

Polk Transportation Planning Organization

Technical Advisory Committee



Polk Transportation
Planning Organization

March 19, 2026



1. Call to Order

Tess Schwartz, Chairperson



2. Confirmation of Quorum

KC Rivera, TPO Staff



3. Approval of Draft Meeting Minutes

January 22, 2026



4. Agenda Review

Polk TPO Staff, Polk TPO

Agenda Review

Action Items

- ❑ **FY 2025/26 – 2029/30 TIP Amendment (I-4 in NE Polk)**
- ❑ **FY 2024/25 – 2025/26 UPWP Amendment (Move funds from FY 25/26 to 26/27)**
- ❑ **Draft FY 2026/27 – 2027/28 UPWP**
- ❑ **Proposed State Road 60 Scenic Highway Presentation (Resolution 2026-04)**
- ❑ **2026 Transportation Priorities Subcommittee Volunteers**

Presentations and Status Reports

- ❑ **FDOT Freight Plan Presentation**
- ❑ **Vision Zero Action Plan/Safe Streets for All (SS4A) Update**
- ❑ **Vulnerability Assessment Update**





5. Amendments to the FY 2025/26 – 2029/30 Transportation Improvement Program (TIP)

TIP Amendment

FDOT has requested the TPO include this project in the FY 2025/26 – 2029/30 TIP to ensure eligibility for federal and state funding is maintained.

This amendment is necessary to ensure authorization of federal funds in the current fiscal year. See the letter and project listing included in the meeting packet.



TIP Amendment

This amendment is part of the regionally significant project, Moving Florida Forward initiative, adding a segment of the project to include reconstructing and adding lanes on the west side of I-4 from US 27 to CR 532.



Florida Department of Transportation

801 N Broadway Ave
Bartow FL 33830

JARED W. PERDUE, P.E.
SECRETARY

RON DESANTIS
GOVERNOR

3/5/2026

Ryan Kordek
Polk TPO Executive Director
330 W. Church Street, P.O. Box 9005-Drawer TS05
Bartow, FL 33831

RE: Request for Amendment and/or Modification to the Polk Transportation Planning Organization (TPO) Fiscal Year (FY) 25/26 – 29/30 Transportation Improvement Program (TIP)

Dear Mr. Kordek:

The purpose of this letter is to request the Polk TPO approve the following amendment/modification to the TIP FY 25/26 - 29/30 at the next Polk TPO Board meeting on April 9, 2026.

- **201210-9: SR 400 (I-4) FROM WEST OF US 27 TO WEST OF CR 532**

Amendment is needed to add this Regionally Significant project, which is part of the Moving Florida Forward initiative to current FY 25/26. This project segment consists of reconstructing and adding lanes on the west side of US 400(I-4) from US 27 to CR 532.

Please see enclosed table for project details. These projects must be shown and listed correctly in the Polk TPO TIP to show transparency and ensure authorization of funds.

If you have any questions or concerns, please let me know.

Edith D. Perez, FCCM
Edith Perez
FDOT District One Community Liaison

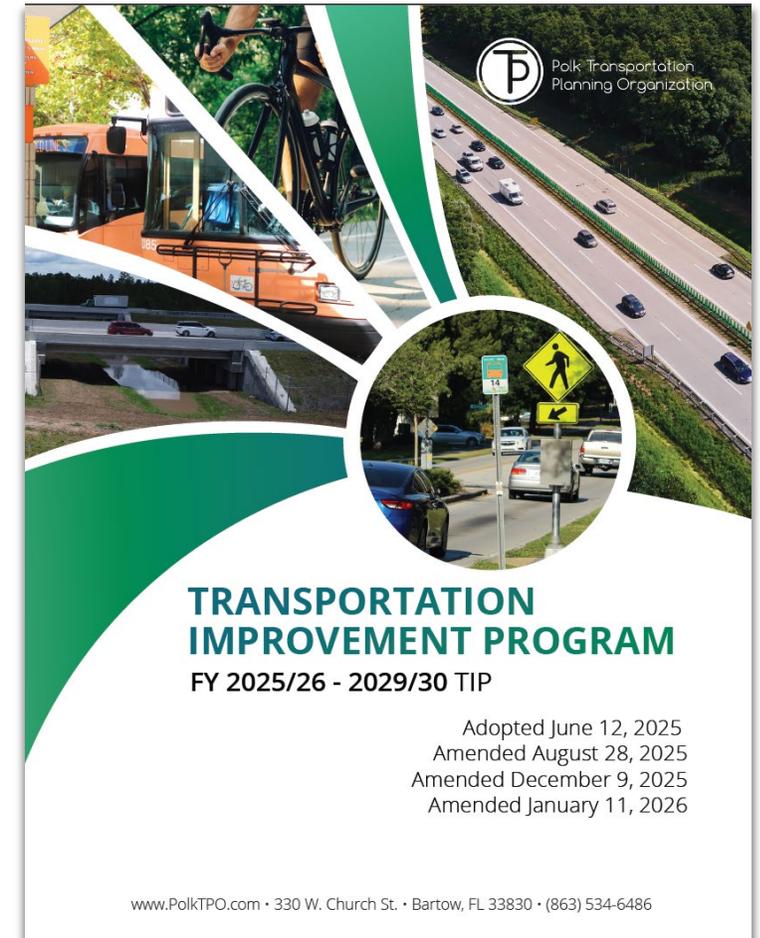
EDP: ep:
Enclosure
cc: Wayne Gaither, FDOT
Kristi Smith, FDOT
Dana Knox, FHWA



TIP Amendment

Recommended Action

Staff is requesting the TAC make a recommendation of approval to the TPO Board for the amendment to the FY 2025/26 – 2029/30 Transportation Improvement Program (TIP) as requested by FDOT.



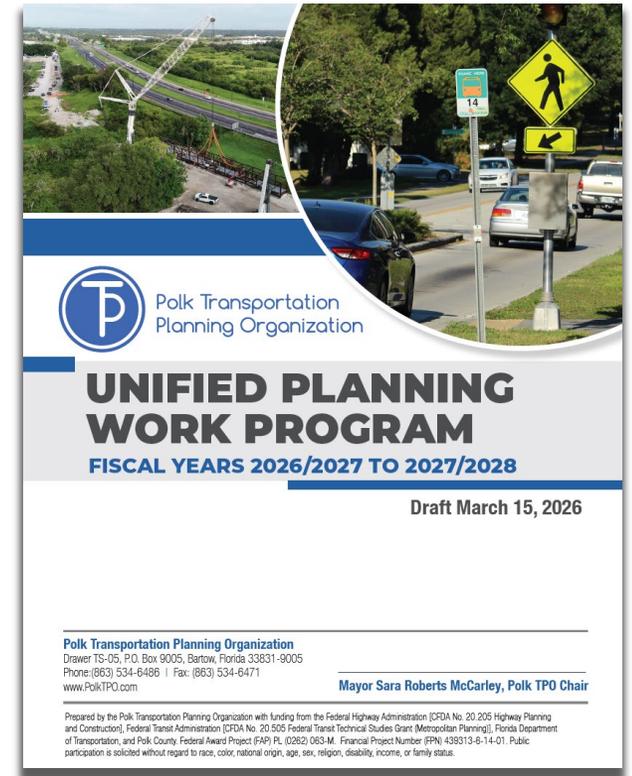


6. & 7. Draft Amendments to the FY 2024/25 -
2025/26 Unified Planning Work Program and
(UPWP)Draft FY 2026/27 – 2027/28 UPWP

Draft UPWP

Introduction

- ❑ The Unified Planning Work Program (UPWP) contains the planning tasks and associated grant budget for the two (2) year period beginning July 1, 2026, through June 30, 2028
- ❑ The Planning Tasks were approved at your last meeting
- ❑ The Draft UPWP has been submitted for agency review and comment with adoption scheduled for April 9th
- ❑ The TPO has solicited public comment on the Draft UPWP from the Adviser Network



Draft UPWP

Introduction – Key Themes

- ❑ The TPO has completed a number of large projects as part of the current UPWP (FY 2024/25 – 2025/26)
 - ❑ Envision 2050
 - ❑ Transit Development Plan
 - ❑ Vision Zero Action Plan
- ❑ Continuing projects
 - ❑ I-4 Passenger Rail Station Feasibility/Planning Study
 - ❑ Vision Zero Action Plan
- ❑ New Projects/Planning Tasks for the next UPWP...



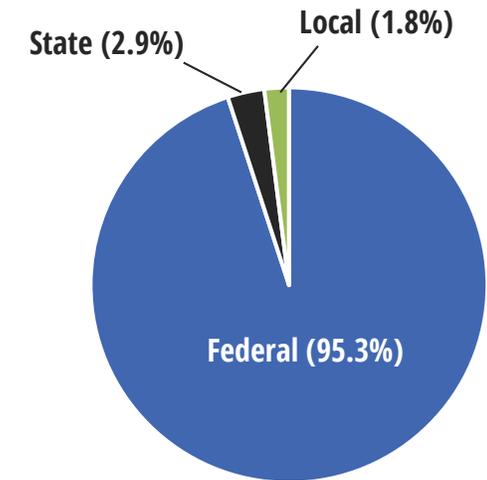
Draft UPWP

Budget

Funding Source	FY 2026/27	FY 2025/26
Federal	\$1,319,055	\$1,349,986
State	\$40,412	\$40,412
Local	\$25,000	\$25,000
Total	\$1,384,467	\$1,415,380

2-Year Total: \$2,799,847

Agency Funding



Draft UPWP

Task 1.1 Administration

- ❑ Four-Year Federal Certification Review
 - ❑ FDOT/FHWA/FTA & Polk TPO
 - ❑ Fall of 2027
- ❑ Annual Report
 - ❑ Year in Review



September 2023



Draft UPWP

Task 2.1 Data Development and Management

❑ Congestion Management Process

❑ State of the Transportation System Report

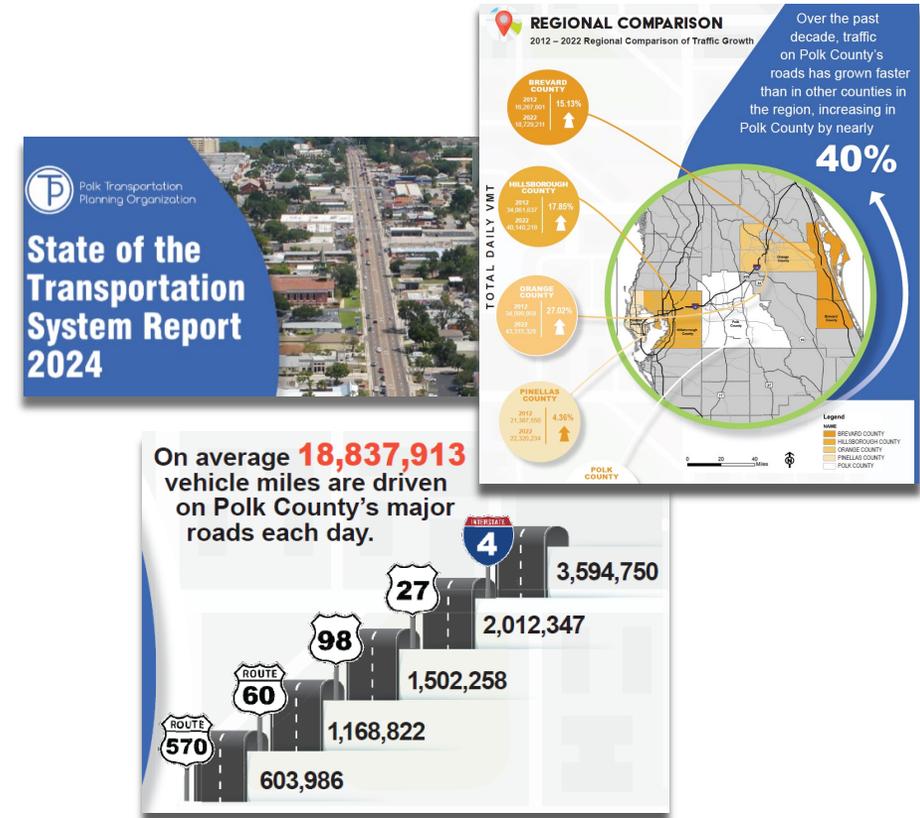
❑ Highway & Multi-Modal Database

❑ Traffic Count Collection

❑ Roadway LOS

❑ Multi-Modal Facilities

❑ Crash Data



Draft UPWP

Task 3.1 Long-Range Transportation Planning

- ❑ I-4 Passenger Rail Station Feasibility Study
 - ❑ \$500,000 in FY 2025/26
 - ❑ Amendment to move \$450,000 of this funding from FY 2025/26 into FY 2026/27
- ❑ SunRail PD&E Study
 - ❑ Transit Supportive Planning

