CITIZEN'S ADVISORY COMMITTEE (CAC) APPLICATION**

The Federal Highway Act of 1962 established legislation that mandated any Urbanized Area (UA) with a population of 50,000 or more that expends United States Department of Transportation (USDOT) funding must implement a continuing, cooperative, and comprehensive planning process. Therefore, the TPO was established in 1981 after the United States Census Bureau determined that the urbanized population exceeded 50,000 people.

The Ocala Marion County Transportation Planning Organization (TPO) is the designated planning agency for the Ocala UA. The TPO includes the cities of Belleview, Dunnellon, and Ocala. In addition, the TPO planning boundaries includes all of Marion County. As a part of the required continuing, cooperative, and comprehensive planning process, the TPO must produce and implement plans such as the Long-Range Transportation Plan (LRTP), Transportation Improvement Program (TIP), and the Unified Planning Work Program (UPWP).

From an organizational standpoint the TPO is governed by the TPO Board which is comprised of local elected officials from Marion County and the cities of Belleview, Dunnellon, and Ocala. Additionally, the TPO is comprised of two advisory committees, the Technical Advisory Committee (TAC) and the Citizen Advisory Committee (CAC). The TAC is made up of technical transportation experts from the local municipalities. The CAC is made up of local citizens that are residents of Marion County, as well as citizens that are actively involved within neighborhood associations, local conservation, cycling, trails, equine groups, among others. The Board, along with our essential committees and staff, make up the TPO.

The purpose of the CAC is to offer a citizen's perspective on transportation related documents, issues, and plans of the TPO. The citizen's perspective is crucial to the TPO's successful implementation of the local communities' goals and objectives. Members of the CAC commit to serving a two-year term and may serve additional terms. If you're interested in becoming a member of the CAC, please fill out the form on the following page and we will be sure to contact you. Also, if you have any additional questions or would like to know more about the TPO and the CAC, then don't hesitate to contact us at (352) 438-2630.



**TO: Board 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 board meeting to share highlights from the guidance paper and considerations for next steps.

**Attachment(s)**

- Presentation
- Transportation Resilience Guidance Paper

**Recommendation(s)**

Feedback and comments by Board members.

**Action Requested**

None.

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

An aerial photograph of a city, likely Savannah, Georgia, showing a mix of historic and modern buildings, streets, and green spaces. A prominent blue rectangular box is overlaid on the lower-left portion of the image, containing white text. The background shows a dense urban area with various colored buildings, parking lots, and roads, surrounded by a thick forest of trees. A tall, thin tower is visible in the distance on the right side.

# TRANSPORTATION RESILIENCY GUIDANCE

FEBRUARY 2022

An aerial photograph of a river meandering through a lush, dense green forest. The river is dark and reflects the surrounding trees. The word "AGENDA" is overlaid in large, white, bold, sans-serif capital letters on the upper left portion of the image.

# AGENDA

- What is Resiliency?
- National guidance
- Funding opportunities
- Vulnerability analysis
- Resiliency strategies
- Next steps

# Transportation Resiliency

Is it relevant to Marion County, FL?

The Federal Highway Administration defines resiliency as:  
***the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions***



# DISRUPTIONS

A photograph of a long, straight asphalt road with double yellow lines, flanked by green grass and trees under a cloudy sky. The road stretches into the distance, creating a strong sense of perspective. The sky is filled with large, white, fluffy clouds, and the overall atmosphere is bright and clear.

Disruptions can include natural and man-made disasters

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

# NATIONAL GUIDANCE



## Resiliency Requirements

Resilience planning was first introduced into federal transportation legislation 10 years ago.

2012

Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21)

Added eligibility of “protection against extreme events” to funding programs

2015

Fixing America’s Surface Transportation Act (FAST Act)

Formalizes resilience consideration into transportation planning

2021

Infrastructure Investment & Jobs Act (II&J)

Allocates \$47 billion to infrastructure resilience

# FUNDING OPPORTUNITIES



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



\$8.7 b

Promoting Resilient Operations for Transformative, Efficient, & Cost-saving Transportation (PROTECT)



\$1.0 b

Building Resilient Infrastructure & Communities (BRIC)

**Federal Infrastructure Investment & Jobs Act**



\$3.5 b

Flood Mitigation Assistance (FMA)



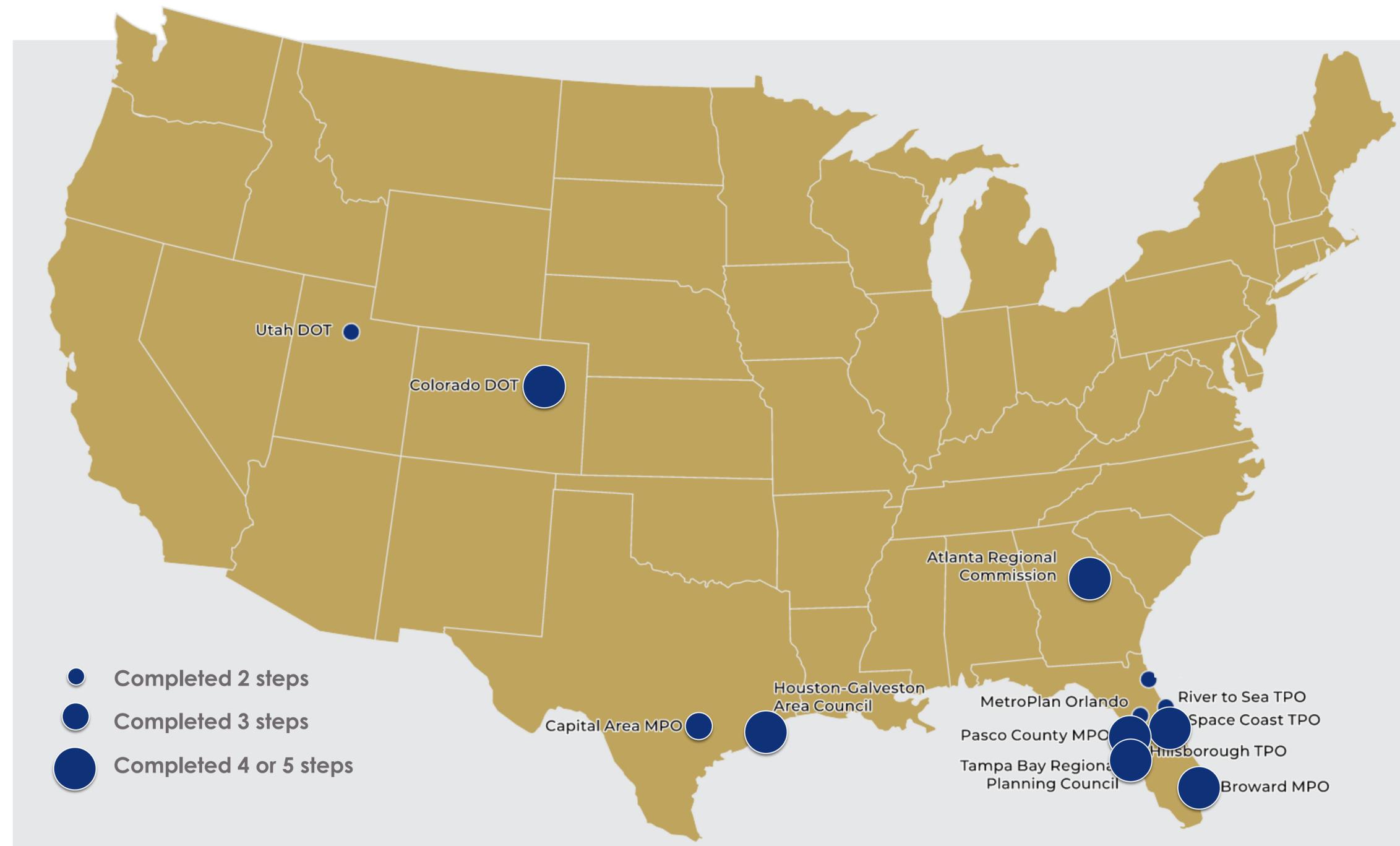
\$20 m

Resilient Florida Grant Program

**Statewide Flooding and Sea Level Rise Resilience**

# PEER AREA RESILIENCY EFFORTS

- 1 Define hazards
- 2 Identify critical roadways
- 3 Assess vulnerabilities
- 4 Develop mitigation strategies
- 5 Specify funding sources



# PEER AREA RESILIENCY EFFORTS

- 1 Define hazards
- 2 Identify critical roadways
- 3 Assess vulnerabilities
- 4 Develop mitigation strategies
- 5 Specify funding sources

| Agency/<br>Location                           | Plan                                  | Description  | Resiliency Actions |                              |                                       |                                |                           |
|---|---------------------------------------|--|--------------------|------------------------------|---------------------------------------|--------------------------------|---------------------------|
|   |                                       |  | Defines Hazards    | Identifies Critical Roadways | Assesses Vulnerabilities/<br>Exposure | Develops Mitigation Strategies | Specifies Funding Sources |
| <b>Space Coast TPO<br/>Brevard County, FL</b> | Transportation Resiliency Master Plan | Defines six unique shocks/stressors and their impact on roadways critical to the communities in Brevard County; develops mitigation strategies.  | ●                  | ●                            | ●                                     | ●                              | ●                         |
| <b>River to Sea TPO</b>                       | SLR Vulnerability Assessment          | Identified exposure/vulnerability to evacuation routes, major roadways, trails, and stormwater storage assets.   | ●                  |                              | ●                                     |                                |                           |
| <b>MetroPlan Orlando</b>                      | 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. | ●                  |                              |                                       |                                |                           |



