

MAY 2026



LAKE COUNTY, FL
SAFETY ACTION PLAN

SAFE STREETS FOR ALL



Acknowledgments

Thank you to the many project partners, stakeholders, government staff, local leaders, and all who contributed to the development of this plan through meetings, interviews, public engagement activities, and draft study reviews.

BOARD OF COUNTY COMMISSIONERS

Anthony Sabatini (*District 1*)

Kirby Smith (*District 3*)

Timothy Morris (*District 5*)

Sean M. Parks,
Vice-Chairman (*District 2*)

Leslie Campione,
Chairman (*District 4*)

LAKE COUNTY PROJECT LEADERSHIP TEAM

Jeff Earhart, PE,
Engineering Director

Michael Olka, PE,
Project Manager

Osvaldo Nunez, *Design Engineer*

Sharon E Lewis, MSCTM,
Senior Transportation Engineer

Adrienne Larue, *Engineer I*

Michael Vitta, *Division Chief*

TASK FORCE COMMITTEE

Town of Lady Lake

City of Leesburg

Lake County Sheriff's Office

City of Clermont

City of Mascotte

Lake County Transit

City of Eustis

City of Minneola

Lake County Schools

City of Groveland

City of Tavares

Bike Walk Central Florida

Town of Howey-in-the-Hills

City of Mount Dora

PREPARED BY:



DRMP

alta

QUEST.



Contents

1	Introduction	page 2
	<i>Safe System Approach</i>	page 5
2	Leadership Commitment and Goals ...	page 8
	<i>Goals & Objectives</i>	page 10
	<i>SS4A Task Force</i>	page 12
3	Safety Analysis	page 14
	<i>Lake County High Injury Network</i>	page 15
	<i>Demographic Analysis</i>	page 29
4	Community Engagement	page 31
	<i>Task Force Meetings</i>	page 34
	<i>Public Meetings</i>	page 37
	<i>Online Community Survey</i>	page 39
5	Policy and Programs	page 41
	<i>Existing Plans and Policies</i>	page 42
	<i>Policy, Strategy, and Program Recommendations</i>	page 49
6	A Plan for Action	page 63
	<i>Project Prioritization</i>	page 64
	<i>Safety Countermeasures</i>	page 70
	<i>Progress and Transparency</i>	page 78
A	Safety Analysis Report	page 80
B	Public Engagement Materials	page 139
C	Prioritized Projects List	page 160

CHAPTER 1:

Introduction



About the SS4A Comprehensive Safety Action Plan

Between 2018 and 2022, Lake County, Florida recorded a traffic fatality rate of 16.4 deaths per 100,000 residents, exceeding both the state average of 14.9 and the national average of 12.9.¹ Half of the fatal crashes occurred at night, and approximately 29% of crashes resulting in fatalities or serious injuries occurred on County roads. Among the 12,999 crashes that resulted in fatalities, serious injuries, or injuries, 23% of fatal or seriously injured crashes involved a senior, and roughly 11% involved teenage drivers, highlighting the need for targeted safety education and countermeasures.

In 2022, Lake County received an \$800,000 Safe Streets for All (SS4A) Planning Grant to develop a Comprehensive Safety Action Plan (CSAP). The federally funded SS4A program emphasizes the Safe Systems Approach, a comprehensive framework aimed at achieving Vision Zero by eliminating traffic-related deaths and serious injuries. Lake County's CSAP serves as a strategic roadmap towards Vision Zero in the County by applying the Safe Systems Approach and aligning with Target Zero, the Florida Department of Transportation's statewide initiative to eliminate fatalities and serious injuries on Florida's transportation network.

Lake County's efforts to improve safety along its transportation network are not in isolation and are part of a regional effort towards achieving Vision Zero. The Lake-Sumter Metropolitan Planning Organization (MPO) and adjacent county, Sumter County, were also both awarded SS4A grants to develop action plans in fiscal

year 2023. Additionally, the City of Mount Dora, located in Lake County, was awarded SS4A grant funds to develop an action plan in fiscal year 2024. Since then, there has been a strategic multijurisdictional effort to coordinate towards shared Vision Zero goals within the region. Lake County's CSAP is intended to include actionable safety strategies and recommendations to make transportation safer for all road users, on all of its roadways.

Lake County is home to 383,956 residents, according to the 2020 Census, which designates it as an urban county by the State of Florida because its population exceeds 75,000.

Despite this, much of Lake County retains its rural character, with significant land outside its urbanized 'Golden Triangle' (the Cities of Mount Dora, Tavares, and Eustis) dedicated to agriculture. When exploring Lake County at a more granular level by land area, most of it remains undeveloped or is used for agriculture.

Rural areas experienced a disproportionate share of fatal and serious injury (KSI) crashes (where people were killed or seriously injured) crashes (56%) compared with urban areas between 2018 and 2023.

In total, there were 12,999 crashes during that period, in which **314 people died and 1,423 were seriously injured**. In fact, in terms of absolute numbers, more people in Lake County lost their lives in 2023 than in 2018, but the increasing population growth over time has diluted the fatality rate.

¹ The City of Mount Dora was excluded from the crash analysis, as it received a separate Safe Streets and Roads for All grant to develop its own Safety Action Plan.

THE BURDEN IS NOT SHARED EQUALLY

Pedestrians accounted for 16% of all fatal crashes, although they represent only 4% of all crash injuries. Crashes involving **pedestrians were 4.7 times and bicyclists 1.7 times more likely to be fatal** compared to crashes involving vehicles. This CSAP aims to recommend transportation safety enhancements and projects that enable residents and visitors of all ages and abilities to walk, bike, and use public transit without compromising their quality of life anywhere in Lake County.



Safe System Approach

The Safe System Approach is human-centric and can accommodate and strengthen the transportation network in ways that mitigate factors contributing to traffic-related fatalities and injuries. The Safe System Approach encompasses five elements:

- **Safe Road Users:** Involves the consideration of safety for all road users, including pedestrians, cyclists, ride transit, and travel by other non-motorized modes. The Safe Systems Approach encourages safe, responsible driving and behavior by people who use our roads and creates conditions that prioritize their ability to reach their destination unharmed.
- **Safe Roads:** Addresses the physical characteristics of the transportation network to include safety countermeasures through design and technology to ultimately prevent crashes and mitigate injuries. The Safe System Approach roadway environments are designed to mitigate human errors, account for injury tolerances, encourage safer behaviors, and facilitate safe travel for the most vulnerable users.
- **Safe Speeds:** Incorporates the implementation of speed management methods, techniques, and strategies to reduce vulnerabilities that result in severe injuries or fatalities. The Safe Systems Approach promotes safer speeds in all roadway environments through a combination of thoughtful, balanced, context-appropriate roadway design, appropriate speed-limit setting, targeted education, outreach campaigns, and enforcement.
- **Safe Vehicles:** Consists of procuring and retrofitting vehicles that are equipped with safety features and other technologies that reinforce injury prevention from crashes, such as Connected Automated

Vehicles (CAVs) and Automated Driving Systems (ADS). The Safe Systems Approach expands the availability of vehicle systems and features that help prevent crashes and minimize their impact on occupants and non-occupants alike.

- **Post-Crash Care:** Engages a multidisciplinary effort among law enforcement, first responders, and other emergency services to improve the health outcomes following a crash, prevent future incidents, and enhance systemic processes. The Safe Systems Approach enhances crash survivability by enabling expedient access to emergency medical care, creating a safe working environment for vital first responders, and preventing secondary crashes through robust traffic incident management practices.

Figure 1. FHWA Safe Systems Approach Framework



The Safe System Approach recognizes that deaths and serious injuries are unacceptable and preventable. By recognizing vulnerabilities in the transportation network, partner agencies and stakeholders can work together to proactively and intentionally address safety concerns through coordination and shared responsibilities.

Guiding Principles

The Safe System Approach is founded on six principles:

- **Traffic-related deaths and serious injuries are unacceptable** – This plan prioritizes eliminating crashes that result in death and serious injuries for all road users in Lake County.
- **Humans Make Mistakes** – All road users will inevitably make errors and misjudgments that can directly or indirectly cause crashes, but the transportation system can be designed and managed to mitigate certain types and levels of human mistakes.
- **Humans Are Vulnerable** - Human bodies are vulnerable to crashes; therefore, a well-designed and operable transportation network should be considered in a human-centric manner.
- **Responsibility is Shared** – Across all multi-jurisdictional and multi-agency levels, Lake County's key decision-makers, stakeholders, and other community partners are critical in collaboratively and proactively working towards a Vision Zero future.
- **Safety is Proactive** – Shifting from a reactive to a proactive traffic crash mitigation approach focuses on preventing crashes that result in injuries and fatalities. Prevention can only be achieved through proactive roadway safety assessments and the implementation of countermeasures.
- **Redundancy is Crucial** – A transportation network with cross-cutting considerations and strategies ensures that if one safety countermeasure fails, people are still protected.



CHAPTER 2:

Leadership Commitment and Goals



The Safe Streets and Roads for All (SS4A) Action Plan is a U.S. Department of Transportation's National Strategy, striving for zero deaths and serious injuries on the nation's roadways. This initiative helps Lake County take steps toward achieving our shared goal of safer streets for everyone.

Every day, more than 100,000 people die from road-related deaths. Whether you drive, bike, walk, or use a wheelchair, we need to make our roads safer for all.

**Help Shape
a Safer Future
Attend the First Safety
Action Plan Event**

The SS4A Action Plan is designed to create a clear strategy and vision for safer streets in Lake County. Its goal is to reduce — and ultimately eliminate — traffic fatalities and severe injuries for all road users.

Thursday, February 6th

6:00 p.m. to 7:30 p.m.
Tavares Civic Center
100 E. Caroline Street

For more information, please contact: Samantha Scarp Samantha.Scarp@OCAla.com 407.885.4866

Lake County complies with various non-discrimination laws and regulations, including:

Title VI of the Civil Rights Act of 1964

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status.

For questions or concerns, you may contact:

Lake County...

Title VI Coordinator

Sharon Lewis

350 N. Sinclair Ave.

Tavares, FL 32778

(352) 253-9050

selewis@lakecountyfl.gov

Lake County is soundly committed to eliminating traffic-related fatalities and serious injuries through an intentional, data-driven, and joint approach to transportation safety. Guided by the principles of Vision Zero and aligned with FDOT's Target Zero, the County acknowledges that traffic deaths are preventable and that the transportation system must be designed and operated to prioritize human life above all. The County adopted a Vision Zero resolution which highlights the County's commitment to eliminating traffic deaths and serious injuries in Lake County by 2040 and endorses Vision Zero/Target Zero and the Safe System Approach. County staff is also directed to integrate these safety principles into their plans and policies, coordinate with FDOT, Lake-Sumter MPO, and other key partners to advance safety goals.

Lake County's CSAP represents a holistic and systemic approach to reducing traffic deaths and serious injuries across all road users and all roadway types and establishes a clear leadership framework and shared responsibility across agencies to prioritize human life and safety on all roadways. County leadership is actively advancing this effort through coordinated actions and strategies across multiple departments that directly support roadway planning, design, operations, enforcement, education, and emergency response. Lead and supporting departments include, but are not limited to, the County's

Public Works, Planning and Zoning, Public Safety, Emergency Management, Sheriff's Office, Transit Services, and Communications, with collaboration from municipal partners and regional agencies such as the Lake-Sumter MPO and Florida Department of Transportation's District 5. Collectively, these departments and agencies share accountability for upholding safety priorities, implementing proven countermeasures, aligning policies and investments, and tracking progress toward safety goals.

Additionally, the Lake-Sumter MPO's adoption of the Comprehensive Safety Action Plan is underway, with a specific target established on February 2018 to achieve zero fatal and serious-injury crashes by 2050 in the Lake-Sumter MPO region, which encompasses both Lake County and Sumter County.^{2,3} Lake-Sumter MPO is also operating a Vision Zero dashboard as a transparent effort to track progress on safety outcomes along the high-injury network and to monitor crash trends in the region.⁴ This chapter outlines Lake County's safety goals and leadership framework to guide implementation of the CSAP program. It defines how County departments, partner agencies, and municipalities will work jointly to establish quantifiable targets, employ the Safe System Approach, and coordinate projects and strategies to achieve zero traffic fatalities and serious injuries countywide.

² Lake-Sumter MPO. (2025). *Lake-Sumter MPO Vision Zero Action Plan – Initial Findings Workshop*.

https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.lakesumtermpo.com%2Fmedia%2Fgdwoi32t%2FIsmpovision-zero-ppt_v6.pptx&wdOrigin=BROWSELINK

³ Lake-Sumter MPO. (2025). *Lake Sumter MPO Vision Zero Action Plan*.

<https://www.lakesumtermpo.com/calendar/lake-sumter-mpo-vision-zero-safety-action-plan/>

⁴ Lake-Sumter MPO. (n.d.). *Vision Zero Dashboard*.

<https://experience.arcgis.com/experience/b1deb5e4dd2a498bab32231de00b5617/>

Goals & Objectives

GOAL #1: SAFE ROAD USERS



Foster a shared culture of safety in which all road users, decision-makers, and implementors are influenced, informed, and supported to adopt safe behaviors through education, engagement, data analysis, strategic actions, and investments.

Objectives:

- Demonstrate and institutionalize safety leadership countywide.
- Engage vulnerable and underserved populations, schools, employers, community groups, and advocacy organizations in safety education efforts, planning, and decision-making processes.
- Expand safety education and targeted enforcement for all road users.
- Enhance staff capacity and interagency collaboration

GOAL #2: SAFE ROADS



Prioritize the design, operation, and maintenance of roadways to minimize the likelihood and severity of crashes by anticipating human error and protecting all users, especially those most vulnerable, and place an emphasis on the High Injury Network corridors, through data-driven, proactive, and context-sensitive solutions.

Objectives:

- Integrate the Comprehensive Safety Action Plan, Vision Zero, and Complete Street principles, and the Safe System approach into all stages of transportation project delivery, which includes programming, planning, design, construction, operations, and maintenance.
- Prioritize and proactively address systemic safety risks on the high-injury network and priority corridors for all road users.
- Improve safety for vulnerable road users through targeted infrastructure investments.
- Enhance systemic safety through audits, coordination, and innovation to proactively identify risks, deploy effective countermeasures, and continuously improve roadway safety performance.
- Identify and secure funding sources to advance strategies and projects to eliminate fatal and serious injuries related to crashes.

GOAL #3: SAFE SPEEDS



Achieve context-appropriate travel speeds through roadway design, policy reform, speed management, and data-driven implementation, with priority on High Injury Network (HIN) corridors, school zones, and arterial roadways, to reduce fatal and serious injury crashes.

Objectives:

- Design roads to be self-enforcing for safe speeds.
- Establish a countywide traffic calming framework
- Implement targeted speed management on HIN corridors through redesign and operational improvements.
- Modernize speed-limit policies to align with roadway context.
- Deploy automated and technology-based speed enforcement tools

GOAL #4: SAFE VEHICLES



Promote the adoption and use of vehicles equipped with safety features and technologies across county and municipal fleets that reduce crash risk, mitigate injury severity, and improve interactions with pedestrians, bicyclists, and other vulnerable road users.

Objectives:

- Integrate advanced safety technologies into public fleets.
- Adopt policies that prioritize high safety ratings and include crash-reduction and driver-assistance technologies.
- Improve vehicle fleet compatibility with vulnerable road users.
- Coordinate and scale fleet safety improvements across jurisdictions

GOAL #5: POST-CRASH CARE



Facilitate rapid, coordinated, and effective emergency response and post-crash care to minimize injury severity, improve survival outcomes, and use post-crash data to improve trauma systemic procedures.

Objectives:

- Establish a coordinated multi-agency post-crash response framework.
- Strengthen responder readiness through training and capacity building.
- Develop and track shared performance targets.
- Institutionalize data-driven post-crash safety planning.
- Enhance crash and near-miss reporting tools and technologies.

SS4A Task Force

Lake County established a Safe Streets and Roads for All (SS4A) Task Force during the development of this Comprehensive Safety Action Plan. The Task Force convenes regularly and serves as an advisory, capacity-building, and coordination body to guide safety priorities and promote cross-departmental and interagency collaboration for plan implementation.

Grounded in the principles of transparency, fairness, and shared responsibility, the Task Force will help align County departments, partner agencies, and community stakeholders around a unified approach to a Safe System. The Task Force will provide technical feedback on proposed strategies and projects.

SS4A TASK FORCE: ROLE AND RESPONSIBILITIES

The SS4A Task Force will fulfill the following roles throughout plan implementation:

- **Strategic Guidance:** Provide input on safety goals, policy direction, and prioritization of projects and strategies consistent with the Safe System Approach.
- **Stakeholder Alignment:** Ensure stakeholder and community engagement findings, including concerns from underserved and vulnerable populations, are reflected in safety priorities, strategies, and investments.
- **Interagency Coordination:** Facilitate coordination among County departments, municipalities, and partner agencies to promote consistent, systemwide safety practices through a data-driven approach and effective project management.
- **Accountability and Transparency:** Support progress tracking, performance evaluation, and clear communication of outcomes to County leadership, partners, and the public.
- **Implementation Support:** Provide feedback throughout the process to help identify implementation challenges, opportunities, programmatic improvements, and lessons learned across jurisdictions.

PARTICIPATING AGENCIES

Task Force membership includes over a dozen organizations representing the following County departments, agencies, and partner organizations:

- Lake County Public Works/Traffic Engineering
- Lake County Planning and Zoning
- Lake County Public Safety
- Lake County Emergency Management
- Lake County Sheriff's Office/Law Enforcement
- Lake County Emergency Medical Services
- Lake County Transit Services
- Lake County Communications
- Lake County School District
- Municipal Governments within Lake County
- Lake-Sumter MPO
- Bike/Walk Safe Central Florida
- Community Safety Partners

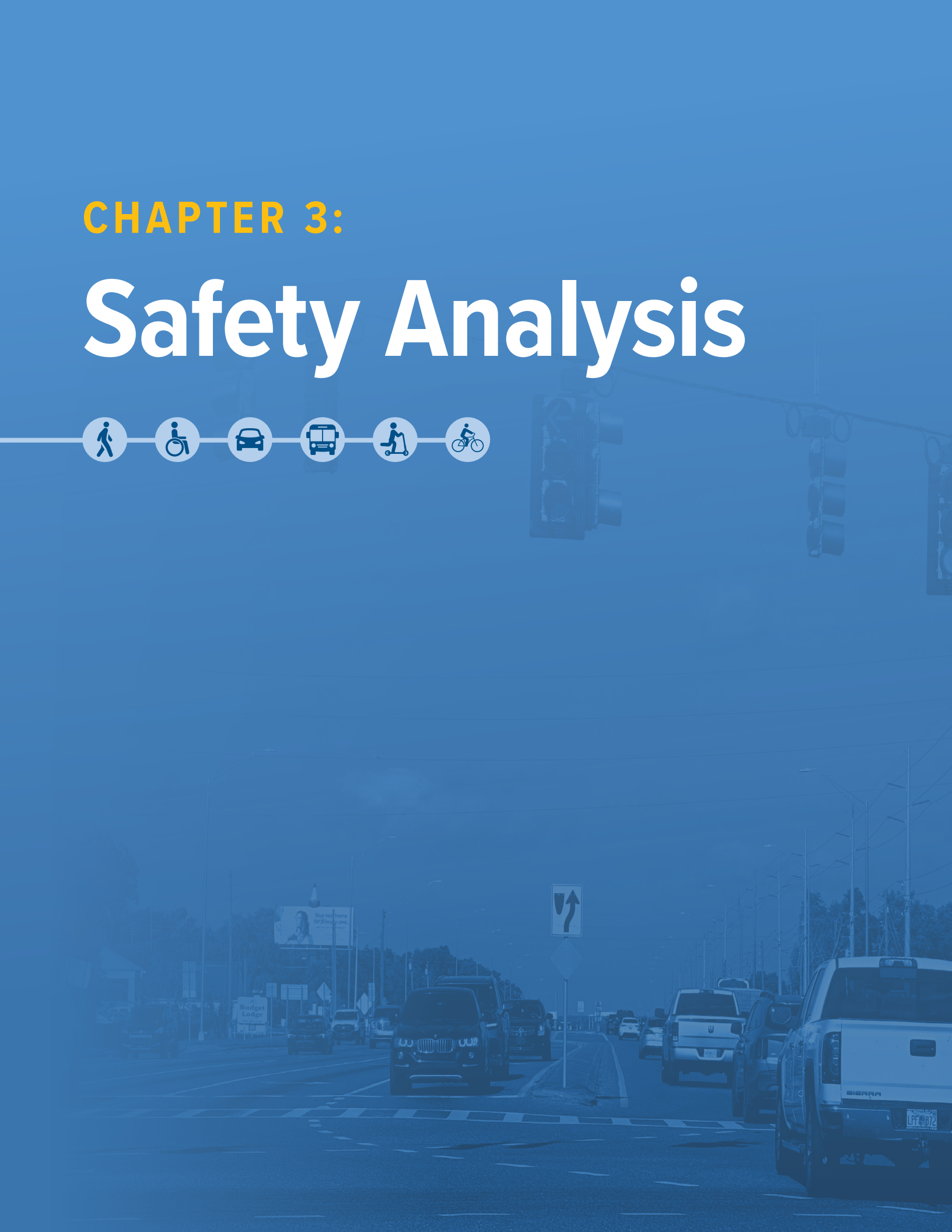
Vision Zero Resolution

Lake County adopted a Vision Zero resolution on May 19, 2026, to support implementation of the Comprehensive Safety Action Plan and established traffic safety as a high priority for achieving zero traffic deaths and serious injuries in alignment with state and federal goals by 2040. The primary purpose of the Vision Zero ordinance is to embed **a Safe System Approach** in County decision-making, policies, and transportation investments. The ordinance recognizes that traffic deaths are preventable and that responsibility for safety is shared across agencies, policymakers, and road users. By adopting this ordinance, the County establishes Vision Zero as the policy foundation for implementing and securing funding for the Comprehensive Safety Action Plan developed under the Safe Streets for All (SS4A) program.

Lake County's Vision Zero resolution significantly and formally affirms County leadership's commitment to eliminating traffic fatalities and serious injuries. The Vision Zero resolution is intended to encourage County departments to align local policies, plans, projects, design standards, evidence-based safety practices, and data-sharing with the County's Vision Zero and Target Zero goals. In tandem with the SS4A Task Force and ongoing community engagement, the ordinance ensures that Vision Zero remains at the forefront of the County's and its municipal partners' short- and long-term priorities.

CHAPTER 3:

Safety Analysis



This chapter documents the safety analysis conducted to identify crash trends, high-risk road users, and locations in Lake County that experience a disproportionate number of serious injury and fatal crashes. The analysis supports the development of targeted safety strategies and projects as part of the Lake County Safe Comprehensive Safety Action Plan.

The safety analysis integrates multiple data sources and analytical approaches, including a systemic review of historical crash data, High Injury Network (HIN) analysis, school zone safety evaluation, demographic analysis, and crash profile assessment. In tandem, these analyses identify priority corridors, intersections, and communities where investments can most effectively reduce fatal and serious injury crashes and improve safety outcomes for all users.

This section summarizes overall crash conditions in Lake County. Between 2018 and 2023, the following crash patterns were observed:

- **A total of 12,999 crashes were identified.**
- **314** people died in traffic crashes and **1,423** were seriously injured (excluding Florida's Turnpike and the City of Mount Dora).
- **49%** of KSI crashes occurred on state-owned roadways.
- Overall, State roads accounted for the highest percentage of KSI crashes (49%) and unlit, nighttime crashes (52%). County roads experienced 29% of KSI crashes and were the primary locations for unpaved shoulder crashes (43%).

Lake County High Injury Network

A High Injury Network (HIN) is a data-driven tool that identifies roadway segments and intersections that experience a high concentration of fatal and serious-injury crashes. Rather than focusing solely on individual crash locations, the HIN identifies corridors that will have the greatest return on investment for safety improvements and countermeasures. This approach will guide Lake County's prioritization of systemic safety enhancements to make meaningful progress toward regional and state goals such as Vision Zero and Target Zero. The Lake County High Injury Network represents roadway segments and intersections with elevated concentrations

of fatal and serious-injury crashes. The resulting HIN provides a clear, visual representation of where safety investments may yield the greatest benefit.

For Lake County, the HIN was developed using reported crash data over the six-year analysis period of January 1, 2018, to December 31, 2023, provided by Signal4Analytics⁵, with emphasis on crashes resulting in fatalities and serious injuries. Network screening methods were applied to pinpoint roadway segments and intersections with crash rates and severities above established thresholds.

⁵ Signal 4 Analytics (S4) is a web-based, interactive mapping tool developed by the University of Florida's GeoPlan Center that serves as Florida's central repository for traffic crash data.

Key HIN Takeaways

The Lake County HIN identifies roadway segments where focused safety investments can most effectively reduce severe crashes and fatalities. The analysis found that the HIN includes 101 roadway miles, just 2.8 percent of the county's road network, yet it accounts for 51 percent of all injury crashes. Serious crashes are largely concentrated on higher-speed, higher-volume corridors, with 74 percent of HIN mileage under State jurisdiction, highlighting the importance of coordination with FDOT. The City of Clermont contains the largest share of HIN roadways at 16.8 miles. While more than one-third of HIN mileage lies in unincorporated, rural areas, the network is disproportionately represented in urban areas, especially Clermont, Leesburg, and Eustis. Combined, Unincorporated Lake County, the City of Clermont, and the City of Leesburg accounted for 63% of KSI crashes. These findings highlight the need for a data-driven, focused approach to improving traffic safety in Lake County. As Lake County advances its Comprehensive Safety Action Plan, the HIN will serve as a critical tool for prioritizing investments and achieving measurable progress toward the County's goal of eliminating traffic crashes that result in deaths or serious injuries. A map of the HIN is shown in **FIGURE 2**.

- **Crash Severity Overview (2018–2023):** 314 traffic fatalities and 1,423 serious injuries occurred in Lake County, indicating ongoing safety concerns despite a slight decline in fatal crash rates. Overall, State roads accounted for the highest percentage of KSI crashes (49%) and unlit, nighttime crashes (52%). County roads were the primary locations for unpaved shoulder crashes (43%).
- **Lane Departure and Off-Road Crashes:** Lane-departure crashes accounted for 42 percent of all fatal and serious injury (KSI) crashes, with offroad crashes alone representing 20 percent. Crash severity was higher on roadways with unpaved shoulders.
- **High-Risk Roadway Types:** State-maintained roads experienced the greatest share of KSI crashes (49 percent). Rural roads, 42 percent of which are County-owned, had fewer total crashes but a disproportionate number of severe outcomes.
- **Intersections and Left-Turn Crashes:** While most pedestrian KSI crashes occurred away from intersections, nearly 30 percent of vehicle and bicycle KSI crashes happened at intersections. Left turn crashes at unsignalized intersections were the most frequently occurring crashes. Four-way intersections (18 percent) and T-intersections (15 percent) were the most common intersection types associated with KSI crashes. Left-turn, right-angle, and rear-end crashes were the predominant severe crash types, with left-entering (28 percent) and right-angle (26 percent) crashes most frequent at four-way intersections.

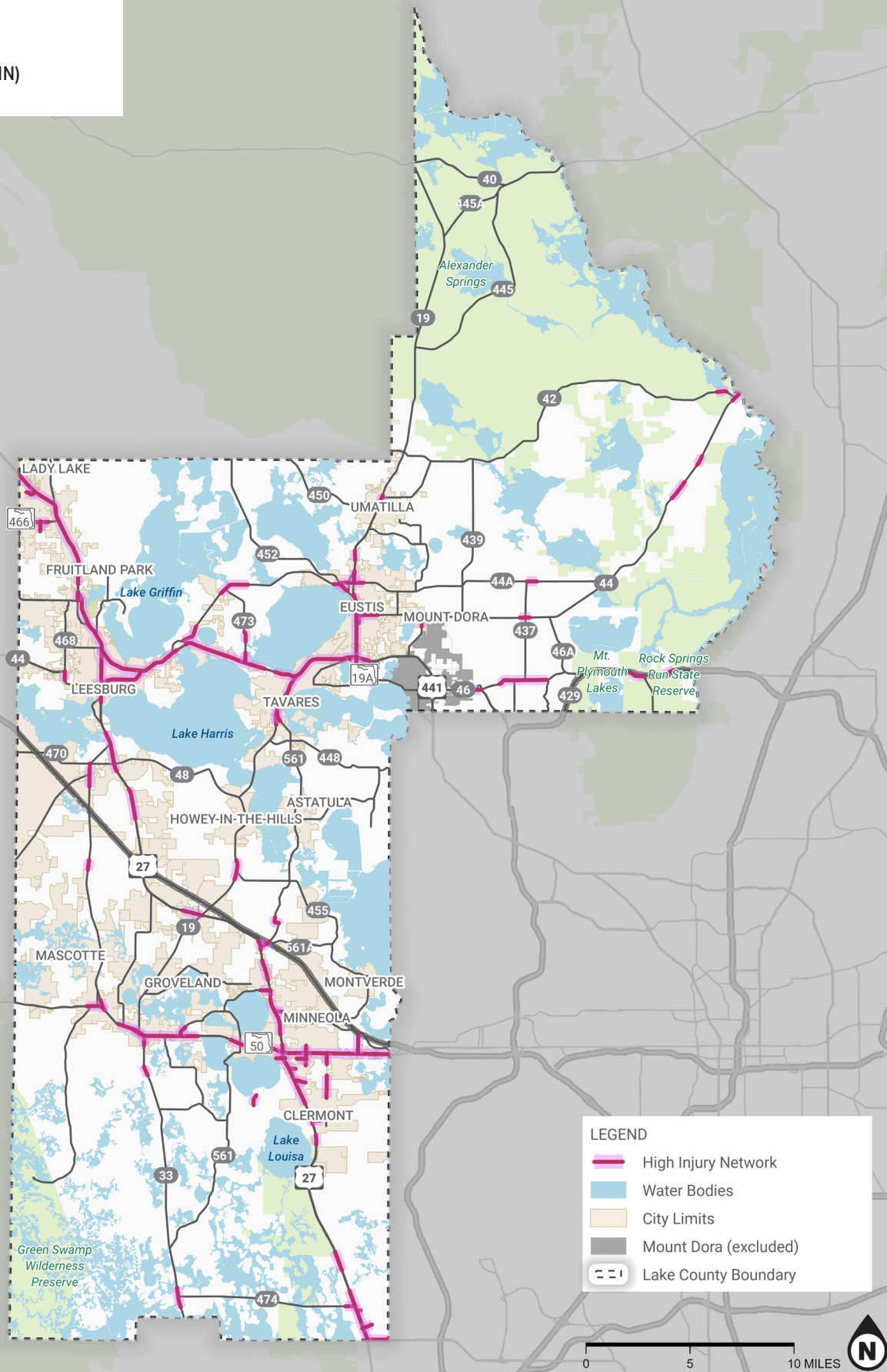
- Vulnerable Road Users:** Pedestrian fatalities were most common on State roads (64%). However, local roads accounted for the highest share of pedestrian fatalities and serious injuries (44%). 64% of pedestrian KSI crashes occurred on urban roadways, including 35 fatalities. Overall, a larger proportion of pedestrian KSI crashes occurred on local roads (35%) compared to vehicle crashes (20%). Pedestrian crashes were 4.7 times more likely to result in a fatality than vehicle-only crashes., Pedestrian KSI crashes occurred most often at midblock locations. Similarly, bicycle crashes were less frequent but more likely to be fatal than vehicle-only crashes. Among the 11 fatal bicycle crashes that occurred in Lake County between 2018-2023, most occurred on State (45%) and County (36%) roads. Serious injury bicycle crashes (40 total) were more evenly distributed among County (36%), State (36%), and local (27%) roads.
- Nighttime and Impaired Driving:** Half of all fatal crashes occurred at night, and nearly two-thirds (64 percent) of substance-related KSI crashes occurred after dark.

These findings suggest the need for context-sensitive countermeasures, including speed management, intersection redesign, access management, and improved pedestrian and bicycle facilities.

Of the 101 HIN miles in Lake County, 36 miles of the HIN are in unincorporated rural areas, while the remaining 65 miles are within incorporated areas of Lake County. 25 miles of the HIN fall on county-maintained roadways. This analysis examined crash characteristics and contextual factors that are disproportionately associated with fatal and serious injury crashes on local, county, and state roadways. In addition, the Safety Analysis identified a set of crash profiles (i.e. groups of crashes that share similar characteristics) using detailed crashes, roadway, and land use data from across Lake County. Although the HIN includes roadways under county, local, and state jurisdiction, this crash profiles analysis was deliberately limited to county- and locally maintained roads.

Figure 2

Map of High Injury Network (HIN)



Crash Profiles

Crash profiles provide a deeper understanding of the who, where, when, and how behind severe crashes in Lake County. Improving traffic safety requires a multifaceted approach. Crash profiles highlight specific categories of crashes that are more likely to result in fatalities or serious injuries within the county. Through a systematic, data-driven methodology, the study synthesizes these patterns into three primary crash profiles and maps their geographic concentrations, highlighting corridors where severe crashes

are most prevalent. The selected profiles focus on crash types that could be mitigated through future projects, safety programs, and policy initiatives, aiding understanding of underlying causes and appropriate safety countermeasures. This section describes the three crash profiles chosen for this analysis and explains the rationale behind their selection. Additional details, including the Comprehensive Safety Memorandum, are provided in **APPENDIX A.**

Table 1: Crash Profile Summary, County and Local Roads

PROFILE NUMBER	PROFILE NAME	CRASH TYPE ⁶ (FDOT)	CONTEXTUAL FACTOR(S)	NUMBER OF CRASHES	SHARE OF ALL CRASHES ⁷	SHARE OF FATAL AND SERIOUS INJURIES ⁸	FHWA RISK RATIO ⁹
1	Off-Road Crashes on High-Speed Rural Roads	Off-Road	Rural, 40+ MPH Road	874	5.10%	15.51%	3.27x
2	Left Turn Crashes at Unsignalized Intersections	Left Turn	Unsignalized Intersections	1,361	7.94%	10.48%	1.46x
3	Midblock Pedestrian-Involved Crashes	Pedestrian-Involved	Midblock (Not at intersection)	392	2.29%	7.48%	3.44x

⁶ The categorization of crashes in the profile as recorded in statewide traffic crash reports assembled by Signal 4 Analytics.

⁷ The percentage of crashes in the crash profile, divided by all crashes in the relevant dataset (county and local roads or all roads).

⁸ The percentage of fatal and serious injury crashes in this profile divided by all fatal and serious injury crashes in the relevant dataset (county and local roads or all roads).

⁹ The Fatal and Serious Injury Crash Multiplier measures how high-severity crashes compare to all crashes within a given profile. In this case, all selected profiles have high multipliers, indicating they are strongly associated with fatalities or serious injuries.

CRASH PROFILE #1 - OFF-ROAD CRASHES ON HIGH-SPEED (40+ MPH), RURAL ROADS

Off-road crashes generally occur when a vehicle departs the roadway and either rolls over or collides with a fixed object, such as a tree, utility pole, or drainage feature. Although these crashes make up a smaller share of total incidents, they were three times more likely to result in fatalities or serious injuries than their overall frequency would indicate, even when limited to those occurring on local or county roadways (**FIGURE 4**).

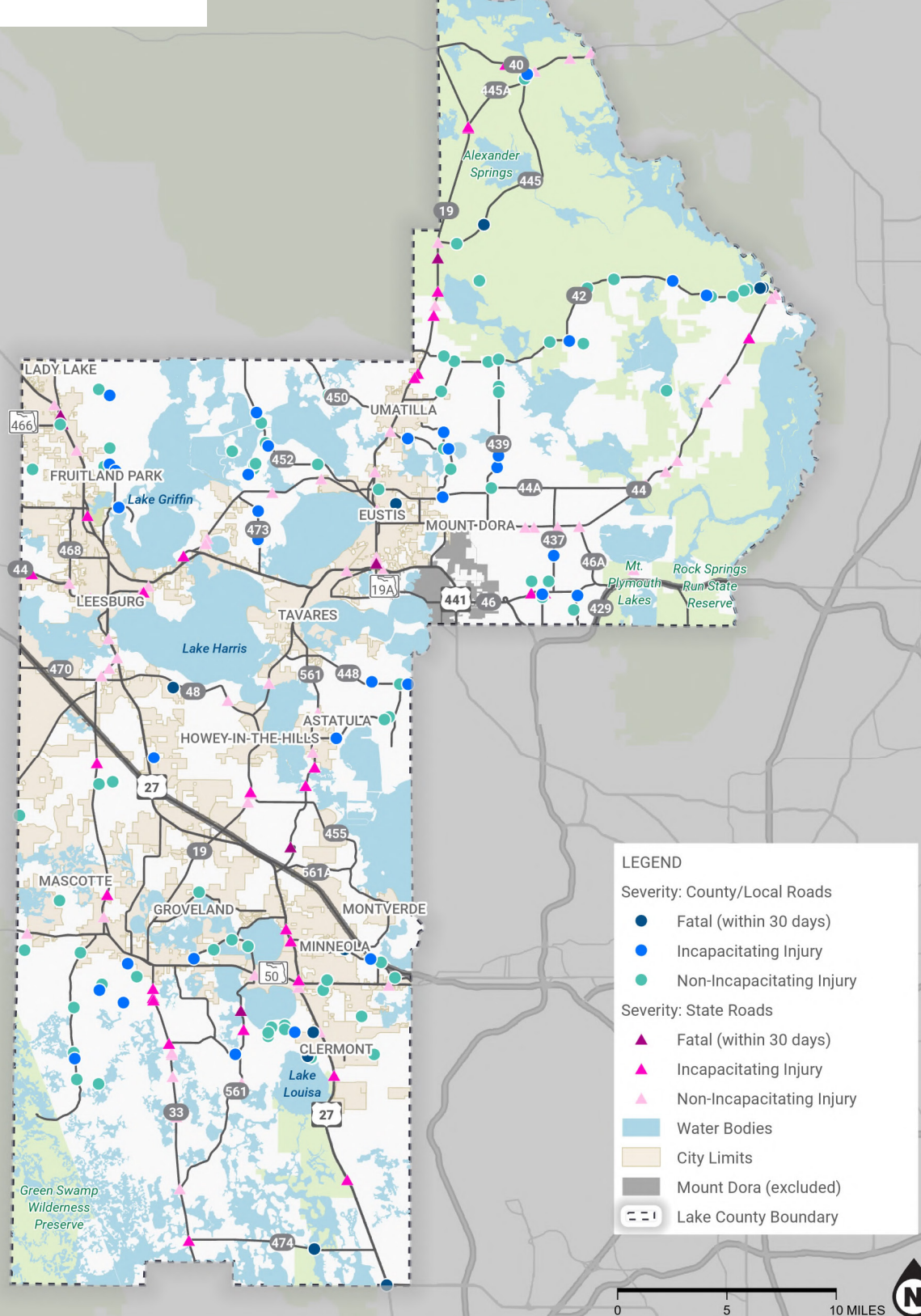
Higher vehicle speeds significantly increase the likelihood of fatal or severe injury outcomes. In urban settings, roadway characteristics, such as divided roadways, signalized or stop-controlled intersections, and higher traffic volumes, tend to moderate vehicle speeds and are often associated with fewer serious injuries. These traffic-calming features are typically less prevalent in rural areas. Lighting conditions also play a critical role for crashes within this profile: while crashes occurring in dark, unlit conditions account for roughly 6 percent of all fatal and serious injury crashes on rural roads, they represent approximately 40 percent of the fatal and serious injury crashes in this category. An example of this crash profile is presented in **FIGURE 3**.