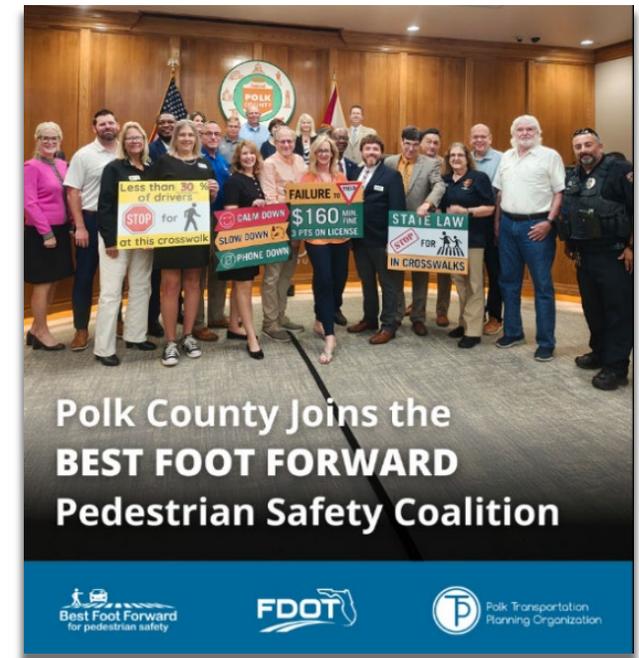
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Draft UPWP

Task 3.2 Short-Range Transportation Planning

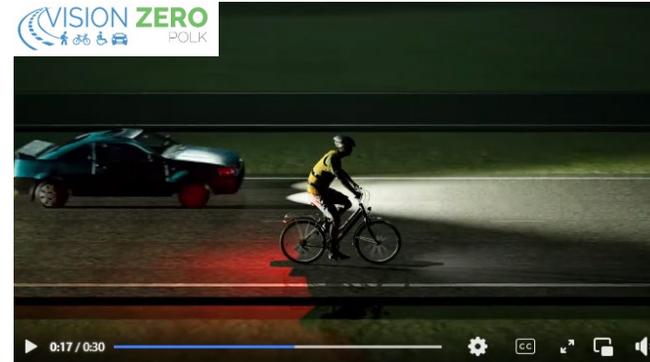
- ❑ Vision Zero Action Plan
 - ❑ Two-Year Project – Early 2027
 - ❑ TPO is managing the Project
- ❑ Best Foot Forward
- ❑ Bicycle/Pedestrian Team
 - ❑ Collaboration with Polk Vision



Draft UPWP

Task 3.5 Public Participation Process

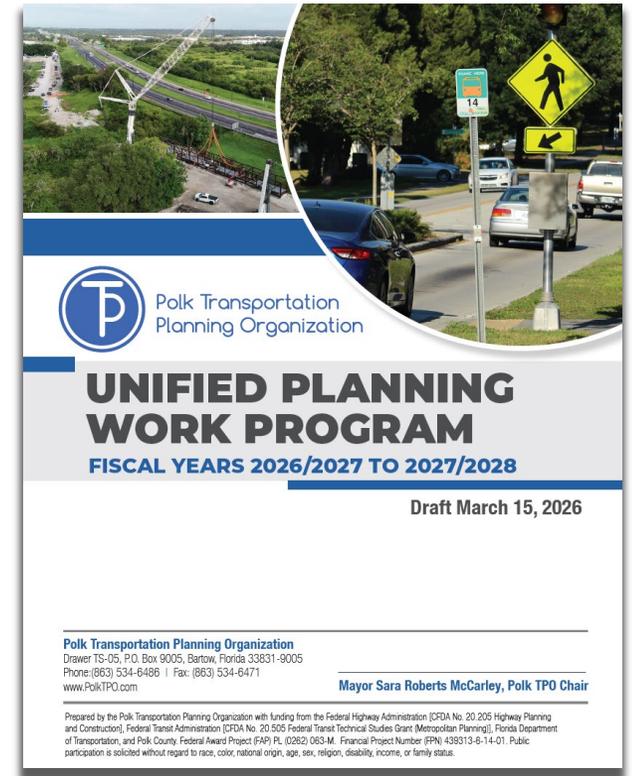
- ❑ Public Participation Plan
 - ❑ Major Update of the Plan
- ❑ Transportation Adviser Network
 - ❑ Virtual Community Forums
 - ❑ TPO Videos
 - ❑ Engagement



UPWP Actions – Agenda Items 6 & 7

Recommendation

- ❑ Recommend the TPO Board approve Amendments to current UPWP to move funding (\$500,000) from FY 2025/26 to 2026/27 (I-4 High Speed Rail Study & Website Dashboards)
- ❑ Recommend the TPO Board approve the Draft UPWP for FY 2026/27 – 2027/28
 - ❑ Staff will request the Board to authorize staff to make needed changes (minor in nature) based on additional agency review and comment.





8. Route 60 Coast to Coast Scenic Highway
 - Resolution 2026-05 in Support of Designation as a Scenic Byway



Scenic Highway Designation Process Overview

June 2025

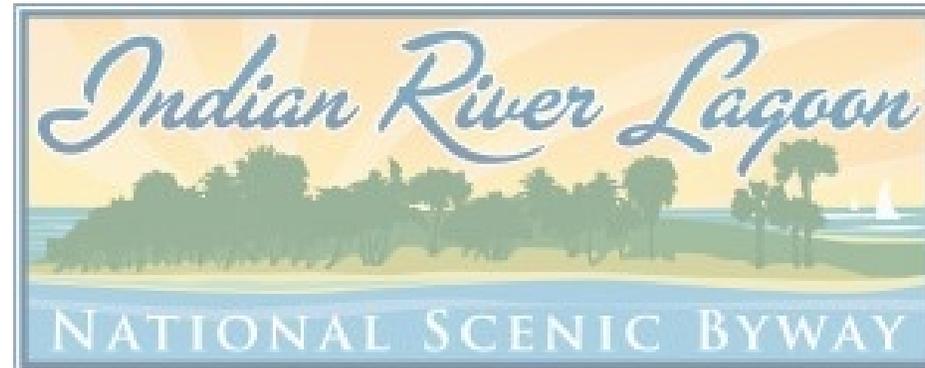


Outline

- **BAYWAY ORGANIZATION**
- **BENEFITS OF DESIGNATION**
- **PURSING DESIGNATION**
- **WORK REQUIREMENTS ONCE DESIGNATED**
- **THE PROCESS**
 - ELIGIBILITY PHASE
- **STEP 1**
 - Letter of Intent
- **STEP 2**
 - Byway Story, Byway Inventory, & Documentation Of Community Commitment

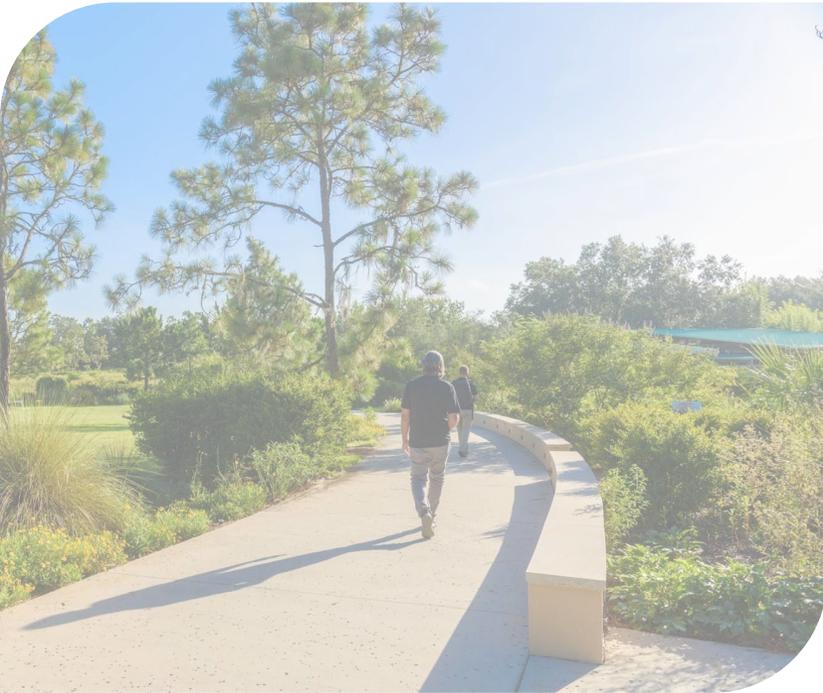
BYWAY ORGANIZATION

- A group of individuals and organization representatives committed to implementing the plans of a designated Scenic Highway and meeting the requirements of the Florida Scenic Highway Program (FSHP).