## Vulnerability analysis



**Wildfires** – **960** square miles in Marion County are prone to wildfires



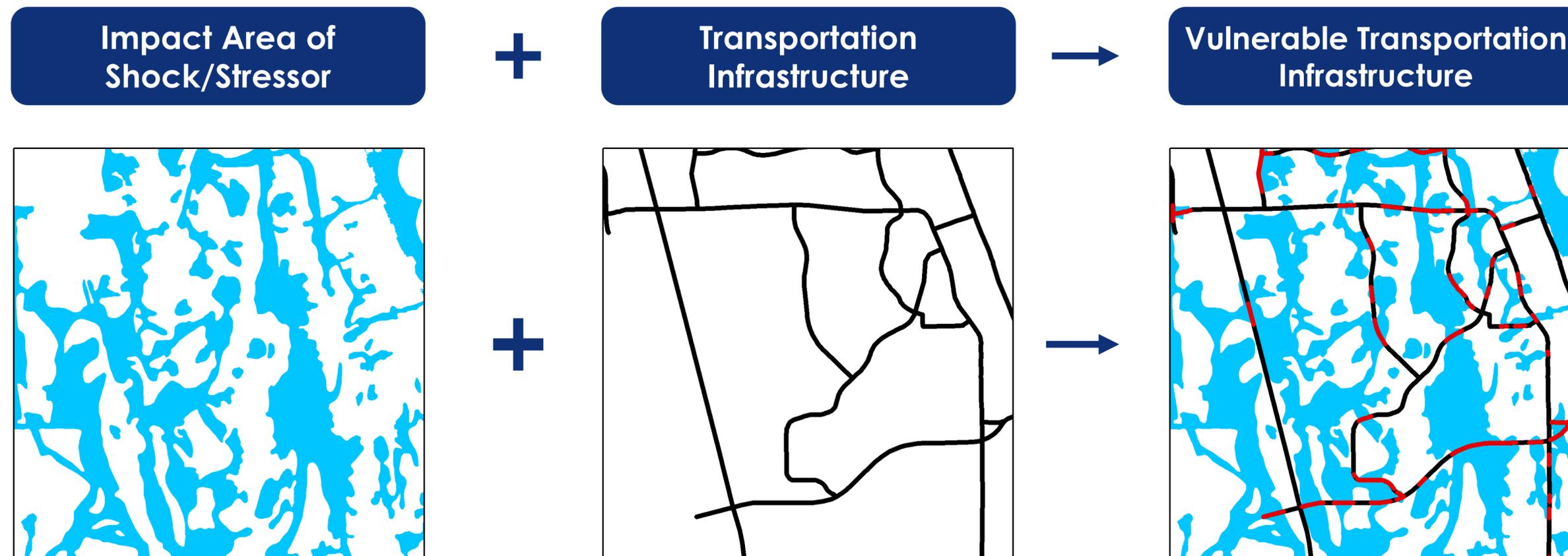
**Flooding** – **315** square miles in Marion County are prone to flooding



**Sinkholes** – **803** sinkholes in Marion County between 2015 and 2020

# Exposure analysis

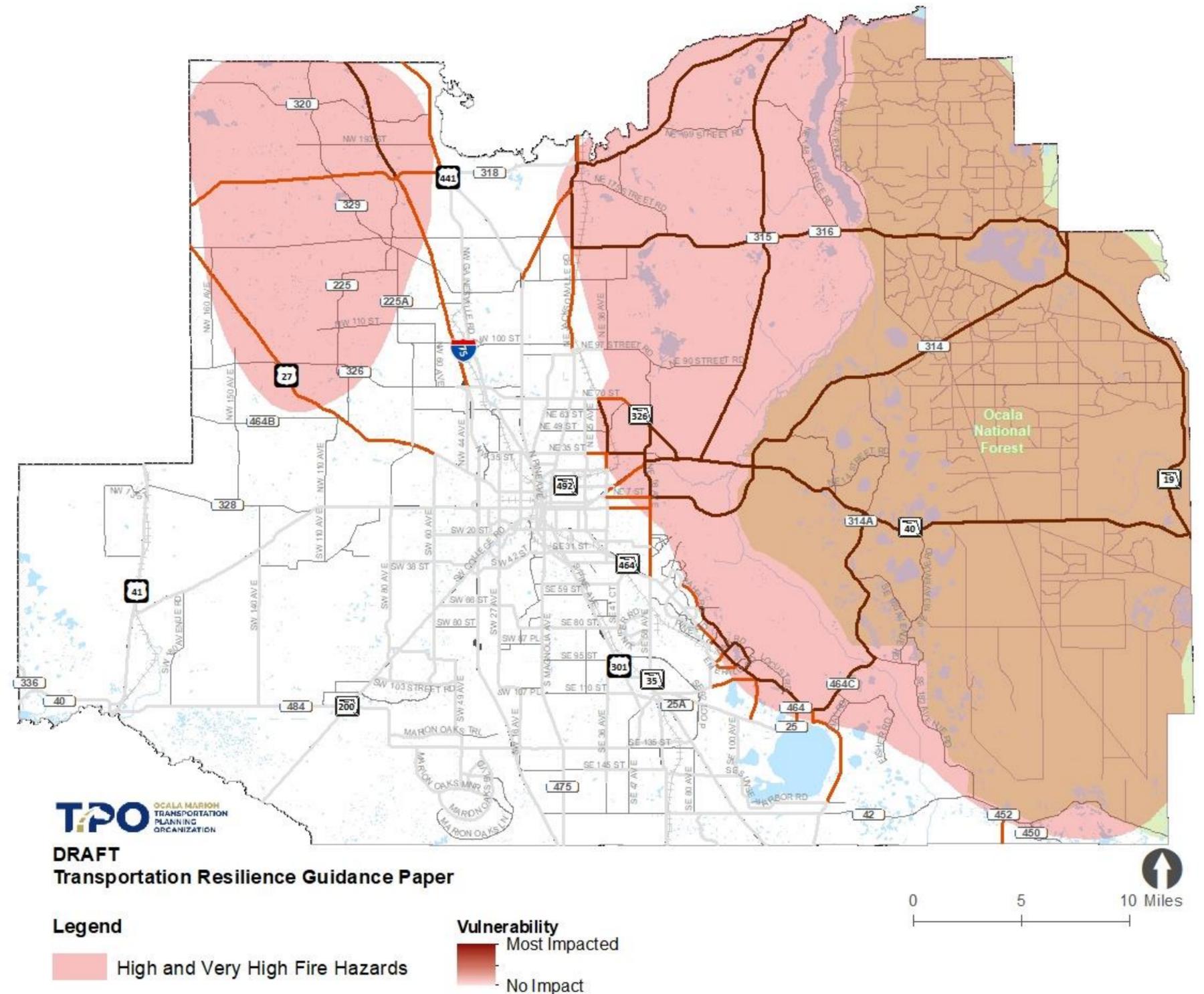
Spatial analysis of the relationship between shock/stressors and federal aid eligible network. Analysis completed separately for evacuation network as well.



# WILDFIRE exposure

## Federal Aid Eligible Roadways exposure

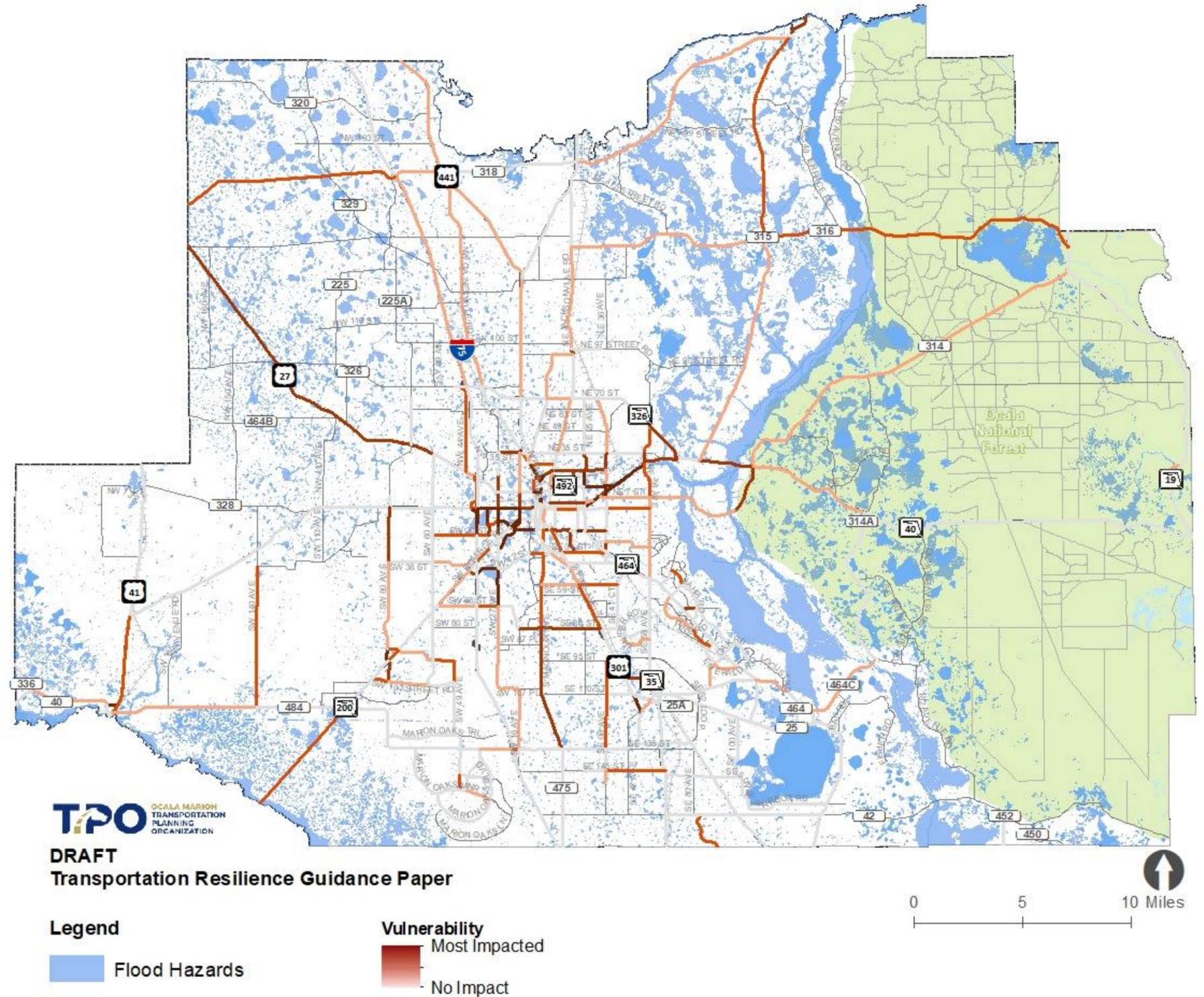
- 78 miles of principal arterials
- 38 miles of minor arterials
- 116 miles of major collectors
- 23 miles of minor collectors
- 255 total miles of roadways  
35% of system