Figure 3. Picture of Tuscanooga Rd between Honeycut Rd and W Myers Blvd in Mascotte



Figure 4

Map of Crash Profile 1: Off-Road Crashes on High-Speed, Rural Roads



CRASH PROFILE #2 - LEFT TURN CRASHES AT UNSIGNALIZED INTERSECTIONS

Left-turn crashes at unsignalized intersections represent the most common crash profile across both datasets and are among the crash types most frequently associated with an elevated risk of fatal or serious injury (**FIGURE 6**).

Injury-related crashes in this category often involve vehicles turning between local streets, driveways, and higher-speed major roadways at locations without traffic signals. The absence of

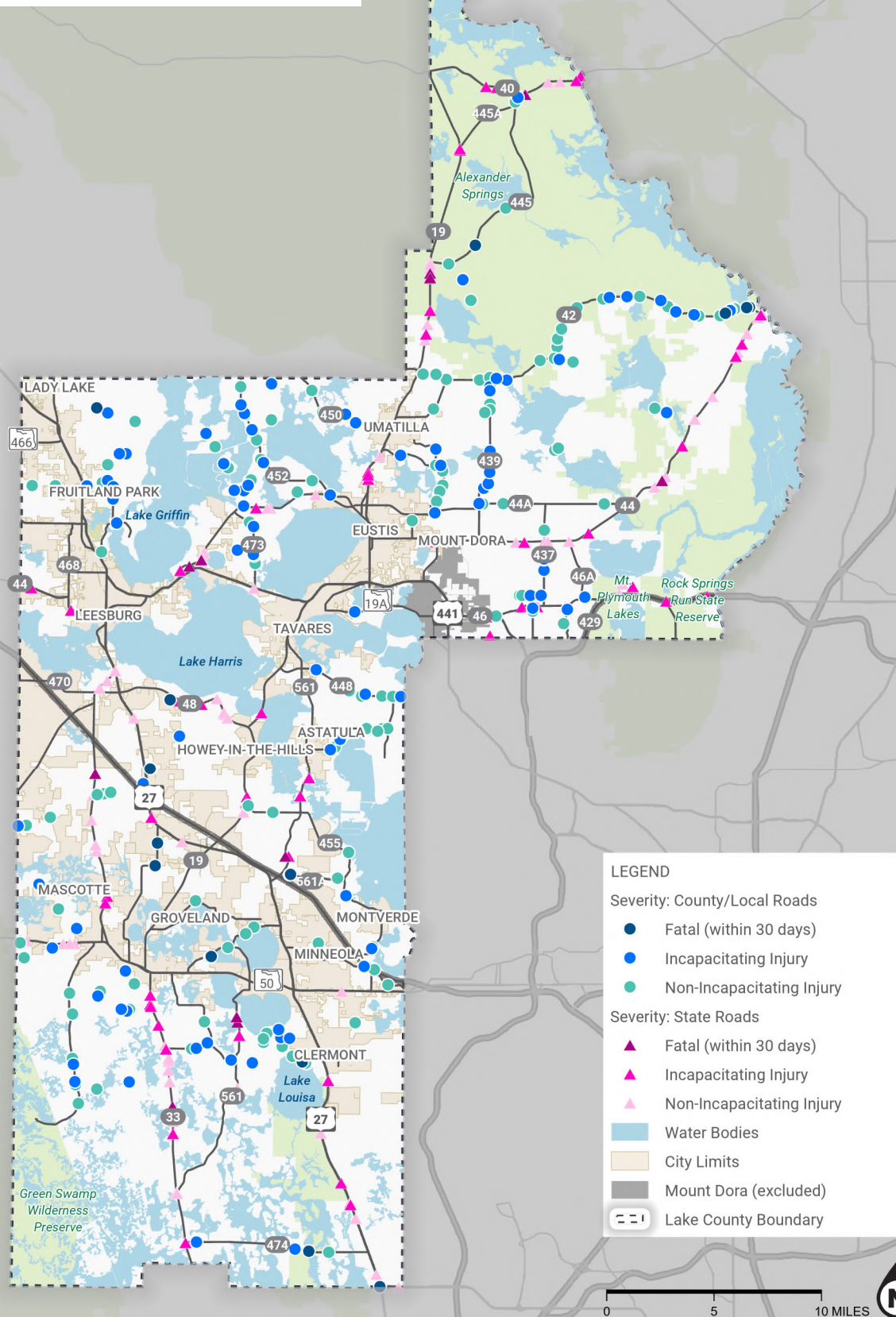
signal control, combined with higher operating speeds, increases the severity of outcomes when crashes occur. This crash profile comprises more than 6 percent of all reported crashes, over 7 percent of crashes on local and county roads, and more than 10 percent of fatal or serious injury crashes across the combined datasets. T-intersections are the most prevalent intersection configuration within this profile; however, other layouts, such as four-legged and Y-intersections, exhibit a comparable likelihood of resulting in fatal or severe injury crashes. An example of this crash profile is presented in **FIGURE 5**.

Figure 5. Picture of N 14th Street between Dixie Avenue and Main Street in Leesburg



Figure 6

Map of Crash Profile 2 – Left Turn Crashes at Unsignalized Intersections



CRASH PROFILE #3: MIDBLOCK PEDESTRIAN-INVOLVED CRASHES

Midblock crashes are defined as crashes that occur between intersections rather than at them. This crash profile represents a substantial majority, 81 percent, of all pedestrian crashes in Lake County, with the remainder taking place at intersections of various types and signal controls. Although fatal crashes account for roughly 20 percent of all fatal or serious injury crashes countywide, they comprise a much larger share, nearly 39 percent, within this crash profile. Pedestrian-involved crashes are inherently more severe due to the lack of physical protection for pedestrians, making

them among the crash types most likely to result in serious injury or death. Despite representing only 1 to 3 percent of total crashes, this profile accounts for more than 7 percent of all fatal and serious injury crashes across both datasets.

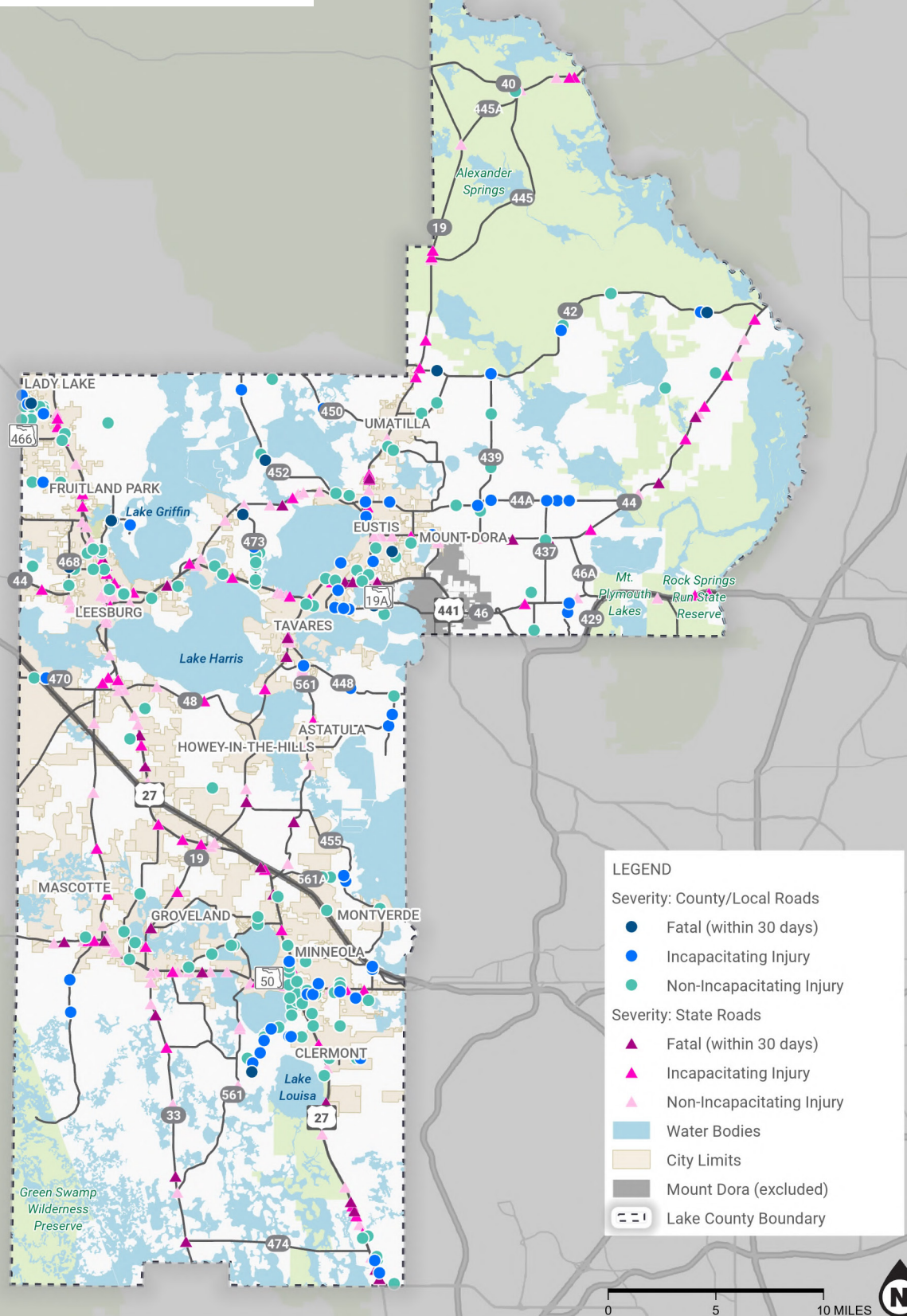
These crashes are predominantly clustered along major roadways characterized by high traffic volumes, elevated speeds, and wider spacing between marked crosswalks. Although most midblock pedestrian crashes occurred during daylight hours, those resulting in fatal or serious injuries were more likely to take place under dark, unlit conditions, which significantly increases the risk of crash severity. An example of this crash profile is presented in **FIGURE 7**.

Figure 7. Picture of S Grand Highway between Pitt St and E Hwy 50 in Clermont



Figure 8

Map of Crash Profile 3 - Pedestrian Involved Crashes at Midblock



Although the HIN and Crash Profiles both consider crash severity, the former emphasizes the location of crashes while the latter emphasizes contextual factors associated with a crash. Together, these analyses offer important insight into where, and under what circumstances, fatal or serious injury crashes occur in an area. Schools were incorporated into the Safety Analysis to better understand the relationship between severe crash patterns and locations with high concentrations of children and other vulnerable road users. By examining the proximity of schools to the High Injury Network and overlaying crash profile locations, the analysis identified areas where students, families, and school staff are more likely to be exposed to roadway safety risks during daily travel. This approach is particularly relevant given the increased pedestrian, bicyclist, and turning movements associated with school activity, as well as the heightened safety

consequences of crashes involving children. This evaluation identified 10 schools located on or adjacent to HIN corridors, as illustrated in **FIGURE 9**.

TABLE 2 summarizes the occurrence of each crash profile within the ten HIN school zones in Lake County. Crash Profile 2—Left Turn Crashes at Unsignalized Intersections—was the most frequently observed in these areas, reflecting the higher concentration of intersections in residential neighborhoods and the turning movements associated with school dropoff and pickup activities along busy roadways. In contrast, Crash Profile 1—Off-Road Crashes on High-Speed Rural Roads occurred least often near schools, as school sites are generally located in lower-speed, urbanized settings; however, nearly all two-mile school buffers still experienced multiple crashes within this category.

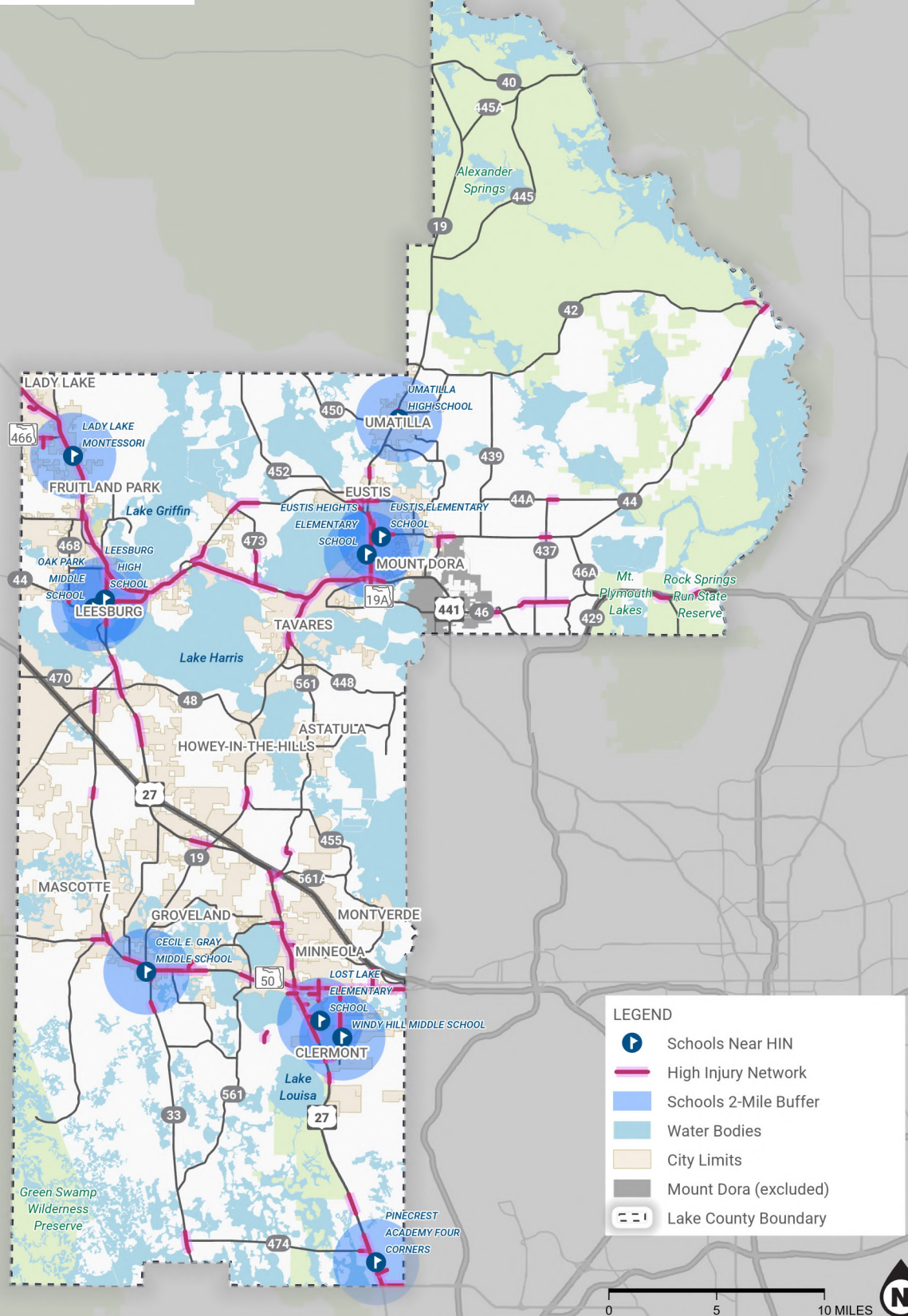
Table 2: Crash Profile Summary, County and Local Roads

RANKING	HIGH INJURY NETWORK SCHOOL	CRASH PROFILE 1	CRASH PROFILE 2	CRASH PROFILE 3	TOTAL
1	Lost Lake Elementary School (Clermont)	11	59	22	92
2	Leesburg High School (Leesburg)	1	46	30	77
3	Oak Park Middle School (Leesburg)	1	32	28	61
4	Eustis Elementary School (Eustis)	1	33	10	44
5	Eustis Heights Elementary School (Eustis)	0	27	15	42
6	Pinecrest Academy Four Corners (Clermont)	4	20	18	42
7	Cecil E. Gray Middle School (Groveland)	9	22	3	34
8	Lake Lady Motessori (Lady Lake)	5	14	9	28
9	Windy Hill Middle School (Clermont)	5	14	4	23
10	Umatilla High School (Umatilla)	5	5	5	15

The safety analysis confirms that fatal and serious injury crashes in Lake County are predictable and preventable, concentrated within identifiable corridors, intersections, and communities. By combining crash data, High Injury Network mapping, school zone evaluation, demographic insights, and crash profiling, this chapter establishes a clear foundation for prioritizing projects and policies that advance Lake County's safety goals.

Figure 9

Lake County High Injury Network Nearby Schools



Demographic Analysis

The demographic analysis examines how crash impacts vary across population groups and geographic areas, ensuring the Action Plan addresses equity and disproportionate safety burdens. The demographic analysis identified clear geographic patterns of transportation-related need and socioeconomic vulnerability across Lake County. Using a block group–level composite transportation needs index, 37 block groups, representing the highest 20 percent of need countywide, were concentrated in Eustis, Leesburg, Fruitland Park, Tavares, Clermont, Mascotte, and rural northeastern areas. These high-need areas are characterized by a combination of factors including higher proportions of low-income households, older adults, limited vehicle access, housing cost burden, and adverse health and environmental conditions.

KEY HIGHLIGHTS

- Thirty-seven block groups ranked in the top 20 percent were identified as having the highest transportation needs, including areas in Eustis, Fruitland Park, Astatula, Mascotte, Leesburg, northern Groveland, and rural northeastern Lake County.
- Five block groups ranked in the 95th percentile across multiple indicators, indicating the most consistent need: eastern Clermont north of SR-50, western Leesburg near CR-468, southern Fruitland Park near CR-468, southern Tavares east of FL-19, and central Eustis north of Orange Avenue. These areas showed consistently high vulnerability across multiple indicators and closely aligned with federally designated Areas of Persistent Poverty (APP) and SS4A underserved community tracts.

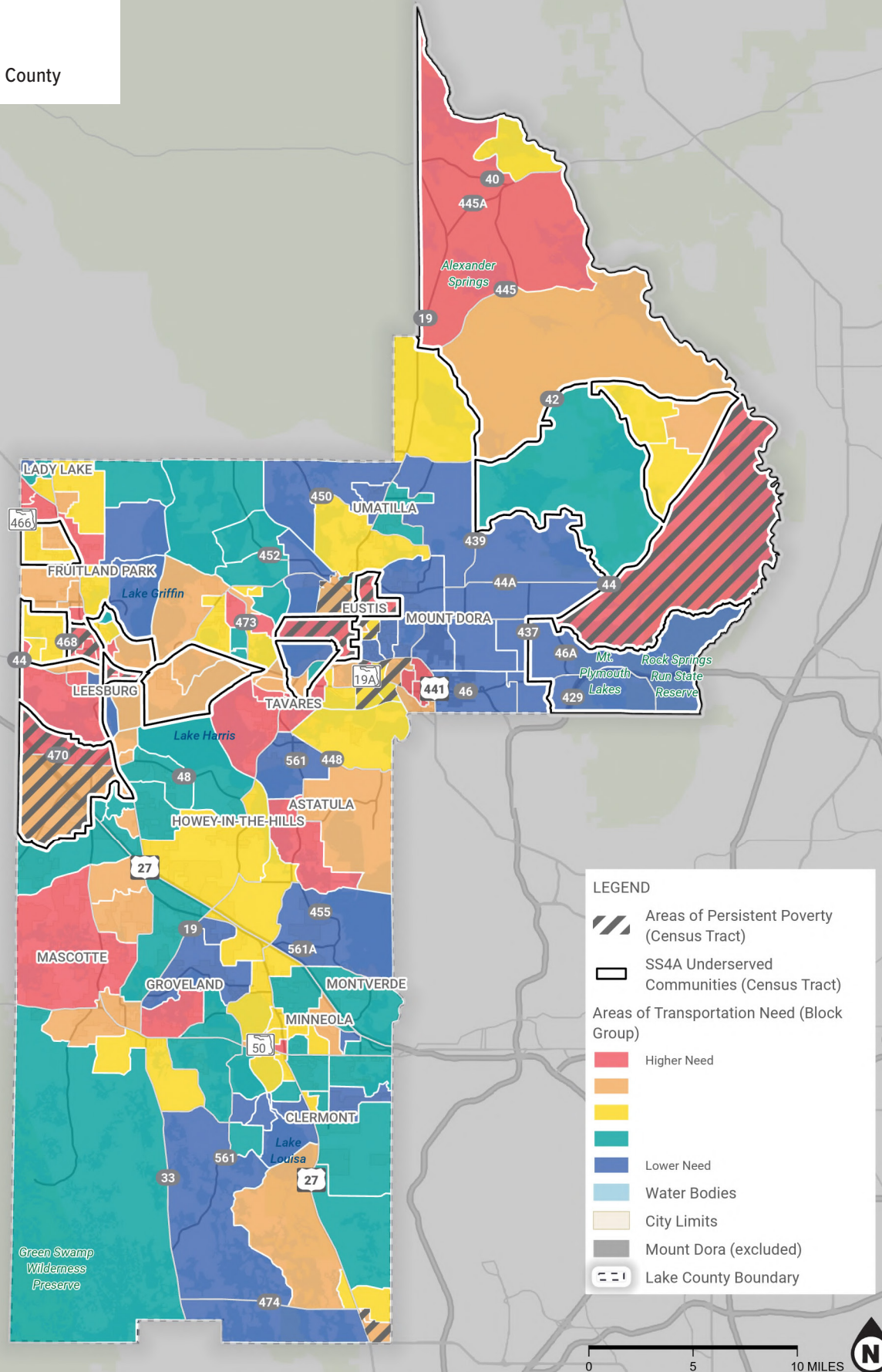
- Overall, block groups in the top quintile include about 62,600 residents (16 percent of the county population) yet account for disproportionate shares of crashes, including 19 percent of injury crashes, 14 percent of fatal and serious injury crashes, one-third of High Injury Network roadway mileage, and over 27 percent of bicycle and pedestrian injury crashes.

In Lake County, 14 of the 108 census tracts are designated as APP, primarily located in Leesburg, Eustis, eastern Tavares, and rural northeastern areas. These tracts accounted for 2,068 injury crashes (15.8 percent of the county total) and 225 fatal or serious injury crashes, representing roughly 13 percent of all KSI crashes.

FIGURE 10 features communities that have historically experienced limited access to transportation resources. These findings were integrated to shape project prioritization, identify locations for safety improvements, and tailor strategies and action items in the final plan to better address the needs of these populations. The demographic analysis shows that many Lake County residents face transportation safety and access challenges such as greater reliance on walking, biking, or public transit highlighting the importance of the Safety Action Plan in supporting public health, mobility, and overall community wellbeing.

Figure 10

Demographic Analysis of Lake County



Community Engagement

Community engagement was a central component in developing the Lake County Safety Action Plan. A comprehensive outreach approach was implemented to ensure that residents, stakeholders, partner agencies, and community members had opportunities to participate in the planning process and share input on transportation safety needs and priorities. Engagement activities were designed to gather local knowledge, understand community concerns, and support a data-driven approach to reducing fatal and serious-injury crashes for all travelers regardless of mode across the county.

COMMUNITY ENGAGEMENT PLAN

The goals of the Community Engagement Plan (CEP) included informing and educating local stakeholders, increasing public awareness about SS4A, establishing community buy-in and trust, promoting multijurisdictional collaboration among stakeholders and agencies, identifying the needs and priorities of disadvantaged communities and groups, and reaching a consensus on shared priorities on key issues and strategies with an overarching goal of reducing the number of traffic fatalities and serious injuries in Lake County.

In a multi-phased effort, the project team utilized a combination of inperson and digital engagement strategies to reach the community. Outreach efforts were supported by a dedicated project website, branding, infographics, and targeted communications via social media and other online platforms. Efforts to convene stakeholders, partner agencies, and the community were facilitated through task force meetings and public meetings throughout the planning process. An online public survey was distributed in April 2025. Feedback collected through these engagement activities informed the identification of safety concerns, targeted areas, and recommended strategies. The community engagement process helped ensure that the Safety Action Plan reflects local conditions, community priorities, and a shared commitment to improving transportation safety for all roadway users in Lake County.

Website

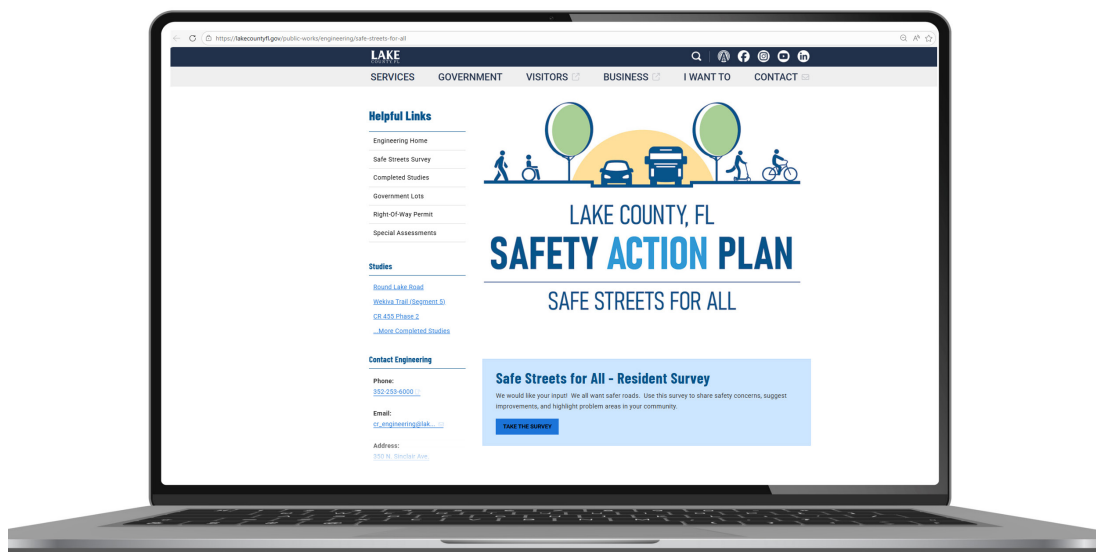
A dedicated project website was developed for the Lake County Comprehensive Safety Action Plan to serve as the primary source of information, updates, and public engagement opportunities throughout the planning process. The website was designed to improve transparency, support ongoing communication, and provide convenient access to project materials for residents, stakeholders, and partner agencies.

<https://lakecountyfl.gov/safestreets>

The website included an overview of the CSAP purpose and goals, background information on transportation safety in Lake County, and frequently asked questions surrounding relevant topics such as the High Injury Networks (HIN). Public involvement meeting materials, such as meeting announcements, presentation summaries, and engagement updates were

posted to keep the public informed about project progress. The website also hosted feedback mechanisms as an opportunity for community members to share safety concerns, identify locations of interest, and provide input on transportation issues affecting people walking, biking, driving, and using transit.

The project website complemented in-person engagement efforts and expanded opportunities for participation by allowing community members to engage with the CSAP in the event they are unable to be physically present at the public meetings. Input received through the website was documented and considered alongside feedback from public meetings and task force workshops to help inform the development of the Lake County CSAP.



Task Force Meetings

Two task force meetings were held to coordinate the development and input for the CSAP. The objectives of these meetings were to facilitate local decision-makers' input and engagement by having participants provide technical insights, local knowledge, and strategic guidance to help the Comprehensive Safety Action Plan's goals, focus areas, and recommended safety strategies. The task force comprises of key

stakeholders serving Lake County, including county and municipal leadership and staff from public works, engineering, public safety, emergency services, transit agencies, the school board, in addition to a bike/ped advocacy group. The task force will continue to advance the CSAP by implementing and monitoring Vision Zero and safety projects over the coming decades.

Table 3: Task Force

NAME	ORGANIZATION	ROLE
Emily Bush	Bike Walk Central Florida	Executive Director
Jim Maiworm	City of Clermont	Ast. Environmental Services Director
Ric Gierok	City of Eustis	Public Works Director / City Manager
Daniel Millan	City of Eustis	Public Works Engineer
TJ Fish	City of Groveland	Director of Transportation and Public Works
Morgan Cates	City of Howey in the Hills	Public Works Director
Neil Gaines	City of Leesburg	Deputy Director, Public Works
Larry Walker	City of Mascotte	Public Services Director
Mark Johnson	City of Minneola	City Manager
Fred Miller	City of Minneola	Public Works Project Manager
Matthew Dodson	City of Mount Dora	Budget Manager
Bryan K. Moore	City of Tavares	Street Operations Manager
Don Griffey	Griffey Engineering	Consultant / Engineer
Jeffrey Earhart	Lake County	Engineering Manager
Seth Lynch	Lake County	Development Engineer

Task Force, continued

NAME	ORGANIZATION	ROLE
Michael Vitta	Lake County	Fire Marshall
Mike Olka	Lake County	Project Manager
Osvaldo Nunez	Lake County	Design Engineer
Sharon Lewis	Lake County	ADA Coordinator
Gallus Quigley	Lake County	Trails Recreation Coord. Lake County
James Oneil	Lake County Schools	Mitigation Manager
Cliff McMennamy	Lake County Sheriff's Office	Captain
David Lazerson	Lake County Transit	Transit Services
Jeff Desantis	LCSO	Traffic Sergeant
Morgan Cates	Town of Howey-in-the-Hills	Public Services Director
Sean O'Keefe	Town of Howey-in-the-Hills	Town Manager
C.T. Eagle	Town of Lady Lake	Public Works Director

TASK FORCE WORKSHOP 1 - FEBRUARY 4, 2025

The first task force meeting was held virtually and focused on introducing the SS4A grant, the Vision Zero initiative, and the Safe Systems Approach to determine the Lake County CSAP goals. The project team reviewed existing transportation safety conditions and crash trends within Lake County with the participants to aid their development of SMART¹⁰ goals. Participants provided input on safety challenges, highrisk behaviors, and systemic issues affecting different roadway users, including pedestrians, bicyclists, motorists, and transit users. The discussion helped identify goals and objectives to reach zero fatalities and injuries in the County's transportation network.

¹⁰ Smart Goals: Specific; Measureable; Achievable; Relevant; Time-Based

TASK FORCE WORKSHOP 2 - APRIL 24, 2025

The second task force meeting built upon feedback from the initial workshop and community engagement activities. Emerging findings from data analysis and public input were presented, along with preliminary emphasis areas and potential safety strategies. Task force members reviewed and discussed proposed approaches based on the findings and locations of crash data. Feedback from this meeting helped refine priorities related to users and locations, confirm feasible safety countermeasures, and ensure the CSAP supports coordinated and datadriven safety improvements.

Input from both task force meetings was documented and incorporated into the CSAP. Stakeholder feedback played a key role in validating safety concerns and their locations, and informing strategies and actions aimed at reducing fatal and serious injury crashes.

The task force process bolstered interagency coordination and supported a collaborative and comprehensive approach to improving transportation safety throughout Lake County.



Public Meetings

Two public meetings were held as part of the development of the Lake County CSAP to provide community members with opportunities to learn about the planning process, review preliminary information and data, and share input on transportation safety concerns. The meetings were designed to reach a broad audience and encourage meaningful participation from residents, stakeholders, and system users across Lake County.

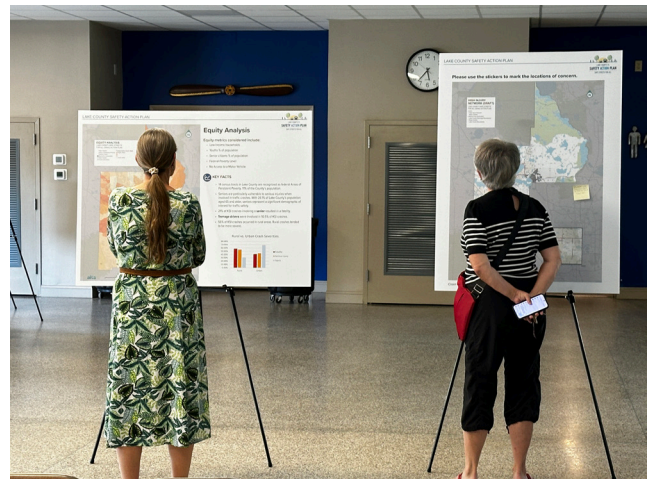
PUBLIC MEETING 1 – FEBRUARY 6, 2025

The first public meeting, held at the Tavares Civic Center in Tavares, Florida, from 6:00 to 7:30 pm on February 6, 2025, introduced the CSAP initiative, outlined the project goals, and reviewed existing transportation safety conditions and trends within the county. Attendees were invited to share their experiences and perspectives on traffic safety issues and challenges faced by vulnerable communities who walk, bike, drive, and use transit.



PUBLIC MEETING 2 – APRIL 3, 2025

The second public meeting was held at the Tavares Civic Center in Tavares, Florida, from 6:00 to 7:30 pm on Thursday, April 3, 2025. The meeting built upon the initial community input and presented emerging findings from the analysis and engagement activities. The project team presented an overview of the High Injury Network (HIN) throughout Lake County and the contributing factors to these crashes. Opportunities to comment were provided to gather feedback on perceived safety priorities and locations.



PUBLIC MEETING 3 – MAY 7, 2026

A third public meeting was held virtually via GoToWebinar on Thursday, May 7, 2026. During this meeting, Lake County shared an overview of roadway safety analysis results, a proposed list of projects, recommended safety strategies, and outlined next steps (FIGURE 11).

Figure 11. Lake County Public Meeting #3 Advertisement



PUBLIC MEETING LAKE COUNTY SAFE STREETS FOR ALL (SS4A)



Lake County invites the public to attend a Virtual Public Meeting for the Safe Streets for All (SS4A) Initiative. This initiative focuses on enhancing roadway safety for all users and advancing the goal of eliminating traffic-related deaths and serious injuries, consistent with the U.S. Department of Transportation's National Roadway Safety Strategy.



**Virtual Public Meeting**
Thursday, May 7, 2026
6 p.m.

During the meeting, Lake County will share:

- An overview of roadway safety analysis results
- A proposed list of projects
- Recommended safety strategies
- An outline of next steps

Participants may join the Virtual Public Meeting from a computer, tablet, or mobile device via Go To Webinar at:
<https://attendee.gotowebinar.com/register/4908025747673532761>
(link is case sensitive)



Those who wish to join via the phone-in (listen only) option may do so by calling: (562) 247-8422 and dialing Access Code: 926-039-863 when prompted.

For more information, please contact:

Jeff Earhart, P.E.
Engineering and Operations Director
(352) 253-6009
jeff.earhart@lakecountyfl.gov

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. Persons who require language translation or interpretive services, which are provided at no cost, or those requiring special accommodations under the Americans with Disabilities Act (ADA) may request assistance by contacting Sharon Lewis, Lake County Title VI Coordinator, at (352) 253-9050 or sharon.lewis@lakecountyfl.gov at least seven (7) days prior to the meeting.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by Lake County pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated May 26, 2022, as executed by the Federal Highway Administration and the Florida Department of Transportation.

Online Community Survey

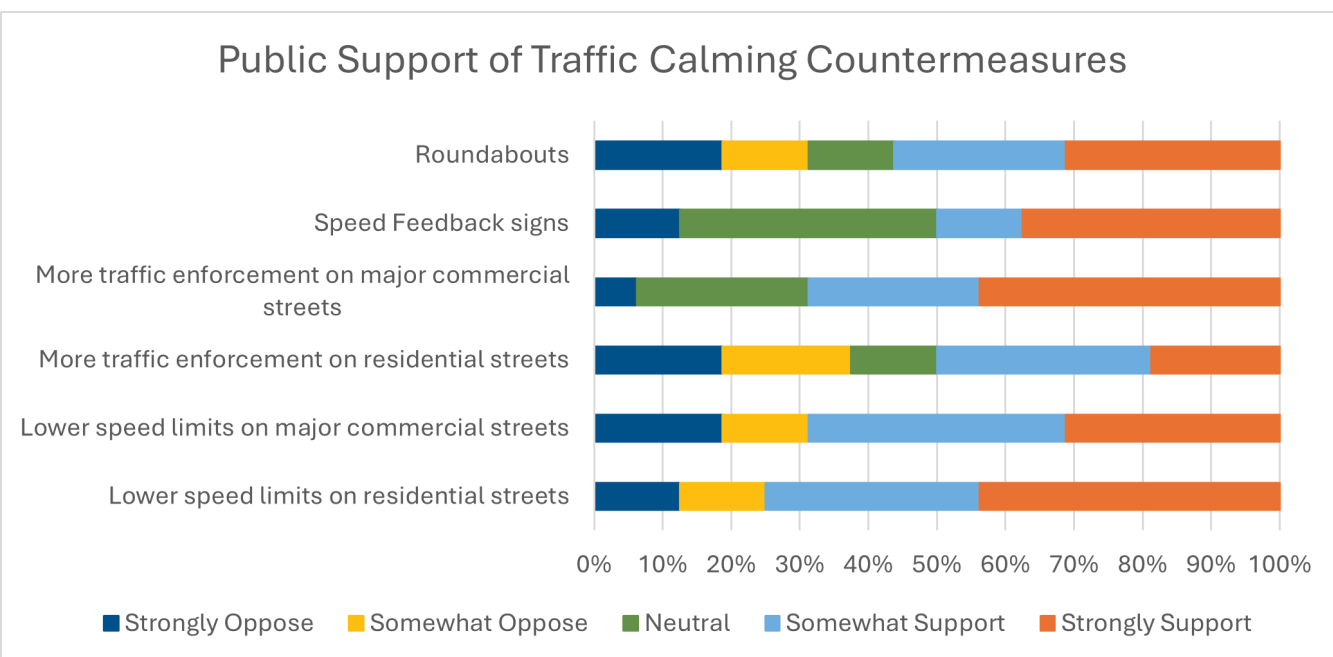
A survey was made available online and distributed publicly in April 2025 to gauge public perception of traffic, cycling, and walking safety in Lake County. The following key findings were recorded from the survey results:

- Public Support of Traffic Calming Countermeasures (FIGURE 12):** Many respondents (44%) strongly supported both increased traffic enforcement on major commercial streets and lower speed limits on residential streets. When accounting for respondents who are somewhat supportive of the listed traffic-calming countermeasures, lowering speed limits on residential streets was ranked highest (75%), followed by lowering speed limits on commercial streets (69%), more traffic enforcement on major commercial streets (69%), and roundabouts (58%). 38% of the respondents were neutral on speed feedback signs.