BENEFITS OF DESIGNATION

- **Improved Quality of Life for Florida Communities**
- **Resource Protection**
- **Economic Impact – Increased Tourism**



PURSUING DESIGNATION

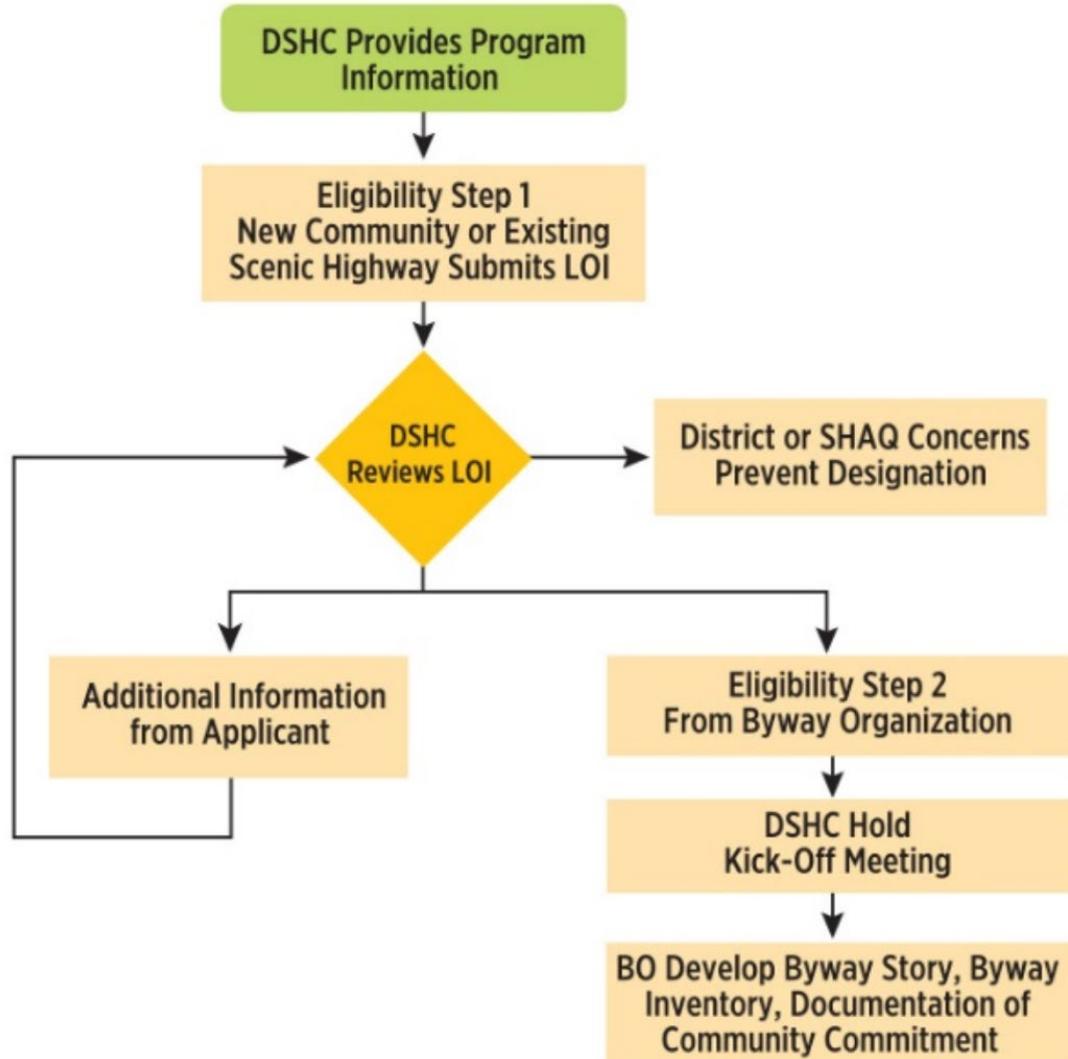
- Pursuing Florida Scenic Highway Program designation requires hard work and the input and commitment of all stakeholders (residents, business owners, local governments, agencies, nonprofits, and other organizations)
- The designation process usually takes at least two years
- Once designated, the byway must be locally managed in perpetuity

WORK REQUIRED ONCE DESIGNATED

- Implementing the Byway Management Plan and updating as necessary
- Developing, implementing, and keeping current an Annual Work Plan (due Nov. 15th of each year)
- Providing a Byway Annual Report to the FSHP (due Feb. 1st of each year)



PROCESS - ELIGIBILITY PHASE



Florida Scenic Highways Acronyms	
DSHC	District Scenic Highway Coordinator/s
BO	Byway Organization
SHAC	Scenic Highway Advisory Committee
BS	Byway Story
BI	Byway Inventory
DCC	Documentation of Community Commitment
LOI	Letter of Intent
BMP	Byway Management Plan
YOWP	Year One Work Plan

STEP 1 – LETTER OF INTENT

- **Byway Organization submits a letter of intent (LOI) to FDOT's District Scenic Highway Coordinator (DSHC)**
- **Purpose of the LOI is for the DSHC to investigate District design and maintenance issues related to the potential route, and for the SHAC member agencies to identify any potential concerns regarding state resources or programs**
- **Letter shall include:**
 - **Map** and detailed description of the precise route of the proposed scenic highway.
 - **Statement of support** as to why scenic highway designation is being considered for the route. Avoid broad generalizations.
 - **Detailed description of who** will be involved in managing the designation process and what financial and human resources are available for the Implementation Phase.

STEP 2 –Byway Story, Byway Inventory, & Documentation of Community Commitment

- **Byway Story** – The intentional, coordinated message that the byway conveys to visitors about the resources and qualities that it promotes.
- **Byway Inventory** - A survey of the intrinsic qualities and resources within the byway corridor.

RECREATION

NATURAL

CULTURAL

SCENIC

HISTORICAL

ARCHAEOLOGICAL

STEP 2 –Byway Story, Byway Inventory, & Documentation of Community Commitment

- **Documentation of Community Commitment**

- A letter of support from every local government entity with jurisdiction over the proposed route.
- Letters or other documentation of community commitment from a diverse group of stakeholders



Draft Polk TPO Resolution 2026-05

Polk TPO's Support for the Designation of SR 60 as a Scenic Highway

- ❑ **Route 60 Coast-to-Coast Scenic Highway**
 - ❑ **The Route 60 Scenic Byway Committee is intending to seek an official Scenic Highway designation from the Florida Department of Transportation (FDOT)**
 - ❑ **Polk TPO is supporting the effort through Resolution 2026-05**

DRAFT POLK TPO RESOLUTION 2026-05

RESOLUTION OF THE POLK TRANSPORTATION PLANNING ORGANIZATION (TPO) SUPPORTING THE CREATION OF A STATE ROAD 60 SCENIC HIGHWAY; TO SEEK AN OFFICIAL SCENIC HIGHWAY DESIGNATION BY THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT).

WHEREAS, at its meeting on April 9, 2026, the Polk TPO received a presentation by Rob Kincart and Myrtice Young seeking support for the designation of State Road 60, otherwise identified in petition as "Route 60 Coast-to-Coast Scenic Highway", as a Florida Scenic Highway, pending such designation by the Florida Department of Transportation (FDOT); and

WHEREAS, a Byway Organization is being established to protect, enhance and preserve the intrinsic resources of the designated corridor, while supporting their use for appropriate economic development, recreation and tourism interests; and

WHEREAS, the proposed Route 60 Coast-to-Coast Scenic Highway traverses a 56.1-mile corridor within Polk County, from County Line Road at the Hillsborough County boundary to the Kissimmee River at the Osceola County boundary, and includes the jurisdictions of Bartow, Lake Wales, Mulberry, Polk County and Winter Haven; and

WHEREAS, the primary intent of the Florida Scenic Highways Program is to designate roadway corridors to preserve, maintain, and enhance Florida's exceptional cultural, historical, archaeological, recreational, natural, and scenic resources for the traveling public's enjoyment; and

WHEREAS, within Polk County the State Road 60 corridor contains numerous cultural, historical, archaeological, recreational, natural and scenic resources along and adjacent to the corridor supporting its eligibility for scenic highway designation and are depicted in Attachment A; and

WHEREAS, the State Road 60 corridor crosses the Ridge Scenic Highway (State Road 17) in Lake Wales and received the support of the Polk TPO (TPO resolution 2003-01) and was designated by FDOT as a Florida Scenic Highway in 2005; and

WHEREAS, the cities of Bartow, Lake Wales and Mulberry, along with Polk County and the Central Florida Regional Planning Council (CFRPC) have expressed their support for the designation of State Road 60 as a Florida Scenic Highway; and

WHEREAS, the Byway Organization now seeks to submit a Letter of Intent to FDOT as the first step to create the Route 60 Coast-to-Coast Scenic Highway to help better

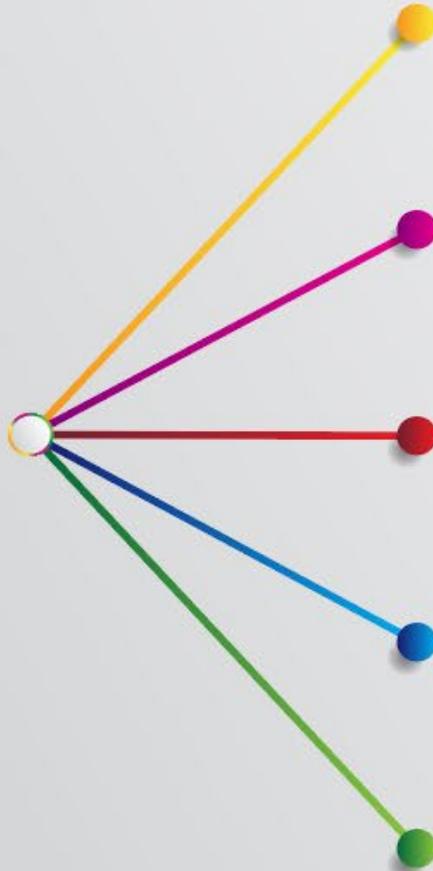




9. Priority Transportation Project Application Cycle Reminder & Call for Volunteers

2026 Transportation Priorities

2026 Priority Transportation Projects Cycle



Application Workshop via
MicroSoft Teams
December 5th, 2025



Application Cycle Opens
January 5th 2026



Application Submittal Deadline
March 31, 2026



Sub-Committee Review & Scoring
of Candidate Priority Projects
April - May 2026



TPO Board Adoption
of Priority Projects
June 11, 2026



2026 Transportation Priorities

Volunteers Needed

- ☞ **Three TAC members and one alternate TAC Member**
- ☞ **Three Adviser Network members**





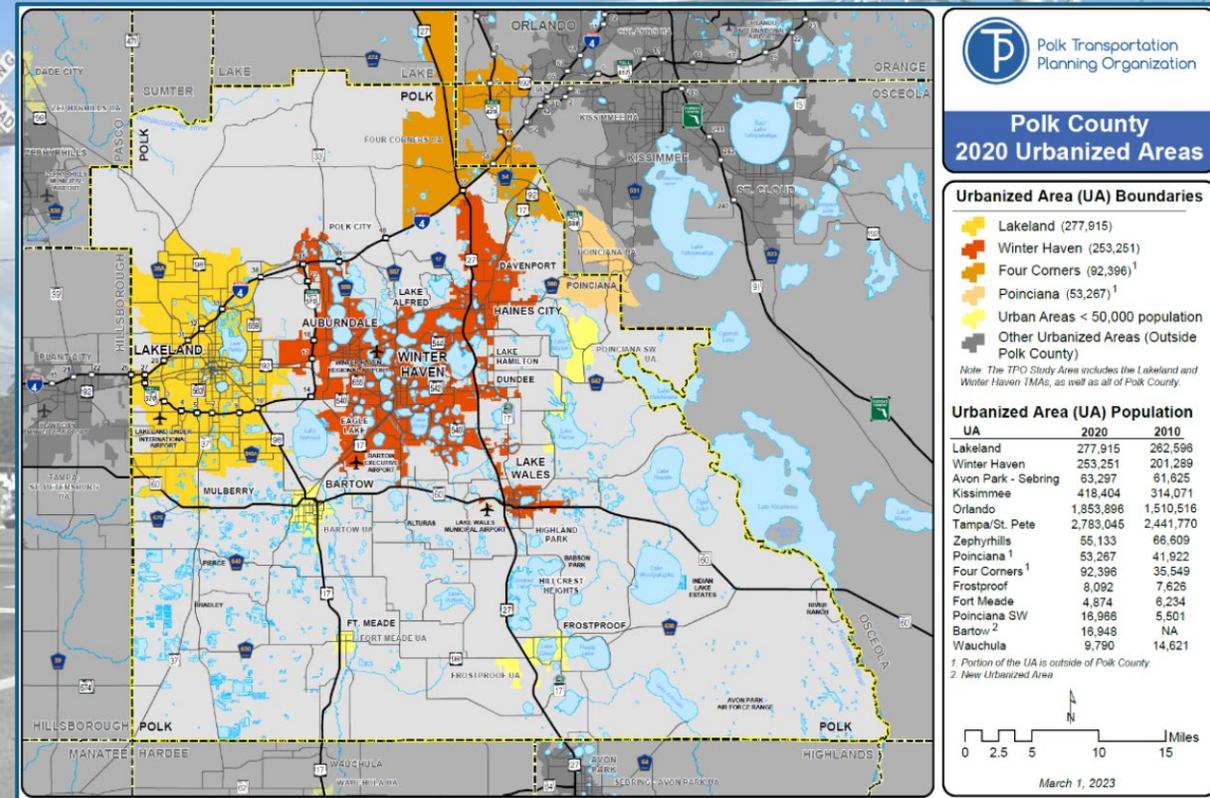
10. FDOT District One Polk County Freight Plan (2024)

Florida Department of Transportation - District One Polk County Freight Plan (2024)



Polk County Freight Plan – Purpose & Methodology

- Better understand freight-related existing conditions in Polk County and identify constraints based on data and forecasting efforts
- Various research, outreach, and data collection occurred, including:
 - Literature & Data Review
 - Stakeholder Engagement
 - Identification of the Polk County Transportation & Freight System
 - Freight Economic Profile Development
 - Truck Route Performance and Origin-Destination Patterns Evaluations
 - Identify Freight Needs and Deficiencies
- Final recommendations help the District identify areas of critical need within existing roadways and networks.