# FLOODING exposure

## Federal Aid Eligible Roadways exposure

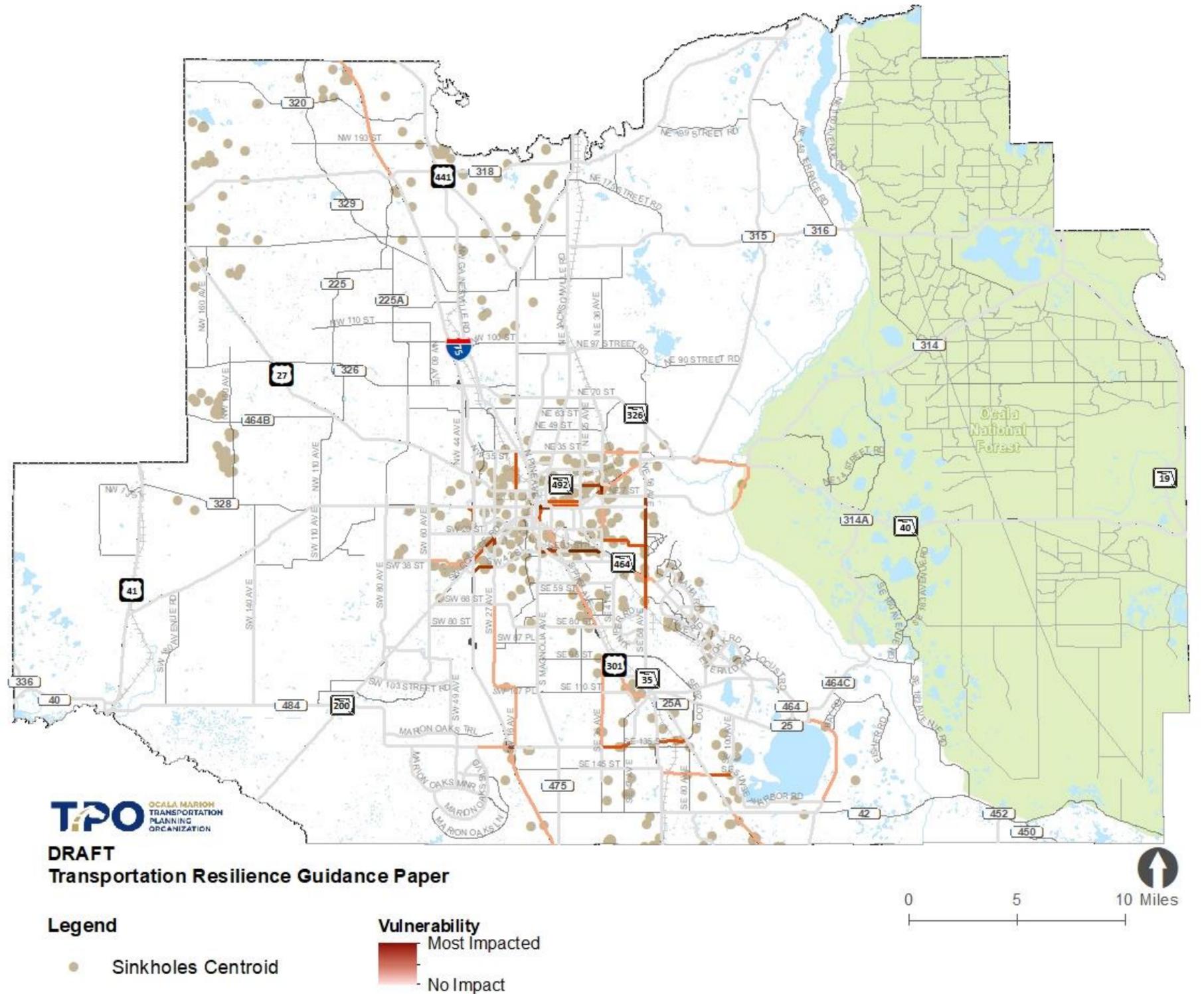
- 125 miles of principal arterials
- 56 miles of minor arterials
- 151 miles of major collectors
- 100 miles of minor collectors
- 436 total miles of roadways  
60% of system



# SINKHOLE exposure

## Federal Aid Eligible Roadways exposure

- 37 miles of principal arterials
- 21 miles of minor arterials
- 6 miles of major collectors
- 21 miles of minor collectors
- 86 total miles of roadways  
12% of system



# MITIGATION STRATEGIES

## Types of Strategies



**Prevention** – Improvements that reduce likelihood of impact to the system



**Adaptation** – Improvements that adjust to shocks and stressors to minimize impacts



**Absorption** – Improvements that fortify the system against shocks and stressors



**Restoration** – Improvements that facilitate restoration of normal function after impacts.

# PREVENTION STRATEGIES

| Strategy   | Description   | Hazards   | Considerations | Benefits   | Cost  | Source   |
|--|---|---|----------------|--|---|--|
| <b>Prevention: Strategies that reduce the likelihood of a shock or stressor impacting the system.</b>  |   |   |                |  |   |  |
| <b>Reduce VMT</b>  | Reducing Vehicle Miles Travelled (VMT) reduces the strain on the network associated with rerouting trips or reducing the available route choices. |    |                | <ul style="list-style-type: none"> <li>Reduce community reliance on automobile trips</li> <li>Reduce the number of vehicles that must use detour routes</li> </ul> |    |  |
| <b>Develop a Stormwater Management Plan</b>  | Develop a plan to address existing conditions and the required capacity for new facilities.   |    |                | <ul style="list-style-type: none"> <li>Determine effectiveness of centralized facilities and other regional opportunities</li> </ul>                               |    | <ul style="list-style-type: none"> <li>Houston Galveston Resilience Pilot Program</li> </ul>   |
| <b>Construct green roofs</b>   | Utilize green roofs that provide shade, reduce surrounding air temperature, and reduce runoff.  |    |                | <ul style="list-style-type: none"> <li>Reduce runoff</li> <li>Reduce urban heat island effect</li> </ul>   |    | <ul style="list-style-type: none"> <li>USFS Compendium of Adaptation Practices</li> </ul>  |
| <b>Realign or reconnect water courses</b>  | Realign waterways away from critical infrastructure. Reconnect waterways to allow natural flood plains to absorb impact of storm events.          |  |                | <ul style="list-style-type: none"> <li>Allow natural flooding to occur, rather than constraining waterways</li> </ul>  |  | <ul style="list-style-type: none"> <li>World Road Association International Climate Change Adaptation Framework for Road Infrastructure</li> </ul> |
| <b>Implement fire-use restrictions</b>   | Implement policies to reduce the likelihood of wildfire during conditions that are conducive to wildfire ignition.                                |  |                | <ul style="list-style-type: none"> <li>Reduce chances of wildfire</li> </ul>   |  | <ul style="list-style-type: none"> <li>USFS Compendium of Adaptation Practices</li> </ul>  |
| <b>Use forest management techniques such as thinning, prescribed burn, and fuels removal</b>   | Reduce the likelihood for an extreme fire, with intermittent fire and other management practices.   |  |                | <ul style="list-style-type: none"> <li>Maintain ecosystems that require fire</li> </ul>  |  | <ul style="list-style-type: none"> <li>USFS Compendium of Adaptation Practices</li> </ul>  |
| <b>Legend</b>  General  Heat  Wildfire  Flood  Tornado  Low cost  Medium cost  High cost |   |   |                |  |   |  |

# ADAPTATION STRATEGIES

## Adaptation: Strategies that change the system in anticipation of shocks and stressors to maintain normal functioning.

|   |   |  |   |  |  |   |
|---|---|--|---|--|--|---|
| <p><b>Discourage development and growth in vulnerable areas</b></p> | <p>Create zoning requirements that encourage dense development to occur outside of impact areas, for example the flood plain.</p>   |  | <ul style="list-style-type: none"> <li>• Consider impacts to communities living in less vulnerable areas</li> <li>• Consider conservation projects, especially in areas that coincide with environmentally vulnerable/valuable areas</li> </ul> | <ul style="list-style-type: none"> <li>• Reduce the amount of vulnerable infrastructure over time</li> </ul>   |  | <ul style="list-style-type: none"> <li>• FEMA Nature-Based Solutions</li> <li>• Houston Galveston Resilience Pilot Program</li> </ul> |
| <p><b>Site new facilities outside of hazard area</b></p>            | <p>When developing new assets or infrastructure, consider locating outside of the hazard area.</p>  |  | <ul style="list-style-type: none"> <li>• Consider impacts to communities living in less vulnerable areas</li> <li>• Consider conservation projects, especially in areas that coincide with environmentally vulnerable/valuable areas</li> </ul> | <ul style="list-style-type: none"> <li>• Consider hazards during the planning phase to reduce the cost of relocation</li> </ul>  |  | <ul style="list-style-type: none"> <li>• FHWA Adaptation Framework</li> </ul>   |
| <p><b>Change the nature of access to critical facilities</b></p>    | <p>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.</p> |  | <ul style="list-style-type: none"> <li>• Consider impacts to communities living in less vulnerable areas</li> <li>• Consider conservation projects, especially in areas that coincide with environmentally vulnerable/valuable areas</li> </ul> | <ul style="list-style-type: none"> <li>• Provides redundant access during normal operations</li> </ul>   |  | <ul style="list-style-type: none"> <li>• USFS Compendium of Adaptation Practices</li> </ul>   |
| <p><b>Provide redundant routes</b></p>                              | <p>Maintain redundant routes in the network that are functional for all modes.</p>  |  | <ul style="list-style-type: none"> <li>• Consider access to critical facilities and critical routes</li> </ul>  | <ul style="list-style-type: none"> <li>• Reduces the consequence of segments being impacted by shocks or stressors</li> <li>• Offers traffic management in non-hazard times</li> </ul> |  | <ul style="list-style-type: none"> <li>• Resilient California</li> </ul>  |