Figure 12. Lake County SS4A Survey Post



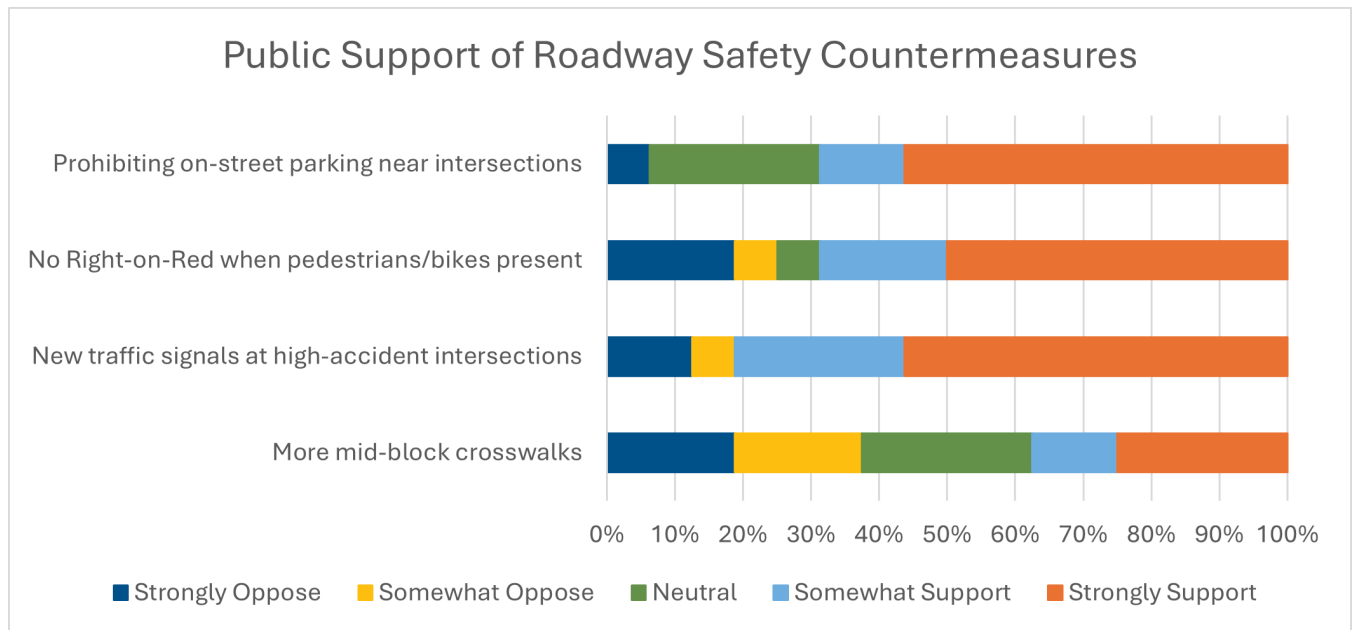
Figure 13. Public Support of Traffic Calming Countermeasures



- Public Support of Roadway Safety Countermeasures (FIGURE 14):** The survey gauged respondents' support of roadway safety countermeasures, such as adding new traffic signals at high-crash intersections and implementing a no right-on-red when pedestrians/bikes are present. There was overwhelming support (strongly or somewhat favorable)

for prohibiting on-street parking near intersections (56%), implementing no right-on-red when pedestrians/bikes are present (50%), and installing new traffic signals at high-crash intersections (56%). For roundabouts, 25 percent of the respondents were neutral, and 38 percent were either somewhat or strongly opposed.

Figure 14. Public Support of Roadway Safety Countermeasures



CHAPTER 5:

Policy and Programs



SR 44

US 441

To inform the development of safety strategies for this CSAP, the project team reviewed Lake County's existing safety policies and planning documents to assess them against recognized Safe Systems best practices. This effort included a comprehensive policy benchmarking analysis grounded in Vision Zero principles and the Safe System Approach, which together promote a holistic view of transportation safety.

The evaluation framework is organized into five categories: Safer Road Users, Safer Roads, Safer Speeds, Safer Vehicles, and Post-Crash Care.

The benchmarking exercise highlighted policy successes as well as areas of improvement to better promote transportation safety in Lake County and the municipalities. The results of the benchmarking exercise informed the policy recommendations included in this chapter.

Existing Plans and Policies

The following list of documents was reviewed by the project team:

- 2003, County Road 44 Corridor Transportation Study - Lake County
- 2010, Comprehensive Plan 2030: Transportation Element - Lake County
- 2012, Public Rights-of-Way ADA Transitional Plan, Lake County
- 2013, 2013 Transit Development Plan, Lake County Community Services and Sumter County Public Works Division
- 2013, Safe School Access Study, Lake-Sumter MPO
- 2017, Land Development Regulations: Transportation Planning, Design and Construction Standards, Lake County
- 2021, Florida Strategic Highway Safety Plan, FDOT
- 2021, Florida Pedestrian and Bicycle Strategic Safety Plan, FDOT
- 2021, 2045 Long Range Transportation Plan, Lake-Sumter MPO
- 2022, Safe Mobility for Life Strategic Action Plan, FDOT
- 2023, County Road 44 Lane Departure Safety Study, FDOT
- 2023, Transportation Disadvantaged Service Plan, Lake-Sumter MPO
- 2024, Transportation Construction Program 2025-2029, Lake County

- 2024, List of Priority Projects 2024, Lake-Sumter MPO
- 2025, Complete Streets Technical Memorandum, Lake-Sumter MPO
- 2025, TSM&O/ITS Element Technical Memorandum, Lake-Sumter MPO
- 2025, Transportation Improvement Program 2025-2029, Lake-Sumter MPO
- 2026, Vision Zero Action Plan, Lake-Sumter MPO
- N.d., Lake-Sumter Counties: Ten-Year Trends of Fatal and Severe Crashes – UCF Department of Civil, Environmental & Construction Engineering

Highlights from the plan and policy review are as follows:

This Safety Action Plan is informed by a comprehensive review of Lake County, regional, and state transportation policies and planning documents, which collectively demonstrate a strong foundation for advancing roadway safety. Regional plans such as the MPO's 2050 Long Range Transportation Plan, Complete Streets framework, and Transportation Systems Management and Operations TSM&O/ITS strategies further reinforce a data driven, multimodal approach to reducing fatalities and serious injuries, particularly for vulnerable roadway users

- A countywide sidewalk network upgrade is programmed in Lake County's 2025-2029 Transportation Construction Plan (2024), in compliance with the county's ADA Transition Plan completed in 2012.
- Lake County collaborated with the City of Eustis, City of Leesburg, and the City of Mount Dora to study potential enhancements along the County Road (CR) 44 corridor, which included bike/ped, intersection, and roadway capacity improvements. The CR 44 Corridor Transportation Study (2003) recommended that multimodal transportation improvements be deemed a critical necessity, as they provide the greatest benefit to residents and employees using the corridor, aligning with what is recognized contemporarily as Complete Streets.
- Rumble strips are proven safety countermeasures to mitigate lane departures and distracted driving, which often lead to traffic fatalities. FDOT's Strategic Highway Safety Plan (SHSP) (2021) outlines the state's approach to integrating safety into all elements of transportation planning, including engineering strategies such as rumble strips and data-driven methods such as road safety audits. In alignment with FDOT, Lake County's TIP has programmed over 60 miles of center- and edge-line rumble strips for FY24-29.
- The 2017 update to the Land Development Regulation (LDR) included a new lighting standard, which mitigates light pollution, intending to meet the "dark skies" principles mandated by the 2030 Comprehensive Plan. There were notable shortcomings identified in reviewing relevant policies and plans, in which this CSAP can offer actionable solutions.
- The 2045 Comprehensive Plan's Transportation Element has insufficient safety goals that will advance this action plan. Apart from bicycle and pedestrian safety goals, there is no mention of lighting, speeding, Complete Streets, or traffic-calming measures. This CSAP calls

for the County to consider aligning its Comprehensive Plan with the MPO's LRTP by including more Complete Streets and Vision Zero recommendations. **Lake County has kicked off its 2050 Comprehensive Plan update in March 2026**, with an expected completion date in September 2026. The Transportation Element will include goals and objectives to increase mobility and expand route options, and to provide safe, convenient, and efficient travel for a variety of transportation modes throughout the County.

- Existing Lake County land development regulations, which include design standards, may be improved through the adoption of NACTO design guidelines, a Traffic Calming Policy, and a Complete Streets Policy to further safety goals.

Lake-Sumter MPO and other regional agencies:

- Lake-Sumter MPO prioritized Safe Routes to School dating back to 2013. Through the *Safe School Access Study* (2013), the MPO coordinated with several schools across various municipalities in the county to develop transportation master plans. These studies resulted in project recommendations to enhance the built environment surrounding schools, including improvements to sidewalk connectivity, accessibility, and crosswalks.
- Within its 2050 Long Range Transportation Plan (2026), Lake-Sumter MPO has continued to express its commitment to Vision Zero principles by incorporating a 'Target 0' fatalities and serious injuries, particularly for vulnerable roadway users such as cyclists and pedestrians. The 2050 update included the Safety Element, in which policy recommendations were developed based on killed and seriously injured (KSI) crash data and analysis, in the context of urban and rural roadway characteristics. These recommendations are incorporated into this CSAP.

- In 2025, the Lake-Sumter MPO's Complete Streets Technical Memorandum outlined the MPO's 2050 LRTP's ongoing efforts to align with and implement Complete Streets projects. The MPO is actively seeking opportunities to integrate Complete Streets concepts into other project types, such as roadway capacity, trail, bike/ped, sidewalk, and transit projects.
- The TSM&O / ITS Element Technical Memorandum (2025) detailed the Lake-Sumter MPO's effort to integrate TSM&O strategies to improve performance, streamline the system, and enhance safety and mobility for motorized and non-motorized users for people and freight. This document includes other supporting TSMO plans developed in the region; priority projects; existing conditions of traffic, fiber optics, and devices, and signal systems; public transit; stakeholder coordination; and performance metrics. Key performance measures encompass dynamic message signs, incident management, traveler information, signal coordination, active arterial management, Connected Automated Vehicle on-board units, and ITS system maintenance.
- While this commitment is mentioned in the LRTP, no Complete Streets projects are funded in the MPO's 2025-2029 Transportation Improvement Plan (TIP), although 2% of the MPO's planning funds are allocated for Complete Streets studies to advance its prevalence in the region. Notably, the MPO's 2025-2029 Transportation Improvement Plan (TIP) includes capital project funds dedicated to sidewalk enhancements and other roadway components that reflect Complete Streets principles, such as bike lanes and lighting. The MPO's LRTP is lacking in performance measures related to safety. Through CSAP, new performance measures and targets can be introduced to bring transparency and accountability to the implementation of safety efforts and improvements.

- The Lake-Sumter MPO's Vision Zero Action Plan demonstrates the region's renewed commitment to safety improvements by leveraging emerging technologies, including smart infrastructure and advanced analytics, to enhance mobility and safety in rural and aging communities.
- Lake Xpress transit stations are in need of first/last-mile connectivity, which can be addressed by prioritizing projects that are along transit corridors as recommended by FDOT.

FDOT District 5:

- CR-44 (between US-441 and SR-19) was also assessed through a Lane Departure Safety Study (2023) led by FDOT due to its significantly high crash rates, 15 fatalities, 269 injuries, six pedestrian crashes, and seven cyclists (2017 and 2022); the CSAP also deemed the corridor a High Injury Network (HIN) corridor. Many of the fatal crashes resulted from unlit or dark conditions, as well as other unsafe road conditions. A multitude of safety improvements were recommended, ranging from enhanced signage/warning systems, speed reduction transition zones, RRFB installations and pavement markings to increased paved shoulders, turn lanes, and lighting installations.

While gaps remain such as limited safety performance measures, inconsistencies in Comprehensive Plan policies, and unfunded or incomplete implementation, the County's ongoing Comprehensive Plan update presents a key opportunity for this CSAP to unify and strengthen policy alignment, establish measurable safety goals, and guide coordinated investment toward safer, more equitable transportation outcomes.

Existing Programs

Lake County has strong interagency coordination with other government agencies, including the Lake-Sumter MPO, the Florida Department of Transportation (FDOT), numerous municipalities within its geographic boundaries, and community organizations serving Lake County. Key municipal-level partnerships include the City of Clermont, City of Eustis, City of Fruitland Park, City of Groveland, Town of Howey-in-the-Hills, Town of Lady Lake, City of Leesburg, City of Minneola, City of Mount Dora, City of Tavares, and City of Umatilla. Collectively, Lake County collaborates with partners throughout the region to plan and implement safety and mobility improvements that enhance the county's transportation network.

Lake County leads and administers several programs that directly and indirectly affect safety outcomes, including the Road Reporter and the Sidewalk Program. Lake-Sumter MPO's Transportation Improvement Program (TIP) is instrumental in funding safety projects throughout the region. The Florida Department of Transportation (FDOT) also administers programs that can advance the Lake County CSAP, such as the Safe Routes to School program, the Traffic Incident Management program, the Incident Corridor Management program, the Safe Mobility for Life Program, and the STRIDES 2 Zero program. A summary of the programs that can support and advance Lake County's CSAP is summarized below.

SUMMARY OF EXISTING PROGRAMS:

Lake County and other regional agencies:

- **Road Reporter – Lake County:** Road Reporter serves as a community-driven safety reporting tool, which enables residents to proactively report roadway safety concerns, supporting rapid response, systemic safety analysis, and maintenance driven safety improvements. This aligns with Post-Crash Care and integrated data efforts depicted under the Safe Systems Approach.
- **Sidewalk Program – Lake County:** The Lake County Sidewalk Program ensures sidewalks are designed, constructed, and integrated in alignment with existing policies and standards into development, capital improvement, and roadway projects, as well as bike, trail, and transit infrastructure.
- **Adopt-A-Roadway – Lake County:** Organizations may adopt two or more miles of a designated roadway to support anti-littering efforts. This program may indirectly support ADA compliance by ensuring that litter, debris, and other temporary items do not obstruct the public right-of-way, thereby promoting an accessible route.
- **Florida Motorcycle Safety Program – ABATE of Florida, Lake County Chapter:** The ABATE Lake County Chapter partners with the Florida Department of Highway Safety and Motor Vehicles (FHSMV) and other motorcycle advocacy groups to implement the Florida Motorcycle Safety Program (FMSP). The FMSP is a motorcycle safety initiative missioned to promote motorcycle crash prevention in an effort to reduce crashes, injuries, and fatalities through education, outreach, and awareness.

- **City Street Lighting Program – City of Leesburg Public Works Dept. & Electric Dept:**
The City of Leesburg Electric Department manages city street lighting, including installing and maintaining streetlights. Residents can contact the Public Works department to request that the Electric Department install new lights, subject to Public Works approval. Residents also have an option to rent streetlights and are subject to monthly rental fees.
- **City Street Lighting Program – City of Leesburg Public Works Dept. & Electric Dept:**
The City of Leesburg Electric Department manages city street lighting, including installing and maintaining streetlights. Residents can contact the Public Works department to request that the Electric Department install new lights, subject to Public Works approval. Residents also have an option to rent streetlights and are subject to monthly rental fees.

Lake-Sumter MPO:

- **Vision Zero – Lake-Sumter MPO:**
Establishes the regional Vision Zero framework that underpins Lake County's Safety Action Goals, including eliminating traffic fatalities and serious injuries, with a focus on vulnerable road users. The plan provides a platform for multijurisdictional transparency, accountability, and coordination, enabling Lake County and its municipalities to align capital investments, policy updates, and education efforts with Safe Systems, Complete Streets, and speed management principles.
- **Best Foot Forward (BFF) for Pedestrian Safety – Lake County (in partnership with Bike/Walk Central Florida):** This program was created in 2025 to advance pedestrian safety through coordinated education, enforcement, and community outreach aimed at improving driver yielding behavior and pedestrian awareness at high risk crossings. BFF coordinated with law enforcement agencies in Mount Dora, Eustis, and Howey-in-the-Hills to conduct high-visibility crosswalk enforcements near schools. This program complements safety improvements along HIN corridors consistent with the Safe Systems approach.

Figure 15 Lake County takes a stand for pedestrian safety. Source: lakeandsumterstyle.com



Through a resolution of support, the Lake County Board of County Commissioners formally joined forces with Best Foot Forward, a proven, data-driven initiative aimed at reducing pedestrian injuries and fatalities across Central Florida.

FDOT District 5:

- **Safe Routes to School (SRTS) – FDOT District 5:** FDOT's SRTS program enables access to state and federal funding to implement short- and long-term safety improvements for schools throughout the region, including Lake County. This program supports planning, outreach, education, enforcement, and infrastructure investments that improve student safety by reducing hazardous conditions and enhancing walking and bicycling conditions near schools.
- **Highway Safety Improvement Program (HSIP) – FDOT District 5:** HSIP is a critical funding source for implementing data driven safety countermeasures, such as lighting, rumble strips, and intersection improvements, to reduce fatal and serious injury crashes on state and local roadways. This program directly supports prioritizing HIN corridors, conducting road safety audits, and implementing safety projects.
- **Central Florida Targeted Enforcement and Awareness Messaging for Safety (TEAMS) – FDOT District 5:** This program enhances coordination between FDOT, law enforcement, MPOs, and local governments to maximize safety outcomes. Central Florida TEAMS targeted enforcement and safety messaging efforts are designed to address high risk driving behaviors, including speeding, impaired driving, and aggressive driving, particularly in high-risk locations and vulnerable populations, including HIN corridors.
- **Connected Mobility and Technologies Program (CMTP) – FDOT District 5:** The CMTP is an umbrella program that houses the Connected Automated Vehicle (CAV) technology deployment and infrastructure readiness, Statewide Arterial Management Program (STAMP), Wrong-Way Driving (WWD), Managed Lanes (ML) programs, and TSM&O Software and Architecture Program. While all these subprograms advance safety initiatives statewide, CAV is being leveraged specifically to help the state reach Target Zero goals and achieve a fatality-free roadway network. Currently, FDOT is deploying connected vehicle (CV) roadside units (RSUs) and smart/advanced traffic signal equipment at 10 signalized intersections along SR 50 in Lake County to improve safety and mobility on state roadways.
- **Transportation Regional Incentive Program (TRIP) – FDOT District 5:** TRIP leverages state matching funds to advance regionally significant safety and Complete Streets projects through intergovernmental collaboration between Lake County, municipalities, the MPO, and FDOT, to accelerate safety initiatives.
- **Traffic Incident Management (TIM) Program – FDOT District 5:** TIM enhances post crash response and responder safety through multi agency training, protocols, and coordinated incident clearance practices. This program effectively strengthens collaboration between law enforcement, fire rescue, EMS, transportation agencies, and recovery providers.
- **Incident Corridor Management (ICM) Program – FDOT District 5:** ICM improves safety, survivability, and reliability on critical corridors by using real time data for performance monitoring and interagency coordination to manage incidents, reduce secondary crashes, and provide real-time traffic information.

- **Safe Mobility for Life Program – FDOT District 5:** This FDOT-led program focuses on reducing crash risks for aging adults and transportation disadvantaged populations through education, planning, and policy initiatives.
- **STRIDES 2 Zero – FDOT District 5:** As an effort to advance Vision Zero statewide, STRIDES 2 Zero is a state-of-the-art predictive analytical approach that serves as Florida's primary safety data platform, enabling crash analysis, High Injury Network identification, and performance monitoring to support data driven safety decisions. Lake County and Lake-Sumter MPO can integrate crash data into the platform to support project prioritization efforts and identify the most appropriate safety measures.
- **Florida Local Technical Assistance (LTAP) Program – FHWA:** LTAP was established to support local agencies in improving their transportation expertise by providing them with resources, technology transfer, training, and technical assistance prepared at the national level to inform the implementation of state and local transportation projects. Examples of safety-related topics covered through capacity-building and training, led by LTAP and in coordination with FDOT or FHWA, include safety countermeasures, road safety audits (RSA), traffic incident management (TIM), Complete Streets, planning, safe routes to school grants, street lighting, and Vision Zero.

Policy, Strategy, and Program Recommendations

This section outlines Lake County’s comprehensive set of strategies and actions to reduce traffic fatalities and serious injuries through a Safe System approach. Organized around the five national safety emphasis areas: Safer Road Users, Safer Roads, Safer Vehicles, Safer Speeds, and Post-Crash Care. These strategies translate the Safety Action Plan’s goals into implementable policies, programs, and projects.

The recommended actions emphasize strong leadership, focused investment, data-driven decision-making, and coordination across County departments, municipalities, regional partners, and state agencies. Together, these strategies provide a clear roadmap for near, mid, and long-term implementation, ensuring that safety is systematically embedded into planning, design, operations, enforcement, and emergency response throughout Lake County.

Table 5: Safer Road Users Strategies, Actions and Timelines

STRATEGY	ACTION ITEMS	DESCRIPTION	TIMELINE	LEAD
1. Leadership establishes and actively promotes safety goals.	Adopt a Vision Zero resolution at the county and municipal levels.	Align with the Lake-Sumter MPO’s commitment to Vision Zero on county and local roads by 2050.	Immediate to short-term	• Lake County
		Demonstrate a strong leadership commitment to eliminating fatalities and serious injuries.		
	Commit to sharing performance measures annually.	Create an annual performance measures report for transparency and success tracking, which includes quarterly data and safety achievements and outcomes.	Immediate to short-term	• Lake County

Safer Road Users Strategies, Actions and Timelines, continued

STRATEGY	ACTION ITEMS	DESCRIPTION	TIMELINE	LEAD
1. Leadership establishes and actively promotes safety goals. <i>(cont.)</i>	Continue the Vision Zero task force to convene monthly or bimonthly with key stakeholders and experts.	The task force will enable a multidisciplinary group of stakeholders to advance the CSAP and related Vision Zero initiatives within the county, including data-driven decision-making, implementation, interagency collaboration, speed management & engineering, community engagement, and progress tracking.	Immediate to short-term	• Lake County • Lake-Sumter MPO • The cities of: Leesburg; Eustis; Tavares; Mount Dora; Clermont; Lady Lake; Umatilla; Groveland; Minneola; Fruitland Park; Howey-in-the-Hills
	Participate in capacity-building and peer-exchange opportunities focused on safety and accessibility.	Staff in county and public works, planning and engineering departments may participate in conferences, workshops, webinars, trainings, courses, and forums led by FHWA, FDOT, AASTHO, ITE, TRB, NACTO, and other transportation industry organizations to share best practices and latest guidance on Vision Zero and safe systems approaches.	Ongoing	• Lake County • Lake-Sumter MPO • Public works/ engineering staff in the cities of: Leesburg; Eustis; Tavares; Mount Dora; Clermont; Lady Lake; Umatilla; Groveland; Minneola; Fruitland Park; Howey-in-the-Hills
2. Focus investments and decisions on communities that are underserved and individuals with constrained mobility choice.	Leverage community partners in the VZ Task Force to coordinate outreach to disadvantaged communities.	Ensure that disadvantaged communities are represented by or considered in the task force.	Mid-term	• Lake County • Lake County Elder Affairs Coordinating Council • Lake County School District • Parks, Recreation and Trails Advisory Board • Lake County Sheriff's Office • Lake-Sumter MPO • Best Foot Forward Pedestrian Safety Coalition • Bicycle Club of Lake County • Lake County Cycling Collective

Safer Road Users Strategies, Actions and Timelines, continued

STRATEGY	ACTION ITEMS	DESCRIPTION	TIMELINE	LEAD
2. Focus investments and decisions on communities that are underserved and individuals with constrained mobility choice. <i>(cont.)</i>	Develop engagement and safety education materials for non-English speaking households.	Both Lake-Sumter MPO and FDOT have Limited English Proficiency (LEP) guidance and language assistance plans that can be adapted to Lake County's existing LEP guidance. The county's updated LEP can be utilized for outreach to disadvantaged communities. The FDOT Safety Office can provide sample education and engagement materials.	Mid-term	• Lake County • Lake-Sumter MPO • FDOT Safety Office • Best Foot Forward Pedestrian Safety Coalition
	Leverage the Areas of Transportation Needs index that accounts for socioeconomic factors and prioritize safety investments.	Coordinate with countywide planning partners to apply this index to guide and prioritize safety investments in underserved communities, both countywide and within individual jurisdictions, including the selection of countermeasures that address specific socioeconomic needs.	Mid-term	• Lake County Public Works • Lake-Sumter MPO • Public works/ engineering staff in the cities of: Leesburg; Eustis; Tavares; Mount Dora; Clermont; Lady Lake; Umatilla; Groveland; Minneola; Fruitland Park; Howey-in-the-Hills

Safer Road Users Strategies, Actions and Timelines, continued

STRATEGY	ACTION ITEMS	DESCRIPTION	TIMELINE	LEAD
3. Advance traffic safety through education of drivers, pedestrians, motorcyclists, bicyclists, and other road users.	Implement targeted enforcement initiatives and targeted safety education campaigns.	Targeted enforcement may include specific behaviors such as safe driving behaviors, impaired driving prevention, speed & aggressive driving reduction, seat belt & occupant protection, and graduated driver licensing (GDL) laws. High-risk areas and HIN corridors should be prioritized. Complement enforcement with safety education campaigns may include older drivers, younger drivers, commercial drivers, motorcyclists, bicyclists, and pedestrians. Coordination with FDOT, Lake-Sumter MPO, and other partners will be necessary to support these safety campaigns. Additional campaigns with county first responders and the public health department, focusing on traffic safety and incident response, may also be desirable.	Mid- to long-term	• Lake County • Lake-Sumter MPO • Lake County Sheriff's Office • Florida Department of Transportation • Florida Highway Patrol • Cities of: Leesburg; Eustis; Tavares; Mount Dora; Clermont; Lady Lake; Umatilla; Groveland; Minneola; Fruitland Park; Howey-in-the-Hills

Table 6: Safer Roads Strategies, Actions and Timeline

STRATEGY	ACTION ITEMS	DESCRIPTION	TIMELINE	LEAD
1. Integration of proven safety countermeasures into all phases of transportation projects.	Identify and update procedures and guidelines related to transportation delivery to incorporate safety.	Reflect the CSAP goals into all phases of transportation project delivery, including programming, planning, design, and maintenance.	Mid- to long-term	• Lake County • Lake-Sumter MPO • Mayor's office in the cities of: Leesburg; Eustis; Tavares; Mount Dora; Clermont; Lady Lake; Umatilla; Groveland; Minneola; Fruitland Park; Howey-in-the-Hills
2. Design roadway environments that encourage safe behavior and safe travel	Adopt a Complete Streets Policy.	The County can adopt the Lake-Sumter MPO's Complete Streets policy or create its own. "Complete Streets are nationally recognized as a planning, designing, engineering, operating, and maintenance approach to enable safe street access to all people, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities."	Immediate to short-term	• Lake County
	Adopt complete streets design guidelines for roadways.	Coordinate with FDOT District 5 to integrate and implement the FDOT Complete Streets Handbook on state roads. Integrate best practices on County and Local roads such as the National Association of City Transportation Officials (NACTO) guidelines.	Mid-term	• Lake County

Safer Roads Strategies, Actions and Timeline, continued

STRATEGY	ACTION ITEMS	DESCRIPTION	TIMELINE	LEAD
2. Design roadway environments that encourage safe behavior and safe travel (cont.)	Adopt the PROWAG/ADAAG design guidance for infrastructure in the public right-of-way.	The ADA Transition Plan, last updated in 2012, is undergoing an update by Lake County. Adopting the latest accessibility guidelines for key pedestrian assets, such as sidewalks and curb ramps, reinforces inclusive design in Complete Streets principles and safety goals that will benefit non-motorized users.	Mid-term	• Lake County
	Update design standards and traffic procedures.	Given the various roadway classes and contexts present in Lake County, design standards and procedures should be revisited to encourage multimodal safety from planning through maintenance.	Mid-to-long term	• Lake County
	Conduct Road Safety Audits (RSAs) and establish a multidisciplinary RSA team.	The County's recent SS4A award that includes RSA funding will help facilitate launching and initiating this process. The following steps are undertaken during an RSA: • Document safety concerns, countermeasures (striping, signing, pedestrian refuges, visibility improvements, etc.), and • Prepare post-RSA Action Plans. • Integrate RSA findings into capital projects and resurfacing schedules.	Short- to mid-term	• Lake County Partners: • Lake-Sumter MPO • Lake County Sheriff's Office • Public Works in the cities of: Leesburg; Eustis; Tavares; Mount Dora; Clermont; Lady Lake; Umatilla; Groveland; Minneola; Fruitland Park; Howey-in-the-Hills • Florida Department of Transportation

Safer Roads Strategies, Actions and Timeline, continued

STRATEGY	ACTION ITEMS	DESCRIPTION	TIMELINE	LEAD
3. Prioritize safety improvements on the HIN.	Prioritize and implement safety treatments, signal, and operational improvements along HIN.	Using a context-sensitive lens prioritize and implement safety treatments, signal & operational enhancements along the HIN. Treatments may include access management strategies, pedestrian-oriented signal timing (e.g., longer or exclusive pedestrian phases, Leading Pedestrian Intervals (LPIs), flashing yellow arrows, and protected left turns), speed management strategies, signage, and other safety countermeasures.	Mid- to long-term	• Lake County • Lake-Sumter MPO Public Works in the cities of: Leesburg; Eustis; Tavares; Mount Dora; Clermont; Lady Lake; Umatilla; Groveland; Minneola; Fruitland Park; Howey-in-the-Hills
	Build interdepartmental and interagency coordination mechanisms.	Integrate safety actions into the Capital Improvement Program (CIP) and budgeting processes. Embed Vision Zero / Safe System principles across all County programs.	Mid- to long-term	• Lake County
	Pursue state and federal implementation grants.	In addition to CIP funds, additional funding mechanisms will need to be explored, such as leveraging funds obtained from federal, state, and local sources, such as the federal Better Utilizing Investments to Leverage Development (BUILD) Grant Program, and the state's Highway Safety Improvement Program (HSIP).	Mid- to long-term	• Lake County

Safer Roads Strategies, Actions and Timeline, continued

STRATEGY	ACTION ITEMS	DESCRIPTION	TIMELINE	LEAD
4. Prioritize vulnerable road users, pedestrians, bicyclists, and motorcyclists.	Complete sidewalk inventory and implement high-priority sidewalk and crossing projects along HIN corridors and activity centers.	A sidewalk gap analysis ¹¹ and connectivity study will help the County create a priority project list that includes higher priority corridors along the HIN. This includes updating County policies to support pedestrian infrastructure; coordinating interagency delivery with cities, FDOT, and MPO; and establishing a stable, recurring pedestrian infrastructure funding program.	Mid to long-term	• Lake County
	Conduct a countywide analysis of lighting-related crashes and implement a targeted lighting installation program.	A countywide lighting study ¹² for HIN will focus on improving safety at night. The study will identify where and why crashes related to poor lighting occur, gather input from community members and partners, and raise awareness of safe nighttime behavior.	Short-term	• Lake County
	Develop a Prioritization Plan for Rural Roads	Create a plan for these areas that includes rumble strips and other appropriate safety improvements, as needed. Prioritize the evaluation of safety countermeasures for rural transportation projects. Coordinate with FDOT on improvements to state routes and with municipalities on local routes. Achieve consistent rumble strip coverage across the rural roadway network and track safety performance after installations.	Mid- to long-term	• Lake County • Lake-Sumter MPO • Public Works in the cities of: Leesburg; Eustis; Tavares; Mount Dora; Clermont; Lady Lake; Umatilla; Groveland; Minneola; Fruitland Park; Howey-in-the-Hills • Florida Department of Transportation

¹¹ Lake County was awarded a SS4A Planning and Demonstration Activities Grant of \$2 million for the implementation of this effort.

¹² Lake County was awarded a SS4A Planning and Demonstration Activities Grant of \$2 million for the implementation of this effort.

Safer Roads Strategies, Actions and Timeline, continued

STRATEGY	ACTION ITEMS	DESCRIPTION	TIMELINE	LEAD
5. Continue to advance TSM&O and ITS strategies to support safer streets.	Advance CV Smart Signal and VZERO projects. ¹³	Continue coordinating with FDOT to deploy CAV projects that improve safety and advance Vision Zero goals in Lake County.	Mid- to long-term	• Lake County • Florida Department of Transportation
6. Develop and establish a countywide Safe Routes to School (SRTS) program	Develop Countywide SRTS Plan ¹⁴ focusing on schools within or near the High Injury Network (HIN) in partnership with municipalities.	The Plan will assess existing conditions, pinpoint locations with elevated safety risks, and define focused strategies to enhance student safety. Using the Safe System Approach, the SRTS Program will combine physical improvements, such as sidewalks, crosswalks, and traffic calming measures, with programmatic actions, including safety education and community outreach. The Program will also provide a clear path for implementation, outlining pilot projects, funding approaches, and coordination with local partners and FDOT.	Mid- to long-term	• Lake County • Lake County School District • Lake-Sumter MPO • Cities of: Eustis; Groveland; Clermont; Fruitland Park; Minneola; Lady Lake; Howey-in-the-Hills; Leesburg • Florida Department of Transportation
	Institutionalize SRTS as a standing County program.	Secure recurring funding for SRTS capital projects, coordinate with FDOT, MPO, and the school district for project funding and delivery.	Mid- to long-term	• Lake County • Lake County School District • Lake-Sumter MPO • Cities of: Eustis; Groveland; Clermont; Fruitland Park; Minneola; Lady Lake; Howey-in-the-Hills; Leesburg • Florida Department of Transportation

¹³ The Lake County TSM&O Master Plan identified the southeastern portion of the County, including the City of Clermont, as a key deployment area for additional TSM&O and ITS improvements. Lake County CV Smart Signal and VZERO projects will deploy connected vehicle (CV) roadside units (RSUs) and smart/advanced traffic signal equipment at 10 signalized intersections along SR 50 in Lake County to improve safety and mobility on state roadways.

¹⁴ Lake County was awarded a SS4A Planning and Demonstration Activities Grant of \$2 million for the implementation of this effort.