Polk County Urbanized Areas, Polk County TPO, 2020

Literature Review

- These reference sources help the reader best understand freight planning best practices. Key issues, tested methodologies, emerging trends, and local considerations are highlighted via summaries of several planning documents, including but not limited to:
 - Polk County Transportation Planning Organization LRTP and TIP
 - FDOT D1 Freight Mobility and Trade Plan (2023)
 - FDOT 5 Year Work Program
 - Florida Rail System Plan (2023)
 - Central Florida Regional Freight Study (2013)
 - Hillsborough + Polk Freight Logistics Zone Strategic Plan (2016)



Stakeholder Engagement

Stakeholder engagement ensures that the Polk County Freight Plan reflects the needs and priorities of the county to provide more effective planning solutions.

Stakeholder Meetings

- Industry and government stakeholders
- 10 total meetings
- First-hand information serves as a cornerstone for recommendations
- Promotes transparency, communication, trust, and credibility

Stakeholder Questionnaire

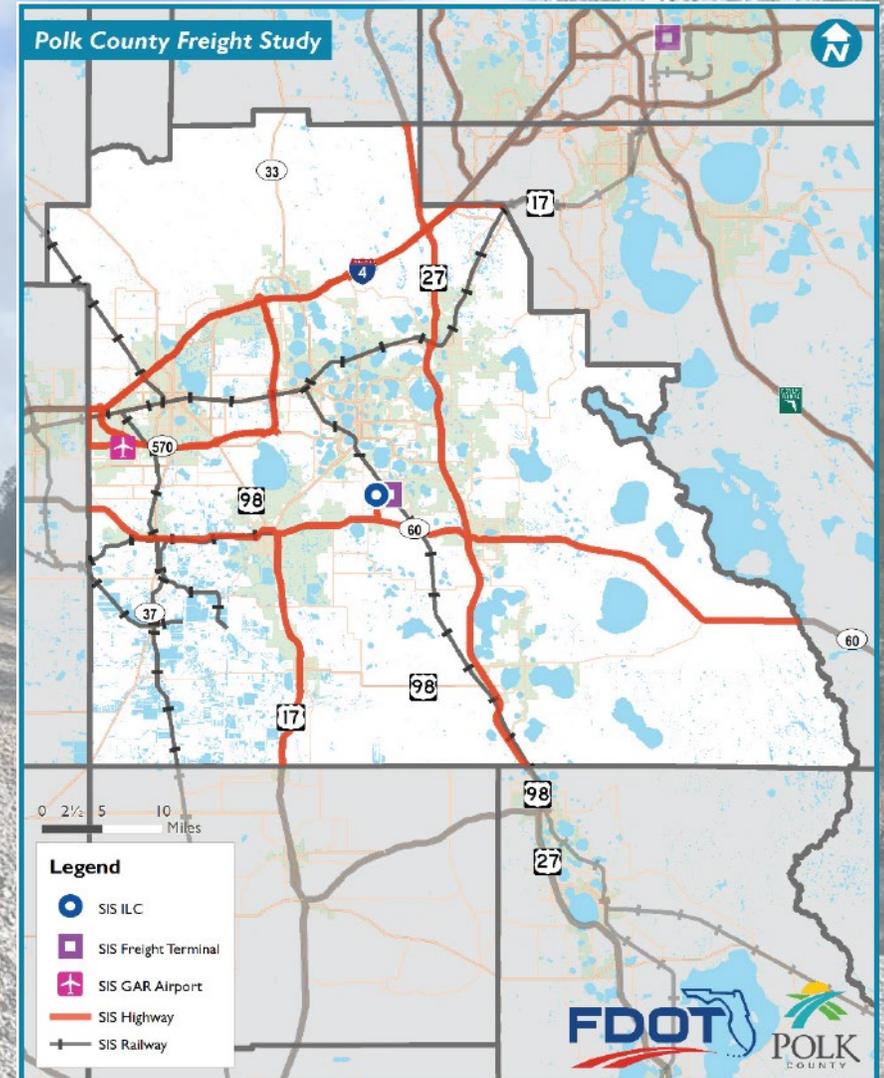
- Private industry and public agencies
- Polk County freight-related standardized questions related to commodities, infrastructure, and other planning topics were developed to initiate more broad discussions

Stakeholder Meeting Content

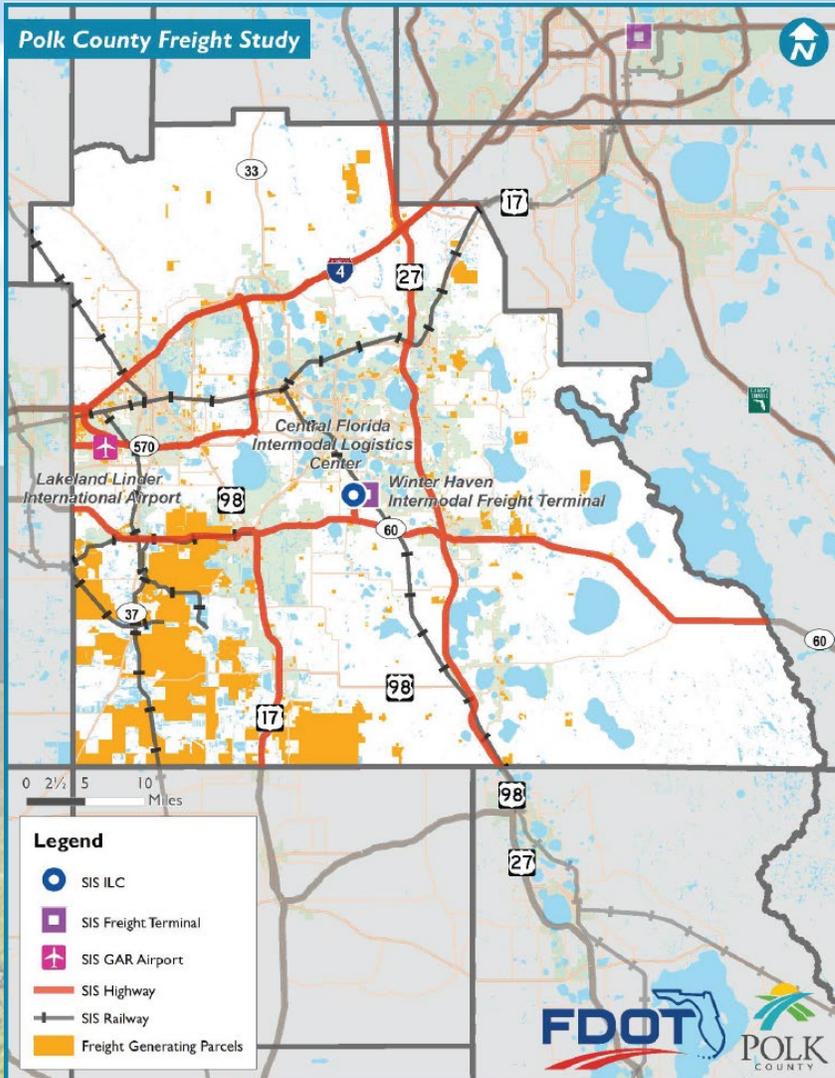
- Some topics of discussion included:
 - Truck driver retention
 - Rail
 - Air freight growth
 - Influx of companies and planned development
 - Infrastructure improvements
 - Truck parking

Systems Inventory

- Identify existing infrastructure in Polk County
- Several components critical to the network were described and mapped, including:
 - National Highway Freight Network (NHFN)
 - Strategic Intermodal System (SIS) components
 - Roadway functional classifications
 - Rail, seaport, aviation, truck parking, and pipeline facilities and infrastructure
 - Highway-rail grade crossing hotspot analysis
 - Safety and crash data (all vehicle and commercial)



Polk County Land Use Profile & Analysis



- Develop an understanding of the relationship between existing and planned conditions relating to freight demand, systems, and future land use designations
- Land use profiles/case studies were developed for the county as well as four municipalities (Lakeland, Winter Haven, Haines City, and Bartow)
- Case studies assessed:
 - Existing and future conditions
 - Regulations
 - Planning documents
 - Known pipeline development projects of impact

Freight Economic Profile

39%

Freight Using Sectors

31%

Freight Moving Sectors

30%

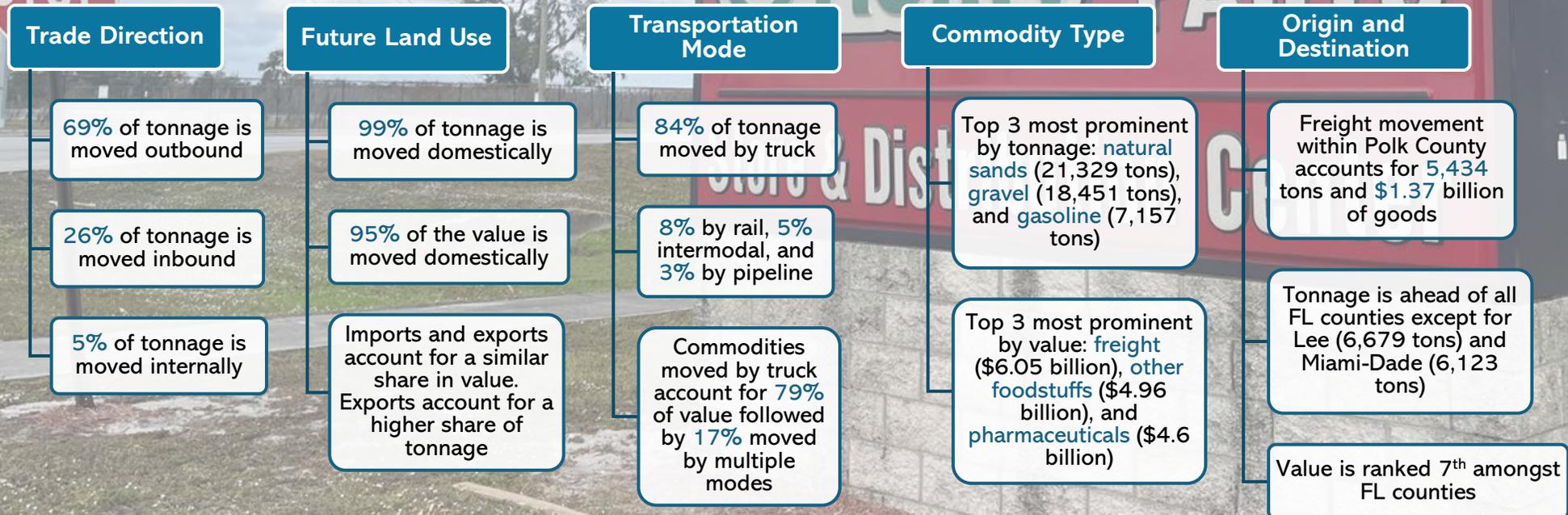
Freight Intensive Sectors

- Polk County experienced significant population and employment growth over the last 19 years. Between 2002 and 2021, the population grew from 501,000 to 754,000 causing employment to rise from 187,000 to 244,000.
- 53% of Polk County jobs were in freight-associated sectors.
- The number of active employees in each sector was observed with the highest share in the Freight Using Sector (39%).