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

# ABSORPTION STRATEGIES

## Absorption: Strategies that help the system function normally during events that cause shocks and stressors.

|  |   |   |  |  |   |   |
|--|---|---|--|--|---|---|
| <b>Conduct regular maintenance of infrastructure</b> | Maintain the working order of infrastructure, for example keeping culverts clear.   |    | <ul style="list-style-type: none"> <li>• Proactive measure to maintain flow at critical points</li> <li>• Maintain clear of overgrown vegetation which may spread wildfire across the roadway</li> </ul>   | <ul style="list-style-type: none"> <li>• Resist water movement and inundation</li> <li>• Withstand impacts of prolonged exposure to heat or submersion</li> </ul>      |    | <ul style="list-style-type: none"> <li>• South Florida Climate Pilot</li> <li>• Houston Galveston Resilience Pilot Program</li> </ul>                         |
| <b>Construct hardened shoulders</b>                  | Widen roadway structure to reduce impact to travel lanes.   |    | <ul style="list-style-type: none"> <li>• Requires clearance around roadway</li> <li>• Along roadways experiencing strong flows</li> </ul>  | <ul style="list-style-type: none"> <li>• Limit inundation to one side of roadway</li> <li>• Reduce erosion from overtopping</li> </ul>                                 |    | <ul style="list-style-type: none"> <li>• Resilient Tampa Bay</li> </ul>   |
| <b>Use permeable pavements</b>                       | Slows, filters, and cleans stormwater runoff by installing porous surfaces.   |    | <ul style="list-style-type: none"> <li>• Especially relevant in areas with large parking lots</li> <li>• Appropriate only for gentle slopes</li> <li>• Can become clogged.</li> <li>• Appropriate for low traffic volumes, loads, and speed</li> </ul> | <ul style="list-style-type: none"> <li>• Reduce runoff</li> <li>• Allow water to infiltrate</li> <li>• Reduced particulates in water</li> </ul>                        |    | <ul style="list-style-type: none"> <li>• Resilient Tampa Bay</li> <li>• Houston Galveston Resilience Pilot Program</li> </ul>                                 |
| <b>Construct enhanced road surface</b>               | For flooding: Increase the thickness of hot mix asphalt (consider increasing 2") and binder course using larger aggregate.<br>For heat and wildfire: Design road with materials resistant to fire and heat. |   |  | <ul style="list-style-type: none"> <li>• Resist water movement and inundation</li> <li>• Withstand impacts of prolonged exposure to heat or submersion</li> </ul>      |  | <ul style="list-style-type: none"> <li>• Resilient Tampa Bay</li> <li>• Resilient California</li> <li>• Houston Galveston Resilience Pilot Program</li> </ul> |
| <b>Construct enhanced sub-surface</b>                | Increase the thickness of subbase layers to provide additional drainage, structural strength, and resistance to flow damages (consider increasing 4-6").  |  |  | <ul style="list-style-type: none"> <li>• Resist water movement and inundation</li> </ul>   |  | <ul style="list-style-type: none"> <li>• Resilient Tampa Bay</li> <li>• Houston Galveston Resilience Pilot Program</li> </ul>                                 |
| <b>Construct berms or barriers</b>                   | Construct a barrier to prevent water from flooding the roadway.   |  | <ul style="list-style-type: none"> <li>• Consider available right-of-way to construct barrier</li> </ul>   | <ul style="list-style-type: none"> <li>• Prevent water from reaching roadway or flowing across roadway</li> </ul>  |  | <ul style="list-style-type: none"> <li>• FHWA Adaptation Framework</li> </ul>   |
| <b>Construct protected or depressed medians</b>      | Separate the roadway and potential effect of inundation with a median between the travel lanes in each direction.   |  | <ul style="list-style-type: none"> <li>• Especially effective along roadways in flat areas</li> <li>• Requires maintenance of vegetation and keeping drains clear</li> </ul>   | <ul style="list-style-type: none"> <li>• Reduce the occurrence of floods across the full roadway</li> <li>• If depressed, serve as a holding area for water</li> </ul> |  | <ul style="list-style-type: none"> <li>• Resilient Tampa Bay</li> <li>• Houston Galveston Resilience Pilot Program</li> </ul>                                 |

# RESTORATION STRATEGIES

## Restoration: Strategies that help the system recover quickly and return to normal functioning.

|  |   |   |  |   |   |  |
|--|---|---|--|---|---|--|
| <b>Install generator connections at traffic signals</b>  | Provide built in connections on signal cabinets to connect a generator.   |    | <ul style="list-style-type: none"> <li>• Battery capacity and need for replacement or installation of a generator</li> <li>• Prioritize signals with greatest impact</li> </ul>  | <ul style="list-style-type: none"> <li>• Quickly resume operations after shock</li> </ul>   |    | <ul style="list-style-type: none"> <li>• Space Coast TPO Resiliency Master Plan</li> </ul>     |
| <b>Prioritize roadways</b>   | 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. |    | <ul style="list-style-type: none"> <li>• Include community input regarding critical routes and facilities</li> </ul>   | <ul style="list-style-type: none"> <li>• Clear and defined plan that can be communicated to the community</li> </ul>                          |    | <ul style="list-style-type: none"> <li>• Resilient California</li> </ul>                       |
| <b>Develop warning systems with resilient communications</b>   | Warning system may consist of sensors, cameras, citizen reporting tool, or other means.   |    |  | <ul style="list-style-type: none"> <li>• Quickly alert of hazard to allow response to occur</li> </ul>  |    | <ul style="list-style-type: none"> <li>• Houston Galveston Resilience Pilot Program</li> </ul> |
| <b>Develop a coordination plan with other agencies to respond to changes and hazards</b>   |   |    |  |   |   | <ul style="list-style-type: none"> <li>• FHWA Adaptation Framework</li> </ul>                  |
| <b>Coordinate with transit providers to identify alternative routes and stops if normal infrastructure is impacted</b>                   |   |  |  | <ul style="list-style-type: none"> <li>• Continue to operate transit in a predetermined manner consistent with rider expectations.</li> </ul> |  | <ul style="list-style-type: none"> <li>• Resilient California</li> </ul>                       |
| <b>Establish stand-by contracts for damage response</b>  | Establish mechanisms to pay for rapid response to hazards.  |  |  | <ul style="list-style-type: none"> <li>• Proactive measure to reduce the length of impact.</li> </ul>   |  | <ul style="list-style-type: none"> <li>• FHWA HOP-15-025</li> </ul>                            |
| <b>Stockpile materials (culvert pipe, fuel, components) and equipment (generators, traffic control devices) at appropriate locations</b> | Maintain an inventory of critical materials to quickly respond to needs during and after shocks.  |  | <ul style="list-style-type: none"> <li>• Different materials will be needed at different locations to address each hazard</li> <li>• Consider in conjunction with prioritized roadways</li> <li>• Consider cost of storage and potential deterioration of materials over time</li> </ul> | <ul style="list-style-type: none"> <li>• Proactive measure to reduce the length of impact.</li> </ul>   |  | <ul style="list-style-type: none"> <li>• FHWA HOP-15-025</li> </ul>                            |

# NEXT STEPS

## Incorporating Resiliency into planning processes



Project level planning/development



Hazard data collection



Scenario planning analysis



Identification of critical facilities



Identification and prioritization of needed resiliency  
improvements



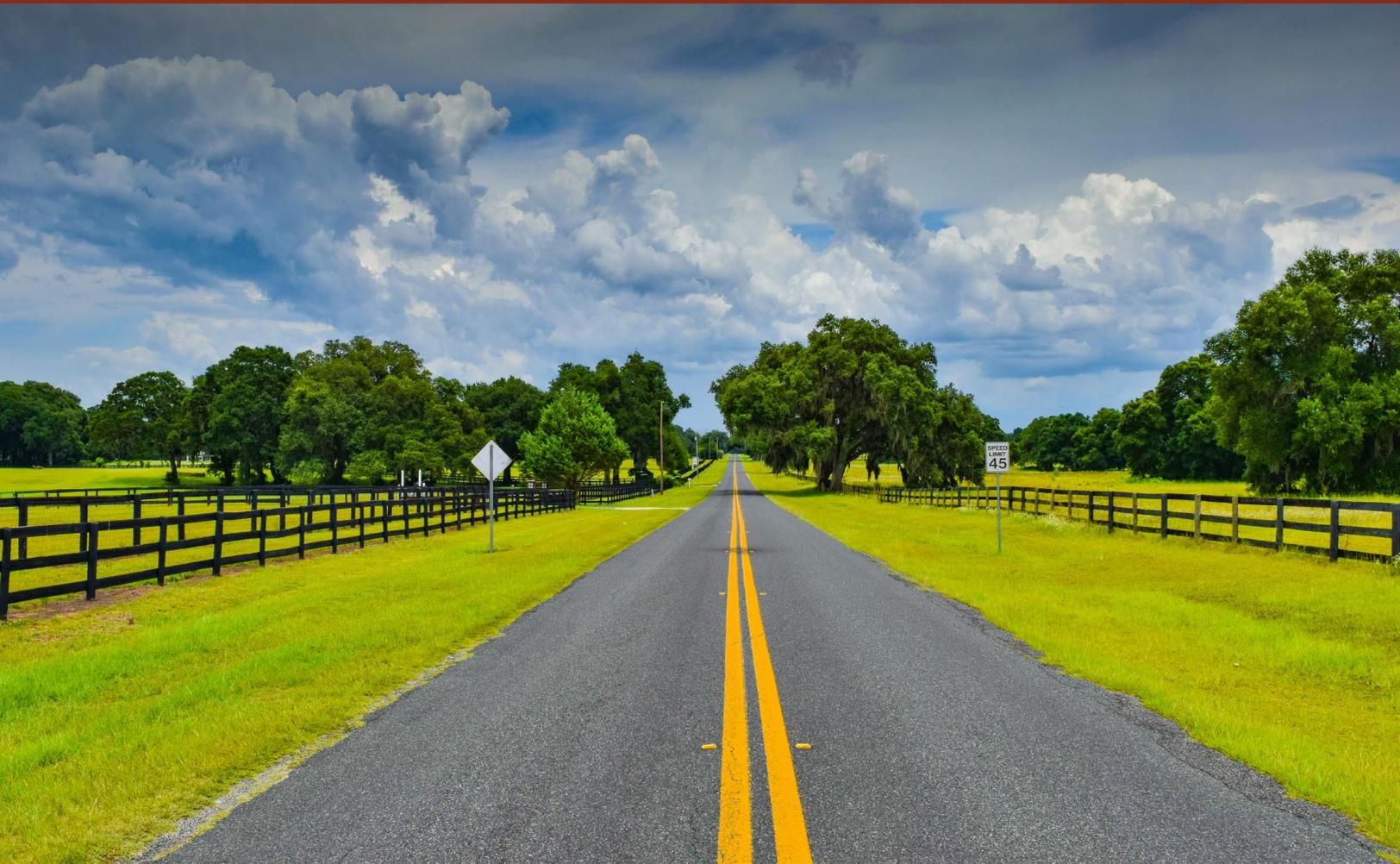
# Questions?

Franco Saraceno

[fsaraceno@kittelson.com](mailto:fsaraceno@kittelson.com)

813.556.6972

# TRANSPORTATION RESILIENCE GUIDANCE



January 2022

# CONTENTS

|   |           |
|---|-----------|
| <b>INTRODUCTION .....</b>   | <b>3</b>  |
| <b>US DEPARTMENT OF TRANSPORTATION (USDOT).....</b>                       | <b>4</b>  |
| US Department of Transportation Guidance .....                            | 4         |
| FHWA Vulnerability Assessment and Adaptation Framework .....              | 7         |
| <b>PEER STUDIES AND CURRENT TRANSPORTATION RESILIENCY PRACTICES .....</b> | <b>8</b>  |
| <b>FEDERAL GUIDANCE &amp; FUNDING .....</b>                               | <b>12</b> |
| <b>STATE FUNDING OPPORTUNITIES .....</b>                                  | <b>14</b> |
| <b>MARION COUNTY LOCAL MITIGATION STRATEGY (LMS) .....</b>                | <b>17</b> |
| Structures/Infrastructure Vulnerability to Hazard Impacts .....           | 17        |
| Vulnerable Critical Facilities.....                                       | 19        |
| <b>VULNERABILITY ANALYSIS .....</b>                                       | <b>23</b> |
| Purpose of Analysis .....   | 23        |
| Methodology and Data Sources.....   | 23        |
| Results.....  | 23        |
| <b>RESILIENCY STRATEGIES .....</b>  | <b>27</b> |
| <b>NEXT STEPS .....</b>   | <b>32</b> |

# 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 withstand, respond to, and recover rapidly from disruptions.”<sup>1</sup> 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.