Table 7: Safer Vehicles Strategies, Actions and Timeline

STRATEGY	ACTION ITEMS	DESCRIPTION	TIMELINE	LEAD
1. Advance safety technology on publicly owned fleets	Integrate the public fleet with advanced driver assistance systems (ADAS) and other safety technologies. Such as speed monitoring and crash reduction technologies	The County can raise the minimum safety standards for its fleet through ratings and regulations. ADAS improves the compatibility of vehicles with vulnerable road users. Coordinate with cities to provide support and guidance for upgrading their fleets.	Long-term	• Lake County Fleet Management Division
	Update fleet purchasing protocols with best-in-class safety.	Ensure that future purchases of vehicles for the County and other public institutions are equipped with the latest safety-related devices, designs, and technologies, such as automatic emergency braking, forward collision warning systems, lane-keep assist, drowsiness detection systems, blind spot detection, speed governors, enhanced mirror or camera systems and other advanced driver assistance systems. Upgrading public fleet vehicles to include truck guards should also be considered.	Mid- to long-term	• Lake County Fleet Management Division • Lake County Procurement Services

Table 8: Safer Speeds Strategies, Actions and Timeline

STRATEGY	ACTION ITEMS	DESCRIPTION	TIMELINE	LEAD
1. Reduce speed through design.	Update roadway design standards.	Update roadway design standards to include strategies for “self-enforcing” roads that naturally encourage drivers to adhere to speed limits. Such speed management strategies may include lane narrowing, roundabouts, curb extensions, and transition zones where the roadway context classification changes.	Mid- to long-term	• Lake County
	Adopt a countywide Traffic Calming Policy.	By adopting a Traffic Calming Policy, the County will facilitate safer design options for implementation on lower volume, lower speed roads.	Mid- to long-term	• Lake County
	Adjust traffic signal timing.	Adjust traffic signal timing and phasing to improve safety. Treatments could include increasing pedestrian crossing time, where appropriate, to encourage lower vehicular speeds, adding protected turning phases, and installing flashing yellow.	Short- to mid-term	• Lake County • Public Works in the cities of: Leesburg; Eustis; Tavares; Mount Dora; Clermont; Lady Lake; Umatilla; Groveland; Minneola; Fruitland Park; Howey-in-the-Hills • Florida Department of Transportation
	Increase the use of speed feedback signs.	Increase the use of speed feedback signs along HIN corridors and ensure their accuracy and maintenance. Coordinate with FDOT on improvements to state routes and with municipalities on local routes.	Short- to mid-term	• Lake County • Lake-Sumter MPO • Public Works in the cities of: Leesburg; Eustis; Tavares; Mount Dora; Clermont; Lady Lake; Umatilla; Groveland; Minneola; Fruitland Park; Howey-in-the-Hills • Florida Department of Transportation

Safer Speeds Strategies, Actions and Timeline, continued

STRATEGY	ACTION ITEMS	DESCRIPTION	TIMELINE	LEAD
1. Reduce speed through design. (cont.)	Identify high-priority arterial roads for redesign to align complete-street design standards.	Based on crash data, arterial roads with high crashes should be identified and prioritized. Quick-build solutions should be considered based on the possible improvements proposed for each area. Recommended solutions may be obtained from the RSA. Coordinate with FDOT on improvements to state routes and with municipalities on local routes.	Mid-term	• Lake County • Lake-Sumter MPO • Public Works in the cities of: Leesburg; Eustis; Tavares; Mount Dora; Clermont; Lady Lake; Umatilla; Groveland; Minneola; Fruitland Park; Howey-in-the-Hills • Florida Department of Transportation
2. Update speed-limit policies and implement a speed management program	Update county ordinances to lower speed limits where appropriate.	Updating county ordinances to lower speed limits will support moving away from the 85th percentile across roadway types.	Mid- to long-term	• Lake County
	Identify and implement target speeds along the HIN.	Create a process to identify and implement target speeds along HIN corridors, lowering speed limits where appropriate, including traffic and engineering studies as required by FDOT procedures. Coordinate with FDOT on improvements to state routes and with municipalities on local routes.	Mid- to long-term	• Lake County • Lake-Sumter MPO • Public Works in the cities of: Leesburg; Eustis; Tavares; Mount Dora; Clermont; Lady Lake; Umatilla; Groveland; Minneola; Fruitland Park; Howey-in-the-Hills • Florida Department of Transportation
	Implement school-zone speed safety cameras.	Pilot the use of school-zone safety cameras as permitted by state law, beginning with schools along HIN corridors, along high-speed arterials, and in school zones with documented speeding problems. Coordinate with FDOT on improvements to state routes and with municipalities on local routes.	Short- to mid-term	• Lake County • Lake County School District • Lake-Sumter MPO • Public Works in the cities of: Leesburg; Eustis; Tavares; Mount Dora; Clermont; Lady Lake; Umatilla; Groveland; Minneola; Fruitland Park; Howey-in-the-Hills • Florida Department of Transportation

Table 9: Post-Crash Care Strategies, Actions and Timeline

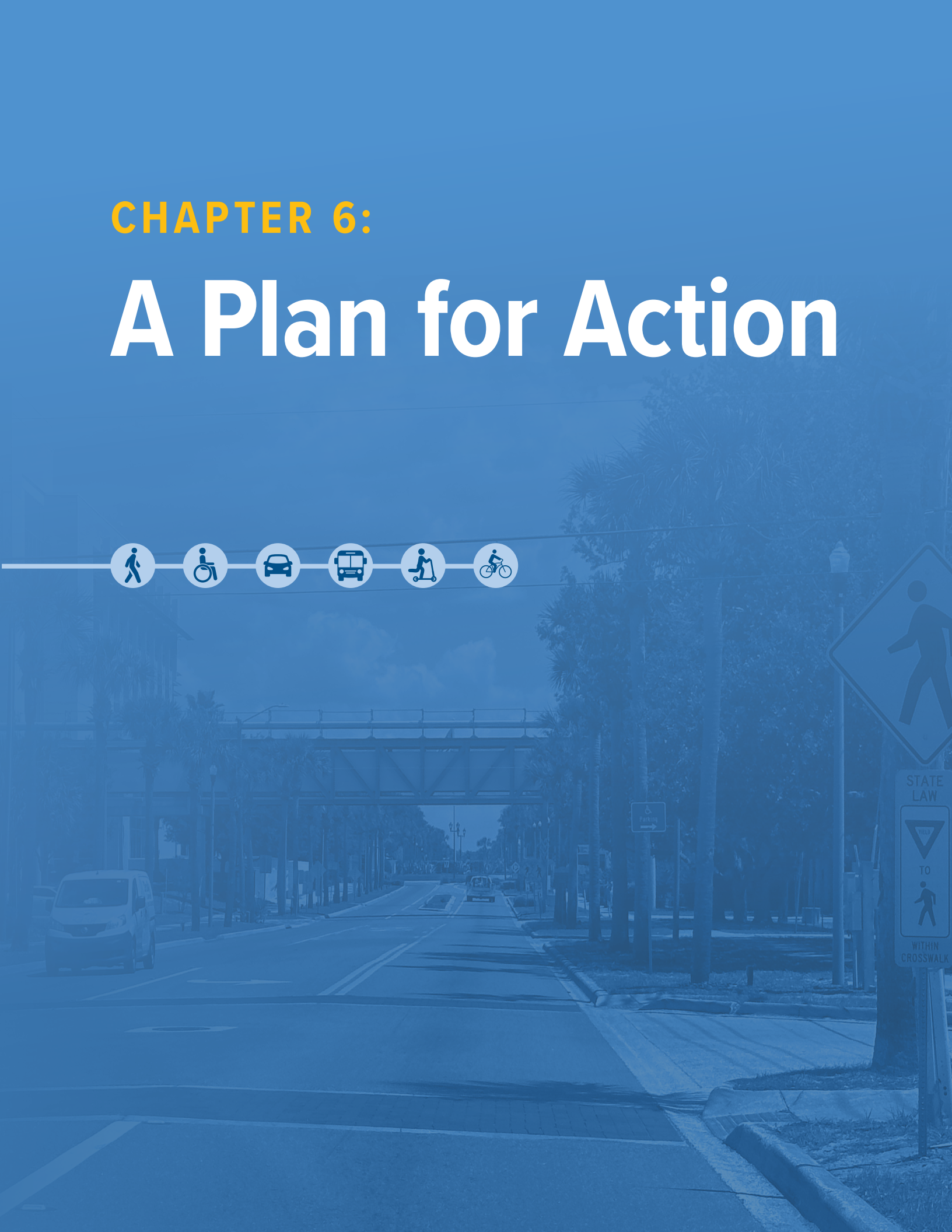
STRATEGY	ACTION ITEMS	DESCRIPTION	TIMELINE	LEAD
1. Integrate safety into all departments and ensure multi-agency coordination	Create and implement a multi-agency fatal crash rapid-response team, integrating FHP and FDOT's Integrated Corridor Management (ICM) and Traffic Incident Management (TIM) efforts where possible.	Establish a multi-agency fatal crash rapid response team by creating a Traffic Safety Committee with a goal of maintaining survivability as a core safety outcome. The committee should meet quarterly to evaluate progress toward implementing the CSAP, leverage communication channels, establish a framework for data-sharing, and discuss safety concerns. The committee should also collaboratively establish and work towards meeting performance targets for response time, rural EMS coverage, secondary crash prevention, trauma system outcomes, and other key indicators.	Mid-term	• Lake County • Lake-Sumter MPO • Public Works in the cities of: Leesburg; Eustis; Tavares; Mount Dora; Clermont; Lady Lake; Umatilla; Groveland; Minneola; Fruitland Park; Howey-in-the-Hills • FDOT
	Participate in TIM trainings in coordination with the FDOT.	Law enforcement, fire rescue, emergency medical services, transportation, towing and recovery service providers, medical examiners, hazardous materials responders, media, and other key personnel or agencies on the committee should participate in TIM training offered by FDOT District 5. FHWA, AASTHO, and other industry organizations may also offer training that may enhance the committee's post-care approach.	Mid- to long-term	• Lake County • Lake County Sherrif's Office
	Update and expand systemic safety analysis	Monitor progress of strategies and actions and update the regional Safety Action Plan at least every five years.	Mid- to long-term	• Lake County • Lake-Sumter MPO
	Integrate safety into project prioritization	Update crash data analysis annually and incorporate findings in strategic planning.	Short- to mid-term	• Lake County

Post-Crash Care Strategies, Actions and Timeline, continued

STRATEGY	ACTION ITEMS	DESCRIPTION	TIMELINE	LEAD
2. Enhance the Lake County Reporter tool	Upgrade the functionality and capabilities of the Road Reporter tool	Integrate vehicle telemetry, and automatic crash notification (AACN) data into Road Reporter. Upgrade Road Reporter to function also as a near-miss reporting channel. Review the data from the tool to inform safety planning.	Long-term	• Lake County • Lake County Sherrif's Office • Florida Department of Transportation • Lake-Sumter MPO

CHAPTER 6:

A Plan for Action



The safety analysis in **Chapter 3** identified crash patterns concentrated along specific corridors, at key intersections, and within certain areas across Lake County. By integrating crash data, High Injury Network mapping, school zone assessments, demographic information, and detailed crash profiles, this chapter provides the foundation for prioritizing safety projects and selecting targeted countermeasures. Together, these analyses guide data-driven decisions that support Lake County's commitment to reducing traffic fatalities and serious injuries.

This chapter presents Lake County's prioritization framework for identifying and advancing future roadway safety improvement projects.

Project Prioritization

The comprehensive prioritization analysis integrates findings from previously completed safety and existing conditions analyses to evaluate County maintained roadway segments on a standardized 100 point scoring scale, where higher scores indicate greater safety need. This quantitative approach produced a prioritization score for each roadway segment and served as the initial step in future project identification and selection. The final output includes complete prioritization scores for all segments and a recommended County Priority List of 100 projects. These results provide a structured, transparent foundation for safety countermeasures implementation along high priority corridors.

HOW SAFETY PROJECTS WERE PRIORITIZED

To identify where safety improvements are needed the most, the project team used a clear, step-by-step scoring process that evaluated every County-maintained roadway and organized

results into realistic project areas. This process ensures that safety investments are guided by data, aligned with existing planning efforts, and reflects how road improvement projects are delivered.

Step 1: Scoring Individual Roadway Segments:

The analysis began by reviewing small roadway segments. Each segment was scored based on factors such as crash history, nearby destinations, proximity to areas with higher safety needs, and roadway characteristics like speed and layout, as shown in **TABLE 10**.

Step 2: Grouping Segments into Project-Sized Corridors:

Next, nearby roadway segments with similar characteristics, such as the same road name, number of lanes, speed limit, and location, were grouped to form larger corridor segments. These "larger segments" better represent the typical size and scope of roadway improvement projects. Corridors were then ranked from highest to lowest priority, creating a countywide list of potential safety projects.

Step 3: Identifying High-Priority Safety

Projects: Finally, the corridor rankings were combined with previously identified County and regional priority projects, including those from the Lake-Sumter MPO's List of Priority Projects (LOPP). This step resulted in a recommended list of 100 high-priority safety projects, with the top 15 identified as the most urgent. In some cases, a single high-priority project includes more than one corridor to align with existing plans or project limits.

This prioritization approach provides Lake County with a transparent, data-driven roadmap for advancing safety improvements. The results will guide future engineering reviews to confirm project feasibility, refine limits, and determine the most appropriate safety solutions before projects move forward.

Table 10: Lake County Project Prioritization Criteria

CRITERION	DESCRIPTION	SCORING	POINTS
High Injury Network Crash Severity Index	Top ranking crash severity segments. HIN segments ranked by their severity index percentile.	Severity index, percentile scaled and ranked.	25
Overlap with Crash Profiles	Segments with more crashes corresponding to the crash profiles. Use crash weighting from HIN (K, A crashes = 4x; C, B crashes = 1x; O crashes = 0.25x) to get weighted number of crashes meeting profiles. Scores for each profile will be summed, and then percentile scaled and ranked.	Weighted number of crashes corresponding to profiles occurring within 100 feet of segment, percentile scaled and ranked.	25
Posted speed limits	Segment has a posted speed limit of 30 MPH or higher. Segments with a posted speed limit of 40 MPH or higher and 50 MPH or higher will receive additional points.	30 – 40 MPH = 5 pts 40 – 50 MPH = 15 pts 50+ MPH = 25 pts	25
Areas of Transportation Need	Areas of Transportation Need score is a composite Demographic Analysis value available at the block group level. Segments are assigned to the value of the block group they are contained within and are ranked by percentile.	Areas of Transportation Need score of nearest adjacent block group, percentile scaled and ranked.	25
MAXIMUM POSSIBLE SCORE			100 POINTS

High-Priority Projects (TOP 15)

The County identified 36 project extents related to local planning efforts that overlapped substantially with some of the high scoring segments. This list was included in the quantitative scoring framework and High-Priority Project list. Where a county-identified project extent overlapped multiple Project IDs, these segments have been consolidated into a single project. County-identified projects which contained one or more large segment with a 95th percentile prioritization score are recommended as “highest priority” (**TABLE 11**). These projects (15 consolidated projects

in total) demonstrate an urgent need for safety improvements and are already aligned with existing planning efforts, providing an opportunity to deliver significant safety benefits on an accelerated timeline. **TABLE 11** shows the list of the top 15 projects.

The full scoring methodology and complete list of the top 100 projects is included in **APPENDIX C**.

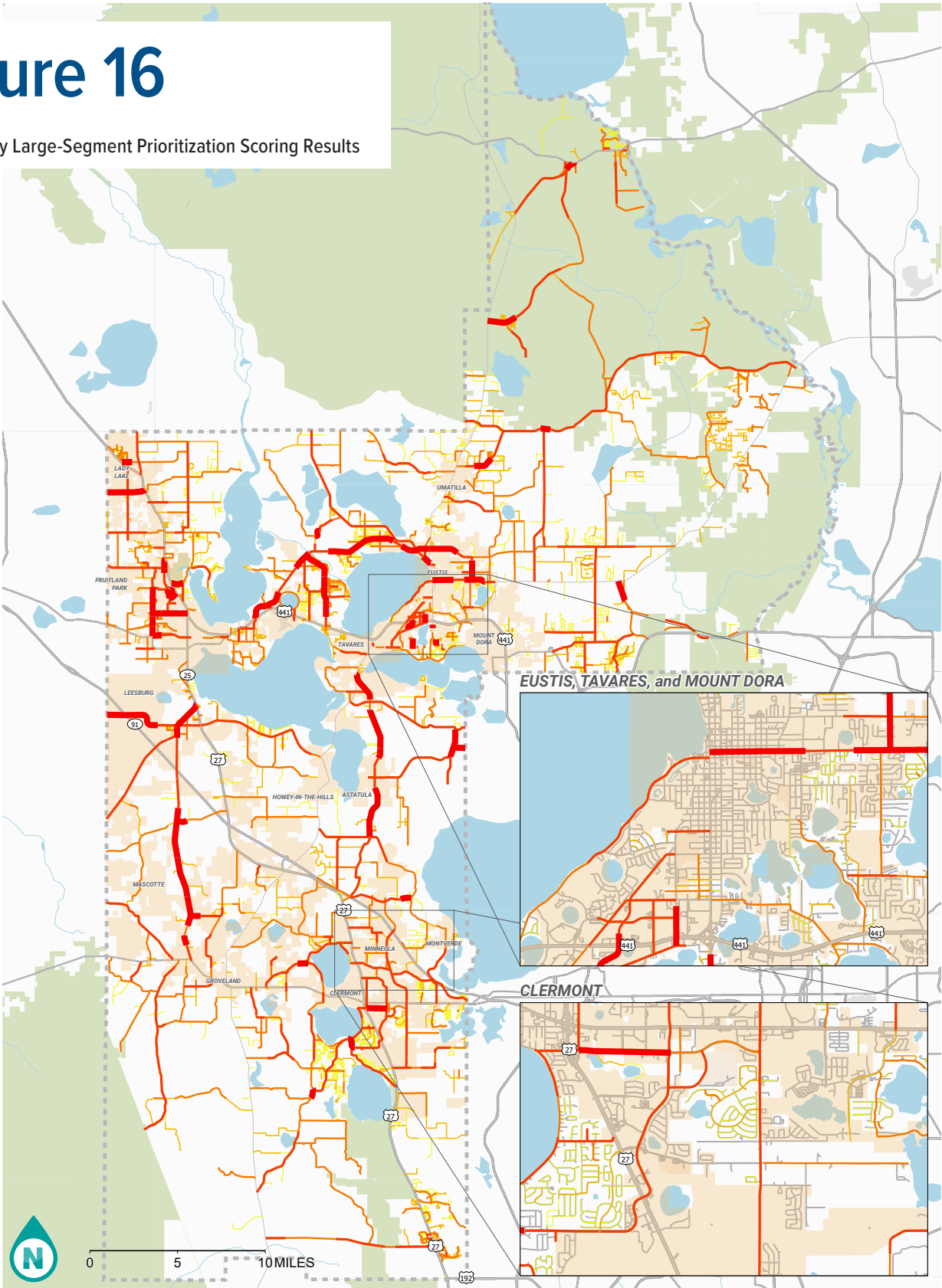
The locations of all High-Priority Projects, including the 15 identified as “highest-priority,” are presented in **FIGURE 16**.

Table 11: Lake County “Highest-Priority” Recommended Projects

PROJECT NUMBER	ROADWAY NAME	FROM	TO	CITY	SPEED LIMIT (MPH)	LENGTH (MILES)
1	CR 561	SR 19	Bates Ln	Astatula, Tavares	40 – 50	6.08
2	E Orange Avenue	N Bay St	Blue Water St	Eustis	40 – 55	2.64
3	CR 470/ CR 48	Sumter County line	US 27	Leesburg	45 – 55	4.98
4	CR 44	Emeralda Ave	SR 19	Eustis	50 – 55	6.42
5	CR 445A	Veterans Dr	St. Johns River Bridge	Unincorporated	25 – 55	6.88
6	CR 44	US 441	Emeralda Ave	Leesburg	45 – 55	4.44
7	CR 468	Urick St	SR 44	Leesburg, Fruitland Park	45	2.44
8	W Main St, E Main St	SR 44	CR 468	Leesburg	25 – 45	3.30
9	CR 450	SR 19	W 5th Ave	Umatilla	35 – 55	1.88
10	CR 46A	SR 44	SR 46	Sorrento	45 – 55	3.65
11	CR 561A	CR 561	CR 455	Unincorporated	55	3.22
12	CR 25	Marion County line	US 27/441	Lady Lake	30 – 35	2.19
13	CR 48	Ranch Rd	CR 448A	Astatula	55	3.30
14	Old Hwy 50	US 27	Brimming Lake Rd	Minneola	30 – 45	1.30
15	Lake Ella Road	Sumter County line	US 27	Lady Lake, Fruitland Park	45 – 55	2.94

Figure 16

Lake County Large-Segment Prioritization Scoring Results



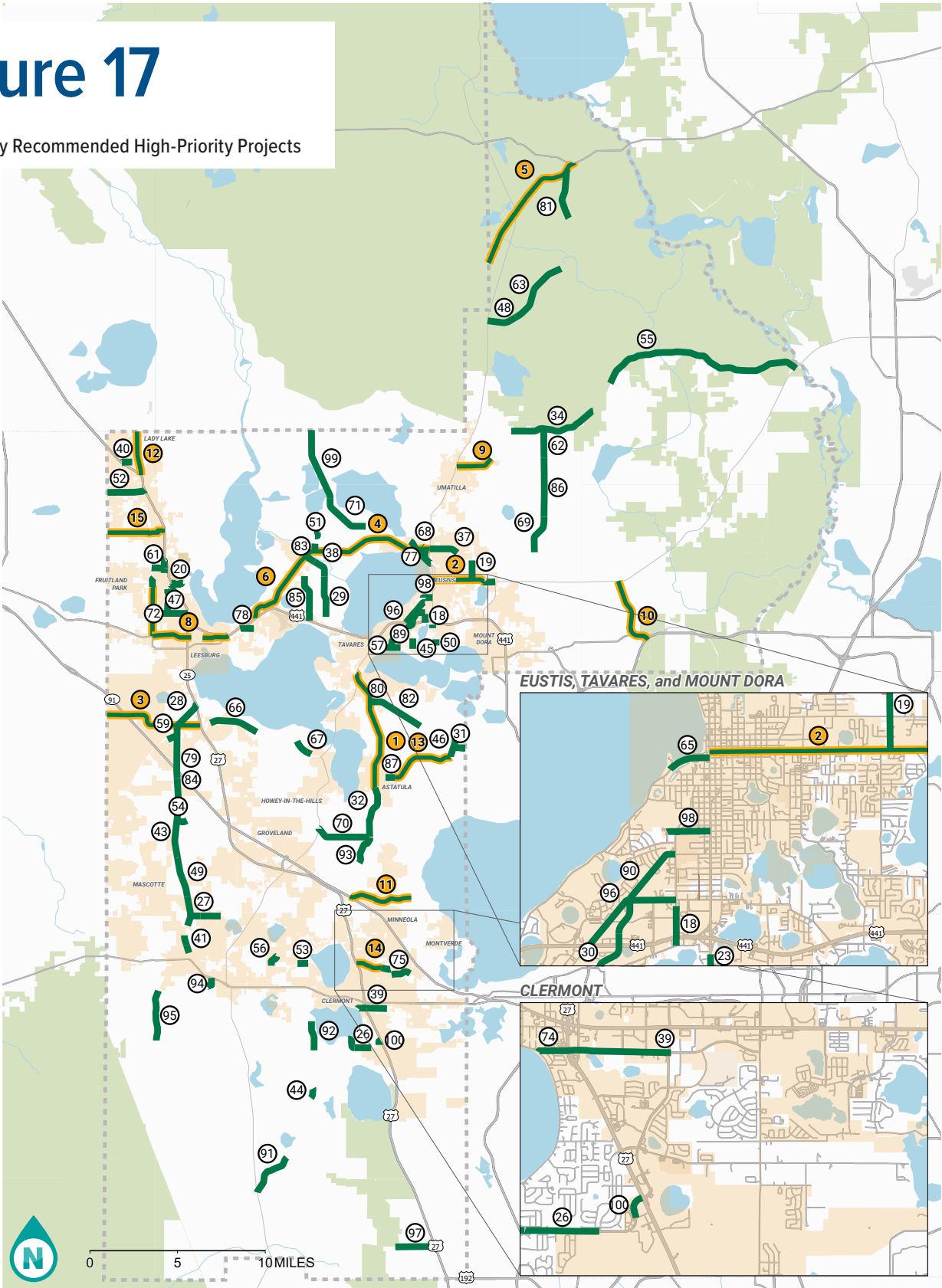
LAKE COUNTY, FL PRIORITIZATION RESULTS, LARGE SEGMENTS

- Legend**
- Ranked Final Prioritization Score
- > 98th Percentile
 - > 90th Percentile
 - > 75th Percentile
 - > 50th Percentile
 - < 50th Percentile



Figure 17

Lake County Recommended High-Priority Projects



LAKE COUNTY, FL
RECOMMENDED
HIGH-PRIORITY PROJECTS

- Legend**
- Recommended Projects
 - Highest-Priority
 - High-Priority



Safety Countermeasures

The crash profiles developed in Chapter 3 play a critical role in shaping the selection of safety countermeasures by revealing when, where, and how severe crashes occur. These insights help align engineering improvements, education initiatives, and enforcement strategies with documented risk patterns, ensuring that safety solutions are targeted, coordinated, and responsive to the County's most pressing safety challenges.

Safety countermeasures are proven strategies, ranging from roadway design treatments and operational improvements to education and behavioral approaches that have been shown to reduce crashes, fatalities, and serious injuries. Lake County's CSAP draws on nationally recognized guidance from the Federal Highway Administration (FHWA) and the National Highway Traffic Safety Administration (NHTSA) to identify countermeasures that are effective across urban and rural settings:

- The Federal Highway Administration's (FHWA) Proven Safety Countermeasures initiative (PSCi) is a compilation of 28 countermeasures and strategies that improve roadway safety for a wide range of road users, road types, and traffic conditions.¹⁵

- The National Highway Traffic Safety Administration (NHTSA), which is also part of the U.S. Department of Transportation, similarly created comprehensive companion guidance for State Highway Safety Offices on proven safety countermeasures, focusing on behavioral and traffic safety strategies.¹⁶

In Lake County, crash data show that higher-speed rural roads, particularly those with posted speed limits above 40 mph, experience a disproportionate share of roadway-departure crashes. Typically, these crashes result from lane departures or from overturning or striking a fixed object, such as a tree, utility pole, or ditch. Inadequate lighting conditions in off-road crashes on high-speed rural roads account for 40% of fatal and serious injury crashes. Special attention is given to rural roads, where higher speeds, limited lighting, and roadway departure crashes contribute to a disproportionate number of severe outcomes. By applying data-driven, evidence-based countermeasures, such as rumble strips, lighting enhancements, and shoulder improvements, the County is focusing investments where they can have the greatest impact.

- NHTSA's Traffic Safety Countermeasures That Work in Rural Communities guidebook¹⁷ is also being used to identify the most effective countermeasures for Lake County's rural communities.

¹⁵ FHWA. *Proven Safety Countermeasures*. <https://highways.dot.gov/safety/proven-safety-countermeasures>

¹⁶ Bevan et al. *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices*, 11th Edition. <https://rosap.nhtl.bts.gov/view/dot/72947>

¹⁷ NHTSA *Traffic Safety Countermeasures That Work in Rural Communities*

As a part of the awarded SS4A Planning and Demonstration Activities Grant, Lake County will conduct a **Rumble Strip Gap Analysis & Prioritization Plan for Rural Roads**. This plan will provide clear guidance on where, why, and when to install centerline and shoulder rumble strips, to efficiently leverage local resources and pursue implementation funding. According to NHTSA, installing rumble strips on both the shoulder and centerline is an effective countermeasure for crash prevention associated with impaired, distracted, or drowsy driving. Centerline rumble strips can result in a 44-64% reduction in head-on fatal and injury crashes on two-lane rural roads, whereas shoulder rumble strips have shown a 13-51% reduction in single-vehicle, run-off-road fatal and injury crashes on two-lane rural roads.¹⁸

Countermeasures Tool Kit

The Lake County's Safety Countermeasures Tool Kit, links local crash trends to proven, data-driven solutions. Building on the crash profiles identified in **Chapter 3**, the tool kit organizes safety countermeasures by common crash types, such as roadway departure crashes on high-speed rural roads, left-turn crashes at unsignalized intersections, and midblock pedestrian-involved crashes, to ensure that recommended treatments directly address documented risk patterns.

Each countermeasure is supported by quantitative crash reduction information drawn from the Federal Highway Administration's Crash Modification Factor (CMF) Clearinghouse and complementary national guidance, providing a transparent, evidence-based foundation for selecting strategies that are most effective for Lake County's roadway contexts.

Table 12: Crash profile # 1, Safety Countermeasures

CRASH PROFILE # 1: OFF-ROAD CRASHES ON HIGH-SPEED, RURAL ROADS	CRASH TYPE (FDOT)	COUNTERMEASURE NAME	CRF
Speed Management	All	Lower Posted Speed Limits	14%
	All	Dynamic Speed Display/Feedback Signs	5%
	All	Speed Safety Cameras	54%
Lighting	Nighttime Injury	Provide Roadway Lighting	28%

¹⁸ FHWA. Proven Safety Countermeasures – Longitudinal Rumble Strips and Stripes.
https://highways.dot.gov/sites/fhwa.dot.gov/files/Longitudinal%20Rumble%20Strips_508.pdf

Crash profile # 1, Safety Countermeasures, continued

CRASH PROFILE # 1: OFF-ROAD CRASHES ON HIGH-SPEED, RURAL ROADS	CRASH TYPE (FDOT)	COUNTERMEASURE NAME	CRF
Roadside Objects	Fixed Object	Remove or Relocate Fixed Objects Outside of Clear Zone	98%
	All	Cable Barrier and Guardrail	57%
	Off-road	Install Roadside Barrier	51%
	All	Increase Distance to Roadside Features From 3.3 ft to 16.7 ft	22%
	All	Increase Distance to Roadside Features From 16.7 ft to 30 ft	44%
Signing and Marking	Off-Road	Install Raised Pavement Markers and Transverse Rumble Strips on Approach to Horizontal Curves	6%
	Single vehicle	Install Wider Edgelines (4 in to 6 in)	27%
	Fixed Object, Off-Road	Install Centerline Rumble Strips	24%
	Head on, Nighttime, Non-intersection, Run off road, Sideswipe	Install Chevron Signs on Horizontal Curves	22%
	Night-Time		25
	Head on, Non-Intersection, Off-Road, Sideswipe	Install New Fluorescent Curve Signs or Upgrade Existing Curve Signs to Fluorescent Sheeting	18%
	Non-Intersection	Install Sequential Dynamic Chevrons	44%

Crash profile # 1, Safety Countermeasures, continued

CRASH PROFILE # 1: OFF-ROAD CRASHES ON HIGH-SPEED, RURAL ROADS	CRASH TYPE (FDOT)	COUNTERMEASURE NAME	CRF
Shoulder/Roadside	Off-Road, Single Vehicle, injury	Widen Shoulder to 5 ft or greater (on road with no rumble strips and shoulder less than 5 ft wide)	62%
	Off-Road	Install Shoulder Rumble Strips	24%
	Off-Road	Install Shoulder Rumble Strips on Unilluminated Highways	21%
	Off-Road	Install Shoulder Rumble Strips on Illuminated Highways	41%
	Off-Road	Install Safety Edge Treatment	12%
	Single-Vehicle	Flatten Side slope from 1V:3H to 1V:4H	8%
	Single-Vehicle	Flatten Side slope from 1V:4H to 1V:6H	12%
Pavement Improvements	Off-Road	Install High Friction Surface Treatment	54%
Policy/programming	All	Road Safety Audit	10-60%

Table 13: Crash profile # 2, Safety Countermeasures

CRASH PROFILE # 2: LEFT TURN CRASHES AT UNSIGNALIZED INTERSECTIONS	CRASH TYPE (FDOT)	COUNTERMEASURE NAME	CRF
Intersection Traffic Control	All	Conversion of Stop-Controlled Intersection Into Single-Lane Roundabout	58%
	Fatal and Injury		82%
	Left Turn, urban	Install a Traffic Signal	55%
	Left turn, rural		60%
	Angle, Head on, Left turn, Right turn	Convert Two-Way Stop (without flashing beacons) to All-Way Stop Control (without flashing beacons)	70%
	Angle, Head on, Left turn, Right turn	Convert Two-Way Stop (without flashing beacons) to All-Way Stop Control (with flashing beacons)	86%
	Angle, Head on, Left turn, Right turn	Convert Two-Way Stop (with flashing beacons) to All-Way Stop Control (with flashing beacons)	84%
	Angle	Replace standard stop sign with flashing LED stop sign	42%
	Angle	Increase retro reflectivity of stop signs	8%
	Angle, Head on, Left turn, Right turn	Install a "Vehicles Entering When Flashing" (VEWF) System (Advance Post Mounted Signs on Major and Loops on Minor)	32%
Signing and Marking	Injury and Fatal Crashes at Rural Intersections	Systemic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections	27%

Crash profile # 2, Safety Countermeasures, continued

CRASH PROFILE # 2: LEFT TURN CRASHES AT UNSIGNALIZED INTERSECTIONS	CRASH TYPE (FDOT)	COUNTERMEASURE NAME	CRF
Intersection Geometry	All	Add Two-Way-Left Turn Lane (TWLTL) To The Major Approach of an Unsignalized 3-Leg Intersection	31%
	All	Add Two-Way-Left Turn Lane (TWLTL) To The Major Approach of an Unsignalized 3-Leg Intersection	34%
	All	Provide a Left-Turn Lane on Both Major-Road Approaches	48%
	All	Provide a Left-Turn Lane on One Major-Road Approach	44%
	All	Install One Left-Turn Lane on the Minor Approach of an Unsignalized 3-Leg Intersection	25%
Lighting	Nighttime	Install Single Luminaire at an Intersection	71%
	Angle	Provide Intersection Illumination	33%
Policy/programming	All	Road Safety Audit	10-60%

Table 14: Crash profile # 3, Safety Countermeasures

CRASH PROFILE # 3: MIDBLOCK PEDESTRIAN- INVOLVED CRASHES	CRASH TYPE (FDOT)	COUNTERMEASURE NAME	CRF
Add pedestrian crossing	Pedestrian-Involved	Presence of a pedestrian crosswalk at midblock locations	18%
	Pedestrian-Involved	Presence of a pedestrian crosswalk with signal at midblock locations	45%
Improve pedestrian crossing	Pedestrian-Involved	Install advance yield or stop markings and signs for unsignalized crossings	25%
	Pedestrian-Involved	Install raised median with marked crosswalk (uncontrolled)	46%
	Pedestrian-Involved	Install raised pedestrian crosswalk	46%
	Pedestrian-Involved	Install RRFB	48%
Signalization of pedestrian crossing	Pedestrian-Involved	Install pedestrian hybrid beacon (PHB)	55%
	Pedestrian-Involved	Install pedestrian hybrid beacon (PHB) with advanced yield or stop markings and signs	57%
	Pedestrian-Involved injury and fatal crashes	Midblock pedestrian signal with crosswalk	45%
	All injury and fatal crashes		34%
Install pedestrian facility	Pedestrian-Involved	Install sidewalk	40%
Traffic calming/ other	Pedestrian-Involved	Install speed humps	56%
	Pedestrian-Involved	Install raised median with unmarked crosswalk (uncontrolled)	39%
	All	Road diet	47%
	Pedestrian-Involved	Install lighting	70%

Crash profile # 3, Safety Countermeasures, continued

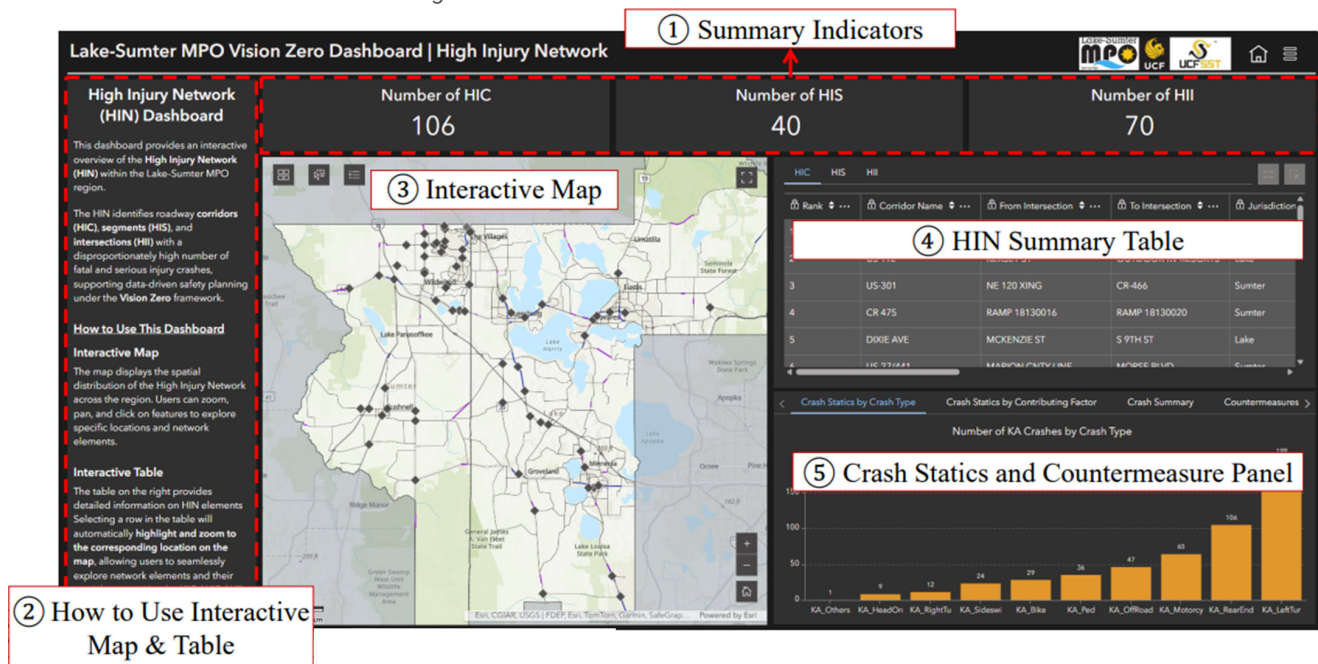
CRASH PROFILE # 3: MIDBLOCK PEDESTRIAN- INVOLVED CRASHES	CRASH TYPE (FDOT)	COUNTERMEASURE NAME	CRF
Policy/programming	Pedestrian-Involved	High-visibility enforcement at pedestrian crossings	High-Visibility Enforcement at Pedestrian Crossings, NHTSA
	Pedestrian-Involved	Pedestrian safety zones	Pedestrian Safety Zones, NHTSA
	Pedestrian-Involved	Safe Routes to School	Safe Routes to School, NHTSA
	Pedestrian-Involved	Walking school bus	Walking School Bus, NHTSA
	All	Road Safety Audit	10-60%

Progress and Transparency

To promote transparency and keep the community informed, Lake County, in collaboration with the Lake-Sumter MPO, will share and publish annual progress reports. These reports will provide a comprehensive overview of updates to policies, progress on safety projects and programs, and, most importantly, trends in crashes, fatalities, and serious injuries, allowing the public to track the impact of ongoing safety efforts.

Relying on Signal 4 Analytics data, Lake-Sumter MPO created a Vision Zero Dashboard to track crash trends and high-injury network elements, including corridors, intersections, and segments.¹⁹ Crash trends summarize regional crash patterns over time, by severity, and by geographic location. A crash summary is included in the HIN component of the dashboard, which features a narrative related to crashes and safety concerns. Lake County will adopt similar performance measures, along with unique metrics that reflect the implementation of safety projects, programs, and initiatives, in coordination with the region's MPO.

Figure 18 Lake-Sumter MPO Vision Zero Dashboard



¹⁹ Lake-Sumter MPO. Vision Zero Dashboard.

<https://experience.arcgis.com/experience/b1deb5e4dd2a498bab32231de00b5617/>

A sample of key indicators and data included in the dashboard is presented in [TABLE 15](#).

Table 15: Indicators and Data in Lake-Sumter MPO’s Vision Zero Dashboard

PERFORMANCE MEASURE	DESCRIPTION
Total KA Crashes	Total number of killed or serious (incapacitating) injury crashes
Bicyclist-Related KA Crashes	Total number of killed or serious (incapacitating) injury crashes involving bicyclists
Pedestrian-Related KA Crashes	Total number of killed or serious (incapacitating) injury crashes involving pedestrians
Crash Severity	Determination of whether a crash is fatal (K) or a serious injury (A)
Crash Type	Types of crash, such as angle, rear-end, etc.
High Injury Corridor	Number of High Injury Corridors
High Injury Segment	Number of High Injury Segments
High Injury Intersection	Number of High Injury Intersections
Number of Total Crashes	Total number of crashes in Lake County
Number of KA Crashes	Total number of killed or serious (incapacitating) injury crashes
Crash Type	Types of crash, such as angle, rear-end, etc.
Crash Contributing Factor	Contributing factors to crashes (e.g., Time of Day, Light Condition, Behavior Factors)

Future safety implementation projects and initiatives will assert the adoption of additional performance measures as outlined in **Chapter 5**, which include:

- Commit to sharing performance measures annually in alignment with Lake-Sumter MPO’s Vision Zero program;
- Implementing a Safe Routes to School program;
- Planning and programming lighting projects, programs, and initiatives;
- Planning and programming rural transportation projects, programs, and initiatives;
- Fostering FDOT STRIDES program coordination;
- Promoting Countywide post-Care coordination.