	Jobs	Average Wage	Total Wages
Polk County	243,834	\$48,322	\$ 11,784,791,911
Freight Employment	130,243	\$ 46,339	\$ 5,768,169,596
Percent in Freight	53%	N/A	49%
Freight Using	51,150	\$43,365	\$ 1,491,551,874
Freight Intensive	38,997	\$ 67,951	\$ 2,324,044,618
Freight Movers and Handlers	40,096	\$ 27,700	\$ 1,952,573,104
Non-Freight	111,609	\$52,657	\$6,171,786,739

Freight Analysis Framework (FAF) Data Review: Commodity Flows

- Data was obtained from the FAF to create a comprehensive picture of freight movement across Polk County
- Commodity Flows: the movement of goods; measured in tons or equivalent values
- The commodity flows were tabulated according to 5 descriptive dimensions:
 - Trade Direction
 - Trade Type
 - Transportation Mode
 - Commodity Type
 - Origin and Destination

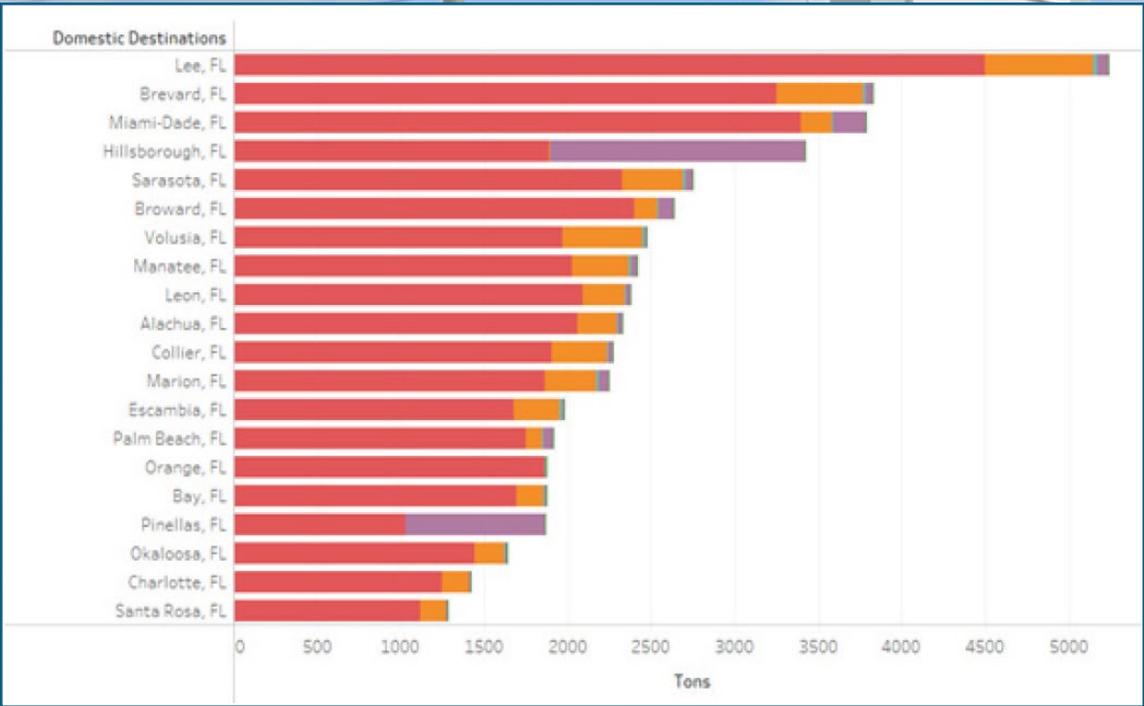


Freight Analysis Framework (FAF) Data Review: Supply Chains

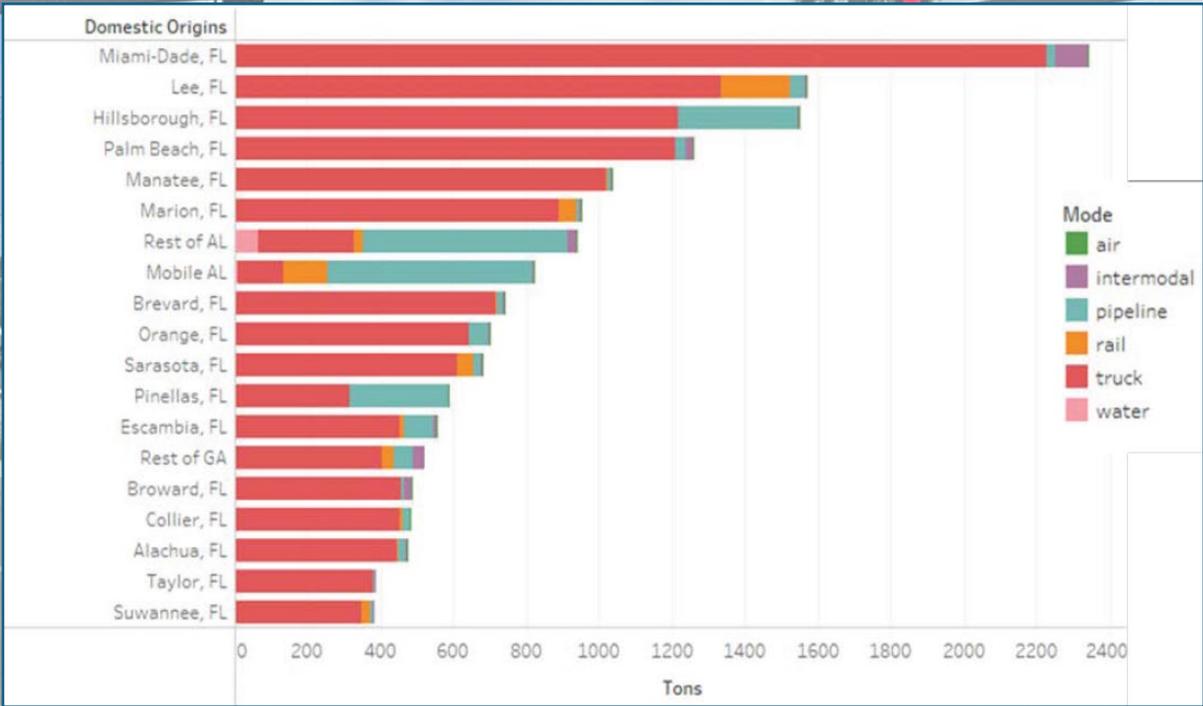
- Supply chain analysis looks at how industries ship and receive commodities to conduct their businesses. A high-level, statewide analysis using “make-use” tables was conducted.

“Make-use” tables summarize the type and quantity of commodities consumed or produced by different industries.

Outbound Flow Destinations – Aggregates in Tons



Inbound Flow Origins



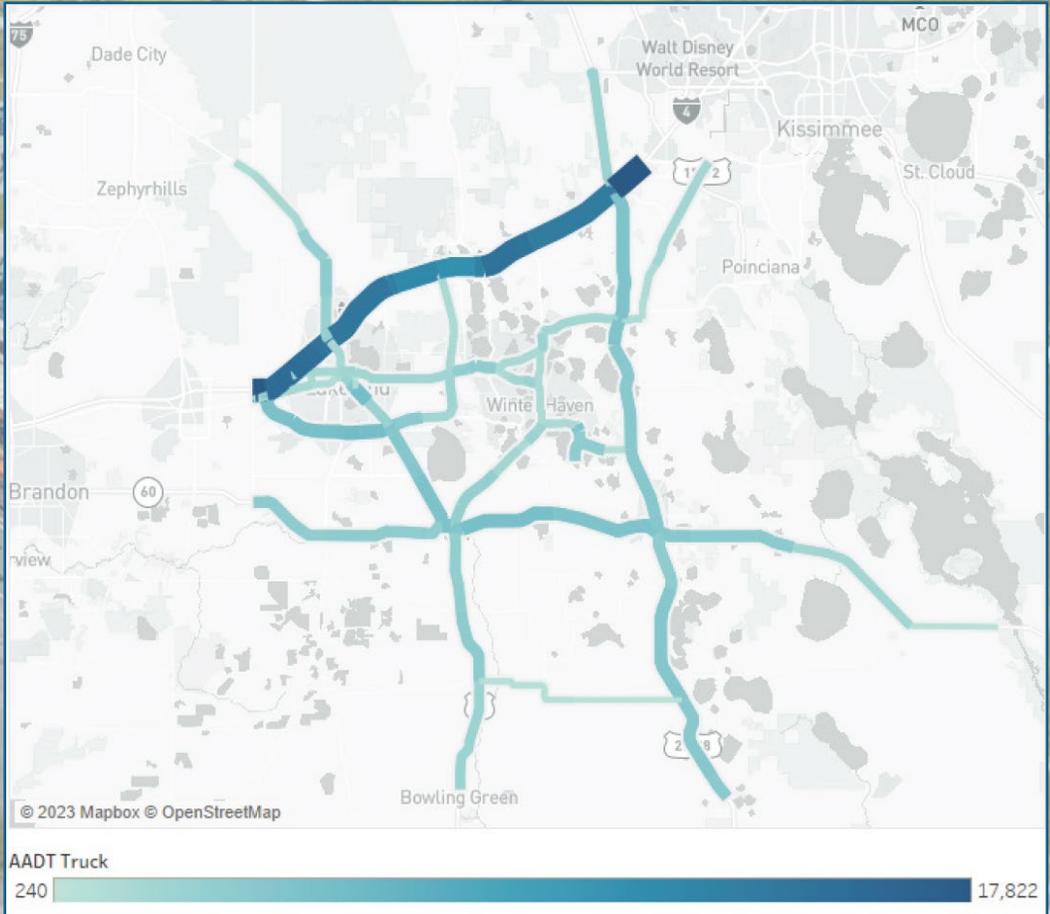
Evaluation of Truck Route Performance & Origin Destination Patterns

Findings from the National Cooperative Highway Research Program (NCHRP) Report 925 were used to estimate the congestion costs for trucking companies and county businesses.