<sup>1</sup> *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 actions 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

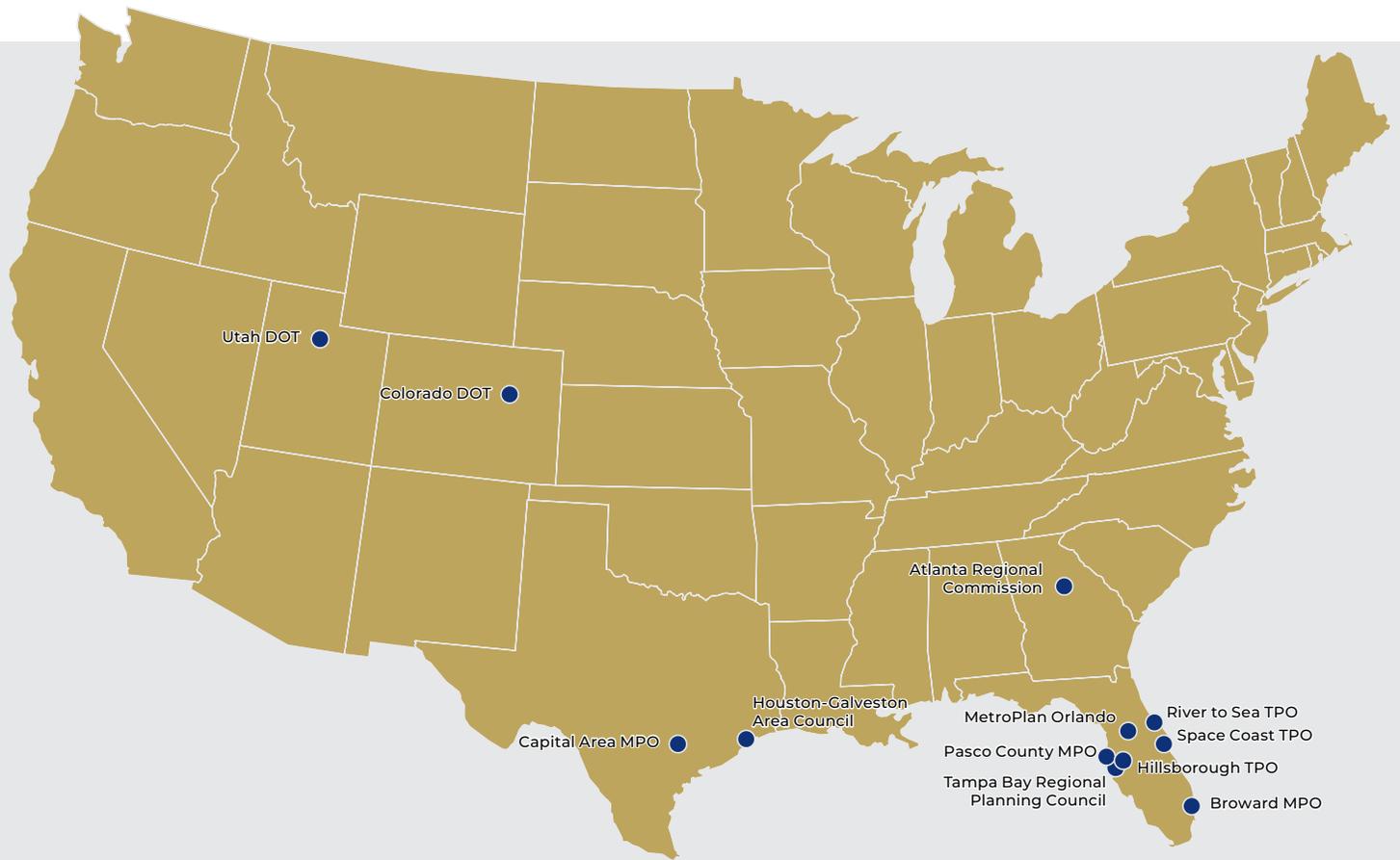


TABLE 1. PEER AGENCIES RESILIENCY EFFORTS

| Agency/<br>Location                           | Plan                                  | Description  | Resiliency Actions |                              |                                       |                                |                           |
|---|---------------------------------------|--|--------------------|------------------------------|---------------------------------------|--------------------------------|---------------------------|
|   |                                       |  | Defines Hazards    | Identifies Critical Roadways | Assesses Vulnerabilities/<br>Exposure | Develops Mitigation Strategies | Specifies Funding Sources |
| <b>Space Coast TPO<br/>Brevard County, FL</b> | Transportation Resiliency Master Plan | Defines six unique shocks/stressors and their impact on roadways critical to the communities in Brevard County; develops mitigation strategies.  | ●                  | ●                            | ●                                     | ●                              | ●                         |
| <b>River to Sea TPO</b>                       | SLR Vulnerability Assessment          | Identified exposure/vulnerability to evacuation routes, major roadways, trails, and stormwater assets.   | ●                  |                              | ●                                     |                                |                           |
| <b>MetroPlan Orlando</b>                      | 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/<br>Location                                      | Plan   | Description  | Resiliency Actions |                              |                                       |                                |                           |
|--|--|--|--------------------|------------------------------|---------------------------------------|--------------------------------|---------------------------|
|  |  |  | Defines Hazards    | Identifies Critical Roadways | Assesses Vulnerabilities/<br>Exposure | Develops Mitigation Strategies | Specifies Funding Sources |
| <b>Broward MPO<br/>Broward<br/>County, FL</b>            | 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. | ●                  | ●                            | ●                                     | ●                              |                           |
| <b>Broward MPO<br/>Broward<br/>County, FL</b>            | 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.   | ●                  | ●                            | ●                                     | ●                              |                           |
| <b>Hillsborough TPO<br/>Tampa, FL</b>                    | 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.  | ●                  | ●                            | ●                                     | ●                              | ●                         |
| <b>Pasco County MPO<br/>Pasco County, FL</b>             | 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.  | ●                  | ●                            | ●                                     | ●                              | ●                         |
| <b>Tampa Bay Regional Planning Council<br/>Tampa, FL</b> | Tampa Regional Resiliency Action Plan  | Five-year roadmap focused on risk reduction and adaptation actions to anticipate and prepare for sea level rise, storms, flooding, and extreme heat. Defines goals and objectives for resiliency.  | ●                  |                              |                                       |                                |                           |

| Agency/<br>Location                                | Plan  | Description  | Resiliency Actions |                              |                                       |                                |                           |
|--|---|--|--------------------|------------------------------|---------------------------------------|--------------------------------|---------------------------|
|  |   |  | Defines Hazards    | Identifies Critical Roadways | Assesses Vulnerabilities/<br>Exposure | Develops Mitigation Strategies | Specifies Funding Sources |
| <b>Capital Area MPO<br/>Austin, TX</b>             | 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.   | ●                  | ●                            | ●                                     |                                |                           |
| <b>Colorado DOT<br/>Colorado</b>                   | 2020 Risk and Resiliency Analysis 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.  | ●                  | ●                            | ●                                     | ●                              |                           |
| <b>Atlanta Regional Commission<br/>Atlanta, GA</b> | 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.   | ●                  | ●                            | ●                                     | ●                              |                           |
| <b>Utah DOT<br/>Utah</b>                           | 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.  | ●                  |                              |                                       |                                | ●                         |
| <b>Houston-Galveston Area Council<br/>Texas</b>    | 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

## 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**

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.

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.<sup>1</sup> 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:<sup>2</sup>

## 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.

<sup>1</sup> 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.

<sup>2</sup> 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          | Ecological       | 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         |                  |

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

Source: National Climatic Data Center

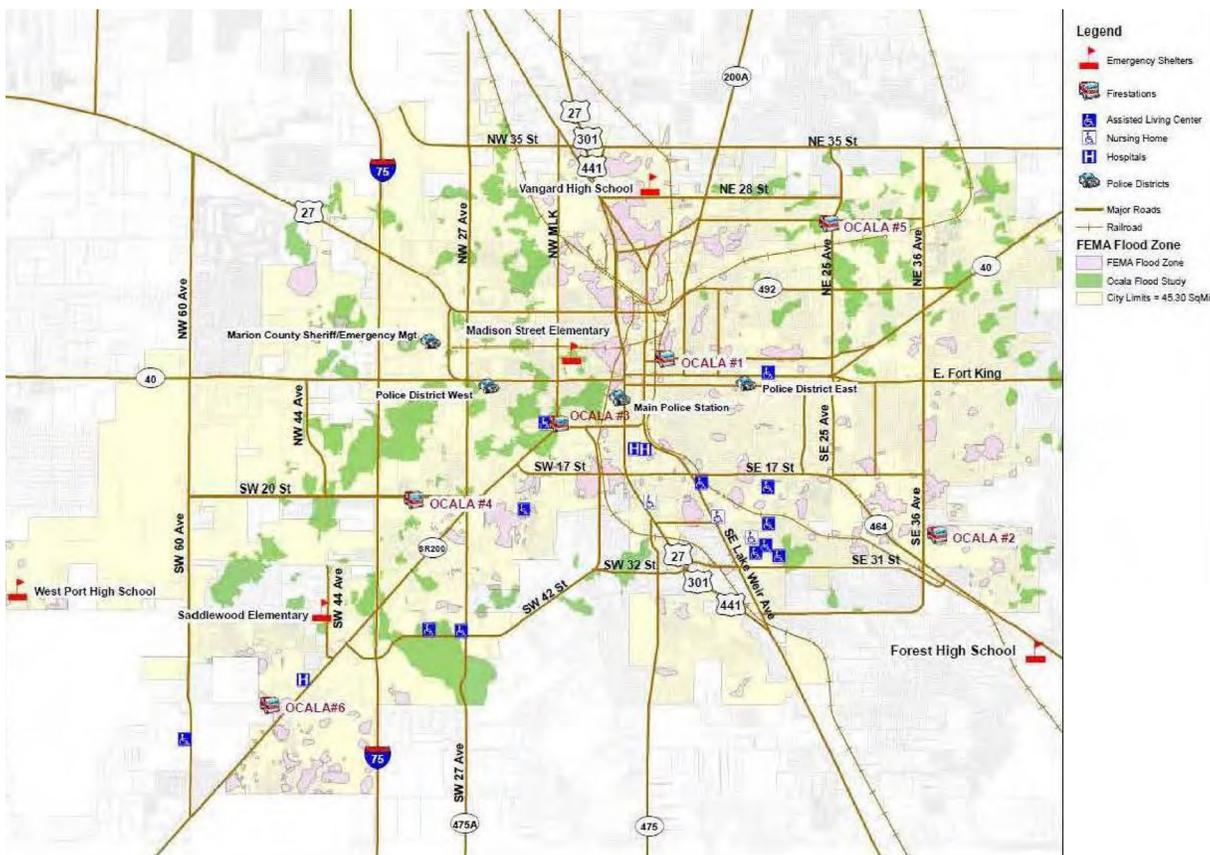
**Low:** 1 event recorded per 10+ years  
**Moderate:** 1 event recorded per 5-9 years  
**High:** 1 event recorded per 1-4 years  
**N/A:** No recorded events or insufficient data.