APPENDIX A

Safety Analysis Report



To: Lake County
 From: Alta Planning + Design
 Date: January 27, 2026
 Re: Comprehensive Safety Analysis

Introduction

This memo combines all previously submitted safety and existing conditions analyses completed as part of Task 3, the Comprehensive Safety Analysis. The project team completed four different analyses in service of the project scope of work and of Safe Streets and Roads for All (SS4A) program requirements. Each analysis focuses on a different aspect of traffic crashes and roadway safety, including contributing factors, locations, and community impact. Together, the following four analyses represent a comprehensive picture of the state of roadway safety in Lake County:

- The **Systemic Safety Analysis** identifies recent trends in traffic crash data to develop an existing conditions overview for Lake County. This report guides subsequent planning and programming efforts within and beyond this task.
- The **High Injury Network Analysis** identifies a subset of roadways within Lake County where the highest frequency of crashes involving serious injuries or deaths occurs. In Lake County, 51% of injury crashes occur on just 2.8% of total roadway mileage. A High Injury Network is the foundation for prioritizing investments in high-impact roadway safety improvements.
- The **Crash Profile Analysis** identifies groupings of contextual and environmental factors for traffic crashes (including roadway speed, intersection type, lighting, weather, etc.) that are correlated with a greater degree of crash severity. This analysis uses point-based crash data, as opposed to road-based, and will help evaluate policy changes and other systemic improvements.
- The **Demographic Analysis** identifies connections between traffic crashes and community-level demographic conditions (including age, income, race, vehicle access, etc.). This analysis helps inform engagement decisions, the prioritization process, and the final report.

Each analysis includes lists of municipalities and roadways as illustrative examples and for further collaboration with municipal partners and FDOT. **After approval, the project team will work together with Lake County to draft a project prioritization approach. The prioritization process will combine the results from all analyses with other inputs, such as stakeholder engagement, feasibility review, and additional considerations, to develop a final project list.**

Where noted, additional revisions to each analysis have been made following Lake County's review. Once all outstanding memos are approved by Lake County (currently: HIN, Crash Profile, and Demographic Analysis) GIS data will be transmitted to the County in a geodatabase.

Systemic Safety Analysis – Final Draft

Methodology

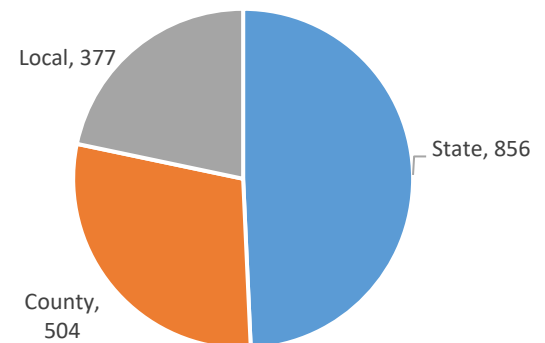
Alta Planning + Design analyzed crash data for all public roadways in Lake County¹ from January 1, 2018, to December 31, 2023, the most recent six-year period available through Florida’s Signal4Analytics crash data portal. The analysis focused on crashes that resulted in fatalities or serious injuries, commonly referred to as KSI (killed or seriously injured) crashes. The data was filtered to only include crashes with injuries or deaths, excluding minor crashes involving property damage only. Additionally, crashes that occurred on Florida’s Turnpike, a limited-access highway, were excluded from this analysis unless specified. For this analysis, motorcycles were categorized as vehicles.

Key Findings

Between 2018 and 2023, the systemic safety analysis identified the following key findings:

- **314 people died in traffic crashes.**
- 49% of KSI crashes occurred on state-owned roadways.
- Crashes involving pedestrians were 4.7 times more likely to be fatal compared to crashes involving motor vehicles only. Similarly, crashes involving bicyclists were 1.7 times more likely to be fatal than vehicle-only crashes.
- Only 19% of pedestrian crashes occurred at intersections, and just 14% of pedestrian KSI crashes occurred at intersections.
- Bicycle-related crashes were relatively rare, representing 50 of 1,737 KSI crashes. Conclusions about trends in these crashes should be approached with caution.

KSI Crashes by Road Jurisdiction



¹ The City of Mount Dora was excluded from the crash analysis, as it received a separate Safe Streets and Roads for All grant to develop its own Safety Action Plan.

Who Is Impacted?

Traffic Fatalities

Using the most recent data from FDOT and the US Census Bureau's Population Estimates Program (2023), this analysis calculated Lake County's fatal crash rate, *including crashes on Florida's Turnpike and within the City of Mount Dora*. **In 2023, Lake County's fatal crash rate was 16.3 fatalities per 100,000 residents, a decrease from the 2018 rate of 17.9 fatalities per 100,000 residents.** However, Lake County's fatal crash rate exceeds Florida's statewide fatal crash rate of 14.9 people per 100,000 residents², and the national fatality rate of 12.8 per 100,000 residents (2022).³

² <https://www.flhealthcharts.gov/ChartsDashboards/rdPage.aspx?rdReport=Death.DataViewer&cid=0110>

³ Insurance Institute for Highway Safety, *Fatality Facts 2022 State by State*. <https://www.iihs.org/topics/fatality-statistics/detail/state-by-state>

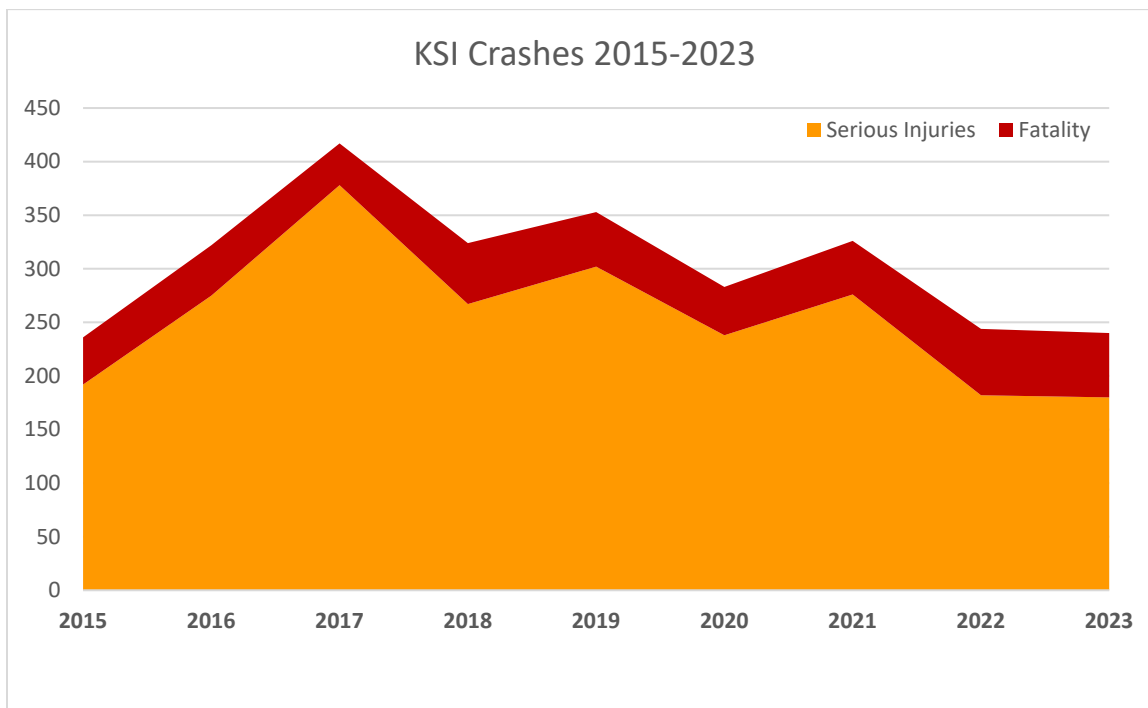


Figure 1. KSI Crashes 2015-2023

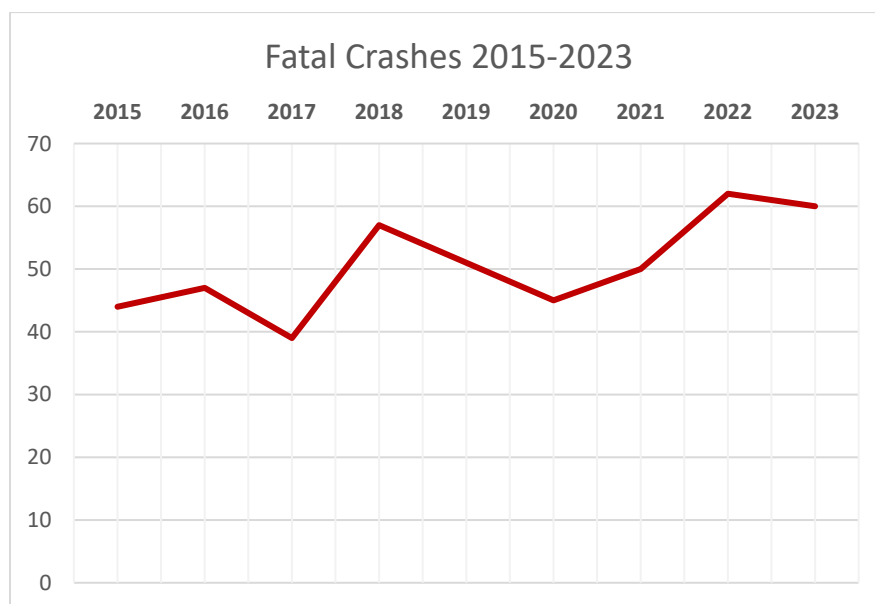


Figure 2. Fatal crashes from 2015-2023

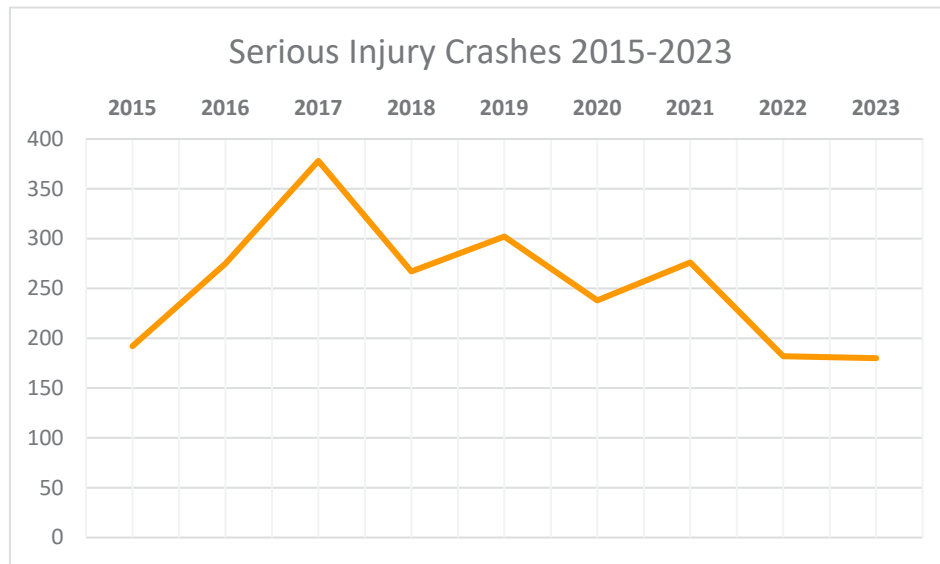


Figure 3. Serious injury crashes 2015-2023

Between 2018 and 2023, a total of 314 people lost their lives in traffic crashes in Lake County (excluding Florida’s Turnpike and the City of Mount Dora). In absolute numbers, more people died in 2023 on Lake County roads than in 2018, but population growth has lowered the fatality rate. **Half of these fatal crashes occurred at night.** Among KSI crashes, the highest proportion occurred on State roads (49%), followed by County roads (29%).

Crash Severity by Mode

Among all travel modes, pedestrians and bicyclists disproportionately experienced KSI crashes. **Crashes involving pedestrians were 4.7 times more likely to be fatal than vehicle-only crashes, while crashes involving bicyclists were 1.7 times more likely to be fatal.** Figures 1 through 3 illustrate the severity of crashes for these three travel modes.

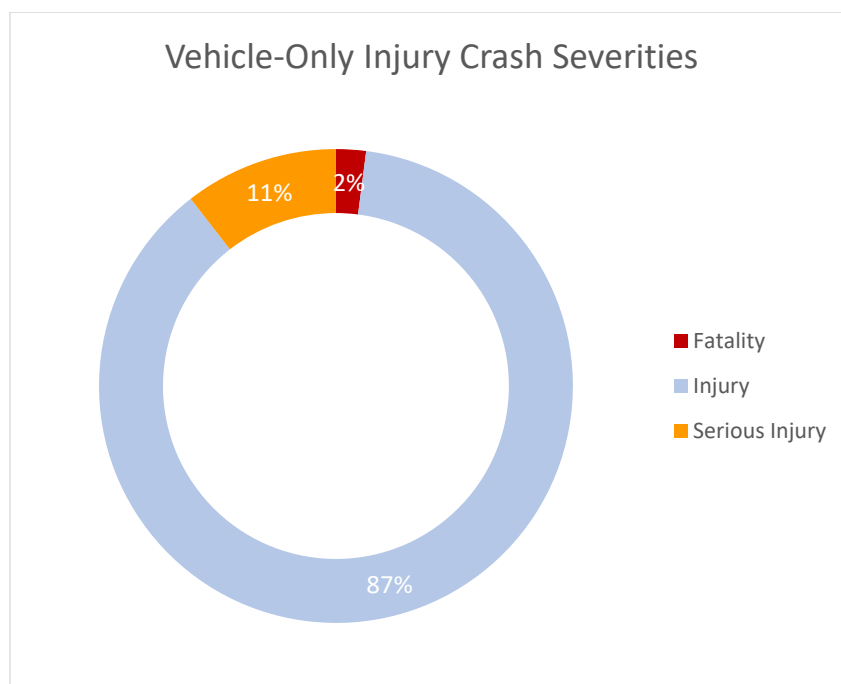


Figure 4: Severity of crashes involving vehicles only.

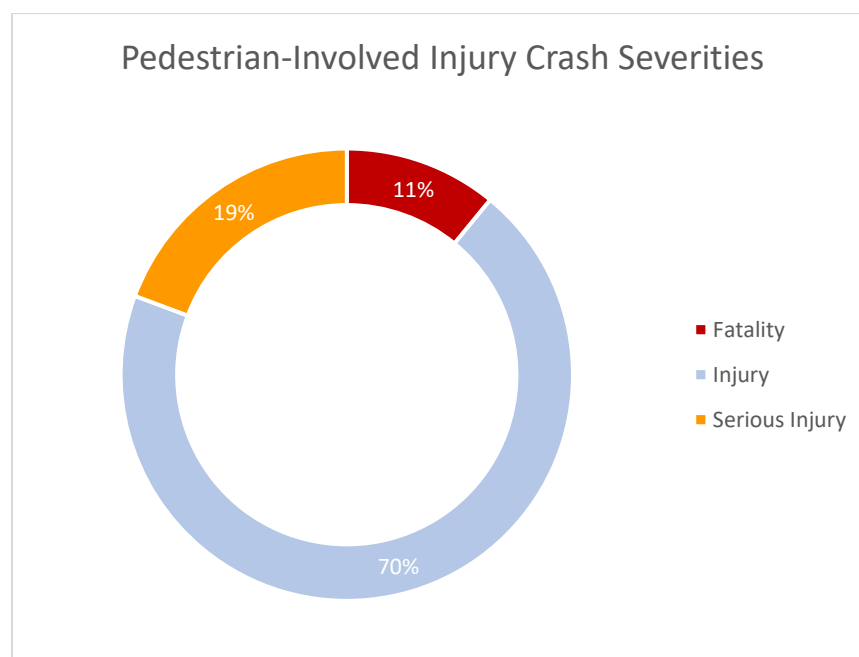


Figure 5: Severity of crashes involving pedestrians.

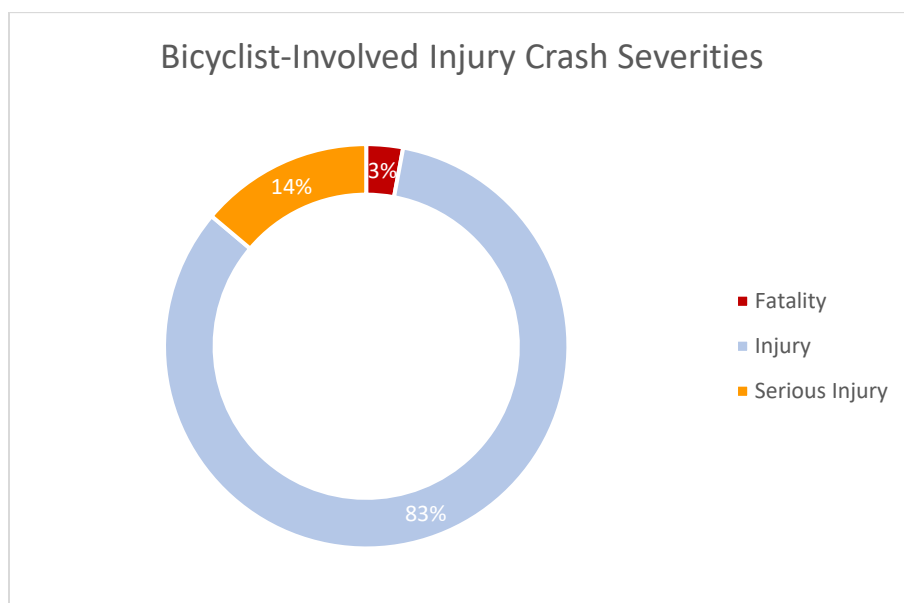


Figure 6: Severity of crashes involving bicycles.

Age

Seniors are particularly vulnerable to serious injuries when involved in traffic collisions. With 26.1% of Lake County's population aged 65 and older, seniors represent a significant demographic of interest for traffic safety.

Data shows that seniors are more likely to be involved in fatal crashes in Lake County: 21.3% of KSI crashes involving a senior resulted in fatalities. However, seniors are underrepresented in fatal crashes relative to their proportion of the county's population.

Teenage drivers were involved in 10.5% of KSI crashes.

What Are the Causes and Factors?

Crash Types

Table 1 below categorizes different types of crashes involving vehicles, pedestrians, and bicyclists. While the categories are primarily designed for vehicle crashes, incidents involving bicyclists or pedestrians are grouped under their respective categories, as shown in Table 1.

Table 1: Crash types for all crashes. Above-average values are highlighted in red.

Crash Types	Fatality	Serious Injury	Injury	Grand Total
Angle	18	105	1,149	1,272
Animal	1	9	45	55
Bicycle	10	40	227	277
Head On	43	68	251	362
Left Turn	51	239	1,577	1,867
Off Road	65	287	1,345	1,697
Other	20	133	938	1,091
Pedestrian	49	101	354	504
Rear End	25	262	4,123	4,410
Right Turn	1	6	105	112
Rollover	11	82	287	380
Sideswipe	10	51	575	636
Unknown	10	40	286	336
Grand Total	314	1,423	11,262	12,999

Table 1 shows that "rear-end" crashes were the most common type, accounting for approximately 37% of injury crashes. However, the types of crashes most associated with fatalities were "off-road", "left turn", and "pedestrian", each representing 21%, 16%, and 16% of fatal crashes, respectively. **Off-road crashes, in particular, are a significant concern**, as discussed further below.

Although pedestrians represent only 4% of all injury crashes detailed in Table 1, they account for approximately 16% of all fatal crashes.

Off-Road and Lane Departure Crashes

Lane departures were a significant factor in injury crashes, causing 42% of all fatal and serious injury crashes. A total of 150 fatal crashes were linked to lane departures. Lane departure occurs when a car leaves its travel lane, either veering into other cars in the same direction, across the directional median, or off the road.

“Off-road” crashes were strongly associated with lane departures, accounting for 43% of lane departure KSI crashes. Overall, 20% of fatal and serious injury crashes were categorized as “off-road.” Other major crash types associated with lane departure KSI crashes included head-on collisions (13%) and rollovers (11%).

Additionally, roads with unpaved shoulders were found to be particularly hazardous, experiencing 1.8 times more KSI crashes compared to roadways with curbs and paved shoulders.

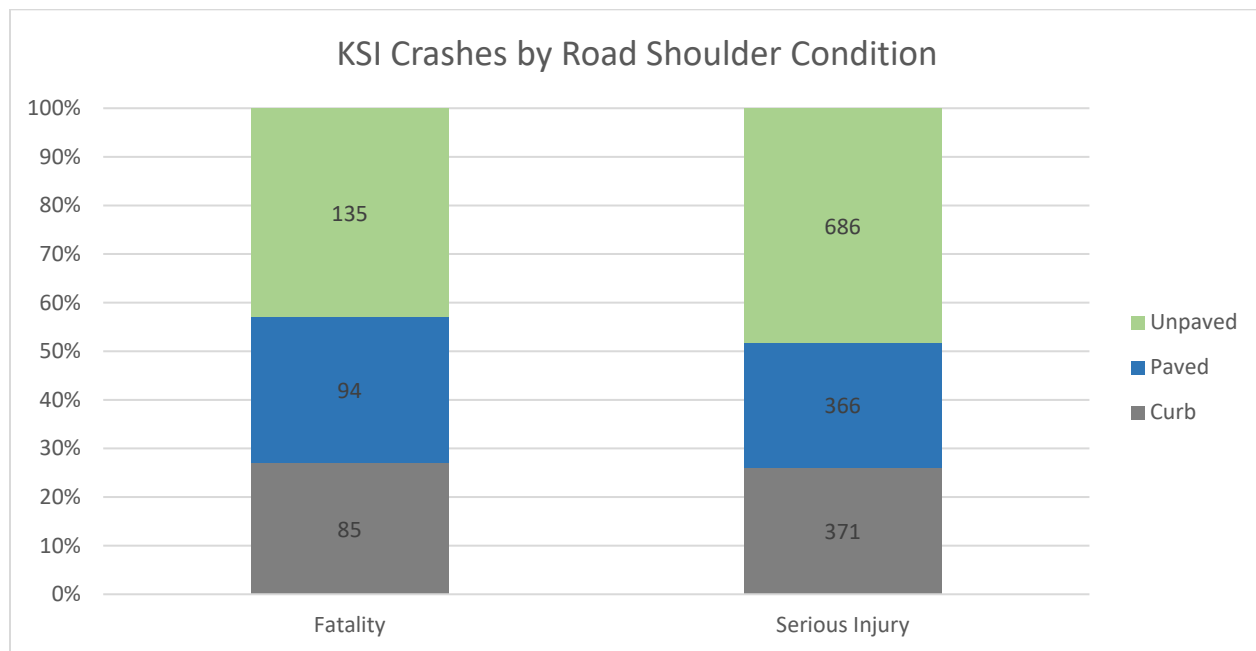


Figure 7: Fatal and serious injury crashes by road shoulder condition.

Lane Departure crashes were particularly severe on roads with unpaved shoulders.

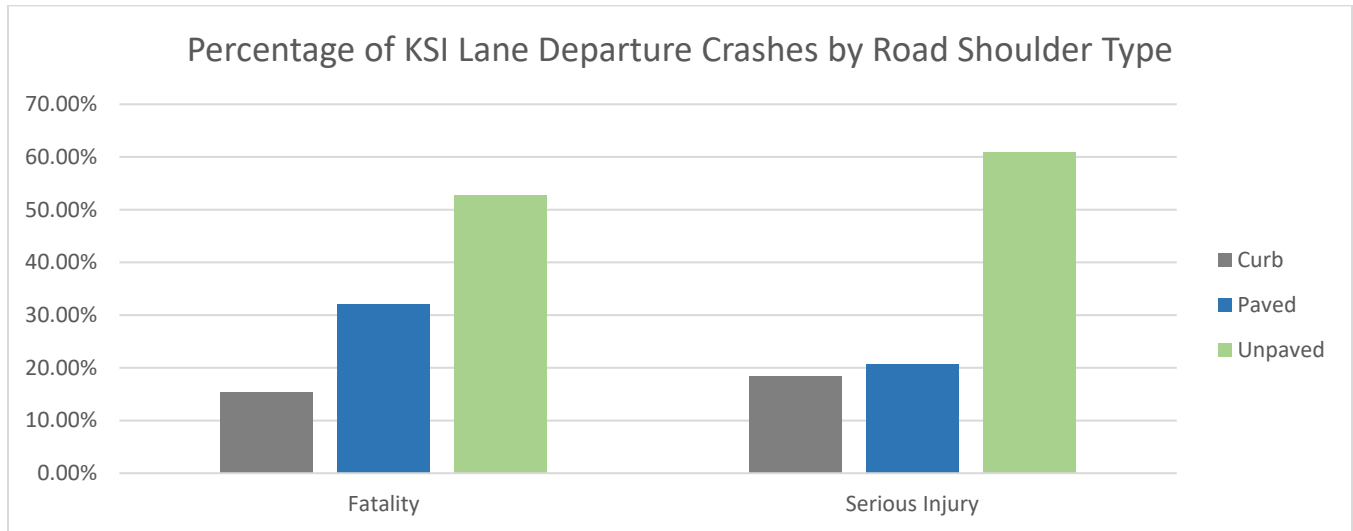


Figure 8: Percentage of Lane Departure KSI Crashes by Road Shoulder Type

Roadways with unpaved shoulders are more commonly found in rural areas, including much of unincorporated Lake County. While urban roadways account for the majority of injury crashes in Lake County (65%), rural areas experience a disproportionate share of KSI crashes (56%).

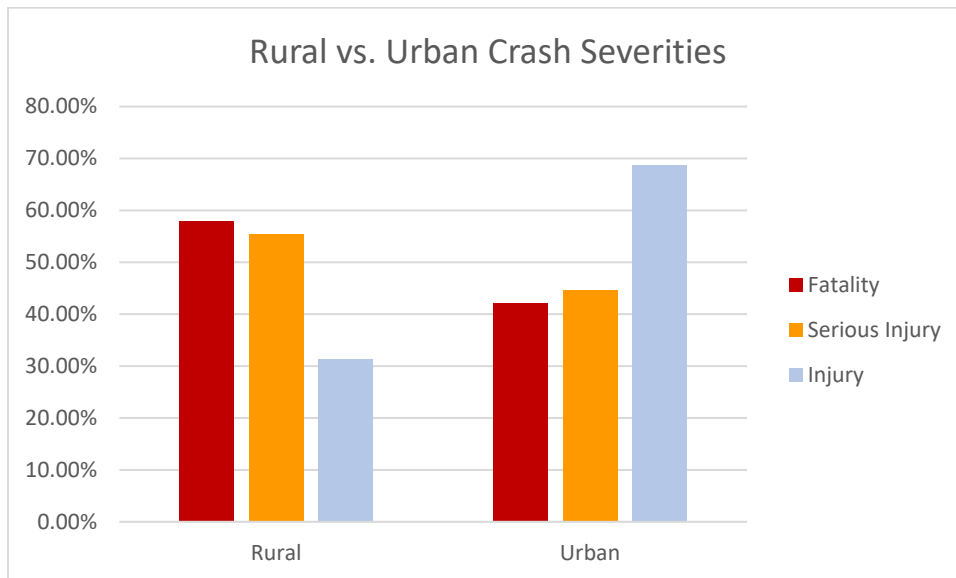


Figure 9: Rural vs. Urban Injury Crash Severities

Nighttime Crashes

Half of all fatal crashes and 36% of serious injury crashes occurred at night. Approximately 50% of these crashes happened in unlit areas.

Drugs and alcohol were factors in 35% of fatal crashes, with 64% of drugs and alcohol-related KSI crashes occurring at night. Alcohol contributed to 15% of nighttime KSI crashes and 24% of all fatal crashes, while drugs were a contributing factor in 7% of nighttime KSI crashes and 20% of all fatal crashes (some crashes involved both drugs and alcohol).

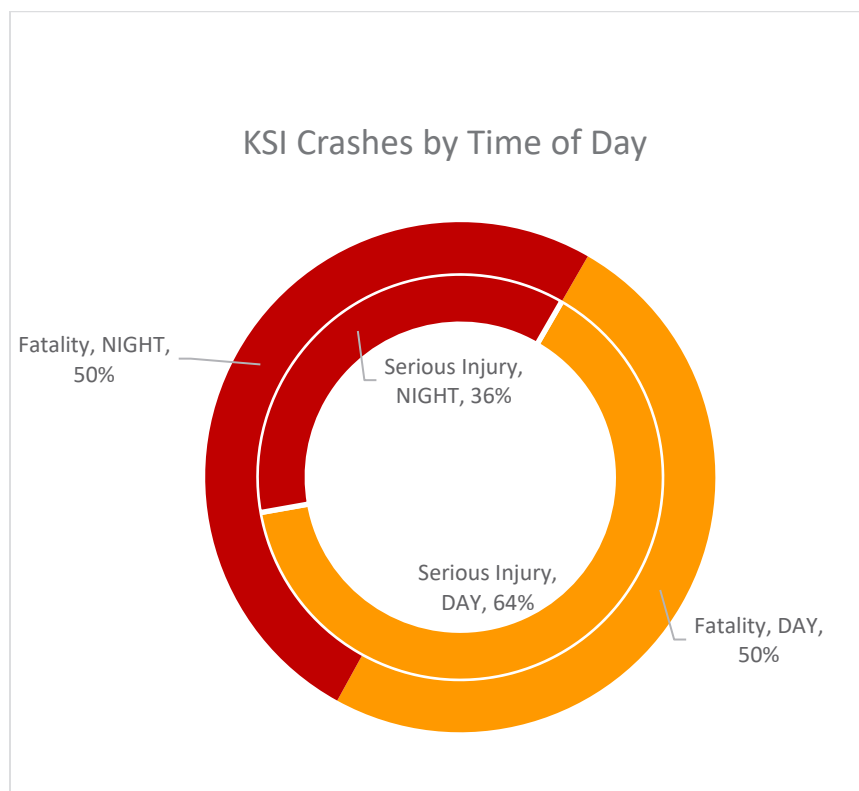


Figure 10: Fatal and Serious Injury Crashes by Time of Day

When and Where Are Crashes Occurring?

KSI Crashes by Road Jurisdiction

Figures 8 through 10 illustrate the percentages of KSI crashes in Lake County by mode and roadway jurisdiction.

Overall, State roads accounted for the highest percentage of KSI crashes (49%) and unlit, nighttime crashes (52%). County roads were the primary locations for unpaved shoulder crashes (43%). The distribution of crashes varied by mode:

- **Pedestrian Crashes:** Pedestrian fatalities were most common on State roads (64%). However, local roads accounted for the highest share of serious pedestrian injuries (44%). Urban roads were the site of 64% of pedestrian KSI crashes, including 35 fatalities.
- **A larger proportion of pedestrian KSI crashes occurred on local roads (35%) compared to vehicle crashes (20%).** This is likely because pedestrians are more likely to use local roads, which provide access to a greater number and variety of destinations.
- **Bicycle Crashes:** Among the 11 fatal bicycle crashes that occurred in Lake County between 2018-2023, most occurred on State (45%) and County (36%) roads. Serious injury bicycle crashes (40 total) were more evenly distributed among County (36%), State (36%), and local (27%) roads. See Figure 13.

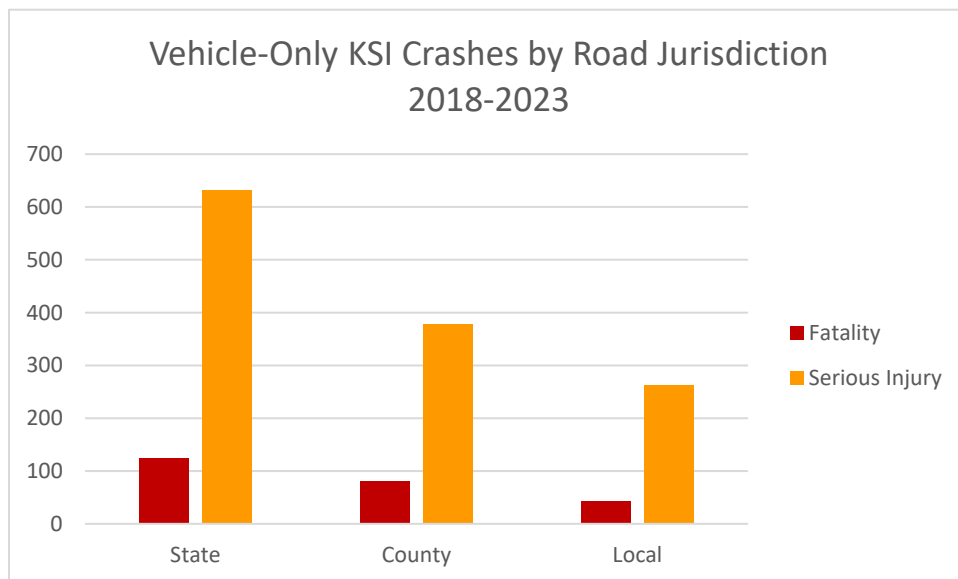


Figure 8: Fatal crashes by roadway jurisdiction (vehicles only).

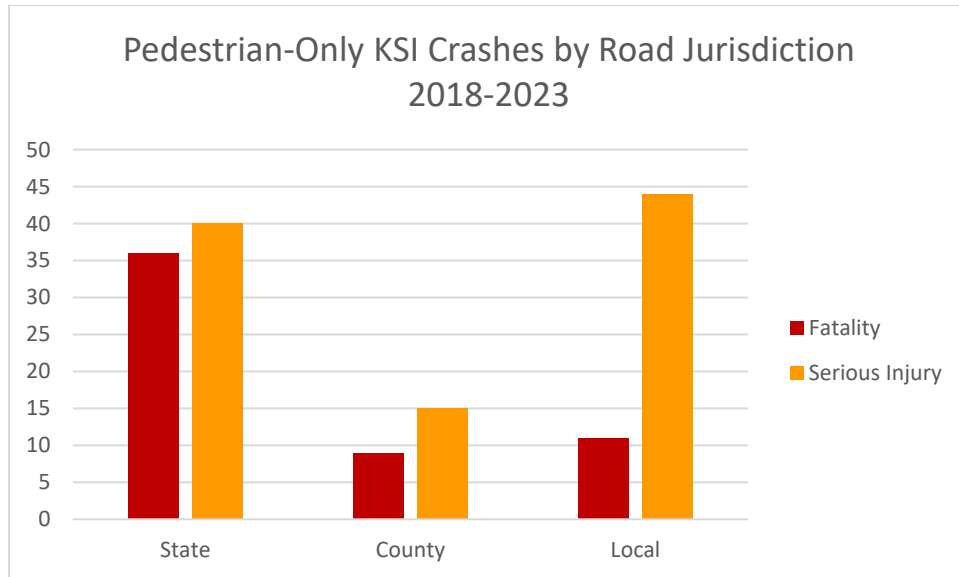


Figure 9: Fatal and serious crashes by roadway jurisdiction (pedestrians only).

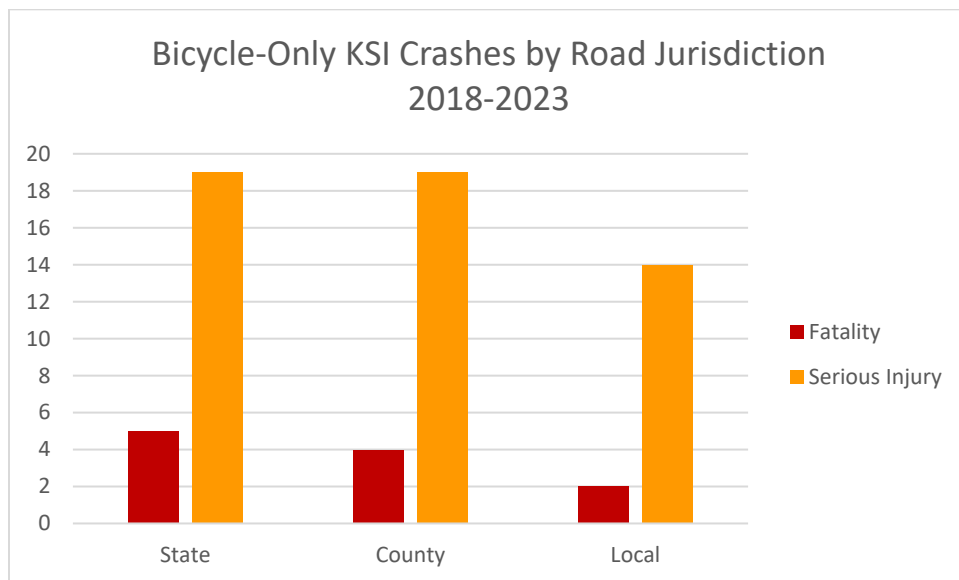


Figure 10: Fatal and serious crashes by roadway jurisdiction (bicycles only).

KSI Crashes by Jurisdiction in Lake County

Table 2 presents the total number of fatal and serious injury crashes in each jurisdiction within Lake County from 2018-2023. The table also highlights the percentage of total KSI crashes that occurred in each jurisdiction. Notably, **Unincorporated Lake County, the City of Clermont, and the City of Leesburg accounted for 63% of KSI crashes.**

Table 2: KSI crashes by jurisdiction in Lake County.

<i>Row Labels</i>	Fatal (within 30 days)	Incapacitating Injury	Percentage of KSI Crashes	Percentage of Injury Crashes
<i>Unincorporated Lake County</i>	152	383	30%	19%
<i>Clermont</i>	37	256	17%	25%
<i>Leesburg</i>	41	242	16%	19%
<i>Eustis</i>	19	137	9%	9%
<i>Tavares</i>	20	87	6%	7%
<i>Groveland</i>	12	93	6%	6%
<i>Lady Lake</i>	10	77	5%	6%
<i>Umatilla</i>	7	53	3%	2%
<i>Fruitland Park</i>	7	43	3%	3%
<i>Astatula</i>	2	18	1%	<1%
<i>Mascotte</i>	3	15	1%	1%
<i>Howey-in-the-Hills</i>	1	13	1%	<1%
<i>Montverde</i>	2	3	<1%	<1%
<i>Minneola</i>	1	3	<1%	1%
Grand Total	314	1423	100%	99.93%

Intersection Types

Approximately 30% of vehicle and bicycle KSI crashes occurred at intersections, compared to just 14% of pedestrian KSI crashes. Four-way intersections and T-intersections were the most common intersection geometries for these crashes, accounting for 18% and 15% of all KSI crashes, respectively.

The most frequent crash types at intersections included Left Turns, Right Angle, and Rear-End crashes. At four-way intersections, Left Entering and Right-Angle crashes were associated with 28% and 26% of KSI crashes, respectively. At T-intersections, Left Turns – both Entering and Leaving – were responsible for 42% of KSI crashes.