Objective	Methodology
Calculation of Congestion Metrics	Processed National Performance Management Research Data Set
	Approximated hourly truck volumes
	Estimated recurring congestion and non-recurring congestion metrics
	Estimated user costs
Bottleneck Identification	Set bottleneck thresholds
	Cluster bottlenecks (if applicable)

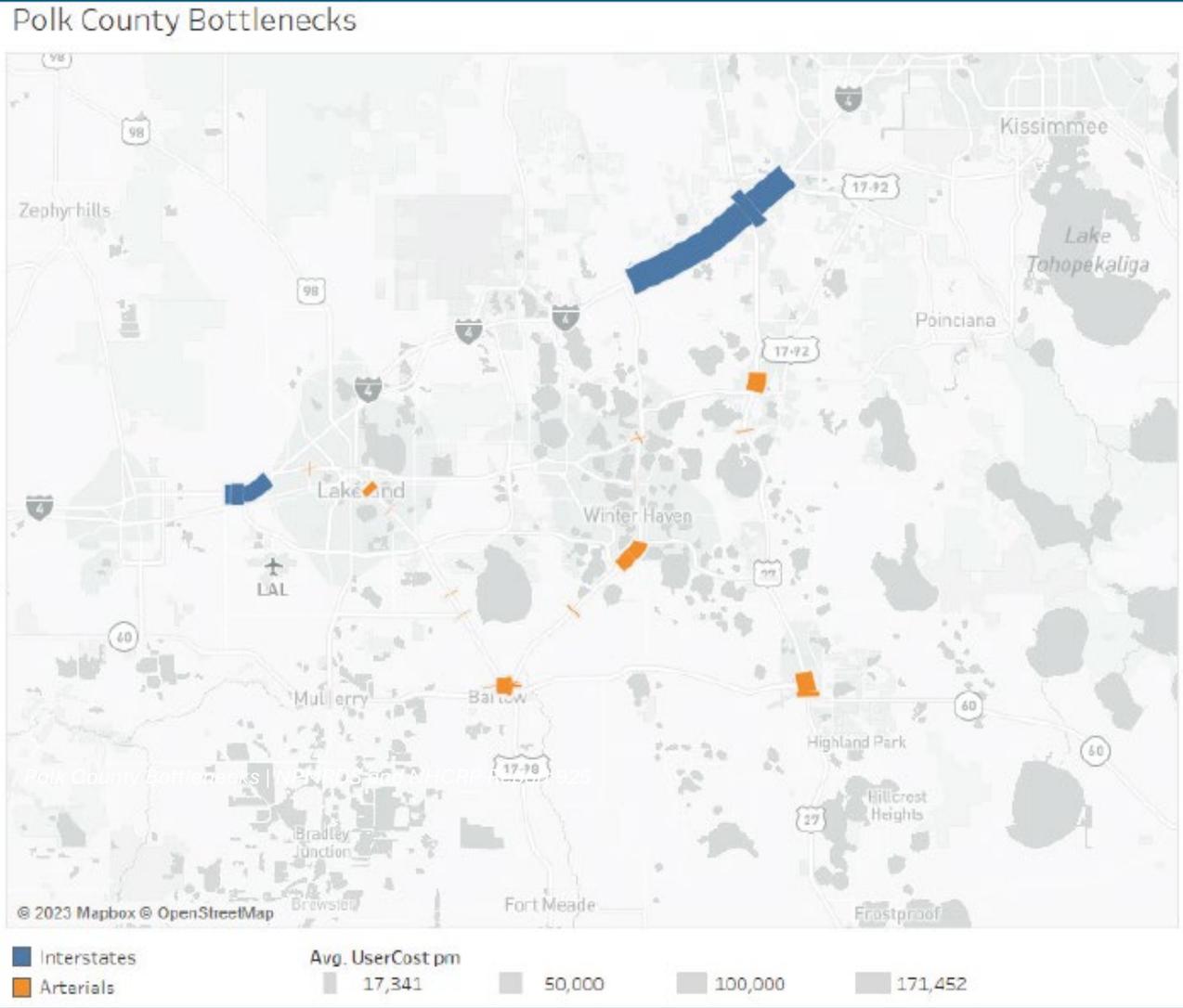
Analysis steps | Source: NCHRP Report 925 and WSP Methodology

- **Travel time data and time-of-day profiles identify areas of high traffic volume.** Key freight corridors with high congestion include I-4, US-27, US-17, US-98, SR 60, Polk Parkway (SR-570), and Cypress Gardens Boulevard (SR 540).
- Congestion metrics were translated into costs using monetization factors for the NCHRP Report 925.
- Segments with high congestion costs per mile include:
 - I-4 and US-27 interchange
 - I-4 near Polk Parkway Interchange
 - Cypress Gardens Boulevard
 - US-27 near SR-60 interchange
 - US-98 in Bartow



Truck AADT | WSP Analysis of 2022 NPMRDS Data

Evaluation of Truck Route Performance & Origin Destination Patterns

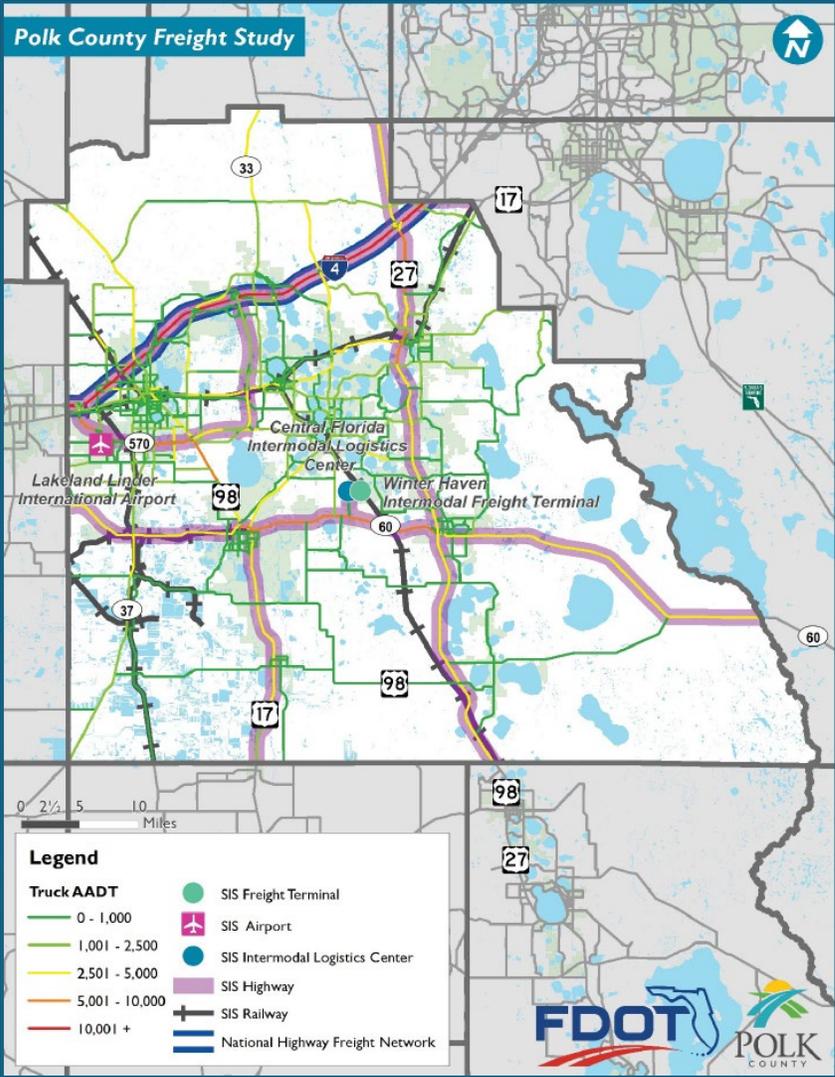


- **Top freight bottlenecks in Polk County:**
 - I-4/US-27 Interchange
 - I-4 near Polk Parkway Interchange
 - US 27 segments near US17/92
 - US 27 segments near SR 60 interchange
 - US 17 segments near Cypress Gardens Boulevard junction
 - US 98 segments in Bartow
 - US 98 segments in Lakeland (Bartow Road)



This 6-mile segment of I-4 eastbound at the US 27 interchange accounts for 15% of total congestion costs in Polk County.

Countywide Freight Needs and Deficiencies



Existing Polk County Truck AADT

- Existing conditions, such as network capacity, gaps, freight network hotspots, community concerns, and environmental considerations, were reviewed to provide recommendations.

AADT/Truck AADT, & Truck Percentages

- Highest traveled SIS roadways (30,000+ daily): I-4, SR 60, SR 570, US 17, US 27, and US 98
- Highest truck volumes (5,000+ daily): I-4, US 98, SR 570, SR 60, and US 27
- Highest truck percentages: I-4, SR 60, Deen Still Rd, and SR 37

Level of Service

- LOS updates are annually conducted by FDOT
- LOS targets for urban areas is "D" and for rural areas, "C"
- There are multiple D or lower areas meaning roads exceed capacity and demand

Freight Network Hotspots

- Hotspots are categorized into two groups: capacity and operations
- Identified critical freight bottlenecks within the county
- Roads with a planning time index (PTI) of over 1.5 have operational issues and are prone to bottlenecks (Operations)

Community Concerns & Environmental Considerations

- Shift from agriculture to urbanization
- Growth should be addressed accordingly to include collaborative efforts and choices
- Local governments and residents work in unison to shape the county's future
- Potential deficiencies in alignment between land uses and transportation needs

Truck Parking

- The most significant needs are along I-4 near Lakeland
- Determined by the number of unauthorized parking incidences
- Additional truck parking lots are needed
- D1 Trucking Parking Master Plan will identify new lots

Study Recommendations

Recommendations are intended to enhance the functionality, consistency, and safety of the intermodal freight network.



Capacity + Operational Improvements

Capacity improvements include roadway widening and/or PD&E studies

Locations with a PTI of >1.5 are recommended for operational improvements

Operational improvements include intersection improvements, TSM&O enhancements, PD&E studies, corridor analyses, and more



Political Issues

Create a supply chain & freight committee

Educational opportunities for elected officials and political leaders

Participate in local transportation-related events



Education & Community Outreach

Encourage balanced development

Gain local perspectives and community consensus

Arrange and host public events for education and input



Truck Parking & Safety

Advance safety techniques and meet truck parking needs

Propose rail crossing closures or improvements

Engage the industry to educate the public on safety

Perform a county-wide gap analysis study and ROW analysis

Florida Department of Transportation - District One Polk County Freight Plan (2024)



Matt McIntosh

Assistant Vice President / Senior Planner

mjmcintosh@gtinc.com

(407) 335-3192



Questions & Contact



11. Vision Zero Polk Update

Vision Zero Polk – Community Engagement

Public Meeting Wahneta 3/5/2026



Vision Zero Polk – Community Engagement

Public Meeting: Auburndale 3/10/2026



Vision Zero Polk – Community Engagement

Public Meeting: Kathleen 3/12/2026





12. Vulnerability Assessment Update

What is a Vulnerability Assessment?