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



FIGURE 3. CITY OF OCALA PRIORITY 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 inconsistencies 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 |
|--|-----------|-----------|----------|----------|----------|-----------------------|
| <b>Actions that promote control of hazards</b>   | <b>M</b>  | <b>M</b>  | <b>L</b> | <b>H</b> | <b>L</b> | <b>H</b>              |
| 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                     |
| <b>Actions that protect public facilities and infrastructure</b>   | <b>M</b>  | <b>M</b>  | <b>L</b> | <b>H</b> | <b>L</b> | <b>H</b>              |
| 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 computers 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                     |

|  | Bellevue | Dunnellon | McIntosh | Ocala    | Reddick  | Unincorporated County |
|--|----------|-----------|----------|----------|----------|-----------------------|
| <b>Actions that promote emergency preparedness and response</b>  | <b>M</b> | <b>M</b>  | <b>L</b> | <b>H</b> | <b>M</b> | <b>H</b>              |
| 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

**803** sinkholes in Marion County  
between 2015 and 2020



areas based on historical tracking in Ocala and the Marion County Office of the County Engineer - Stormwater Division.

**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.

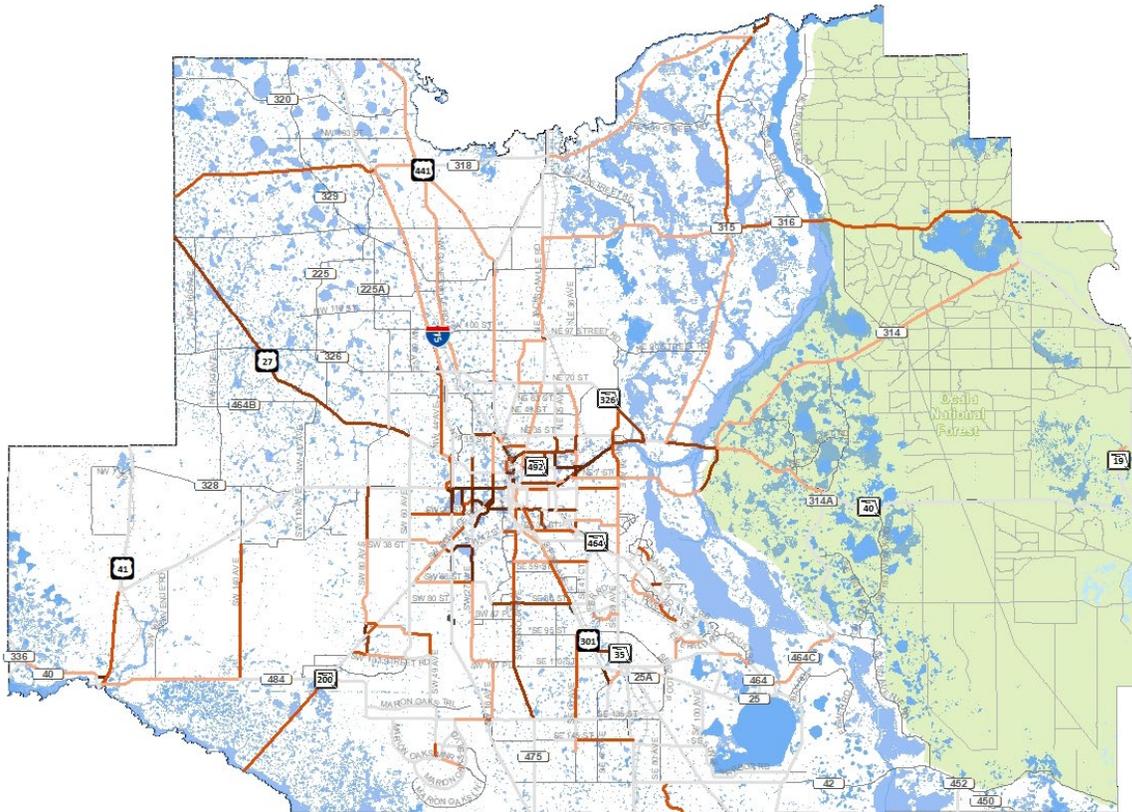
## Results

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.



**Legend**  
 Flood Hazards

**Vulnerability**  
 Most Impacted  
 No Impact

### 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%                               |
| <b>All Road Classifications</b> | <b>436</b>                | <b>61%</b>                        |

### FLOODING IMPACTS ON EVACUATION ROUTES

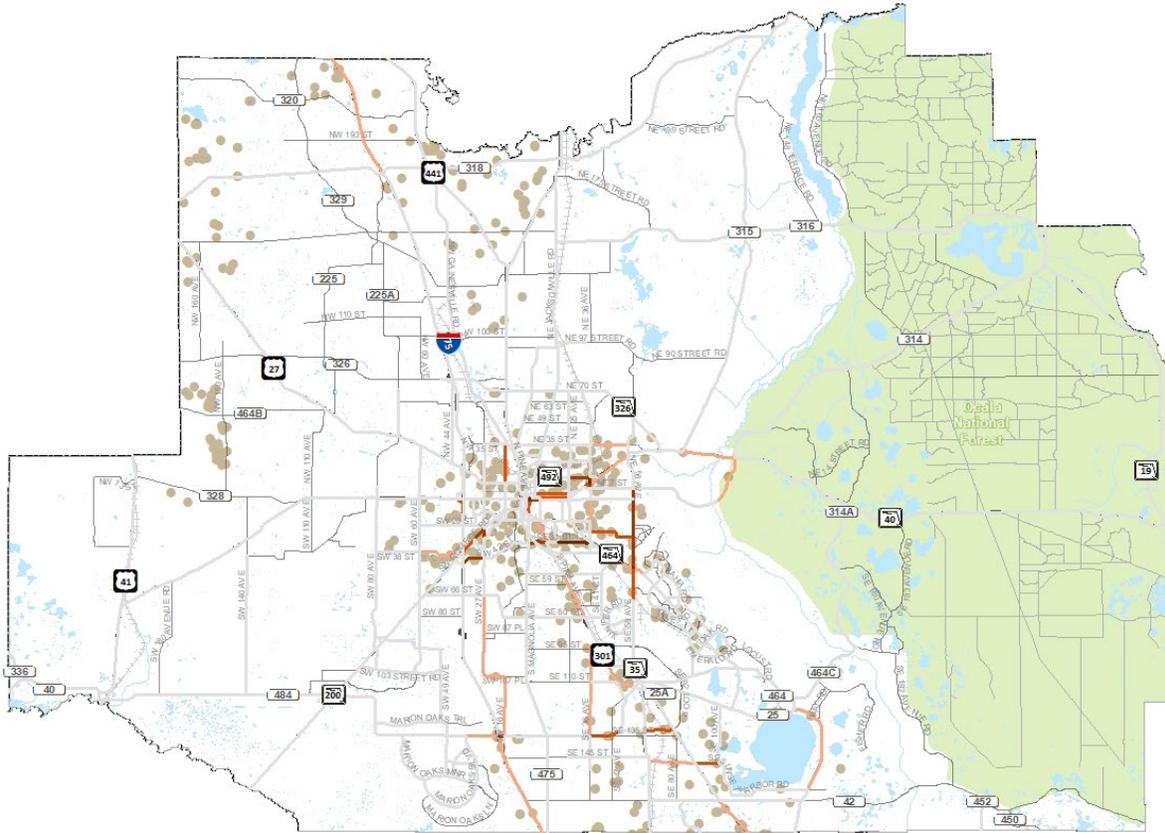
| Functional Classification       | Centerline Miles Impacted | Percent Centerline Miles Impacted |
|---------------------------------|---------------------------|-----------------------------------|
| Principal Arterial              | 192                       | 88%                               |
|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

Source: Marion County, Florida | Flood Factor



## Sinkholes

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



### Legend

● Sinkholes Centroid

### Vulnerability

Most Impacted  
No Impact

### 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%                               |
| <b>All Road Classifications</b> | <b>86</b>                 | <b>12%</b>                        |

### SINKHOLE IMPACTS ON EVACUATION ROUTES

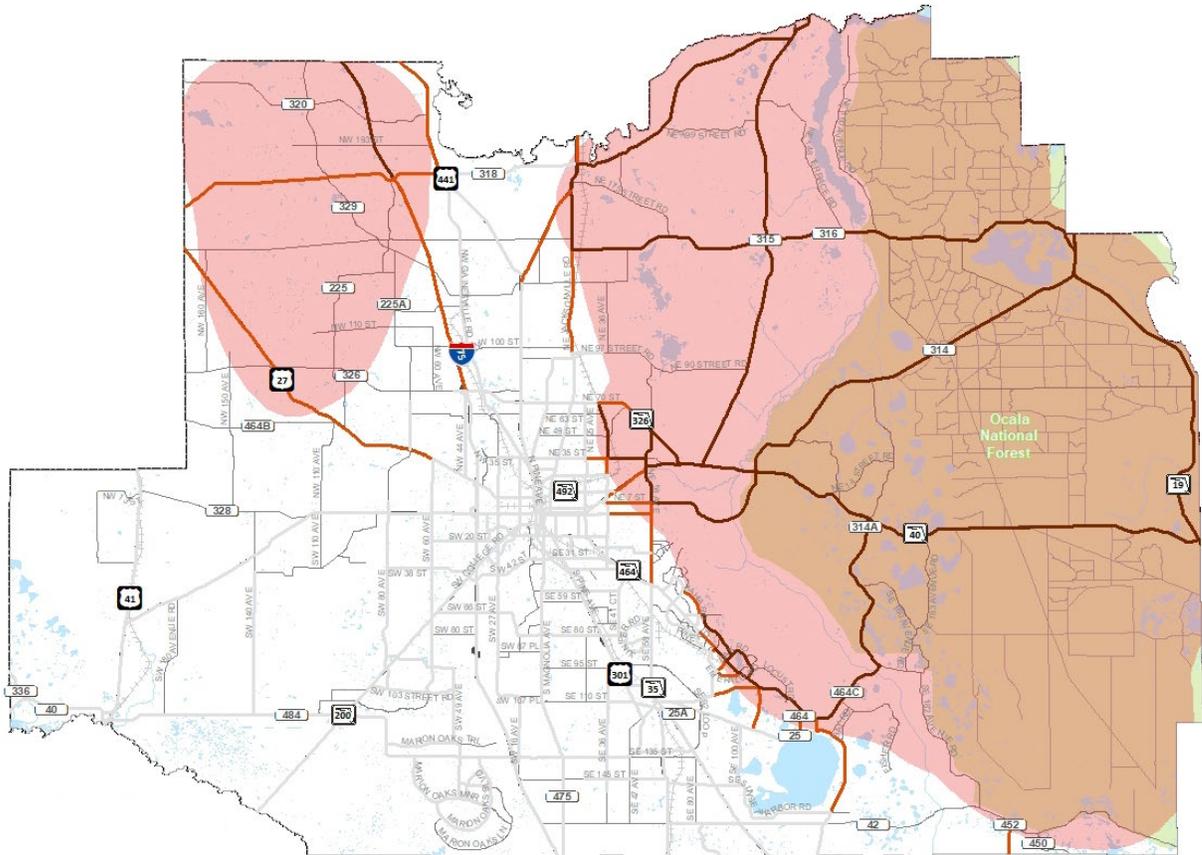
| Functional Classification       | Centerline Miles Impacted | Percent Centerline Miles Impacted |
|---------------------------------|---------------------------|-----------------------------------|
| Principal Arterial              | 70                        | 32%                               |
| Minor Arterial                  | 41                        | 57%                               |
| Major Collector                 | 0                         | 0%                                |
| Minor Collector (Fed Aid)       | 0                         | 0%                                |
| <b>All Road Classifications</b> | <b>111</b>                | <b>34%</b>                        |