Summary

Between 2018 and 2023, Lake County experienced 314 traffic fatalities and 1,423 serious injuries, highlighting ongoing safety concerns despite a slight decline in the overall fatal crash rate. The Safety Analysis identified several critical trends and risk factors contributing to these serious crashes:

- **Lane Departure and Off-Road Crashes:** Lane departure crashes accounted for 42% of all fatal and serious injury (KSI) crashes, with unpaved shoulders increasing crash severity. Off-road crashes alone made up 20% of KSI crashes.
- **High-Risk Roadway Types:** State-owned roads had the highest proportion of KSI crashes (49%). Rural roads, 42% of which are County roads, had fewer total crashes, but a disproportionately high number of serious incidents.
- **Vulnerable Road Users:** Pedestrian and bicycle crashes were significantly more deadly than vehicle-only crashes. Pedestrian crashes were 4.7 times more likely to result in a fatality, and two-thirds of pedestrian KSI crashes occurred in urban areas, often at mid-block locations.
- **Intersections and Left-Turn Crashes:** While most pedestrian KSI crashes occurred away from intersections, nearly 30% of vehicle and bicycle KSI crashes happened at intersections, with left-turn and right-angle crashes being the most common serious collision types.
- **Nighttime and Impaired Driving:** Half of all fatal crashes occurred at night, and 35% of fatal crashes involved drugs or alcohol. The majority (64%) of drug- and alcohol-related KSI crashes happened after dark.

Crash Type Definitions

Left Entering	Vehicle directions of travel are opposite. One vehicle maneuver is turning left. One vehicle maneuver is straight ahead. Vehicle directions of travel after completing their respective maneuvers would have been perpendicular.
Left Leaving	Vehicle directions of travel are perpendicular. One vehicle maneuver is turning left. One vehicle maneuver is straight ahead. Vehicle directions of travel after completing their respective maneuvers would have been opposite.
Right Angle	Both vehicles are traveling straight ahead; their directions of travel are perpendicular. Right-angle crashes involve crashing into the right-hand side of the vehicle.

High Injury Network Analysis – Revised Draft

Introduction

A High Injury Network (HIN) is a data-driven tool used to identify the percentage of roadways where a disproportionate number of fatal and serious injury crashes occur. These networks are critical in understanding where countermeasures can have the greatest impact on reducing crashes that lead to life-altering injuries or deaths. By focusing resources on these high-risk roadways, counties and municipalities can address systemic safety challenges and make meaningful progress toward goals like Vision Zero, which aims to eliminate traffic-related fatalities and serious injuries.

The development of an HIN moves beyond simply analyzing crash histories; it provides critical insights into the patterns, characteristics, and systemic factors that contribute to crash risks. This method emphasizes prioritizing safety improvements on corridors where the potential for reducing serious crashes is highest. Such a targeted approach is a cornerstone of Lake County's Safety Action Plan, ensuring that investments in safety improvements are both effective and equitable.

This memorandum outlines Alta's methodology for analyzing crash data and developing the HIN for Lake County. It details the inputs, data preparation, and analytical processes required to identify high-injury corridors, offering a roadmap for addressing the most pressing safety issues in the county's transportation network.

Inputs

Alta used the following data sets to develop a High Injury Network for Lake County:

- 1) **Crash layer:** Six-year crash data (2018 – 2023) of all crashes listed as within the County, provided by Signal4Analytics.
 - Inclusive of motor vehicle, bicyclist, pedestrian, and motorcycle crashes within the County limits.
 - Removed crashes within the City of Mount Dora.
 - Removed crashes on limited-access highways, toll roads, interstates, and ramps from this analysis using ArcGIS Pro.
 - Filtered crashes to remove Property Damage Only (PDO) severity crashes.
 - Checked crash points for unique crash identification numbers to confirm no duplicate records were included.
- 2) **Street Centerlines:** Lake County GIS Streets
 - Removed limited-access highways, toll roads, interstates, and ramps.
 - Removed crashes within the City of Mount Dora.
 - Consolidated divided roads so that each roadway is represented by a single line.
 - Used "unsplit lines tool" to merge road segments based on road name and functional classification. This eliminates any arbitrary splits in the centerline shapefile.
 - Divided centerlines into segments of approximately 0.5 miles (2,640 ft.) each so that crashes can be summarized for segments of equal length. .
 - Created unique IDs for roadway segments.

Methodology

Alta used the following methodology to develop a High Injury Network for Lake County:

1. Prepare the Crash Data:

- a. Crashes were weighted based on the most serious injury sustained by any individual involved in the crash. This effectively prioritizes areas where more serious crashes are occurring to identify areas where the most serious injuries can be reduced. These proportions are based on the ratio of the average cost to society from fatal and serious crashes compared to minor injury crashes. While some analyses may weigh serious crashes higher in proportion to minor crashes, that can lead to every segment with a fatal crash being represented on the HIN. Using this ratio avoids overweighting fatal crashes that occur as isolated events so that the HIN can represent roadways with patterns of serious crashes.⁴
 - Fatal injury or serious injury: 4
 - Minor injury: 1
- b. Snap all “killed or seriously injured” (KSI) crashes within 250 feet of the street centerline network to a prepared network segment. This distance generally accounts for collisions on divided highways that occur far from the now-consolidated centerline (such as wide highways) but is not long enough to capture collisions that occurred in parking lots adjacent to roadways. 181 crashes further away than 250 feet from a roadway were not considered for this analysis. Crashes that were within 50 feet of a major road were snapped to the prepared network segments. This accounts for crashes at intersections between local roads and major roads. Crashes are joined to the higher speed and higher volume roadways rather than smaller side streets.

⁴ There are many calculations of average cost of serious and fatal crashes. The ratio shown here is based on FHWA’s *Crash Costs for Safety Analysis* (Harmon et al, 2018), table 17. The weights shown here are proportional to the average of the square root of costs to society of serious crashes (fatal and serious injury) compared to the baseline of minor-injury crashes. Source: <https://safety.fhwa.dot.gov/hsip/docs/fhwasa17071.pdf>.

2. Prepare the Street Network:

- c. Create a Rolling Window / Sliding Window feature class where the lines are extended over each road segment approximately 2,640 feet, or 0.5 miles, with a 25% overlap in each direction (660 feet), for a total rolling segment length of approximately 3,960 feet. Alta will use custom splitting tools that have an overlap percentage (Wasserman, 2023). Lines will overlap with adjacent lines by the 25% set percentage. This process allows rolling window statistics to be calculated on each road segment. The benefits of rolling window analyses are that they reduce the impact that dead-end streets, the [boundary effect](#) (where boundaries from the centerline file are imposed on unbounded crash data), or anomalous crashes have on the final HIN. Fundamentally, it better captures the linear corridor crash patterns where they exist (Fitzpatrick, 2018)⁵. The rolling window concept is illustrated in **Figure 1**.

3. Applied Rolling Window Analysis:

- d. Spatially joined the crash layer to the rolling window road network.
- e. Calculated the summed rolling crash weight for each rolling road segment. This sums the weight of crashes on each rolling segment to reflect total crash severity on each segment.
- f. Rejoined the rolling crash weight from the rolling window layer to the original centerline network to calculate the rolling crash weight per mile for each segment. This step normalizes the crash weight based on road length. For segments shorter than 0.25 miles, a minimum length of 0.25 miles was applied to prevent overrepresenting crashes on small road segments, as dividing by very small numbers can produce disproportionately large values.

⁵ These patterns would take into account collisions sometimes not directly on a particular segment in order to smooth out analysis results. Examples of this type of analysis are provided by FHWA in their [Guide Book on High Pedestrian Crash Locations](#).

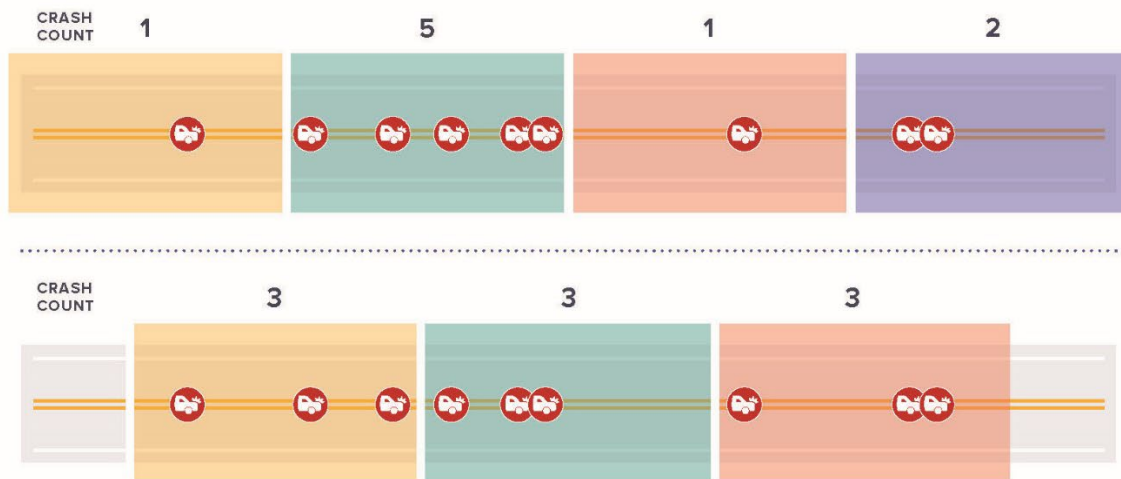
Alta Civic Analytics Explainer

Rolling Window Approach



Segmented roadways can be misleading.

The same roadway, segmented in two different ways, paints a different picture of where crashes are happening. Where segments get divided is somewhat arbitrary.



The rolling window approach more accurately represents crash count figures.

The rolling window approach helps mitigate bias caused by arbitrary segmentation.

Rolled crash counts are shown here for simplicity. In the analysis, a sum of crash weights is used, and then divided by the segment length to show the weighted crash rate per mile.

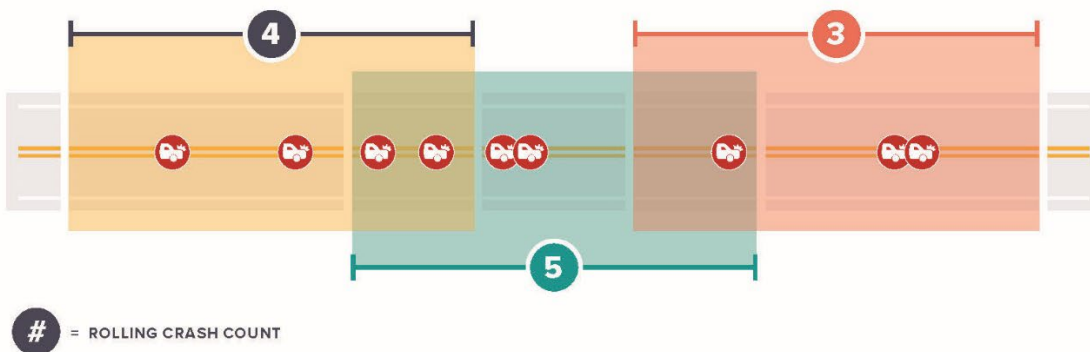


Figure 11: Rolling window approach.

4. Accumulate Crashes:

- a. Beginning with segments with the highest crash weight per mile, use Alta's custom-built *HIN Generation Tool* to progressively add segments to the HIN. This tool calculates the length in miles for each segment as it is added and keeps track of the cumulative miles in the HIN and the number of crashes occurring on those segments. It stops when the designated threshold of KSI collisions has been accumulated. The tool also generates a table that shows the number of crashes and the number of roadway miles accounted for with each HIN segment.
- b. Decide the threshold for the percentage of crashes included in the HIN by examining a graph of accumulated collisions and accumulated centerline miles and identifying the natural inflection point in the data. This represents the point at which adding more roadways to the HIN has diminishing returns in terms of identifying more crashes. An example graph is shown in **Figure 2**.

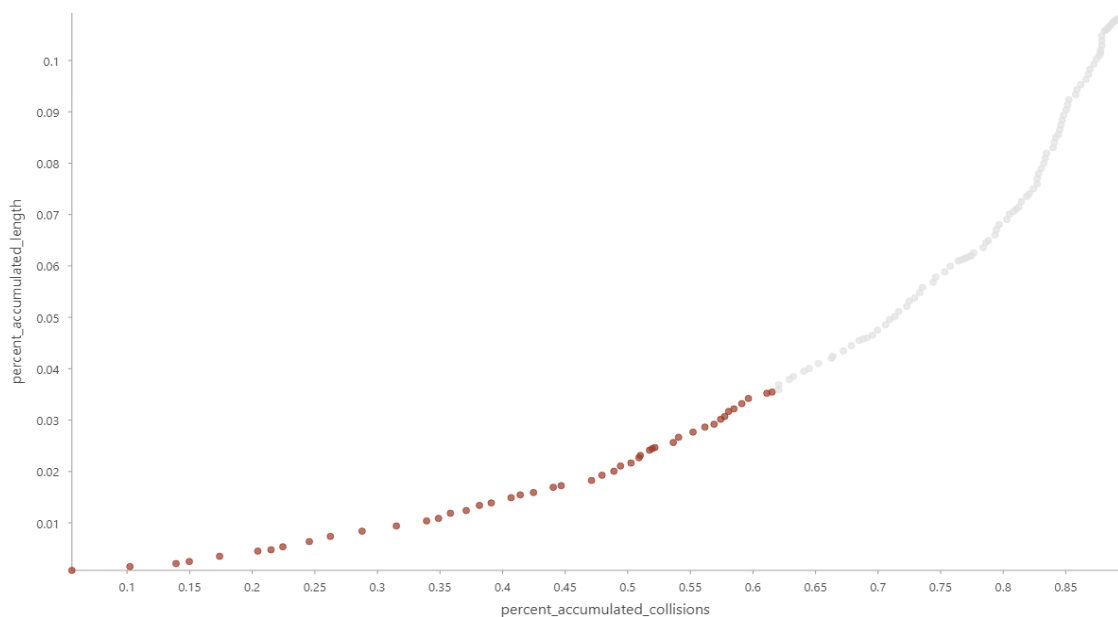


Figure 12: Example of a graph of accumulated collisions and accumulated centerline length. Collisions selected for the HIN are represented in brown.

5. Final Refinement:

- a. Examine the map of qualifying HIN segments and perform manual cleaning of the output from the tool. This step eliminates segments that the tool may have selected where no crashes have occurred. It also fills small gaps in otherwise contiguous networks on major roadways.
- b. Calculate the percentage of roadway miles and the percentage of KSI crashes accounted for in the final HIN.

Results

The **high injury network (HIN)** in Lake County spans **101 roadway miles**, accounting for **51% of injury crashes while representing just 2.8% of the total roadway network**. A full map showing the HIN is shown on *Map 1*. Of the 101 HIN miles in Lake County, 36 miles of the HIN are in unincorporated rural areas, while the remaining 65 miles are within incorporated areas of Lake County. The City of Clermont has the highest concentration of HIN miles, totaling 16.8 miles. The following table displays the HIN miles by municipality. **For the purposes of this analysis, Mount Dora was excluded.**

An interactive map showing the HIN results is available here: [Lake Co - HIN Ownership](#).

Table 3 - HIN Mileage by Municipality

City	HIN Miles	Total Centerline Miles**	HIN Percentage of Centerline Miles
Unincorporated Areas	35.4	2,344.4	1.5%
Clermont	16.8	269.3	6.2%
Leesburg	14.5	238.1	6.1%
Eustis	10	146.8	6.8%
Lady Lake	7	126.4	5.5%
Tavares	6.4	131.4	4.9%
Groveland	5.8	141.5	4.1%
Fruitland Park	3.1	72.4	4.1%
Mascotte	1.4	58.4	2.4%
Umatilla	0.4	39.6	1.0%
Minneola	0.3	99.5	0.3%
Astatula	0	23.5	0.0%
Howey-in-the-Hills	0	22.1	0.0%
Mont Verde	0	19.1	0.0%
Total	101.3	3,732.5	2.8%

***excludes interstates and ramps*

The High Injury Network in Lake County is predominantly concentrated on higher-speed, higher-capacity roadways, which are typically under the jurisdiction of the State or County. Notably, 74% of the HIN is on FDOT-maintained roads.

Table 4 - HIN by Ownership

Roadway Jurisdiction	HIN Miles
State	73.6
County	24.9
Local	1.18
Unincorporated	0.51

As outlined in the methodology, the HIN prioritizes roadways based on the number and severity of crashes occurring on them. The table below displays the roadways with the highest overall weighted crash severity index, which corresponds to roads with the highest total number of serious crashes.

Table 5 - Top 25 HIN Segments Overall

Street Name	From Street	To Street	Crash Severity Index	Number of Fatalities	Jurisdiction	Location
Us Hwy 192	Kersey St	Bail Blvd	283.6	4	State	Unincorporated Lake County
E Hwy 50	Miss Florida Ave	Summit Greens Blvd	272.0	0	State	Clermont
Citrus Blvd	S Dixie Ave	Picciola Rd	195.9	2	State	Leesburg, Fruitland Park, Unincorporated
E Hwy 50	Almond St	US HWY 27	193.7	2	State	Clermont
N 14th St	William St	Palm Plaza Shopping Center	187.7	1	State	Leesburg
N 14th St	Picciola Rd	N Shore Dr	184.0	3	State	Leesburg
Us Hwy 192	US HWY 27	Kersey St	164.0	1	State	Unincorporated Lake County
Sr 50	Summit Greens Blvd	Orange Lake Blvd	158.4	0	State	Clermont
Us Hwy 27	Cagan Park Ave	US HWY 192	157.3	1	State	Unincorporated Lake County
US Hwy 27	Avenida Cuarta	Cagan Park Ave	153.3	4	State	Unincorporated Lake County
S 14th St	Buena Vista Ave	Gunston St	153.2	0	State	Leesburg

N US Hwy 27/441	Griffin Ave	2nd St	147.8	0	State	Lady Lake
W North Blvd	Perkins St	N Palmetto St	145.7	1	State	Leesburg
E Main Street	Nichols Dr	Ice Cream Rd	138.7	2	State	Leesburg
N Duncan Dr	W Burleigh Blvd	N Lake Ave	138.5	0	State	Tavares
N Us Hwy 27	Southern Breeze Dr	S Grassy Lake Rd	138.3	1	State	Unincorporated Lake County
E Hwy 50	Helen St	Champions Way	137.4	2	State	Clermont
S Us Hwy 27	US Hwy 27	Brogden Dr	135.5	1	State	Clermont
E Hwy 50	Orange Lake Blvd	Castle Hills Rd	134.5	1	State	Clermont
E Hwy 50	East Ave	Almond St	133.5	0	State	Clermont
N 14th St	Cauthen Cir	W Main St	133.3	0	State	Leesburg
US Hwy 441	US 41	Professional Dr	132.3	0	State	Leesburg
W Hwy 50	12th St	Lake Ave	131.8	0	State	Clermont
E Burleigh Blvd	N New Hampshire Ave	Lake Eustis Dr	126.6	1	State	Tavares
E North Blvd	Mills St	Sunnyside Dr	125.6	0	State	Leesburg

****This calculation is based on the “number of fatalities” attribute in the crash data. In some instances, there are more than one fatality per crash event.**

Table 7 - Top 3 High Injury Roads by Municipality

City	Municipal Rank	Street Name	To	From	Ownership	Crash Severity Score	Overall HIN Ranking
ASTATULA	1	CR 48	Layliane Drive	Ranch Street	County	29.68	not on county HIN
	2	CR 561	Alabama Ave	Virginia Ave	County	20.57	not on county HIN
	3	CR 561	Virginia Ave	Westbrock Rd	County	11.87	not on county HIN
CLERMONT	1	E HWY 50	Summit Greens Blvd	Miss Florida Ave	State	271.99	2
	2	E HWY 50	US HWY 27	Almond St	State	193.69	4
	3	SR 50	Orange Lake Blvd	Summit Greens Blvd	State	158.38	8

EUSTIS	1	S BAY ST	US HWY 441	W Seminole Ave	State	106.41	38
	2	US HWY 441	Kurt St	T H Poole Rd	State	96.35	48
	3	US HWY 441	T H Poole Rd	Mount Homer Rd	State	86.72	63
FRUITLAND PARK	1	US HWY 27/441	Grays Airport Rd	Lake Ella Rd	State	122.62	30
	2	US HWY 27/441	S Dixie Ave	Forest St	State	90.43	60
	3	US HWY 27/441	E Berckman St	N Dixie Ave	State	72.81	78
GROVELAND	1	US HWY 27	Howey Rd	Obrien Rd	State	110.22	35
	2	SR 33	E Anderson Rd	E Broad St	State	90.89	56
	3	E ORANGE ST	SR 33	S Main Ave	State	62.15	102
HOWEY-IN-THE-HILLS	1	S PALM AVE	E Central Ave	S Dixie Dr	State	19.17	not on county HIN
	2	SR 19	Porto Fino Bay	Little Lake Harris Bridge	State	16.80	not on county HIN
	3	S PALM AVE	Revels Rd	South of S Florida Ave	State	14.38	not on county HIN
LADY LAKE	1	N US HWY 27/441	2nd St	Avenida Central	State	147.81	12
	2	N US HWY 27/441	Lady Lake Blvd	Water Oak Blvd	State	122.79	28
	3	N US HWY 27/441	Teague Trl	Rolling Acres Rd	State	120.01	31
LEESBURG	1	CITRUS BLVD	Picciola Rd	S Dixie Ave	State	195.89	3
	2	N 14TH ST	Palm Plaza Shopping Center	William St	State	187.72	5
	3	CITRUS BLVD	N Shore Dr	Picciola Rd	State	184.02	6

MASCOTTE	1	EAST MYERS BLVD	American Legion Rd	N Sunset Ave	State	65.62	93
	2	BLUFF LAKE RD	SR 50	towards N Sunset Ave	county	56.17	128
	3	WEST MYERS BLVD	N Sunset Ave	Elizabeth Ave	State	44.49	176
MINNEOLA	1	E WASHINGTON ST	E Washington St	US HWY 27	local	90.47	59
	2	N HANCOCK RD	Hamlin Ridge Road	Fox Trail Ave	Local	21.62	not on county HIN
	3	OLD HWY 50	E Washington St	Forestwood Dr	Local	17.08	not on county HIN
MONTVERDE	1	SEVENTH ST	Highland Ave	Morningside Dr	County	8.01	not on county HIN
	2	SIXTH ST	Porter Ave	Division Street	Local	4.00	not on county HIN
	3	CR 455	Gladys St	7th Street	County	1.61	not on county HIN
TAVARES	1	N DUNCAN DR	N Lake	W Burleigh Blvd	State	138.52	15
	2	E BURLEIGH BLVD	Lake Eustis Dr	N New Hampshire Ave	State	126.64	24
	3	W BURLEIGH BLVD	N New Hampshire Ave	Orange Ave	State	105.22	39
UMATILLA	1	N CENTRAL AVE	W Ocala St	Owens St	State	58.39	116
	2	S CENTRAL AVE	Mebane Street	Ball Park Road	State	28.70	Not on county HIN

	3	CR 450	Charles Osborne Road	W 9th Street	County	26.79	Not on county HIN
--	---	--------	----------------------	--------------	--------	-------	-------------------

County Roads

Twenty-five miles of the high injury network fall on county-maintained roadways. Among the highest-ranking segments, most (16) are in unincorporated areas in Lake County. The most common jurisdictions for county-road crashes include Clermont and Eustis.

Table 6 - Top 25 HIN Segments on County Roads

Street Name	From Street	To Street	Jurisdiction	Crash Severity Index	Overall Rank	Local Public Agency
Hancock Rd	E HWY 50	Greater Pines Blvd	County	93.1	52	Clermont
E Washington St	US HWY 27	E Washington St	County	90.5	59	Minneola
CR 44	Shady Acres Rd	N Silver Lake Rd	County	87.8	62	Unincorporated Lake County
CR 33	Lake Thomas Rd	Charter Ln	County	81.4	71	Unincorporated Lake County
CR 44	N Silver Lake Rd	Hill Rd	County	68.9	85	Unincorporated Lake County
CR 474	Chapel Baptist Church	US HWY 27	County	68.2	86	Unincorporated Lake County
Holly Dr	N HWY 19 A	W Old US Highway 441	County	67.8	87	Unincorporated Lake County
HWY 466	Rolling Acres Rd	Clay Ave	County	67.4	89	Lady Lake, unincorporated
Deerwood Farms Rd	Wekiva Pkwy	CR 433	County	62.6	101	Unincorporated Lake County
CR 44	Fernery Rd	Oak Dr	County	62.1	103	Unincorporated Lake County
HWY 466	Chula Vista Ave	Rolling Acres Rd	County	61.7	104	Unincorporated Lake County
E Orange Ave	N Bay St	N Exeter St	County	57.6	119	Eustis
N Dixie Ave	US HWY 27	E Miller St	County	56.3	126	Fruitland Park

Bear Pond Dr	Wekiva Pines Blvd	N/A	County	56.3	127	Unincorporated Lake County
Bluff Lake Rd	towards N Sunset Ave	SR 50	County	56.2	128	Mascotte
CR 455	Great Lawn Way	SR 50	County	55.5	131	Clermont, unincorporated
CR 44	Oak Dr	Rhett Rd	County	55.4	133	Unincorporated Lake County
CR 44	Rotary Dr	N HWY 19	County	55.1	134	Eustis
CR 33	3rd St	CR 48	County	54.7	135	Unincorporated Lake County
Sorrento Ave	Lawrence St	4th St	County	54.6	136	Unincorporated Lake County
CR 561	SR 19	Dora Blvd	County	53.8	142	Tavares
Hancock Rd	Trade Ave	Windy Mount Cir	County	53.0	145	Clermont
CR 561	US HWY 27	CR 561A	County	52.1	147	Unincorporated Lake County
Lake Saunders Dr	US HWY 441	Dora Ave	County	52.0	149	Eustis
Sorrento Ave	Payne Rd	Carroll St	County	51.8	151	Unincorporated Lake County

Local Roads

Roadways under local ownership in Lake County are primarily residential roads with lower speeds and carry lower vehicle volumes. Accordingly, these are less likely to feature crashes that result in a fatal or serious injury. Of the roadways identified in the HIN, three are locally maintained roads. Table 7 includes additional research into crash hot-spots on local roads in Lake County. The results are broken out by municipality. Only roadways with at least one KSI (Killed or Serious Injury) crash are included. Astatula, Howey-In-The-Hills, Montverde, and Umatilla did not have any KSI crashes on local roads.

Table 7 - HIN Roads on Local Roads

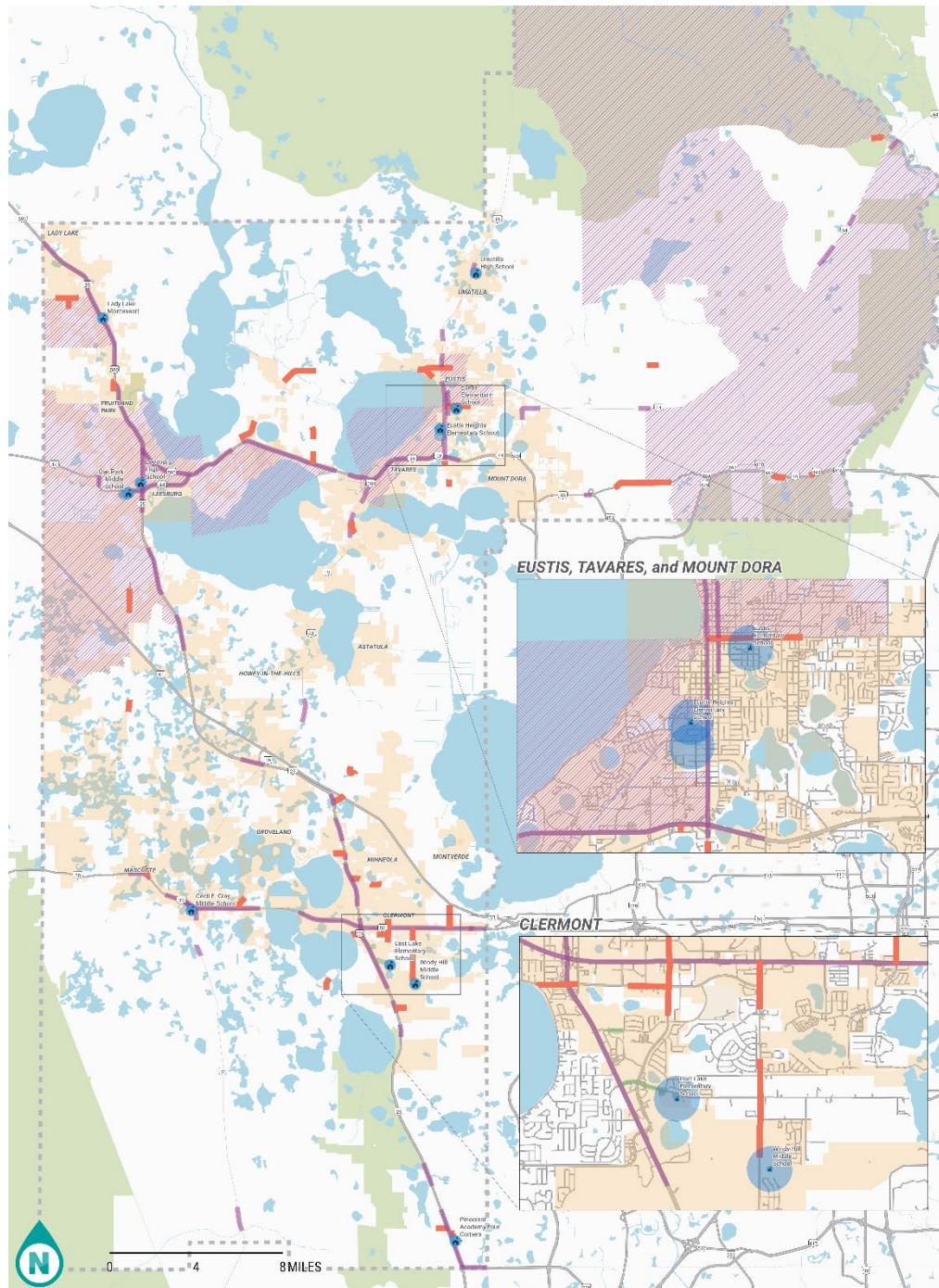
Street Name	From Street	To Street	Jurisdiction	Crash Severity Index	Overall Rank	Location
Steves Rd	Cross Ridge Rd	Hastings Blvd	Local	96.0	49	Clermont
Johns Lake Rd	US HWY 27	Eagle Lake Dr	Local	51.0	156	Clermont
Avenida Central	Alvarez Ave	US HWY 27	Local	40.7	196	Lady Lake

Table 8 - Top High Injury Local Roads by Municipality

City	Municipal Rank	Street Name	To	From	Ownership	Crash Severity Score	Overall HIN Ranking
ASTATULA	<i>No Fatal or Serious Injury crashes on local roads.</i>						
CLERMONT	14	STEVES RD	Linkwood Ave	US HWY 27	Local	96.0	49
	27	JOHNS LAKE RD	Eagle Lake Dr	US HWY 27	Local	60.0	156
	38	SANDHILL VIEW BLVD	Hooks St	E HWY 50	Local	36.0	Not on county HIN
EUSTIS	30	LAKEVIEW AVE	Lakeview Ct	Orange Ct	Local	28.0	Not on county HIN
	33	LAKEVIEW AVE	Bay St	Atwater Ave	Local	26.28	Not on county HIN
	36	ATWATER AVE	Bay St	Lakeview Ave	Local	26.0	Not on county HIN
FRUITLAND PARK	31	MOYER LP	Drake Dr	Manly Pl	Local	9.70	Not on county HIN
GROVELAND	33	BIBLE CAMP RD	Arnold St	Villa City Rd	Local	14.3	Not on county HIN
	45	SILVER MAPLE RD	Balmy Coast Rd	n/a	Local	5.40	Not on county HIN
HOWEY-IN-THE-HILLS	<i>No Fatal or Serious Injury crashes on local roads.</i>						
LADY LAKE	18	PAIGE PL	Morse Blvd	Main St	Local	34.86	Not on county HIN
	23	MAIN ST/ALVEREZ AVE	Del Mar Dr	N US HWY 27/441	Local	22.79	Not on county HIN
	24	LAGRANDE BLVD	Griffin Ave	N US HWY 27/441	Local	19.50	Not on county HIN
LEESBURG	47	MONTCLAIR RD	McCormack St	Colonial St	Local	24.47	Not on county HIN

	52	N LAKE ST	Main St	N BLVD	Local	20.0	Not on county HIN
	54	PINE ST	Lake St	Canal St	Local	19.49	Not on county HIN
MASCOTTE	14	BAY RIDGE LP	Bay Lake Rd	n/a	Local	5.57	Not on county HIN
MINNEOLA	21	FORESTWOOD DR	Old HWY 50 W	South Ave	Local	4.52	not on county HIN
	22	EDUCATION AVE	Grassy Lake Rd	US HWY 27	Local	4.22	not on county HIN
MONTVERDE	<i>No Fatal or Serious Injury crashes on local roads.</i>						
TAVARES	34	PARK DR	Lake Ave	n/a	Local	12.0	not on county HIN
	35	RUBY ST	Sinclair Ave	N New Hampshire Ave	Local	12.0	not on county HIN
UMATILLA	<i>No Fatal or Serious Injury crashes on local roads.</i>						

Map 1 - High Injury Network



LAKE COUNTY, FL HIGH INJURY NETWORK (HIN) AND DEMONSTRATION PROJECT LOCATIONS

- Legend**
- High Injury Network (HIN)
 - Schools Near HIN
 - Schools Near HIN (1/4 Mile Buffer)
 - Unfunded Sidewalks (Near HIN Schools)
 - SS4A Underserved Communities
 - Ownership
 - State
 - County
 - Local

State Roads

As stated in the safety action plan components section on the [Safe Street and Roads for All \(SS4A\) website](#), the geospatial identification of higher-risk locations should include all roadways within the jurisdiction with a demonstrated safety need, irrespective of ownership. Accordingly, the HIN includes state-maintained roads. The list of the top HIN segments on state roads can be leveraged for further collaboration with FDOT and to advocate for the incorporation of safety-improvements into planned FDOT roadway projects.

Table 8. Top 10 HIN Segments on State Roads

Street Name	From Street	To Street	Jurisdiction	Crash Severity Index	Overall Rank	Location
Us Hwy 192	Kersey St	Bail Blvd	State	283.6	1	Unincorporated Lake County
E Hwy 50	Miss Florida Ave	Summit Greens Blvd	State	272.0	2	Clermont
Citrus Blvd	S Dixie Ave	Picciola Rd	State	195.9	3	Leesburg, Fruitland Park, Unincorporated
E Hwy 50	Almond St	US HWY 27	State	193.7	4	Clermont
N 14th St	William St	Palm Plaza Shopping Center	State	187.7	5	Leesburg
N 14th St	Picciola Rd	N Shore Dr	State	184.0	6	Leesburg
Us Hwy 192	US HWY 27	Kersey St	State	164.0	7	Unincorporated Lake County
Sr 50	Summit Greens Blvd	Orange Lake Blvd	State	158.4	8	Clermont
Us Hwy 27	Cagan Park Ave	US HWY 192	State	157.3	9	Unincorporated Lake County
Us Hwy 27	Avenida Cuarta	Cagan Park Ave	State	153.3	10	Unincorporated Lake County

Conclusion

The development of the High Injury Network for Lake County has identified the roadways where targeted safety interventions can have the greatest impact on reducing serious crashes and saving lives. The HIN analysis resulted in the following key findings:

- The HIN spans 101 roadway miles, which accounts for 51% of all injury crashes while representing just 2.8% of the County's total roadway network.

- Serious crashes in Lake County are concentrated on higher-speed, higher-capacity roads – 74% of the HIN is under State jurisdiction – underscoring the need for strong collaboration with FDOT.
- The City of Clermont has the highest concentration of HIN roadway miles, totaling 16.8 miles.
- More than 1/3 of Lake County’s HIN includes roadways within unincorporated areas of the county that tend to be more rural. However, the HIN is overrepresented in urban areas (particularly Clermont, Leesburg, and Eustis), where the HIN makes up a larger percentage of the roadway network.

These findings highlight the need for a data-driven, focused approach to improving traffic safety in Lake County. As Lake County advances its Safety Action Plan, the HIN will serve as a critical tool for prioritizing investments and achieving measurable progress toward the County’s goal of eliminating traffic crashes that result in deaths or serious injuries.

References

- Fitzpatrick, K. A. (2018). *Guidebook on Identification of High Pedestrian Crash Locations. FHWA-HRT-17-106. Supplemental Material*. McLean, VA: Federal Highway Administration Office of Safety Research and Development.
- Harmon, T. G. (2018). *Crash Costs for Highway Safety Analysis. Report No. FHWA-SA-17-071*. Washington, D.C.: Federal Highway Administration.
- Wasserman, D. (2023, March 30). Study-Line-Editor. Portland, OR, USA. Retrieved from <https://github.com/d-wasserman/study-line-editor/tree/dev>

Crash Profiles Analysis

This crash profile analysis reviewed reported crashes in Lake County from 2018 to 2023 to identify common contributing factors and attributes. Consistent with the Safe Roads and Streets for All (SS4A) framework, the analysis focused on crashes resulting in fatalities or incapacitating injuries. The analysis examined various crash characteristics, including crash types (e.g., rear-end, roadway departure), driver behavior, roadway and intersection features, the presence of pedestrian and bicycle facilities, and environmental and contextual factors such as time of day, weather, and adjacent land use. Through this review, combinations of attributes frequently associated with crashes – especially those overrepresented in fatality and serious injury crashes – were synthesized into three primary crash profiles. The analysis also identified roadway corridors where one or more of these crash profiles were significantly clustered.

Methodology

Alta conducted a crash pattern analysis using crosstabulations to examine crash factors and identify shared characteristics, with an emphasis on those disproportionately linked to fatal and incapacitating injury crashes. This analysis focused on two sets of crash data: the first includes all crashes that occurred on local, county, and state roads in Lake County (excluding interstates), while the second includes only crashes that occurred on local and county roads (excluding all state-maintained roads).