Assessment of potential impacts on the community's critical assets due to future rainfall induced flooding

- Predicts depth of water from flooding
- Analyzes potential flooding impacts on different types of critical assets
- Determines a sensitivity score to the critical assets
- Serves as basis for building resilience
- Provides an opportunity for funding with Resilient Florida funds



Vulnerability Assessment Tasks



ACQUIRE
BACKGROUND
DATA



EXPOSURE
ANALYSIS
*ANALYZE WATER
DEPTH*



SENSITIVITY
ANALYSIS
*EVALUATE FLOODING
IMPACTS ON CRITICAL
ASSETS*



FINAL
VULNERABILITY
ASSESSMENT
REPORT, MAPS,
AND TABLES

ACQUIRE BACKGROUND DATA

THREE MAJOR CATEGORIES

Critical / Regionally Significant Assets

Topographic Data

Flood Scenario-Related Data





CRITICAL / REGIONALLY SIGNIFICANT ASSETS DATA

- ✓ Transportation Assets and evacuation Routes
- ✓ Critical Infrastructure
- ✓ Critical Community and Emergency facilities
- ✓ Natural, Cultural, and Historical Resources

Digital Elevation Model (DEM) Data



Flood Scenario Data Current, 2040, and 2070

100-Yr/24-Hr

200-Yr/24-Hr

500-Yr/24-Hr

- Airports
- Bus Terminals
- Colleges and Universities
- Communications Facilities
- Community Centers
- Correctional Facilities
- Disaster Debris Management Sites
- Disaster Recovery Centers
- Drinking Water Facilities
- Electric Production and Supply Facilities
- Emergency Medical Service Facilities
- Emergency Operation Centers
- Fire Stations
- Health Care Facilities
- Historical and Cultural Assets

Drain Flow Depth

Value

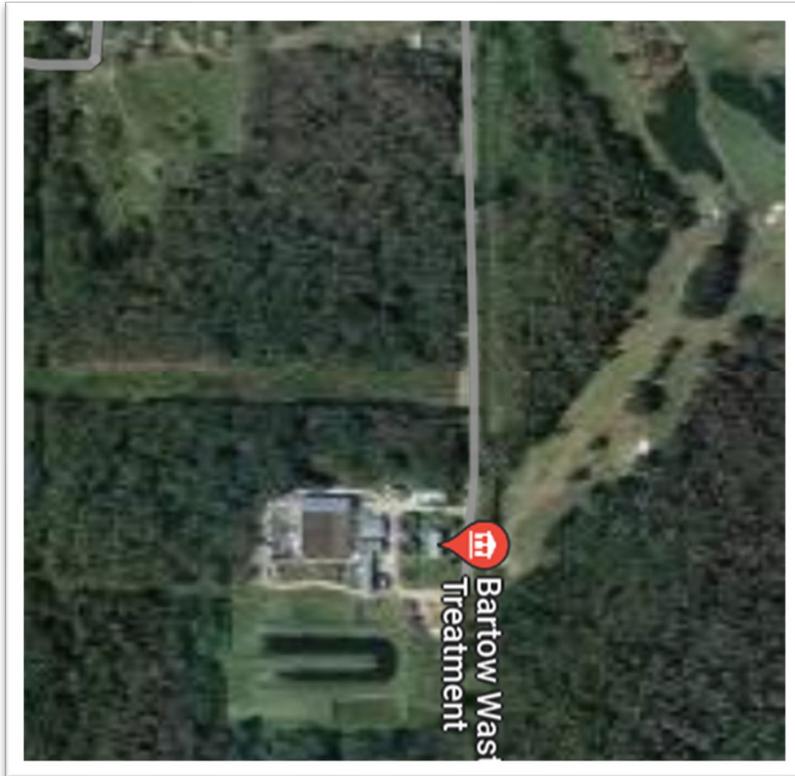


Deepest

Shallow

- Hospitals
- Law Enforcement Facilities
- Local Government Facilities
- Logistical Staging Areas
- Marinas
- Rail Facilities
- Railroad Bridges
- Risk Shelter Inventory
- Schools
- Solid and Hazardous Waste Facilities
- State Government Facilities
- Stormwater Treatment Facilities and Pump Stations
- Wastewater Treatment Facilities and Lift Stations
- Water Utility Conveyance Systems

EXPOSURE ANALYSIS

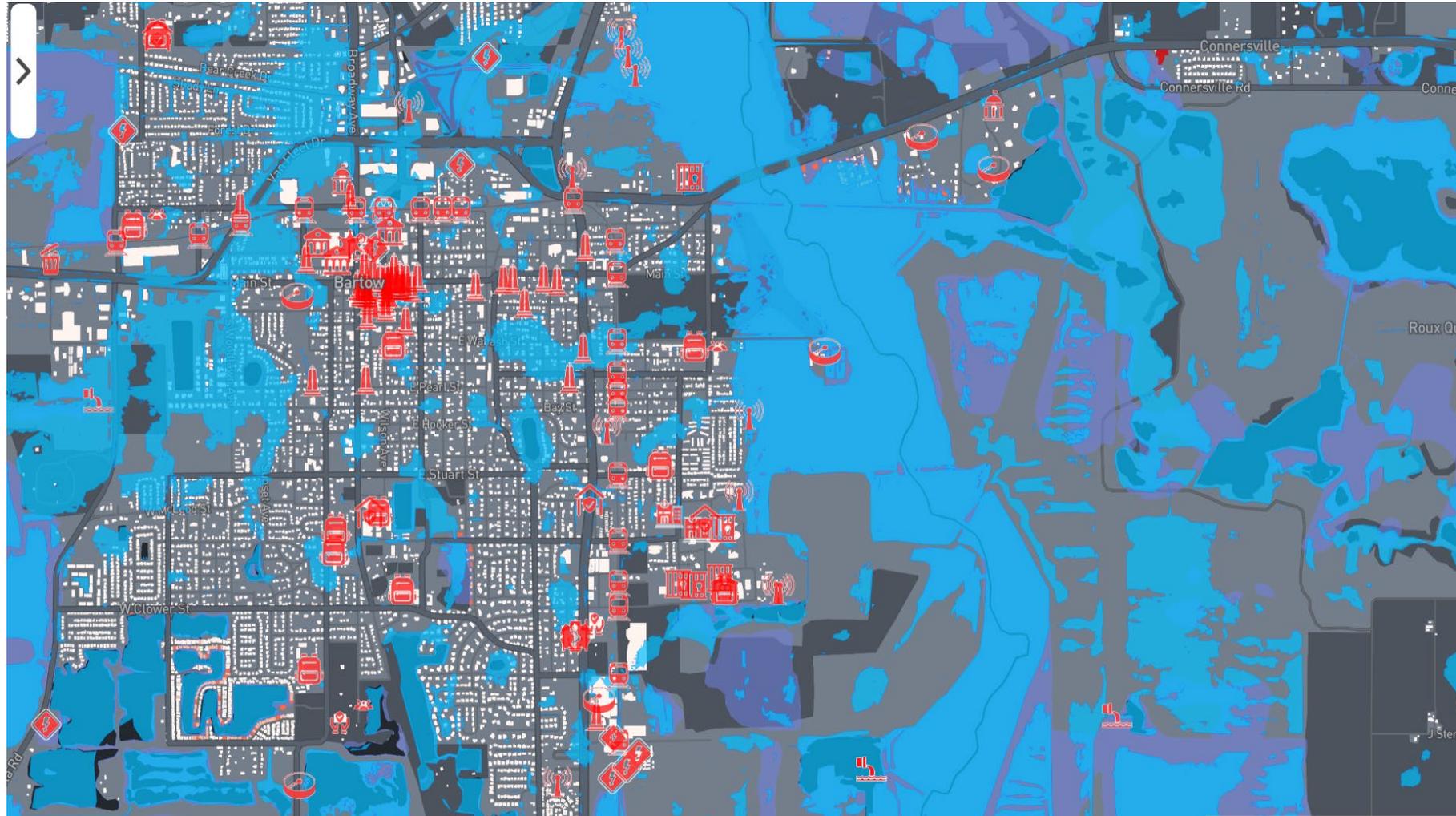


**Example: Bartow Wastewater Treatment Plant
2017 Google Earth**



**Example: Bartow Wastewater Treatment Plant
Image Credit: Polk County (Hurricane Ian)**

Exposure Analysis Example



EMPLOYMENT



...y of Florida.
...ed into 400
...s.

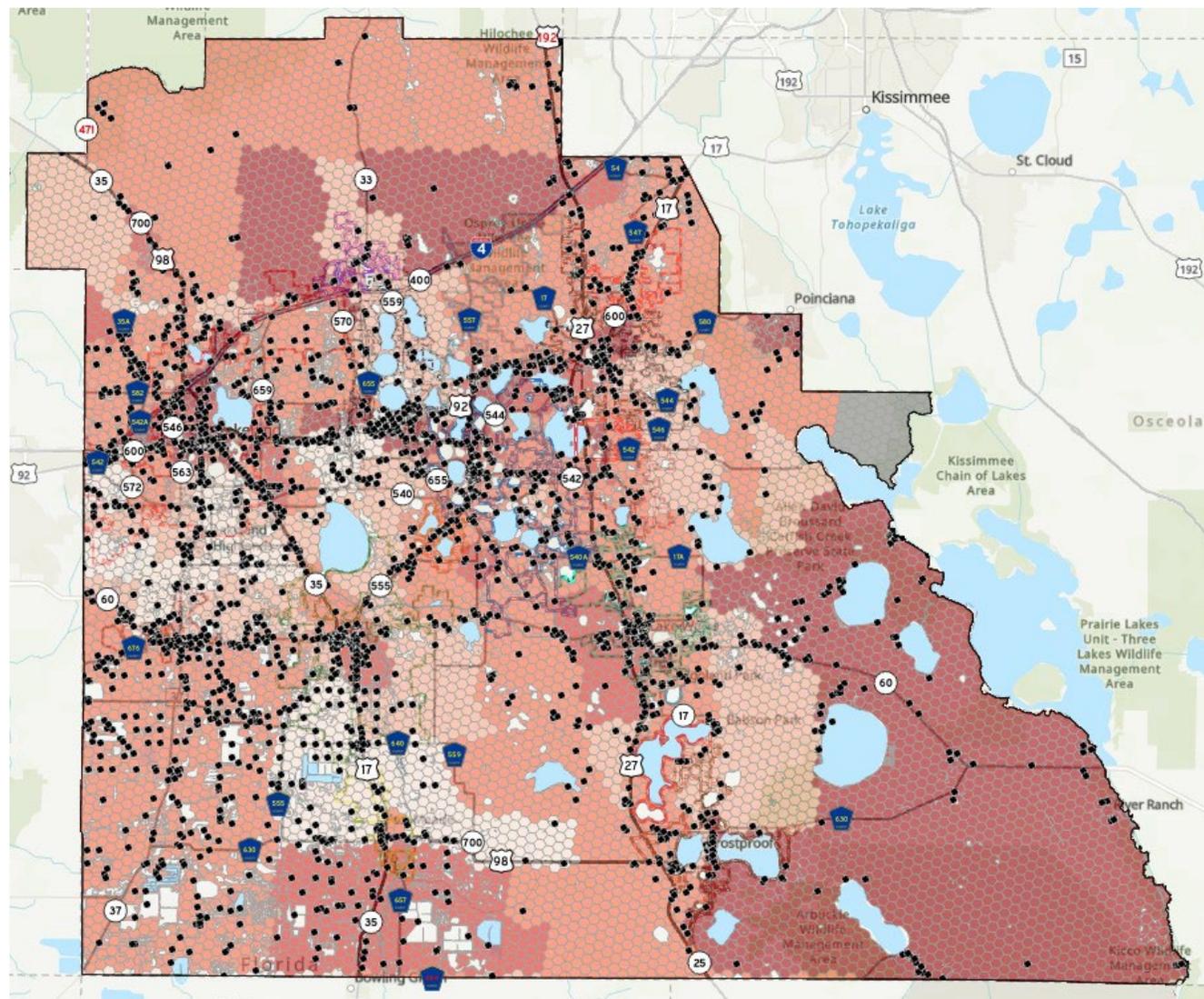
...y Spencer Schien (@MrPecners) | Data: Kontur Population (Released 2022-06-30)