Source: Marion County, Florida



## Wildfires

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



### Legend

High and Very High Fire Hazards

### Vulnerability

Most Impacted  
 No Impact

### 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%                               |
| <b>All Road Classifications</b> | <b>255</b>                | <b>36%</b>                        |

### 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%                              |
| <b>All Road Classifications</b> | <b>140</b>                | <b>43%</b>                        |

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 Stautes 0427.011 | Florida House of Representatives \(myfloridahouse.gov\)](https://www.floridahouse.gov/legislation/bills/2021/0427-011)

TABLE 5. RESILIENCY STRATEGY MATRIX

| Strategy   | Description  | Hazards | Considerations  | Benefits   | Cost    | Source   |
|--|--|---------|---|--|---------|--|
| <b>Prevention: Strategies that reduce the likelihood of a shock or stressor impacting the system.</b>                        |  |         |   |  |         |  |
| <b>Reduce VMT</b>  | Reducing Vehicle Miles Travelled (VMT) reduces the strain on the network associated with rerouting trips or reducing the available route choices.  |         |   | <ul style="list-style-type: none"> <li>Reduce community reliance on automobile trips</li> <li>Reduce the number of vehicles that must use detour routes</li> </ul>                 |         |  |
| <b>Develop a Stormwater Management Plan</b>  | Develop a plan to address existing conditions and the required capacity for new facilities.  |         |   | <ul style="list-style-type: none"> <li>Determine effectiveness of centralized facilities and other regional opportunities</li> </ul>   |         | <ul style="list-style-type: none"> <li>Houston Galveston Resilience Pilot Program</li> </ul>   |
| <b>Construct green roofs</b>   | Utilize green roofs that provide shade, reduce surrounding air temperature, and reduce runoff.   |         |   | <ul style="list-style-type: none"> <li>Reduce runoff</li> <li>Reduce urban heat island effect</li> </ul>   |         | <ul style="list-style-type: none"> <li>USFS Compendium of Adaptation Practices</li> </ul>  |
| <b>Realign or reconnect water courses</b>  | Realign waterways away from critical infrastructure. Reconnect waterways to allow natural flood plains to absorb impact of storm events.   |         |   | <ul style="list-style-type: none"> <li>Allow natural flooding to occur, rather than constraining waterways</li> </ul>  |         | <ul style="list-style-type: none"> <li>World Road Association International Climate Change Adaptation Framework for Road Infrastructure</li> </ul> |
| <b>Implement fire-use restrictions</b>   | Implement policies to reduce the likelihood of wildfire during conditions that are conducive to wildfire ignition.   |         |   | <ul style="list-style-type: none"> <li>Reduce chances of wildfire</li> </ul>   |         | <ul style="list-style-type: none"> <li>USFS Compendium of Adaptation Practices</li> </ul>  |
| <b>Use forest management techniques such as thinning, prescribed burn, and fuels removal</b>                                 | Reduce the likelihood for an extreme fire, with intermittent fire and other management practices.  |         |   | <ul style="list-style-type: none"> <li>Maintain ecosystems that require fire</li> </ul>  |         | <ul style="list-style-type: none"> <li>USFS Compendium of Adaptation Practices</li> </ul>  |
| <b>Adaptation: Strategies that change the system in anticipation of shocks and stressors to maintain normal functioning.</b> |  |         |   |  |         |  |
| <b>Discourage development and growth in vulnerable areas</b>   | Create zoning requirements that encourage dense development to occur outside of impact areas, for example the flood plain.   |         | <ul style="list-style-type: none"> <li>Consider impacts to communities living in less vulnerable areas</li> <li>Consider conservation projects, especially in areas that coincide with environmentally vulnerable/valuable areas</li> </ul> | <ul style="list-style-type: none"> <li>Reduce the amount of vulnerable infrastructure over time</li> </ul>   |         | <ul style="list-style-type: none"> <li>FEMA Nature-Based Solutions</li> <li>Houston Galveston Resilience Pilot Program</li> </ul>                  |
| <b>Site new facilities outside of hazard area</b>  | When developing new assets or infrastructure, consider locating outside of the hazard area.  |         |   | <ul style="list-style-type: none"> <li>Consider hazards during the planning phase to reduce the cost of relocation</li> </ul>  |         | <ul style="list-style-type: none"> <li>FHWA Adaptation Framework</li> </ul>  |
| <b>Change the nature of access to critical facilities</b>  | 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. |         |   | <ul style="list-style-type: none"> <li>Provides redundant access during normal operations</li> </ul>   |         | <ul style="list-style-type: none"> <li>USFS Compendium of Adaptation Practices</li> </ul>  |
| <b>Provide redundant routes</b>  | Maintain redundant routes in the network that are functional for all modes.  |         | <ul style="list-style-type: none"> <li>Consider access to critical facilities and critical routes</li> </ul>  | <ul style="list-style-type: none"> <li>Reduces the consequence of segments being impacted by shocks or stressors</li> <li>Offers traffic management in non-hazard times</li> </ul> |         | <ul style="list-style-type: none"> <li>Resilient California</li> </ul>   |
| <b>Legend</b>  | General  | Heat    | Wildfire  | Flood  | Tornado | Low cost            Medium cost            High cost   |

| Strategy  | Description  | Hazards   | Considerations  | Benefits   | Cost  | Source  |
|---|--|---|---|--|---|---|
| <b>Construct green stormwater infrastructure</b>  | 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. |  | <ul style="list-style-type: none"> <li>• Maintenance costs, but life cycle benefits</li> <li>• Community is committed to maintaining during establishment</li> </ul>            | <ul style="list-style-type: none"> <li>• Filter water</li> <li>• Infiltrate water</li> <li>• Retain water</li> </ul> |  | <ul style="list-style-type: none"> <li>• Resilient Tampa Bay</li> <li>• Houston Galveston Resilience Pilot Program</li> </ul>       |
| <b>Relocate assets to avoid damage</b>            | Move critical infrastructure or components to avoid or reduce the probability of impact. For example, relocate signal cabinet to higher elevation at intersection.   |  |   |  |  | <ul style="list-style-type: none"> <li>• FHWA Adaptation Framework</li> <li>• Houston Galveston Resilience Pilot Program</li> </ul> |
| <b>Install battery backups at traffic signals</b> | Provide batteries for signal operation during power disruption. Power disruption may occur if powerlines are knocked down from wind debris.  |  | <ul style="list-style-type: none"> <li>• Battery capacity and need for replacement or installation of a generator</li> <li>• Prioritize signals with greatest impact</li> </ul> | <ul style="list-style-type: none"> <li>• Continue operations during shock</li> </ul>                                 |  | <ul style="list-style-type: none"> <li>• Space Coast TPO Resiliency Master Plan</li> </ul>  |

**Absorption: Strategies that help the system function normally during events that cause shocks and stressors.**

|  |  |   |  |  |   |   |
|--|--|---|--|--|---|---|
| <b>Conduct regular maintenance of infrastructure</b> | Maintain the working order of infrastructure, for example keeping culverts clear.  |    |  | <ul style="list-style-type: none"> <li>• Proactive measure to maintain flow at critical points</li> <li>• Maintain clear of overgrown vegetation which may spread wildfire across the roadway</li> </ul> |    | <ul style="list-style-type: none"> <li>• South Florida Climate Pilot</li> <li>• Houston Galveston Resilience Pilot Program</li> </ul>                         |
| <b>Construct hardened shoulders</b>                  | Widen roadway structure to reduce impact to travel lanes.  |    | <ul style="list-style-type: none"> <li>• Requires clearance around roadway</li> <li>• Along roadways experiencing strong flows</li> </ul>  | <ul style="list-style-type: none"> <li>• Limit inundation to one side of roadway</li> <li>• Reduce erosion from overtopping</li> </ul>   |    | <ul style="list-style-type: none"> <li>• Resilient Tampa Bay</li> </ul>   |
| <b>Use permeable pavements</b>                       | Slows, filters, and cleans stormwater runoff by installing porous surfaces.  |   | <ul style="list-style-type: none"> <li>• Especially relevant in areas with large parking lots</li> <li>• Appropriate only for gentle slopes</li> <li>• Can become clogged.</li> <li>• Appropriate for low traffic volumes, loads, and speed</li> </ul> | <ul style="list-style-type: none"> <li>• Reduce runoff</li> <li>• Allow water to infiltrate</li> <li>• Reduced particulates in water</li> </ul>  |  | <ul style="list-style-type: none"> <li>• Resilient Tampa Bay</li> <li>• Houston Galveston Resilience Pilot Program</li> </ul>                                 |
| <b>Construct enhanced road surface</b>               | 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. |  |  | <ul style="list-style-type: none"> <li>• Resist water movement and inundation</li> <li>• Withstand impacts of prolonged exposure to heat or submersion</li> </ul>  |  | <ul style="list-style-type: none"> <li>• Resilient Tampa Bay</li> <li>• Resilient California</li> <li>• Houston Galveston Resilience Pilot Program</li> </ul> |
| <b>Construct enhanced sub-surface</b>                | Increase the thickness of subbase layers to provide additional drainage, structural strength, and resistance to flow damages (consider increasing 4-6").   |  |  | <ul style="list-style-type: none"> <li>• Resist water movement and inundation</li> </ul>   |  | <ul style="list-style-type: none"> <li>• Resilient Tampa Bay</li> <li>• Houston Galveston Resilience Pilot Program</li> </ul>                                 |
| <b>Construct berms or barriers</b>                   | Construct a barrier to prevent water from flooding the roadway.  |  | <ul style="list-style-type: none"> <li>• Consider available right-of-way to construct barrier</li> </ul>   | <ul style="list-style-type: none"> <li>• Prevent water from reaching roadway or flowing across roadway</li> </ul>  |  | <ul style="list-style-type: none"> <li>• FHWA Adaptation Framework</li> </ul>   |
| <b>Construct protected or depressed medians</b>      | Separate the roadway and potential effect of inundation with a median between the travel lanes in each direction.  |  | <ul style="list-style-type: none"> <li>• Especially effective along roadways in flat areas</li> <li>• Requires maintenance of vegetation and keeping drains clear</li> </ul>   | <ul style="list-style-type: none"> <li>• Reduce the occurrence of floods across the full roadway</li> <li>• If depressed, serve as a holding area for water</li> </ul>                                   |  | <ul style="list-style-type: none"> <li>• Resilient Tampa Bay</li> <li>• Houston Galveston Resilience Pilot Program</li> </ul>                                 |