The analysis was based on crash, roadway, and land use attribute data provided by the Florida Department of Transportation, Lake County, and the Lake-Sumter Metropolitan Planning Organization. As part of the analysis, Alta evaluated two-factor attribute combinations across both datasets. Combinations were selected for further review if they met the following criteria:

- They were present in more than **1%** of all reported crashes between 2018 and 2023 for the relevant dataset. Focusing analysis on contextual factors that occur across a significant sample size of crashes allows for countermeasures that can be widely used or matched to grant funding for systemic improvements. For the first dataset, representing all roads, this figure represents approximately **422** reported crashes. For the second dataset, representing local and county roads only, this figure represents approximately **170** reported crashes.
- They represented a higher share of fatalities or incapacitating injuries compared to their share of all crashes.

This initial list was then refined using additional variables that provided more detailed descriptions of crash circumstances and showed potential for mitigation through roadway safety countermeasures.

To support this memo, the project team is including the spreadsheet used to apply the above methodology. This Excel file includes the following sheets:

- **Crash Profile Attributes:** includes all crashes and associated crash, roadway, and land use attributes contributing to this analysis. Each row represents a single traffic crash. A second version of this sheet (suffix “noState”) excludes all crashes occurring on state roads.
- **Crash Profile Tables:** includes several pivot tables representing combinations of crash attributes, used to assess the crash severity outcomes associated with different combinations. Dozens of contextual factors were assessed as potential profiles, with the results of the Systemic Safety Analysis guiding this investigation. A second version of this sheet (suffix “noState”) excludes all crashes occurring on state roads from the data output.
- **Crash Profile Determination:** includes a selection of potential crash profiles shortlisted as potential candidates for further analysis. Statistical values were calculated for each; the respective formulas are preserved in the sheet. Those deemed to be best suited for further analysis (through calculating statistical significance and assessing the suitability of each for systemic intervention) were eventually selected as the three profiles expanded on below.

Crash Profile Summary

Alta identified three crash profiles (i.e. groups of crashes that share similar characteristics) for all roads and three crash profiles for local and county roads, specifically. These profiles were selected based on the volume of crashes they represent and the presence of factors that are disproportionately associated with fatalities or serious injuries. Profiles were also selected based on their applicability for both datasets.

A summary of the profiles is provided in **Table 1** (local and county roads only) and **Table 2** (all roads). Each profile includes:

- **Crash Type:** the categorization of crashes in the profile as recorded in statewide traffic crash reports assembled by Signal 4 Analytics.
- **Contextual Factor(s):** one or more additional elements (such as posted speed limit, lighting condition, or location along roadway segment) which, in combination with the overall crash type, correlate with a higher incidence of fatal and serious injury crashes.
- **Share of all Crashes:** the percentage of crashes in the crash profile, divided by all crashes in the relevant dataset (county and local roads or all roads).
- **Share of Fatal and Serious Injury Crashes:** the percentage of fatal and serious injury crashes in this profile divided by all fatal and serious injury crashes in the relevant dataset (county and local roads or all roads).
- **Fatal and Serious Injury Crash Multiplier:** the percentage of fatal and serious injury crashes divided by the percentage of all crashes. This is based on the methodology established by FHWA.⁶ The Fatal and

⁶ <https://highways.dot.gov/safety/zero-deaths/applying-safety-data-and-analysis-performance-based-transportation-planning-2>

Serious Injury Crash Multiplier measures how high-severity crashes compare to all crashes within a given profile. A higher value indicates that crashes in a profile are correlated with a disproportionate share of fatal and serious injury crashes relative to their quantity. A value of less than one suggests that crashes in a profile are correlated with a disproportionately low share of fatal and serious injury crashes relative to their quantity. In short, this metric shows whether certain crash types or locations are disproportionately dangerous. In this case, all selected profiles have high multipliers, indicating they are strongly associated with fatalities or serious injuries.

Table 1: Crash Profile Summary, County and Local Roads Only

Profile Number	Profile Name	Crash Type (FDOT)	Contextual Factor(s)	Number of Crashes	Share of All Crashes	Share of <u>Fatal and Serious Injury</u> Crashes	FHWA Risk Ratio
1A	Off-Road Crashes on High-Speed, Rural Roads	Off-Road	Rural 40+ mph road	874	5.10%	15.51%	3.27x
2A	Left Turn Crashes at Unsignalized Intersections	Left Turn	Unsignalized Intersections	1,361	7.94%	10.48%	1.46x
3A	Midblock Pedestrian-Involved Crashes	Pedestrian-Involved	Midblock (Not at Intersection)	392	2.29%	7.48%	3.44x

Detailed descriptions of each profile and example locations are included in this memo, followed by maps illustrating the locations of crashes within each profile. These maps are also available on the project's interactive web map:

<https://apd.maps.arcgis.com/apps/instant/basic/index.html?appid=6023d728dea64753b2801c60b7aaf69b>

Table 2: Crash Profile Summary, All Roads

Profile Number	Profile Name	Crash Type (FDOT)	Contextual Factor(s)	Number of Crashes	Share of All Crashes	Share of <u>Fatal and Serious Injury</u> Crashes	FHWA Risk Ratio
1	Off-Road Crashes on High-Speed, Rural Roads	Off-Road	Rural 40+ mph road	1,419	3.36%	10.68%	3.43x
2	Left Turn Crashes at Unsignalized Intersections	Left Turn	Unsignalized Intersections	2,795	6.62%	11.81%	2.05x
3	Midblock Pedestrian-Involved Crashes	Pedestrian-Involved	Midblock (Not at Intersection)	586	1.39%	7.44%	5.71x

Profile 1: Off-Road Crashes on High-Speed (40+ mph), Rural Roads

Profile	Includes	Number of Crashes	Share of All Crashes	Share of <u>Fatal and Serious Injury</u> Crashes	Fatal and Serious Injury Crash Multiplier
1	All Roads	1,419	3.36%	10.68%	3.43x
1A	Local and County Roads Only	874	5.10%	15.51%	3.27x

Off-road crashes typically involve a vehicle leaving the roadway and either overturning or striking a fixed object, such as a tree, utility pole, or ditch. Crashes in this profile were three times more likely to result in a fatal or serious injury crash than their quantity alone would suggest, including crashes only occurring on local or county roads. Higher vehicle speeds are associated with a greater risk of fatality or serious injury. An urban land use context may include roadway elements (such as a divided facility, signalized or stop-controlled intersections, or the increased presence of other traffic) that control driver speed and result in a lower incidence of serious injury; these features are generally less common or frequent in rural areas. Roadway lighting conditions for crashes in this profile are also correlated with a greater incidence of serious injury; though dark, unlit crashes account for approximately 6% of all fatal and serious injury crashes on rural roads, they account for 40% of fatal and serious injury crashes in this profile. This profile is mapped in **Figure 1**.

Corridors experiencing fatal or serious injury crashes matching this profile include:

- **CR 474 between SR 33 and US HWY 27 in Clermont** [AADT 5800 | Speed Limit 55 MPH]

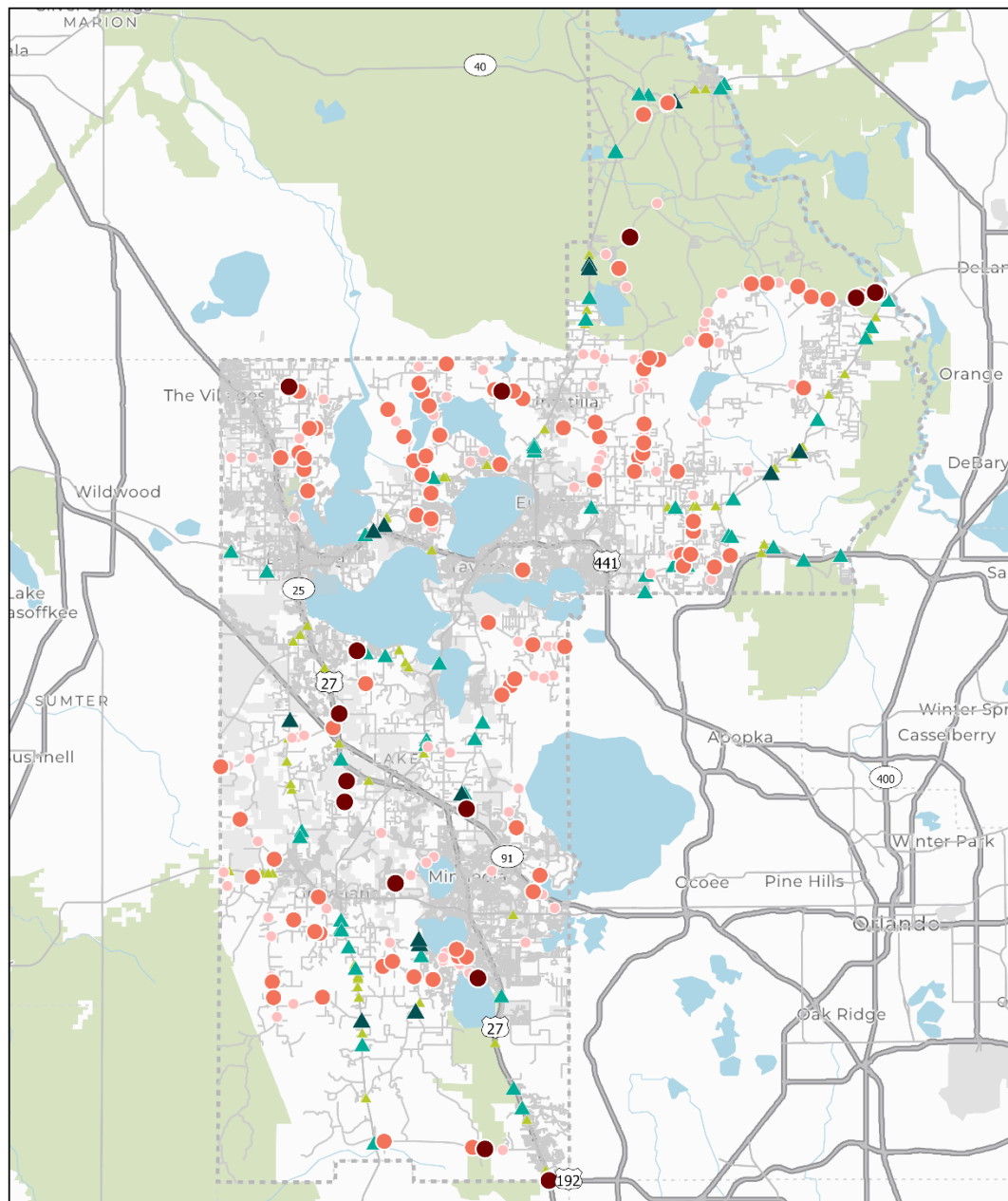


- **Tuscanooga Rd** between Honeycut Rd and W Myers Blvd in Mascotte [AADT 600 | Speed Limit 40 MPH]



- **Lake Unity Rd** between Eagles Nest Rd and Picciola Rd in Fruitland Park [AADT 4700 | Speed Limit 45 MPH]





LAKE COUNTY, FL CRASH PROFILE #1

OFF-ROAD CRASHES ON
HIGH-SPEED, RURAL ROADS

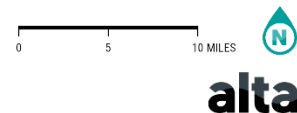
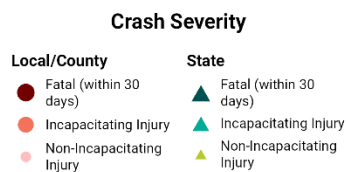


Figure 1: Crash Profile 1: Off-Road Crashes on High-Speed, Rural Roads

Profile 2: Left Turn Crashes at Unsignalized Intersections

Profile	Includes	Number of Crashes	Share of all Crashes	Share of <u>Fatal and Serious Injury Crashes</u>	Fatal and Serious Injury Crash Multiplier
2	All Roads	2,795	6.62%	11.81%	2.05x
2A	Local and County Roads Only	1,361	7.94%	10.48%	1.46x

Left turn crashes at unsignalized intersections are the most frequently occurring crash profile across both datasets and one of the most common crash types associated with a higher risk of fatality or serious injury. Injury crashes in this profile typically involve a vehicle turning onto a major roadway from a local street or driveway – or vice versa – at locations without traffic signals, where higher travel speeds increase the likelihood of serious injury or fatal crashes. This profile accounts for over 6% of all crashes and over 7% of local and county road crashes, and over 10% of fatal or serious injury crashes occurring across both datasets. T-intersections are the most common intersection type in this profile, but other configurations, such as four-way and Y-intersections, are similarly likely to result in a fatal or serious injury crash. This profile is mapped in **Figure 2**.

Corridors experiencing fatal or serious injury crashes matching this profile include:

- **N 14th St** between Dixie Ave and Main St in Leesburg [AADT 22500 | Speed Limit 35 MPH]

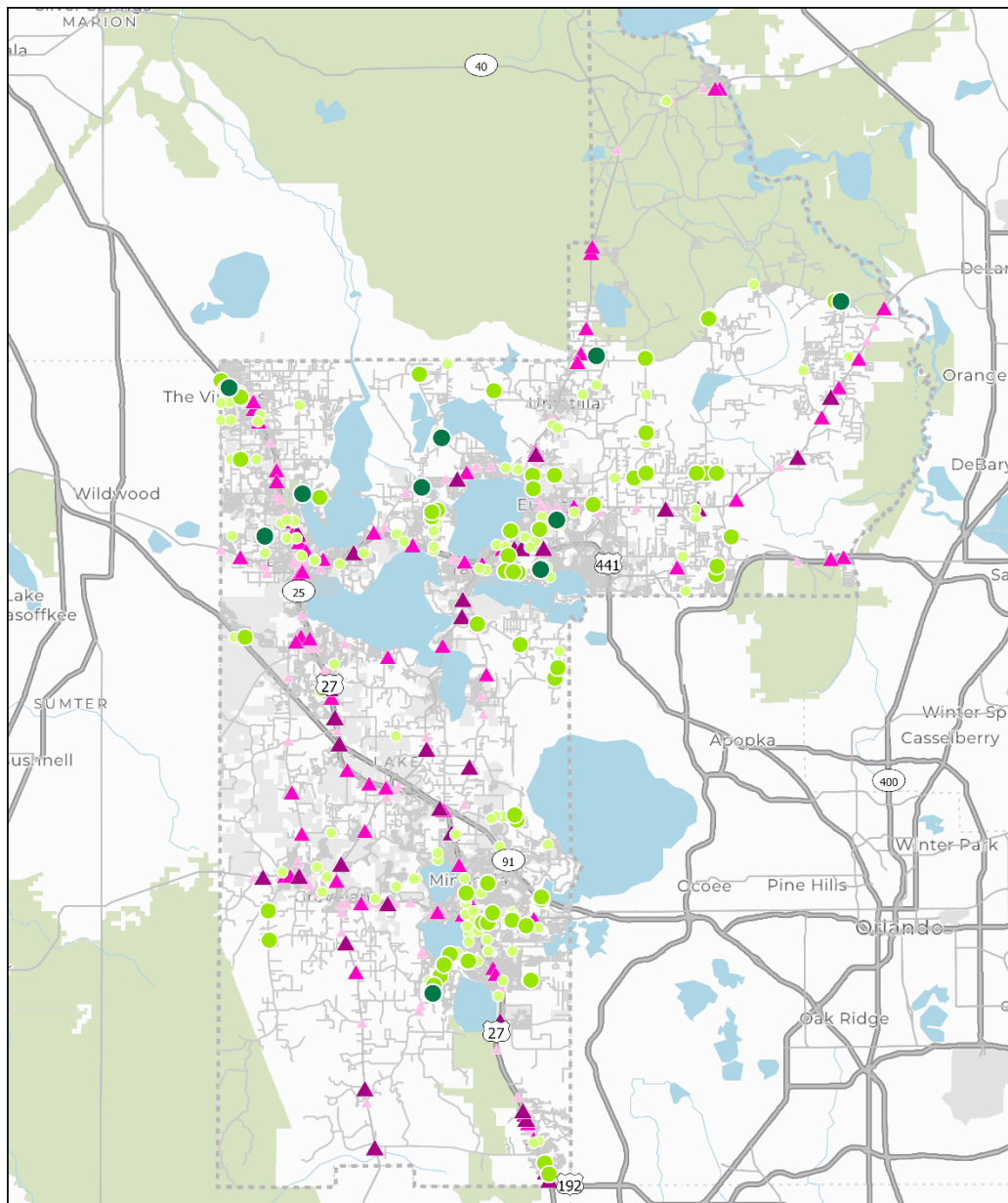


- **Hammock Ridge Rd** between Spangled Ln and US HWY 27 in Clermont [AADT 18600 | Speed Limit 45 MPH]



Pine Island Road between SR 33 and Monte Vista Road in Clermont [AADT 1650 | Speed Limit 45 MPH]





**LAKE COUNTY, FL
CRASH PROFILE #2**
*LEFT TURN CRASHES AT
UNSIGNALIZED INTERSECTIONS*

Crash Severity

County/Local	State
● Fatal (within 30 days)	▲ Fatal (within 30 days)
● Incapacitating Injury	▲ Incapacitating Injury
● Non-Incapacitating Injury	▲ Non-Incapacitating Injury

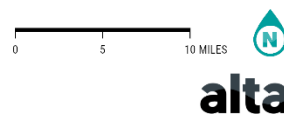


Figure 2: Crash Profile 2: Left Turn Crashes at Unsignalized Intersections

Profile 3: Midblock Pedestrian-Involved Crashes

Profile	Includes	Number of Crashes	Share of All Crashes	Share of <u>Fatal and Serious Injury</u> Crashes	Fatal and Serious Injury Crash Multiplier
3	All Roads	586	1.39%	7.44%	5.71x
3A	Local and County Roads Only	392	2.29%	7.48%	3.44x

Midblock crashes refer to crashes that occur away from intersections. This profile accounts for 81% of all pedestrian crashes in Lake County, with the remaining crashes occurring at intersections (including all signalization and intersection configurations). While fatalities made up about 20% of the countywide ‘fatal or serious injury’ crashes, they make up 38.7% of that subset here. Crashes involving pedestrians are generally among the most likely to result in a serious or fatal injury, owing to the vulnerability of the pedestrian as a road user. Crashes in this profile accounted for over 7% of the fatal and serious injury crashes across both datasets, despite only accounting for between 1 and 3% of overall crashes.

These crashes are concentrated along major corridors where traffic volumes and speeds are high, and crosswalks are spaced farther apart. While most crashes in this profile occurred during daylight, fatal or serious injury crashes were more likely to happen under dark, unlit conditions, which significantly increased the risk. This profile is mapped in **Figure 3**.

Corridors experiencing fatal or serious injury crashes matching this profile include:

- **Citrus Tower Blvd between E HWY 50 and Excalibur Rd in Clermont** [AADT 1900 | Speed Limit 40 MPH]



- ***S Grand Hwy*** between Pitt St and E HWY 50 in Clermont [AADT 3700 | Speed Limit 35 MPH]



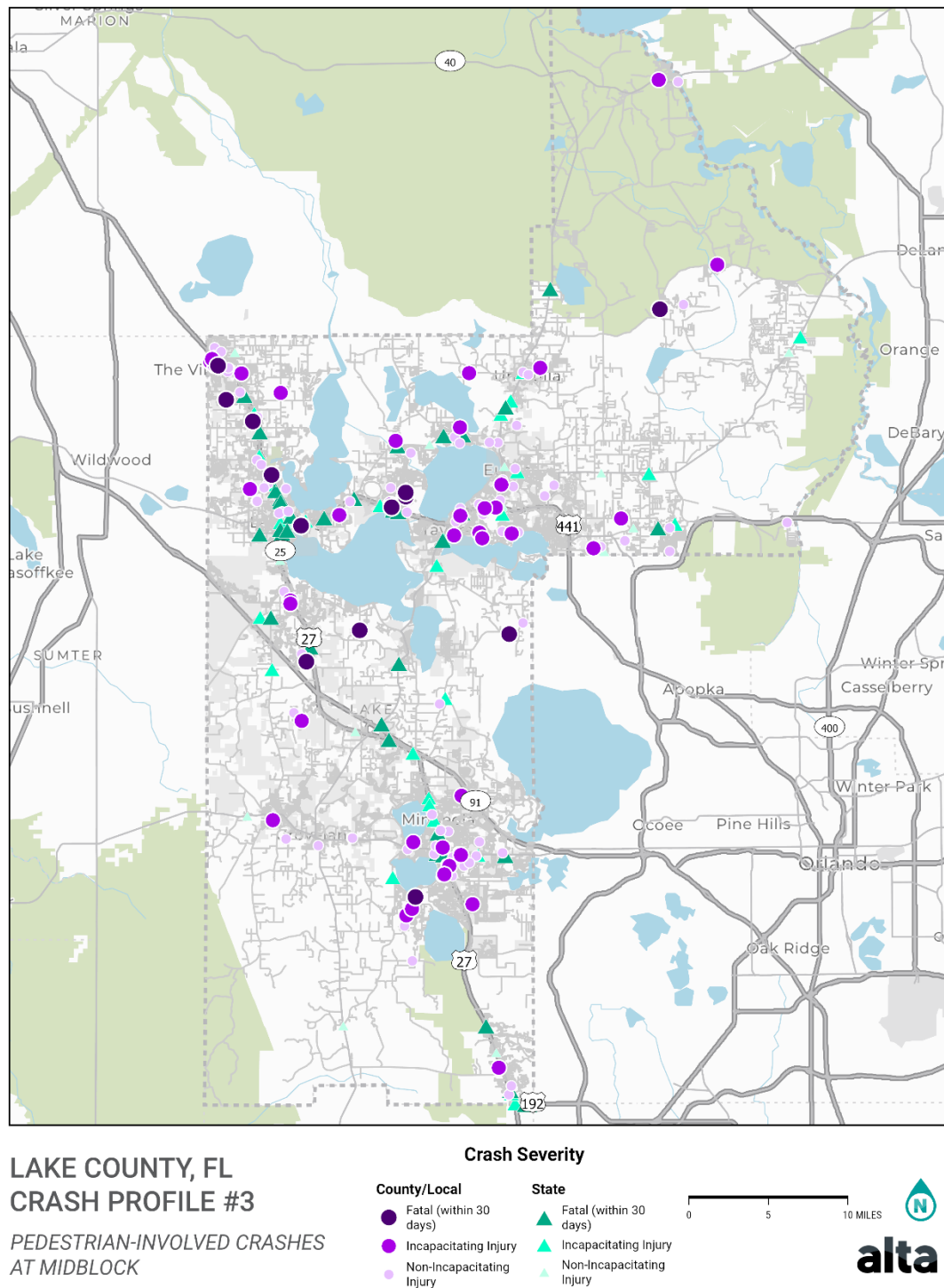


Figure 3: Crash Profile 3: Pedestrian-Involved Crashes at Midblock

Crash Profiles and the High Injury Network

Schools

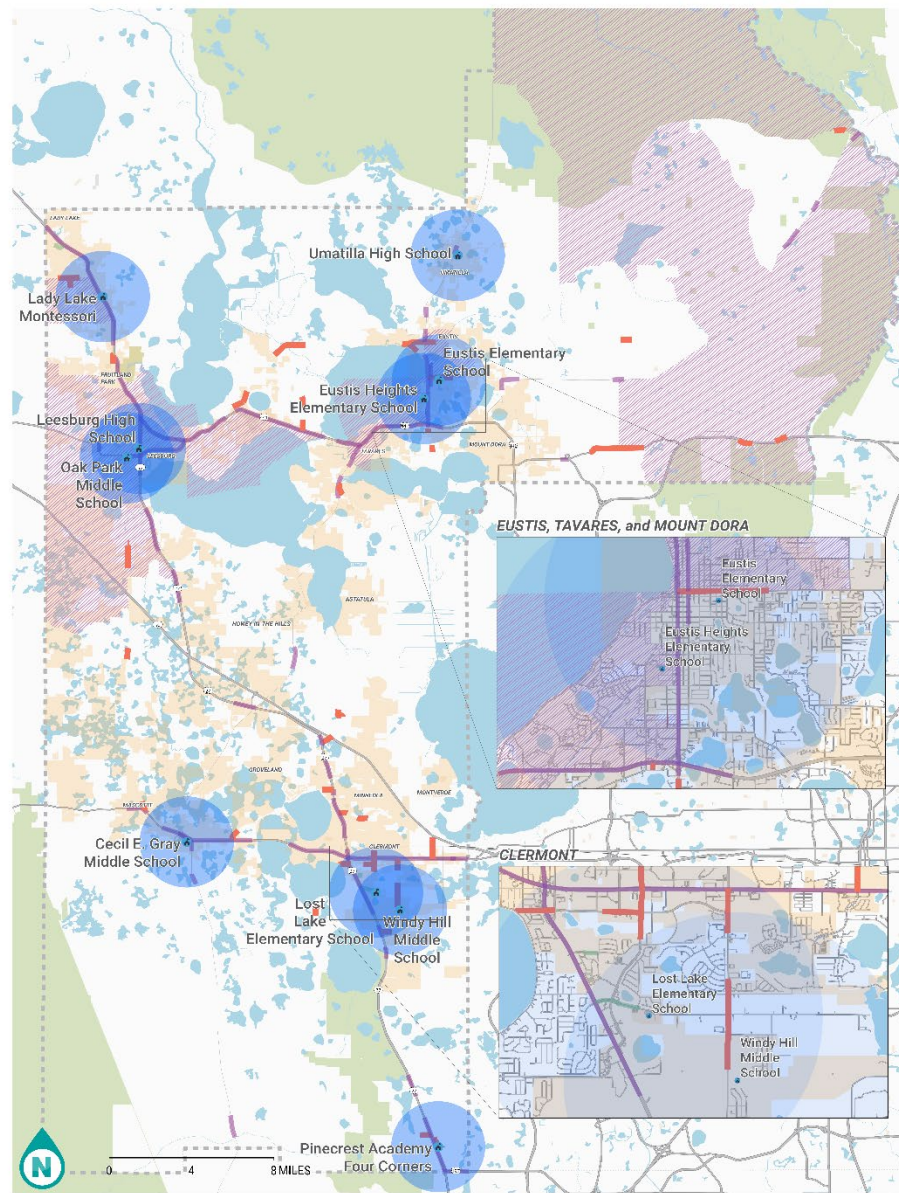
The project team developed a High Injury Network (HIN) for Lake County during a prior analysis to determine the corridors and roadway segments which accounted for an outsized proportion of traffic crashes, particularly those resulting in fatality or serious injury. Although the HIN and Crash Profiles both consider crash severity, the former emphasizes the location of crashes while the latter emphasizes contextual factors associated with a crash. Together, these analyses offer important insight into where, and under what circumstances, fatal or serious injury crashes occur in an area.

During the High Injury Network development process, the project team highlighted Lake County schools which fell in close proximity (two miles or less) to a segment on the county's HIN. Schools near the High Injury Network represent high-priority targets for safety improvements due to the increased number of children and other Vulnerable Road Users intended to travel to or near the school daily. This analysis found **ten** schools which were located on or near the HIN. The results of this analysis are presented in **Figure 4**.

Since the crash profiles generated through this analysis represent the contextual factors most associated with a substantial number of fatal or serious injury crashes, determining the relevance of each profile to high-priority school area will allow safety improvements to target fatal or serious injury crashes nearby most effectively. The number of each crash profile occurring in the ten Lake County HIN school areas is presented in **Table 3**. Crash Profile 2 (Left Turn Crashes at Unsignalized Intersections) is the most commonly occurring crash profile in these areas, with residential neighborhoods generally having a greater intersection density and school drop-offs frequently necessitating turning on or off high-traffic roads. Crash Profile 1 (Off-Road Crashes on High-Speed, Rural Roads) is the least common, since schools are typically placed in urban areas and near lower speed limits; nevertheless, almost all two-mile zones contain several crashes in this profile.

Table 3: Frequency of Crash Profile Crashes Occurring Near High Injury Network Schools

Ranking	High Injury Network School	Crash Profile 1	Crash Profile 2	Crash Profile 3	Total
1	Lost Lake Elementary School (Clermont)	11	59	22	92
2	Leesburg High School (Leesburg)	1	46	30	77
3	Oak Park Middle School (Leesburg)	1	32	28	61
4	Eustis Elementary School (Eustis)	1	33	10	44
5	Eustis Heights Elementary School (Eustis)	0	27	15	42
5	Pinecrest Academy Four Corners (Clermont)	4	20	18	42
7	Cecil E. Gray Middle School (Groveland)	9	22	3	34
8	Lady Lake Montessori (Lady Lake)	5	14	9	28
9	Windy Hill Middle School (Clermont)	5	14	4	23
10	Umatilla High School (Umatilla)	5	5	5	15



**LAKE COUNTY, FL
HIGH INJURY NETWORK (HIN)
AND DEMONSTRATION
PROJECT LOCATIONS**

- Legend**
- Schools Near HIN
 - Schools Near HIN (2 Mile Buffer)
 - Unfunded Sidewalks (Near HIN Schools)
 - SS4A Underserved Communities
- Ownership**
- State
 - County
 - Local

alta

Figure 4: Lake County High Injury Network with Nearby Schools

Demographic Analysis – Revised Draft

Purpose

This demographic analysis aims to identify underserved communities in Lake County and guide safety investments in areas where residents may have limited transportation options. The analysis evaluates criteria that directly influence or are closely tied to transportation access to help determine where additional investment is most needed. Findings from this analysis will be combined with crash severity data and the High Injury Network (HIN) to identify corridors with both significant safety concerns and high concentrations of underserved residents.

Demographic and Socioeconomic Profile of Lake County

Population Characteristics

According to the 2020 Census, Lake County is home to 383,956 residents. The median age is 46.7, notably higher than the Florida statewide median of 42.8, with 27% of residents aged 65 or older. The county's racial and ethnic composition includes 66% White (non-Hispanic), 17% Hispanic or Latino (of any race), 11% multiracial, 10% Black or African American, 2% Asian, and 0.4% American Indian and Alaska Native.

Income and Poverty

The employment rate for working age adults is 52.2%, which is lower than the Florida state average of 57.2%.⁷ The median income in Lake County is \$70,730, slightly below the state average of \$73,311.⁸ The County's poverty rate of 10.8% is also slightly below the state average of 12.7%.⁹ 1.61% of households in Lake County do not have a motor vehicle, significantly below the state average of 5.8%.¹⁰

Persistent poverty is defined in U.S. Code Title 49, Section 6702(a)(1) as areas where at least 20% of the population has lived in poverty over a 30-year period, or census tracts with poverty rates of at least 20% based on 2014–2018 American Community Survey data. Fourteen census tracts are designated as federal Areas of Persistent Poverty (APP), encompassing 40,843 residents, or approximately 11% of the population.

Approach

The initial dataset was developed using Alta's in-house Site Explorer tool, which aggregates socioeconomic, health, and environmental indicators at the census block group level. All variables were weighed equally for the analysis.

Before conducting a demographic analysis with Site Explorer in January 2025, the project team reviewed available federal screening tools used to identify underserved communities. The tools considered included USDOT's Equitable

⁷ 2023 American Survey 1-Year Estimates, DP03

⁸ 2023 American Survey 1-Year Estimates, S1901

⁹ 2023 American Survey 1-Year Estimates, S1701

¹⁰ 2023 American Survey 5-Year Estimates, B08141

Transportation Community Explorer, the Council on Environmental Quality’s Climate and Economic Justice Screening Tool (CEJST), and USDOT-designated Areas of Persistent Poverty.

Based on this review, Alta’s Site Explorer was selected as the most appropriate method for generating transportation need scores because it provides analysis at the census block group scale. This approach allows for more detailed and locally relevant results compared to federal screening tools that rely on census tract–level data. Site Explorer also offers complete geographic coverage across Lake County, while the Areas of Persistent Poverty dataset is limited to select locations.

Additionally, both the Equitable Transportation Community Explorer and CEJST tools have been discontinued and are no longer available for use. USDOT has since developed a new transportation needs assessment tool called the *SS4A Underserved Communities Tool*, which maps underserved areas at the census tract level, but does not provide underlying data or a documented methodology. However, Alta has incorporated the SS4A Underserved Communities Tool into the Demographic Analysis to validate and supplement Alta’s Site Explorer results, and highlight areas that may be more competitive for federal funding opportunities.¹¹

A comparison of the federal screening tools and the Site Explorer tool is provided in Table 1.

Table 1. Variable Comparison in Federal Datasets**

Demographic Analysis Categories	Data Source	USDOT	CEQ	Alta Planning + Design
	Screening Tool	Equitable Transportation Community Explorer	Climate and Economic Justice Screening Tool	Alta Site Explorer
	Geography	Census Tract	Census Tract	Block Group
	Demographic Criteria			
Socioeconomic	Low-Income Households	X	X	X
	People of Color		X	X
	Youth	X	X	X
	Seniors	X	X	X
	Economic Opportunity	X		X
	English Proficiency	X	X	
	Unemployment	X	X	

¹¹ The inclusion of underserved community census tracts was a selection criterion in the most recent SS4A notice of funding opportunity. <https://www.transportation.gov/sites/dot.gov/files/2025-03/SS4A-FY25-NOFO.pdf>

	People with Disabilities	X		
	Educational Attainment	X	X	X
Housing	Housing Cost Burden	X	X	X
Transportation	No Vehicle Access	X		X
	Transportation Cost Burden	X		
	Commute Time	X		
	Walkability	X		
	Frequency of Transit	X		
	Jobs within 45-minute Drive	X		
	Drive Time to POIs	X		
	Walk Time to POIs	X		
Environmental	Air Quality	X	X	X
	Lead Exposure	X	X	
	Superfund Site Proximity	X	X	
	Traffic Proximity	X	X	
	Hazardous Waste Proximity	X	X	
	Wastewater Discharge		X	
Resilience	Green Space		X	
	Flood Risk	X	X	
	Wildfire Risk		X	
	Impervious Surfaces	X	X	
Health	Coronary Heart Disease		X	X
	Diabetes	X	X	
	Asthma	X	X	
	Cancer	X		
	Low Mental Health	X		
	High Blood Pressure	X		

****The USDOT ETC and CEJST datasets have been discontinued by USDOT as of late January, 2025.**

A full list of variables included in the Site Explorer analysis, along with justification for each, is provided in Table 2.

Table 2. Variables Selected for the Lake County Demographics Analysis

Category	Variable	Rationale
Socioeconomic	Low-Income Households	Households with lower incomes may have fewer transportation options than households with higher incomes. Investments in safe active transportation infrastructure can expand the number of destinations accessible to lower income households, which is why it is included in this index.

	People of Color	Transportation planning has a legacy of excluding and marginalizing people of color from decision-making processes, often resulting in harmful outcomes that compound existing transportation inequities.
	Youth	Defined as people under the age of 17. Children are unable to start driving until they are at least 15 years old. Without a vehicle, they are more likely to walk or bike, increasing their exposure to traffic danger, or restricting their mobility. They also have reduced ability to withstand crashes and are more likely to die in crashes.
	Seniors	Defined as people over the age of 65. Seniors have higher rates of disability, and increased chances of not being able to drive, compared to the rest of the adult population. They also have reduced ability to withstand or recover from crashes and are more likely to die in crashes.
	Economic Opportunity	Measures a census tract's economic mobility for children from lower-income families. This variable is included to help show areas that have historically been marginalized or underinvested.
	Educational Attainment	Percentage of people age 25 or older who do not have a high school diploma. Educational attainment is closely related to income levels, which impacts housing location, travel behavior and decision making.
Housing	Housing Cost Burden	Housing and transportation are intrinsically intertwined, and their effect on travel behavior and decision-making justifies the inclusion of this variable in the index.
Transportation	No Vehicle Access	Families who have no motor vehicle access either travel less, rely on transit, walking, or biking for transportation. They are at higher exposure to traffic danger.
Environmental	Air Quality	Proximity to PM25 is often associated with high volumes of motor vehicle transportation, like highways, and has negative health effects for communities.
Health	Coronary Heart Disease	Safe active transportation infrastructure can increase opportunities for people to be physically active, thereby lowering their risk for CHD.

Methodology

Alta's Site Explorer tool generated a composite transportation need analysis using a weighted average of the selected variables. The development of this index followed a multi-step process:

- **Data Collection:** Raw values were obtained for each census block group across all selected demographic and socioeconomic categories using the data sources listed. Values were ordered so that higher values represent greater need.

- **Normalization:** Values in each category were normalized to the statewide dataset and converted to percentile ranks for every block group.
- **Weighting:** Each block group's percentile score was multiplied by the assigned weight for that category. For Lake County, all variables were weighted equally.
- **Composite Score Generation:** Weighted scores for each variable were summed to produce a composite transportation need score between 0 and 1 for each census block group.

Results

The Demographic Analysis researched federally designated areas of socioeconomic vulnerability and in Lake County, and further refined this understanding through a customized block-group level analysis through the Alta Site Explorer. The results identified several geographic patterns related to transportation need, socioeconomic vulnerability, and crash history in Lake County.

Local Findings

Map 1 presents a visual summary of the analysis' block group-level findings for Lake County. Transportation need scores are mapped by their percentile relative to other county block groups, divided into quintiles. A total of 37 block groups, representing the 80th percentile or higher of transportation need scores, were identified as the highest-need areas. These locations include Eustis, Fruitland Park, Astatula, Mascotte, Leesburg, and northern Groveland, as well as rural areas in the northeast. Because each variable in the transportation need analysis was weighed equally, the top 20th percentile block groups demonstrated variation in the makeup of contributing vulnerability factors. For example, the percentage of low-income households in these block groups ranged widely, from 13.8 percent to 89.3 percent.

Despite this range, the data revealed a strong pattern: block groups with high concentrations of low-income households often also experienced higher levels of limited vehicle access and other transportation-related barriers. Five block groups demonstrated the most consistently high need across multiple indicators, placing them in the 95th percentile of the overall transportation need score. These areas include eastern Clermont north of State Highway 50, western Leesburg near County Road 468, southern Fruitland Park also near CR 468, southern Tavares east of FL-19, and central Eustis north of Orange Avenue. These locations appear consistently across APP, SS4A, and Alta's Site Explorer transportation need scoring.

Block groups ranked within the highest 20th percentile represent 62,648 residents, or 16 percent of the countywide population. These locations account for 19 percent of all injury crashes, 14 percent of fatal and serious injury crashes, more than one-third (33.2 percent) of High Injury Network roadway mileage, and 27.5 percent of all bicycle and pedestrian injury crashes.