SENSITIVITY ANALYSIS

Social Vulnerability Index Input Variables

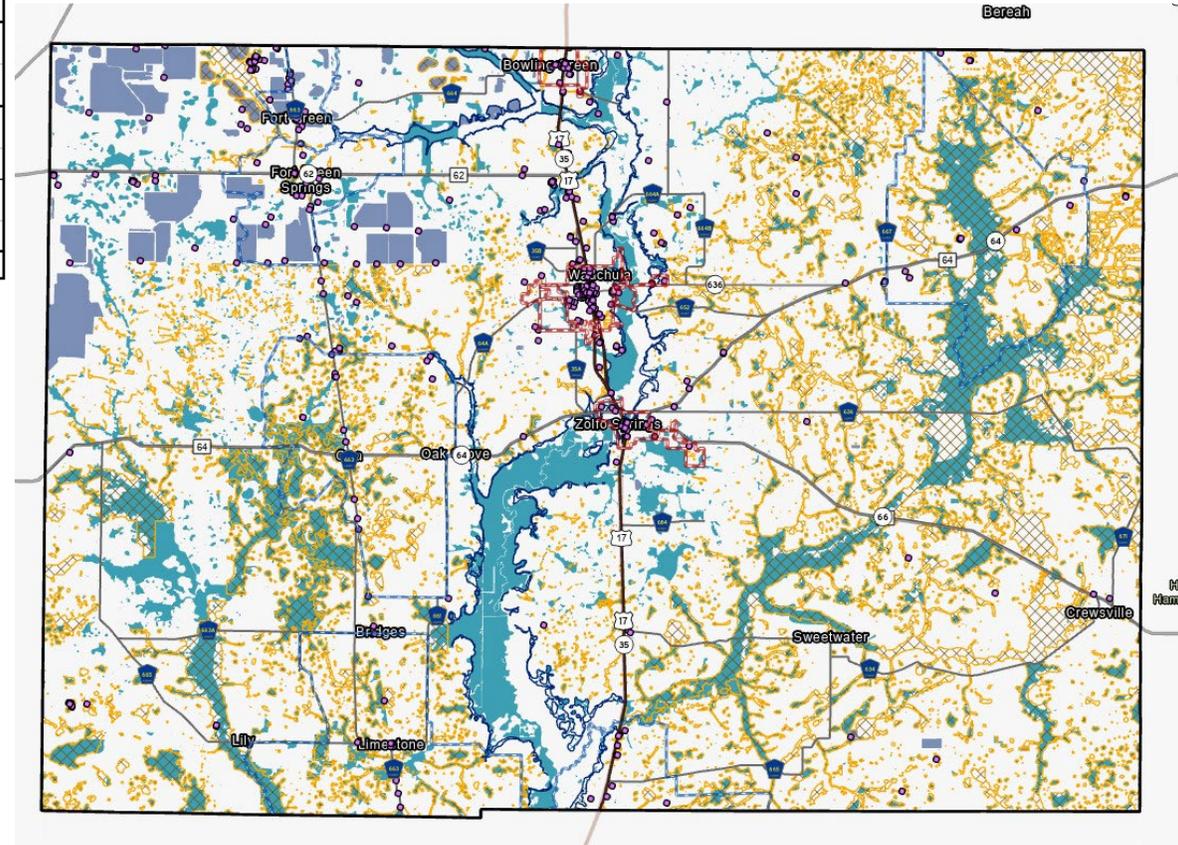
Variable	Description	Pillar
1	Percent Civilian Unemployment	Employment Structure
2	Percent Employment in Extractive Industries	Employment Structure
3	Percent Employment in Service Industry	Employment Structure
4	Percent Female Participation in Labor Force	Employment Structure
5	Percent Renters	Housing
6	Percent Mobile Homes	Housing
7	Percent Unoccupied Housing Units	Housing
8	Percent Population under 5 years or 65 and over*	Population structure
9	Percent of Children Living in 2-parent families	Population structure
10	Median Age	Population structure
11	Percent Female*	Population structure
12	Percent Female Headed Households*	Population structure
13	People per Unit	Population structure
14	Percent Asian*	Race/Ethnicity
15	Percent Black*	Race/Ethnicity
16	Percent Hispanic*	Race/Ethnicity
17	Percent Native American*	Race/Ethnicity
18	Percent Poverty	Socioeconomic Status
19	Percent Households Earning over \$200,000 annually	Socioeconomic Status
20	Per Capita Income	Socioeconomic Status
21	Percent with Less than 12th Grade Education	Socioeconomic Status
22	Median Housing Value	Socioeconomic Status
23	Median Gross Rent	Socioeconomic Status
24	Percent of households spending more than 40% of their income on rent or mortgage	Socioeconomic Status
25	Percent Households Receiving Social Security Benefits*	Special Needs
26	Percent Speaking English as a Second Language with Limited English Proficiency	Special Needs
27	Nursing Home Residents Per Capita	Special Needs
28	Percent of population without health insurance	Special Needs
29	Percent of Housing Units with No Car	Special Needs

Social Vulnerability (SOVI)



FEMA Risk Level

	Risk Level	Designation	Score	Special Flood Hazard Areas	Notes
100 Year Floodplain	High Risk (Coastal)	(AE) Floodway	10	SFHA	Channel of a river or other watercourse to convey floodwaters during a 100-year flood event.
		V	8	SFHA	Coastal areas with a 1% or greater chance of flooding annually and subject to storm waves
		VE	8	SFHA	Flood zone VE is a coastal flood zone where base flood elevations have been determined. It's the coastal equivalent of an AE flood zone.
	High Risk	A	8	SFHA	Represents areas with a 1% annual chance of flooding, also known as the 100-year flood
		AE	8	SFHA	Similar to Zone A, but detailed studies have determined BFEs
AO		7	SFHA	River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet	
High / Moderate Risk	A1-A30	7	SFHA	These were older designations that have been replaced by Zone AE	
	AH	6	SFHA	Areas with a 1% annual chance of shallow flooding, typically 1 to 3 feet deep. Flood zone where ponding of water can usually happen. BFEs have been determined.	
500 Year Floodplain	Moderate / Low Risk	AR	5	SFHA	Flood zone AR is a high-risk zone with a temporarily increased flood risk due to the building or restoring a flood control system nearby, such as a dam or levee.
		B	4	-	Represents areas with a moderate flood hazard between the 100 and 500-year flood levels, or base floodplains with lesser hazards
	Low Risk	X (unshaded)	3	-	Represents areas with a moderate flood hazard, similar to Zone B
C		2	-	The area is outside the 500-year floodplain and is usually protected by a federal control system. On new flood maps, unshaded flood zone X has replaced the previously known "flood zone C."	
	Undetermined Risk	D	1	-	Less than 1% chance of flooding each year
		D	1	-	No flood hazard analysis has been conducted. Areas in zone D are often sparsely populated and largely undeveloped.



Interactive Viewer Exposure Results – Critical Facilities

POLK COUNTY SHERIFF SOUTHEAST SUBSTATION

Zoom to

Asset Information

NAME	POLK COUNTY SHERIFF SOUTHEAST SUBSTATION
Asset	LAW ENFORCEMENT
Sub Type	
Street Address	4012 SGT MARY CAMPBELL WAY
City	LAKE WALES
Zip Code	33859
County	POLK
Latitude	27.957783
Longitude	-81.624163
CFRPC ID	CFRPC_PT:688

Exposure

Exposure analysis is the process of identifying and quantifying the extent to which people or things are exposed to a particular flood hazard or risk using precipitation, inundation, storm events, sea level rise, and FEMA Flood data.

Z Value (Elevation)	118.68216925356921
Elevation	119.68216705322266
Near (2040)	Medium
NearMin	0.148087
NearMax	2.291069
Far (2070)	Medium
FarMin	0.259766
FarMax	2.560883
Flood Zone	AE
Fl. Zone: Sub-Type	
Static BFE (FEMA)	0
FEMA 100 YR (FZ)	
FEMA 500 YR (FZ)	

Sensitivity Analysis / Score

In the context of vulnerable areas, sensitivity analysis investigates how various model inputs (rainfall, storm events, sea level rise, and SoVI factors) or assumptions affect the model's output (e.g., flood extent or damage estimates), helping to identify the most influential factors and assess the robustness of flood risk assessments.

CFRPC ID	CFRPC_PT:688
NAME	POLK COUNTY SHERIFF SOUTHEAST SUBSTATION
Asset Type	Law Enforcement Facilities
SoVI Score	3
FEMA Score	8
Parcel Inun. Score	0
2040 / Near Dr. Fl. Score	5
2040 / Near Pond. Score	0
2070 / Far Dr. Fl. Score	5
2070 / Far Pond. Score	0
CFRPC Sens. Score	21

Polk County Vulnerability Assessment Map

<https://experience.arcgis.com/experience/a6e99ed8857e469494f0c13ff2cab3a3/>

Polk County - Florida

Cities of Auburndale, Bartow, Davenport, Eagle Lake, Fort Meade, Frostproof, Haines City, Lake Alfred, Lakeland, Lake Wales, Mulberry, Polk City, Winter Haven and the Towns of Dundee, Hillcrest Heights, Lake Hamilton, as well as the Village of Highland Park, while supporting the City of Bartow Vulnerability Assessment, a separate Vulnerability Assessment project.

Vulnerability Assessment Map

Find address or place

Swipe

Leading layers

Trailing layers

2040 Drain Flow	2040 Ponding	2070 Drain Flow	2070 Ponding

Polk County - Vulnerability Assessment

Polk County Vulnerability Assessment includes the Cities of Auburndale, Davenport, Eagle Lake, Fort Meade, Frostproof, Haines City, Lake Alfred, Lakeland, Lake Wales, Mulberry, Polk City, Winter Haven and the Towns of Dundee, Hillcrest Heights, Lake Hamilton, as well as the Village of Highland Park, while supporting the City of Bartow Vulnerability Assessment, a separate Vulnerability Assessment project.

What is a Vulnerability Assessment?

Florida Statutes Section 380.093 provides the details behind Resilient Florida Grant Program; comprehensive statewide flood vulnerability and sea level rise data set and assessment; Statewide Flooding and Sea Level Rise Resilience Plan; and regional resilience entities.

Don't show this again

OK

10 km
10 mi

Esri, CGIAR, USGS | University of South Florida, FDEP Esri, TomTom, Garmin, SafeGraph, FAO, MET/NASA, USGS, EPA, NPS, USFWS

UPCOMING ENGAGEMENT

Polk TPO TAC Meeting
9:30am

19 Mar. 2026

24 Mar. 2026

Virtual MS Teams – CFRPC website
(www.cfrpc.org)
11:00am – 11:30am

PROJECT TEAM CONTACT INFORMATION

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13. Committee Member Comments



14. Adjournment

Next Meeting: May 21, 2026

FDOT District One Conference Center - Bartow