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

| Strategy   | Description  | Hazards   | Considerations  | Benefits   | Cost  | Source  |
|--|--|---|---|--|---|---|
| <b>Harden or armor key infrastructure components</b>               | Protect key infrastructure, for example embankments, signal wires, or bridge piers, against extreme weather events.  |    | <ul style="list-style-type: none"> <li>Consider the impact of armoring to the transportation and ecological system during shocks and stressors, but also during normal operations</li> </ul>  | <ul style="list-style-type: none"> <li>Reduce disruption to traffic flow</li> <li>Maintain access during storm</li> </ul>  |    | <ul style="list-style-type: none"> <li>South Florida Climate Pilot</li> </ul>   |
| <b>Construct swales or ditches</b>                                 | Drains stormwater away from infrastructure toward larger stormwater facilities.  |    | <ul style="list-style-type: none"> <li>Requires clearance around roadway</li> <li>Stability and durability of slopes and ditches</li> <li>Must be maintained and cleared of debris</li> </ul>   | <ul style="list-style-type: none"> <li>Retain water prior to entering the sewer system.</li> <li>Reduce standing water which may serve as insect breeding areas</li> </ul>                 |    | <ul style="list-style-type: none"> <li>Resilient Tampa Bay</li> <li>Houston Galveston Resilience Pilot Program</li> </ul>   |
| <b>Construct retention/detention ponds or rainwater harvesting</b> | 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. |    | <ul style="list-style-type: none"> <li>Requires a potentially large area to be available Maintenance to ensure proper drainage is required</li> </ul>   | <ul style="list-style-type: none"> <li>Retain water prior to entering the sewer system</li> <li>Reduce flooding due to overwhelmed systems</li> <li>Enhance natural environment</li> </ul> |    | <ul style="list-style-type: none"> <li>Resilient Tampa Bay</li> <li>FEMA Nature Based Solutions</li> <li>Miami Beach Stormwater Management Master Plan</li> <li>Houston Galveston Resilience Pilot Program</li> </ul> |
| <b>Construct recharge wells</b>                                    | Directly discharge water into deep water-bearing zones.  |    |   | <ul style="list-style-type: none"> <li>Reduce stormwater to be managed by other conveyance infrastructure</li> </ul>   |    | <ul style="list-style-type: none"> <li>Miami Beach Stormwater Management Master Plan</li> </ul>   |
| <b>Reduce the gradient of slopes</b>                               | Reduce the grade of slopes abutting roadways.  |   |   | <ul style="list-style-type: none"> <li>Reduce the likelihood of erosion</li> </ul>   |  | <ul style="list-style-type: none"> <li>World Road Association International Climate Change Adaptation Framework for Road Infrastructure</li> </ul>  |
| <b>Construct stormwater parks</b>                                  | Recreational spaces designed to flood. Brazilian city Curitiba has extensive system of wet parks, Tallahassee, Tampa parks.  |  |   | <ul style="list-style-type: none"> <li>Provide recreational facilities most of the time</li> <li>Relocate critical infrastructure from flood prone areas.</li> </ul>                       |  | <ul style="list-style-type: none"> <li>FEMA Nature Based Solutions</li> </ul>   |
| <b>Restore and protect wetlands and floodplains</b>                | Develop or restore facilities at the watershed level to manage severe events.  |  |   | <ul style="list-style-type: none"> <li>Act as a barrier to the spread of fire</li> <li>Provide water storage</li> </ul>  |  | <ul style="list-style-type: none"> <li>FEMA Nature Based Solutions</li> <li>Houston Galveston Resilience Pilot Program</li> </ul>   |
| <b>Construct raised roadways</b>                                   | Raise the profile of the road in critical areas.   |  | <ul style="list-style-type: none"> <li>Requires clearance around roadway</li> <li>Areas where extended inundation is expected and other drainage options are insufficient</li> <li>Connection to other raised facilities.</li> <li>Construct flow structures to prevent the roadway from acting as a dam</li> <li>Access to adjoining properties</li> </ul> | <ul style="list-style-type: none"> <li>Increase runoff possibilities.</li> <li>Reduce damage to surface and base elements from pooling.</li> </ul>   |  | <ul style="list-style-type: none"> <li>Resilient Tampa Bay</li> <li>Miami Beach Stormwater Management Master Plan</li> <li>Houston Galveston Resilience Pilot Program</li> </ul>                                      |

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

| Strategy   | Description   | Hazards   | Considerations   | Benefits  | Cost  | Source                                       |
|--|---|---|--|---|---|--|
| <b>Install tie-downs</b>   | Use tie downs for buildings at risk of high winds   |    |  |   |    | • USFS Compendium of Adaptation Practices    |
| <b>Create and maintain defensible space around facilities</b>  | Buffer facilities with an area that is resistant to quick spreading fire, for example grass.  |    |  | • Prevent fire from spreading to structures<br>• Offer additional warning and time for evacuation |    | • USFS Compendium of Adaptation Practices    |
| <b>Restoration: Strategies that help the system recover quickly and return to normal functioning.</b>                                    |   |   |  |   |   |  |
| <b>Install generator connections at traffic signals</b>  | Provide built in connections on signal cabinets to connect a generator.   |    | • Battery capacity and need for replacement or installation of a generator<br>• Prioritize signals with greatest impact  | • Quickly resume operations after shock   |    | • Space Coast TPO Resiliency Master Plan     |
| <b>Prioritize roadways</b>   | 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                       |
| <b>Develop warning systems with resilient communications</b>   | 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 |
| <b>Develop a coordination plan with other agencies to respond to changes and hazards</b>   |   |    |  |   |   | • FHWA Adaptation Framework                  |
| <b>Coordinate with transit providers to identify alternative routes and stops if normal infrastructure is impacted</b>                   |   |  |  | • Continue to operate transit in a predetermined manner consistent with rider expectations.       |  | • Resilient California                       |
| <b>Establish stand-by contracts for damage response</b>  | Establish mechanisms to pay for rapid response to hazards.  |  |  | • Proactive measure to reduce the length of impact.   |  | • FHWA HOP-15-025                            |
| <b>Stockpile materials (culvert pipe, fuel, components) and equipment (generators, traffic control devices) at appropriate locations</b> | 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<br>• Consider in conjunction with prioritized roadways<br>• 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**

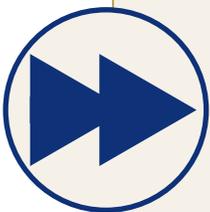


**Identification and prioritization of needed resiliency improvements.**

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.



## *Florida Department of Transportation*

RON DESANTIS  
GOVERNOR

719 S. Woodland Boulevard  
DeLand, Florida 32720-6834

KEVIN J. THIBAUT, P.E.  
SECRETARY

### **Marion County Project Status Update as of January 31, 2022**

The following is a brief status update on major FDOT road construction projects in Lake and Sumter counties as of the October cutoff. The next cutoff date is February 28, 2022. Information is also available on [www.cflroads.com](http://www.cflroads.com). For questions, please contact Anna Taylor at 386-943-5499 or via email at [Anna.Taylor@dot.state.fl.us](mailto:Anna.Taylor@dot.state.fl.us).

#### **MARION COUNTY**

##### **Current Projects:**

##### **Dallas Pond Redesign on U.S. 301 Drainage Construction (FDOT Financial Information Number 411256-5)**

- Contract: E57A3
- Contractor: Concept Construction & Demolition, LLC.
- Estimated Start: January 2022
- Estimated Completion: Spring 2022
- Update: The purpose of this project is to re-design the existing pond that is currently out of compliance for water quality treatment. The project also includes the extension of the outfall, and acquisition of drainage easements for future maintenance of the complete drainage system.

##### **441136-1 Mill and resurface U.S. 441 from County Road 25A in Ocala north 8.8 miles to the U.S. 441/301 split.**

- Contractor: Anderson Columbia Inc.
- Estimated Start: October 2021
- Estimated Completion: Fall 2022
- Project Cost: \$15.4 million
- Update: Project started work on October 26, 2021, southbound and northbound lane closures has been put in place for clearing and grubbing operations from 7 a.m. to 5 p.m. Monday through Friday. Subcontractor BKW has been working on side drain extension and Subcontractor Art Walker will continue with widening operations by Ring Power. Clearing and Grubbing operations continue to be performed as the crews move South. Subcontractor US&S started drilled shaft work once completed lighting conduit and poles installations will begin.

**439238-1 Resurface U.S. 441 from State Road 35 (SE Baseline Road) to State Road 200**

- Contract: T5675
- Contractor: C.W. Roberts Contracting, Inc.
- Start: January 2021
- Estimated Completion: Fall 2021
- Cost: \$15.7 million
- Update: A new company has been assigned to this project; C.W. Roberts Contracting, Inc. will be the contractor in charge of the project execution after DAB defaulted. Work on this project began again on November 29<sup>th</sup>, 2021, and project is progressing well so far. Per CWR Denson will begin concrete barrier work and JKI is continuing with temp detection. CWR is working on sidewalk and curb ramps, turn lane grading and continuing with drainage installation. Median Barrier work on U.S.441 under the CSX bridge between 23rd and 32<sup>nd</sup>, CEI mentioned that this item is a delay for CWR but that the green light was given over a week ago and work has not yet begun. The modified work plan for barrier under CSX bridge was approved on January 7, 2022.