Federal Findings

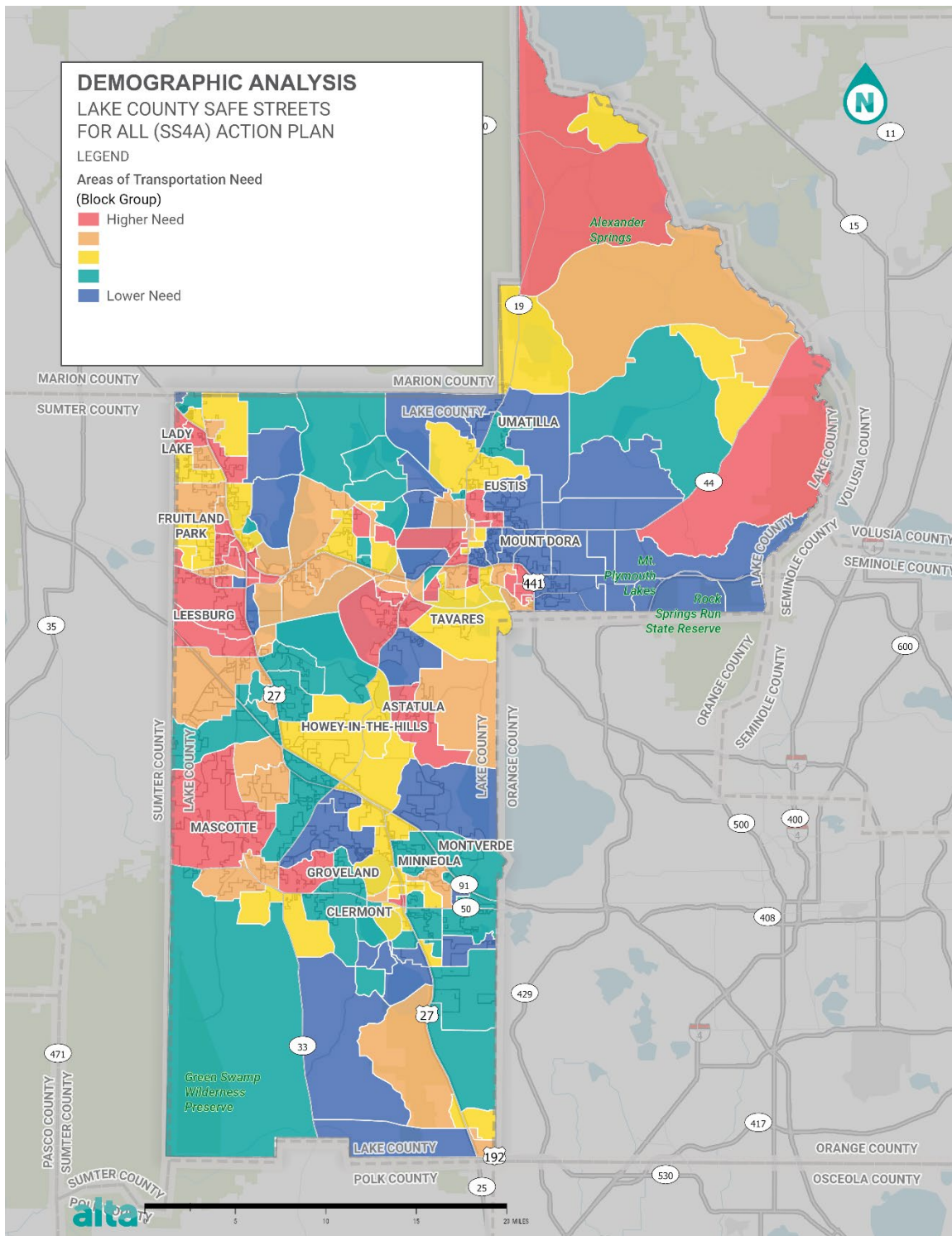
Map 2 presents a visual comparison of the Alta Site Explorer transportation need analysis referenced above with two federal datasets: Areas of Persistent Poverty and SS4A underserved communities. Fourteen of the county's 108 census tracts are classified as Areas of Persistent Poverty. These areas are concentrated in Leesburg, Eustis, and eastern Tavares, with additional rural tracts located in the far northeast portion of the county. Together, these census



tracts accounted for 2,068 injury crashes, representing 15.8 percent of all injury crashes in Lake County, as well as 225 fatal or serious injury crashes, or approximately 13 percent of all KSI crashes recorded countywide.

The SS4A Underserved Communities Tool also identified areas of need within Lake County. Fifteen census tracts were classified as underserved, primarily located in Leesburg, Eustis, Tavares, and rural northeastern areas. These tracts closely align with both the federal Areas of Persistent Poverty (APP) designations and the block groups identified through Alta's transportation need analysis, reinforcing the geographic consistency of equity-related indicators across multiple data sources.

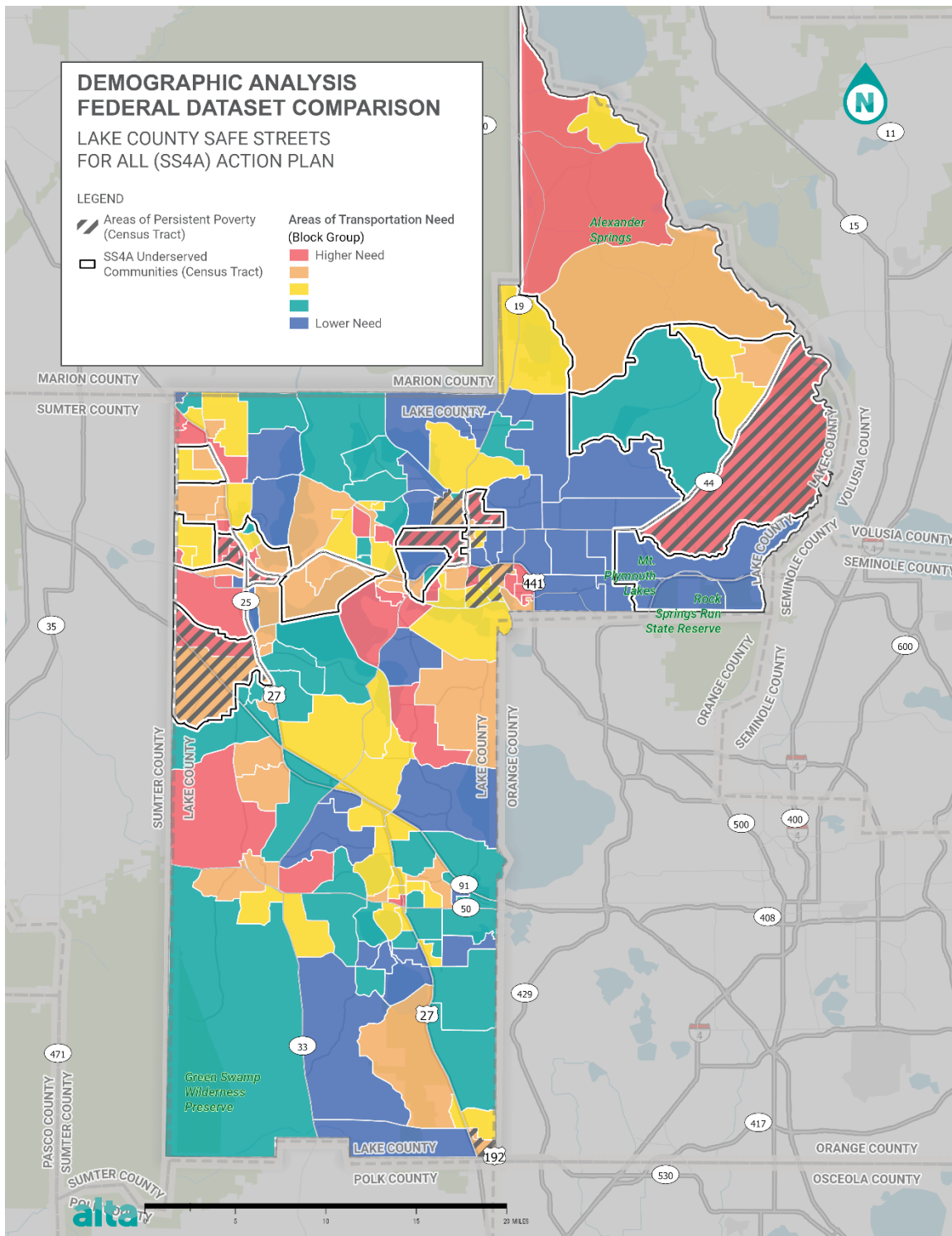
Map 2. Demographic Analysis of Lake County





The map identifies areas traditionally considered underserved. These results will guide project prioritization, inform safety improvement locations, and help tailor recommended strategies and action items in the final plan to better support the needs of these populations, in alignment with the FY25 SS4A grant priority to “ensure equitable investment in the safety need of underserved communities”. The analysis reveals that a significant share of Lake County residents experience barriers related to transportation safety and access (such as relying more on public transportation, walking, or biking for transportation), reinforcing the importance of this Safety Action Plan for advancing public health, mobility equity, and overall community well-being.

Map 2. Comparison of Lake County Demographic Analysis with Federal Datasets



Conclusion

The Systemic Safety Analysis, High Injury Network Analysis, Crash Profile Analysis, and Demographic Analysis are each used to understand different dimensions of the present state of traffic safety in Lake County. Presented in combination, they offer significant insight into the location, distribution, and associated environmental and contextual circumstances of traffic crashes countywide, particularly those crashes which resulted in fatality or severe injury. This analysis allows for subsequent planning efforts to take a data-driven approach to reducing traffic injuries and deaths in Lake County.

Task 4, Project Identification and Prioritization, will use the analysis completed in this combined memo to inform the project selection and prioritization process. Other inputs, including stakeholder engagement, will be included alongside the safety analysis results in a prioritization process approach. The final methodology for this prioritization process will be developed collaboratively by Lake County and the project team. Finalized GIS datasets will be sent to the County following approval, and the results of the safety analysis will be presented to the public in the project's action plan in accordance with Task 5.

APPENDIX B

Public Engagement Materials



To: Kenneth Spitz, AICP

From: Alta Planning + Design

Date: November 1, 2024

Re: Community Engagement Plan (CEP) Outline

This memorandum provides an overview of engagement strategies and best practices to be implemented in the Lake County SS4A Safe Streets for All Action Plan Community Engagement Plan (CEP).

Community Engagement Plan (CEP)

The purpose of the SS4A Action Plan is to develop a comprehensive strategy and vision for safer streets for all users, aimed at reducing – and ultimately eliminating – traffic fatalities and severe injuries in Lake County. The Community Engagement Plan will be instrumental in identifying and understanding the safety issues faced by people who travel in and through Lake County, as well as gathering input on the improvements they would like to see in their community. Through active community engagement, we will gain insight into the current challenges, needs, and concerns of community members, pedestrians, cyclists, motorists, and transit users in Lake County.

Engagement Goals for the Lake County SS4A Safety Action Plan

The following goals will guide the Lake County CEP:

- Inform and educate local partners, the public, and community leaders about Safe Streets for All and the SS4A Action Plan planning process.
- Increase public awareness about the Safe Streets for All initiative.
- Build community trust and support for the SS4A Action Plan.
- Collaborate with stakeholders and government agencies to establish an inclusive, accessible engagement process that utilizes strategies designed to reach a diverse audience in Lake County.
- Consider key population groups and incorporate community ideas and concerns throughout the planning process.
- Identify shared priorities on key issues and strategies to reduce the number of traffic fatalities and severe injuries in Lake County.

The following community engagement best practices will help the project team with engaging a wide range of community members by using multiple outreach strategies, involving key partners and stakeholders, and incorporating metrics to evaluate the CEP. Additionally, the Alta team has drafted a CEP outline to guide the development of a community engagement process that is productive, inclusive, and aligned with U.S. DOT's Safe System Approach principles and requirements.

Public Engagement – Outreach Strategies

The Lake County SS4A Safe Streets for All Action Plan will utilize a variety of outreach strategies to effectively engage the community. These proposed outreach methods will include a mix of digital engagement opportunities and in-person events. The proposed strategies are organized according to the different phases of the project:

Table 1. CEP Proposed Outreach Strategies

Plan Phase	Outreach Strategy	Target Audience	Communication Goals
Project (All)	- Project website - Project logo and branding - Social media - Key messaging - Project factsheets - Data dashboard - Commission meetings	General public. Elected officials. Partners and stakeholders.	- Introduce the project to the community. - Promote engagement activities to encourage participation. - Raise awareness of project developments and activities. - Provide updates on major project milestones. - Use social media (e.g. Facebook, X, and Instagram) and the Lake County website to drive traffic to the project webpage. - Direct the public to the survey through Facebook, X, Instagram, the County website, and County Commission meetings.
Phase 1: Existing Conditions & Comprehensive Safety Analysis.	- Online public survey - Stakeholder interviews - Community engagement meeting (1)	General public. Partners and stakeholders.	- Collect, analyze, and synthesize survey data from to identify existing issues and safety concerns from the community. - Provide an overview of the project and its objectives. - Gather community feedback and insights.

Phase 2: Recommendations & Project Prioritization.	Community engagement meeting (1)	General public. Partners and stakeholders.	- Provide an overview of the plan recommendations and performance measures. - Collect detailed input on challenges and recommendations for design and implementation.
Phase 3: Action Plan.	- Presentation - Vision Zero resolution	General public. Elected officials. Partners and stakeholders.	- Present and adopt the draft and final Action Plan. - Adopt a resolution in support of Lake County's goal of eliminating traffic deaths and serious injuries.

Partners and Stakeholders

To achieve successful outcomes with the Community Engagement Plan, it is essential to collaborate with diverse organizations and agencies to create strong, long-lasting relationships and broad support. The stakeholders listed below will be involved in gathering information and providing input on the development of the plan:

- Lake County Mayor and District Commissioners: Districts 1, 2, 3, 4, and 5.
- County Manager and Leadership Team
- County Departments and Divisions: Transit Services, Public Works, Sheriff's Office, Public Safety Support, Economic Development, Code Enforcement, Planning and Zoning, Geographic Information Services, Emergency Management, Communications, etc.
- Advisory committees: Community Advisory Committee, Technical Advisory Committee (TAC)
- Lake-Sumter MPO
- Florida Department of Transportation District 5
- Transit agencies (
- School Board
- Law enforcement agencies (municipal, county, and state)
- Municipal representatives from all 14 municipalities in Lake County
- Institutions: Universities, hospitals, etc.
- Non-profits
- Business associations
- Other

Roles and Responsibilities of Partners and Stakeholders

The following activities outline how partners and stakeholders can contribute to the development of the Lake County SS4A Action Plan:

- Participate in interviews and/or online surveys to provide feedback on existing safety programs, countermeasures, capital improvement projects, and specific community needs.
- Attend community engagement meetings and participate in committee discussions.
- Promote press releases and news articles to their local media sources.
- Share social media posts from Lake County, including links to the public survey and mapping tools.
- Represent their constituents' interests in the Lake County SS4A Action Plan, advocating for the community's specific needs and priorities.

Evaluation Metrics

To ensure transparency in the planning process, the Lake County SS4A Action Plan will benefit from measuring the performance of the Community Engagement Plan. The following metrics are recommended to evaluate the effectiveness of engagement efforts:

- Responses to in-person and online survey
- Number of stakeholders engaged
- Number of events held and their geographic distribution
- Number of public meetings and attendance
- Demographic diversity and broad community representation
- Documentation and feedback shared with the community
- Engagement through social media, project website, public meetings, committees, etc.

For more information on evaluation metrics, visit the U.S. Department of Transportation's guide on [Promising Practices for Meaningful Public Involvement in Transportation Decision-Making](#).

Draft Outline

The Alta team prepared a draft outline of the Community Engagement Plan for the Lake County SS4A Safety Action Plan. Following best practices and tailored to the requirements of SS4A, the outline includes key components of the CEP:

- **Introduction**
 - Overview of USDOT's Safe Streets and Roads for All (SS4A) Grant Program
 - Establishing a Community Engagement Plan (CEP)
 - Core Team Members
 - Roles and Responsibilities
 - Community Engagement Goals
- **Background**
 - Planning Process
 - Lake County Community Profile
 - Project Branding
 - Project Schedule
- **Communication & Engagement Approach**
 - Target Audiences



- Partners and Stakeholders
- Key Messaging
- Outreach Strategies
 - Communication Tactics for Soliciting Input into the Action Plan
 - Community Tactics for Increasing Awareness about Vision Zero and Safety
- Schedule of Activities
 - Community Engagement Activity Checklist
- **Evaluation Metrics**



PRESENTATION AT CITY/COUNTY TRANSPORTATION MEETING HIGH INJURY NETWORK April 16, 2025

Attendees:

Ryan Sharp
Jeffrey Earhart
C.T. Eagle
Kenneth Spitz
Cliff
Bryan K. Moore
Gallus Quigley
Matthew Dodson
Seth Lynch
Michael Vitta
Mike Olka
Jim Maiworm
David Lazerson
Osvaldo Nunez
Mark Johnson
Kurt Luman
Larry Walker
Jeremy Morton
Ric Gierok
James Oneil
Don Griffey
TJ Fish
Daniel Millan
Sharon Lewis
Neil Gaines
Morgan Cates
Sean O'Keefe
Fred Miller
Emily Bush

PRESENTATION

Traffic Safety in Lake County

- Six years of crash data was collected and analyzed (2018-2023).
 - Since 2018, 314 people have lost their lives.
 - 254 vehicle occupants.
 - 49 pedestrians.
 - 11 bicyclists.
 - 1,423 serious injuries were reported.
 - There's an average of nearly one serious injury per day over six consecutive years.
 - Lake County crash rate in 2023: 16.3/100,000.
 - Florida rate of 14.9/100,000.
 - U.S. rate of 12.8/100,000.
 - NYC murder rate: 4.6/100,000.

Who is Most Impacted?

- Pedestrians have suffered 49 deaths and 101 serious injuries.
 - Pedestrian crashes are 4.7 times more likely to be fatal than vehicle-only crashes.
 - Pedestrians represent only 4% of all injury crashes but were involved in 16% of all fatal crashes.
 - Only 14% of pedestrian killed or seriously injured (KSI) crashes occurred at intersections.
- 21% of KSI crashes involving a senior resulted in a fatality versus 17% of killed or seriously injured crashes not involving seniors.
- Teenage drivers were involved in 10.5% of KSI crashes.

What are the Contributing Factors?

- 35% of fatal crashes involved drugs or alcohol.
 - 24% of alcohol-related crashes resulted in a death.
 - 64% of drug and alcohol crashes occurred at night.
- 50% of fatal crashes occurred at night despite lower volumes are night.
 - Half of the nighttime KSI crashes occurred in unlit areas.
- 42% of KSI crashes involved a lane departure.
 - Lane departures were a significant factor in 150 fatal crashes.

Vulnerable Areas in Lake County

- More than 15% of crashes occur in vulnerable areas.
 - Some variables selected for the analysis:
 - Low-income households.
 - Youth percentage of population.
 - Senior citizens percentage of population.
 - Federal poverty level.
 - No vehicle access.
- 56% of KSI crashes occurred in rural areas, and rural crashes tended to be more severe.

What are the Most Unsafe Streets?

- FDOT roads accounted for 49% of fatal and serious injury crashes in Lake County.
- 30% of KSI crashes occurred in Unincorporated Lake County.
- Clermont at 17% and Leesburg at 16% had the highest share of KSI crashes among Lake County municipalities.

What is the High Injury Network (HIN)?

- An HIN identifies specific segments of roadways within a city, county, or region where a disproportionately high number of traffic deaths and serious injuries occur.
 - Objective: allocate resources most efficiently to have the greatest impact on improving traffic safety.
 - Lake County HIN spans 101 miles.
 - The HIN is only 2% of Lake County's roadway network.
 - 51% of injury crashes occurred on the HIN.

Lake County High Injury Network (HIN)

- 36 miles of the HIN is located within unincorporated areas of Lake County.
- 75% of Lake County's HIN is along FDOT roads.
- 17% of the HIN is located on Lake County roads.
- 12% of the HIN is on municipal roads.

Questions/Comments/Discussions

1. *Discussion on many county roads previously being state roads so there is a higher traffic volume.*
2. *Discussion on the next steps for the grant*
 - a. Data collection is 95% done.
 - b. With this contract, they can do 15-20 conceptual designs of a mile long roadway.
 - c. They received notice in March that their funding was approved, so the next steps are moving forward.
3. *Federal funding is available right now for demonstration projects, and anyone can apply for those grants for up to \$5 million.*
4. *Discussion on using <https://signal4analytics.com/>.*
5. *Discussion on the importance of lighting on roadways.*
6. *Discussion on using the funding for bike and pedestrian needs.*
7. *Top 3 contributing factors of fatal crashes: impaired driving at 35%, lighting at 50%, lane departure at 42%.*
8. *Bike Walk Central Florida has data that shows 97% of crashes in Central Florida involved residents.*
9. *Bike Walk Central Florida has identified 8 intersections in Lake County that need attention.*



PUBLIC ENGAGEMENT SESSION 1

GOALS AND OBJECTIVES

Feb. 6, 2025

Attendees

Sign-In Sheet Lake County Safe Streets for All (SS4A) Public Engagement Session				Thursday, February 6, 2025 6:00 P.M. - 7:30 P.M. Tavares Civic Center 100 E. Caroline Street Tavares, FL 32778
Name (please print)	Organization (if applicable)	Mailing Address (please print)	Email Address/Phone (please print)	
Cindy Newton	FOUR LACC	19025 Lake Swatara Dr. Eustis, FL 32736	Cindynewton01@gmail.com	

Sign-In Sheet Lake County Safe Streets for All (SS4A) Public Engagement Session				Thursday, February 6, 2025 6:00 P.M. - 7:30 P.M. Tavares Civic Center 100 E. Caroline Street Tavares, FL 32778
Name (please print)	Organization (if applicable)	Mailing Address (please print)	Email Address/Phone (please print)	
Jon Swartz		22551 Curk Rd, Eustis	JonSwartz@aol.com	
Sharon				
Annabelle Burke		10843 South St Leesburg	honeschoolbooth@gmail.com	
Leslie Champion				

Staff Sign-In Sheet Lake County Safe Streets for All (SS4A) Public Engagement Session				Thursday, February 6, 2025 6:00 P.M. - 7:30 P.M. Tavares Civic Center 100 E. Caroline Street Tavares, FL 32778
Name (please print)	Organization (if applicable)	Mailing Address (please print)	Email Address/Phone (please print)	
Simantra scarp	Quest			
Kenneth Spitz	CPH		kspitz@cpl.com	
Ashley Moore	QUEST		Ashley.Moore@cpl.com	
Jeff Eantab	LCPH		jeff.eantab@lakersburgfl.gov	
Mike dika	LCPH		mikedika@lakersburgfl.gov	
Fred Schneider				
Sharon Lew				
Jeff Foley	BOCC		Jeff.Foley@LakeCountyFL.gov	
Leslie Champion	BOCC			
Cliff Kelsy	City of Leesburg		cliff.kelsy@leesburgfl.gov	
TJ Lish	City of Ocala		TJ.Lish@ocalfld.com	

PRESENTATION

What is Safe Streets for All (SS4A)?

- This Lake County Public Works project is part of the Federal Safe Streets for All initiative.
- Some firms working on this: CPH, DRMP, Alta, Quest.
- The U.S Department of Transportation SS4A program provides grants to local communities for implementation, planning, and demonstration activities. This safety program was created by the Bipartisan Infrastructure Law and provides \$5 billion over five years.
- The findings will help communities address the preventable crisis of deaths on our nation's roadways through safe people, roads, and appropriate vehicle speeds and improved post-crash care.

How does Vision Zero fit?

- The overall U.S. crash death rate is more than double that of other high-income nations. Pedestrian and cyclist injuries and deaths have risen significantly since 2010. From 2014 to 2018, Florida had the second highest number of fatal car crashes – 12,670 – almost 20% more than Texas.
- In response, many communities are adopting ambitious safety goals and strategies as part of the Vision Zero movement. The basis of this movement is that human mistakes should not have fatal consequences – one death is too many.
- The traditional approach assumes that traffic deaths are inevitable, relies on perfect human behavior, emphasizes individual responsibility, and views saving lives as costly. In contrast, the Vision Zero approach recognizes that traffic deaths are preventable, accounts for human error, focuses on a systemic approach to prevent severe and fatal crashes, and considers saving lives to be cost-effective.
- A primary responsibility for roadway safety lies with the facility designers and operators. The Safe Systems Approach was developed to recognize this greater accountability. New design elements – called “countermeasures” – are implemented that can modify human behavior, reduce physical impact, align vehicle speeds to their proper context, and help to protect vulnerable users.
- Mount Dora received their own SS4A grant; this grant is for Lake County exclusive of Mount Dora.

Steps to Success

1. Align and Define Approach
 - a. Confirmed strategic planning approach and timeframe
 - b. Identified key internal and external stakeholders
 - c. Designed data collection materials and methods
 - d. Confirmed focus areas and scope for environmental scan
2. Collect and Analyze Data

- a. Conducted external data analysis and developed environmental assessments
 - b. Executed scans for leading practices
 - c. Collected subject matter expertise and data through focus groups and interviews
3. Prioritize and Plan
 - a. Conduct a series of facilitated sessions with leadership to align on strategic direction and priorities
 - b. Develop a draft strategic plan document and iterate to ensure alignment and buy-in
4. Build and Implement
 - a. Engage internal and external stakeholders as needed to validate the Strategic Plan
 - b. Build an implementation plan and identify owners for key activities under each strategy
5. Monitor and Evaluate
 - a. Build initial performance measures to track progress against the Strategic Plan
 - b. Develop an approach to facilitate buy-in and adoption of the plan
 - c. Design materials to communicate the Strategic Plan broadly

SMART

- **Specific** – Make your goal specific and narrow for more effective planning
- **Measurable** – Make sure your goal and progress are measurable
- **Achievable** – Make sure you can reasonably accomplish your goal within a certain time frame
- **Relevant** – Your goal should align with your values and long-term objectives
- **Time-based** – Set a realistic but ambitious end date to clarify task prioritization and increase motivation

Goals and Objectives Examples

1. What is a goal? A brief description of a desired outcome.
 - a. Reduce conflicts between roadway users
 - b. Make roadway safety a government-wide priority and responsibility
 - c. Adopt Safety First processes to prevent future problems from arising
 - d. Reduce influence of speed in crash severity
 - e. Promote a safety culture via the budget process
2. What is an objective? An action to achieve the desired outcome
 - a. Prohibit right turn only (RTOR) at high conflict intersections
 - b. Multi-agency road safety audit (RSA) after every killed/seriously injured (KSI) crash
 - c. Include Vision Zero review as part of the development approval process
 - d. Adopt lower night-time speed limits
 - e. Earmark a set percentage of capital spending on roadway safety projects

Next Steps

1. Set goals and objectives for the action plan

2. Share data collection results and analysis

Questions/Comments/Discussions

1. *How will future public outreach be performed?*
 - a. We will continue to send information to the outreach list, social media, and utilize the Lake County Communications team
2. *Discussion: goals and objectives.*
 - a. The \$800,000 is just for planning and design. The money that would go into the prioritization project is the next phase and would be a different grant. To get the money for the next phase, you must go through this stage first.
3. *Chairman brought up S.R. 44 and the issues on that roadway.*
4. *Community Traffic Safety Team (CTST)*
 - a. Discussion regarding involving the CTST in this process. The CTST meets once a month at the Florida Department of Transportation Leesburg Office.
5. *Discussion: Roundabouts and how they are needed, especially on Thrill Hill Road.*
6. *Who is involved in the Task Force Meetings?*
 - a. City of Tavares, City of Eustis, Lake County Sheriff's Office, Bike Walk Central Florida, City of Clermont, City of Leesburg Public Works Department, Lake County Schools, Lake County Office of Parks and Trails, City of Howey-in-the-Hills, Lake County Transit.
7. *Discussion: How to get people to understand that narrowed lanes are positive.*
8. *Recommendation to have a short presentation on SS4A in multiple cities within Lake County.*
9. *Discussion: Channel 6 interview on S.R. 44 interview.*
10. *Discussion: Channel 9 story on Sawgrass.*
11. *Discussion: C.R. 473 and how the turn lane helped on Westmont.*

Completed Public Comment Form



LAKE COUNTY, FL
REAL FLORIDA • REAL CLOSE

Lake County
Safe Streets for All (SS4A)
Public Engagement Session
February 6, 2025



LAKE COUNTY, FL
SAFETY ACTION PLAN
SAFE STREETS FOR ALL

PUBLIC COMMENT FORM

Name: Annabelle Burke Phone: 352-346-9554
 Address: 10843 South St L
 City: Leesburg State: FL Zip: 34788
 Email: homeschoolbee4@gmail.com

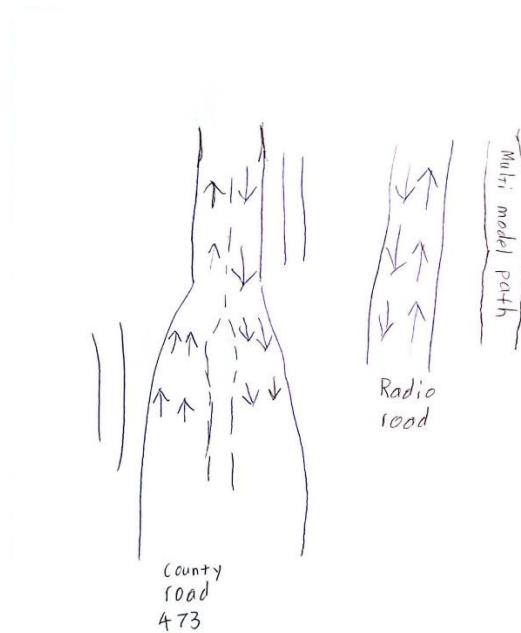
Please use this comment form to express your opinions regarding the Safe Streets for All Project. Please turn this form in to a staff member at the public meeting or send your comments via email as shown below.

COMMENTS:
Make safe connection for new sidewalk
on old On 473 county road to old side walk
cross walk light on pep boys side of 441 -
at Radio road intersection is not changing
when you press button
Cross walk at 441 Lake Square Mall
intersection

Please send comments or questions via email to:

Samantha Scarp
407-853-1606
Samantha.Scarp@QCAusa.com

Scanned with
CamScanner



Scanned with
CamScanner



PUBLIC ENGAGEMENT SESSION 2

TAVARES CIVIC CENTER

HIGH INJURY NETWORK

April 3, 2025

Attendees:

Staff Sign-In Sheet Lake County Safe Streets for All (SS4A) Public Engagement Session #2				Thursday, April 3, 2025 6:00 P.M. – 7:30 P.M. Tavares Civic Center 100 E. Caroline Street Tavares, FL 32778
Name	Organization	Email Address	Initials	
Kenneth Spitz	qph	kspitz@qphcorp.com		
Logan Hill	qph	lhill@qphcorp.com		
Jeff Eshart	Lake County	Jeff.Eshart@lakecountyfl.gov	<i>JE</i>	
Fred Schneider	Lake County	Fred.Schneider@lakecountyfl.gov		
Mike Oka	Lake County	Mike.Oka@lakecountyfl.gov	<i>MO</i>	
Sharon Lewis	Lake County	SLewis@lakecountyfl.gov		
Jeff Foley	Lake County	Jeff.Foley@lakecountyfl.gov	<i>JF</i>	
Leslie Campione	Lake County	Leslie.Campione@lakecountyfl.gov		
Chf Kelsey	City of Leesburg	Chf.Kelsey@leesburgflorida.gov		
T.J. Fish	City of Groveland	TJ.Fish@grovelandfl.gov		

Shari Cutley	Quest	Shari.Cutley@QCAusa.com	<i>SC</i>
Samantha Scarp	Quest	Samantha.Scarp@QCAusa.com	
Kirsten Mabry	Lake County	kirsten.mabry@lakecountyfl.gov	<i>KM</i>
Sharon Lewis	Lake County	sharon.lewis@lakecountyfl.gov	<i>SL</i>

Sign-In Sheet Lake County Safe Streets for All (SS4A) Public Engagement Session #2				Thursday, April 3, 2025 6:00 P.M. – 7:30 P.M. Tavares Civic Center 100 E. Caroline Street Tavares, FL 32778
Name (please print)	Organization (if applicable)	Mailing Address (please print)	Email Address/Phone (please print)	
Will Minichino		1111 Kennedy Dr. Leesburg	will.minichino@qphcorp.com 352-602-1451	
Ann Carter		1414 Myrtle Ave. Ft. Meade, FL	407-953-7362	
R. Soldevilla		332 W. M. Oakley Ave. Clear	352-516-8105	
Lois King		2001 1st St. E. Leesburg	352-346-9554	
Annabelle Burke		10043 South Street Leesburg, FL		

Sign-In Sheet Lake County Safe Streets for All (SS4A) Public Engagement Session #2				Thursday, April 3, 2025 6:00 P.M. – 7:30 P.M. Tavares Civic Center 100 E. Caroline Street Tavares, FL 32778
Name (please print)	Organization (if applicable)	Mailing Address (please print)	Email Address/Phone (please print)	
<i>Noted</i>			<i>Noted</i>	

PRESENTATION

Traffic Safety in Lake County

- Six years of crash data was collected and analyzed (2018-2023).
 - Since 2018, 314 people have lost their lives.
 - 254 vehicle occupants
 - 49 pedestrians
 - 11 cyclists
 - 1,423 serious injuries reported
 - An average of nearly one serious injury per day over six consecutive years
 - Lake County crash rate in 2023: 16.3/100,000
 - Florida rate: 14.9/100,000
 - U.S. rate: 12.8/100,000
 - NYC murder rate: 4.6/100,000

Who is Most Impacted?

- Pedestrians have suffered 49 deaths and 101 serious injuries.
 - Pedestrian crashes are 4.7 times more likely to be fatal than vehicle-only crashes.
 - Pedestrians represent only 4% of all injury crashes but were involved in 16% of all fatal crashes.
 - Only 14% of pedestrian killed or seriously injured (KSI) crashes occurred at intersections.
- 21% of KSI crashes involving a senior resulted in a fatality versus 17% of killed or seriously injured crashes not involving seniors.
- Teenage drivers were involved in 10.5% of KSI crashes.

What are the Contributing Factors?

- 35% of fatal crashes involved drugs or alcohol.
 - 24% of alcohol-related crashes resulted in a death.
 - 64% of drug and alcohol crashes occurred at night.
- 50% of fatal crashes occurred at night despite lower volumes are night.
 - Half of the nighttime KSI crashes occurred in unlit areas.
- 42% of KSI crashes involved a lane departure.
 - Lane departures were a significant factor in 150 fatal crashes.

Vulnerable Areas in Lake County

- More than 15% of crashes occur in vulnerable areas.
 - No vehicle access.
- 56% of KSI crashes occurred in rural areas, and rural crashes tended to be more severe.
 - Some variables selected for the analysis:
 - Low-income households
 - Youth percentage of population
 - Senior citizens' percentage of population
 - Federal poverty level
 - No vehicle access

What are the Most Unsafe Streets?

- FDOT roads accounted for 49% of fatal and serious injury crashes in Lake County.
- 30% of KSI crashes occurred in Unincorporated Lake County.
- Clermont at 17% and Leesburg at 16% had the highest share of KSI crashes among Lake County municipalities.

What is the High Injury Network (HIN)?

- An HIN identifies specific segments of roadways within a city, county, or region where a disproportionately high number of traffic deaths and serious injuries occur.
 - Objective: allocate resources most efficiently to have the greatest impact on improving traffic safety.
 - Lake County HIN spans 101 miles.
 - The HIN is only 2% of Lake County's roadway network.
 - 51% of injury crashes occurred in the HIN.

Lake County High Injury Network (HIN)

- 36 miles located within unincorporated areas of Lake County.
- 75% along FDOT roads
- 17% on Lake County roads
- 12% on municipal roads

Questions/Comments/Discussions

1. Discussion about the potential role of electric vehicles, such as Tesla's, in reducing the number of traffic-related fatalities.
2. Pedestrians were identified as the most vulnerable road users.
3. Teenage vaping was discussed as a segue to slide three in the presentation.
4. Seniors account for 27% of the population but are involved in 21% of accidents. Discussion explored contributing factors such as the seasonal presence of "snowbirds" during winter months and the resulting decrease in traffic during the summer.
5. It was noted that state roads typically carry higher traffic volumes and operate at higher speeds, which may influence safety outcomes.
6. Attendees expressed an expectation that law enforcement representatives would address enforcement-related issues.
 - a. It was noted that law enforcement is involved in the Task Force meetings, so they are getting the same information.
7. A question was raised about whether more bike lanes and sidewalks are being implemented in Lake County.
 - a. It was confirmed that there is an initiative to include these features on new road projects, and efforts are also underway to retrofit older roads where possible.
8. Attendees inquired about the timeline for completing the current study.
 - a. The projected completion is targeted for the fourth quarter of the year.
9. A question was raised regarding the scope of a \$800,000 grant in terms of road construction.
10. It was confirmed that there is a partnership with the MPO, and coordination is ongoing between the two entities on various projects.



TASK FORCE WORKSHOP 1

GOALS AND OBJECTIVES

Feb. 4, 2025

Attendees

Kenneth Spitz - Transportation Planner, CPH and Meeting Facilitator
Bryan Moore - Streets Operations Manager, City of Tavares
Daniel Millan - Public Works Engineer, City of Eustis
Jeff DeSantis - Traffic Sergeant, Lake County Sheriff's Office
Emily Bush - Executive Director, Bike Walk Central Florida
Jim Maiworm - Assistant Environmental Services Director, City of Clermont
Lisa Mark - Public Information Specialist, Quest
Neil Gaines - Deputy Director, City of Leesburg Public Works Department
James O'Neil - Mitigation Manager, Lake County Schools
Gallus Quigley - Recreation Coordinator for Trails, Lake County Office of Parks and Trails
Samantha Scarp - Public Information Specialist, Quest
Morgan Cates - Public Works Director, City of Howey-in-the-Hills
Logan Hill - Transportation Planner, CPH
David Lazerson - Transit Services, Lake County Transit

What is Safe Streets for All (SS4A)?

- This Lake County Public Works project is part of the Federal Safe Streets for All initiative.
- Some firms working on this: CPH, DRMP, Alta, Quest.
- The U.S Department of Transportation SS4A program provides grants to local communities for implementation, planning, and demonstration activities. This safety program was created by the Bipartisan Infrastructure Law and provides \$5 billion over five years.
- The findings will help communities address the preventable crisis of deaths on our nation's roadways through safe people, roads, and appropriate vehicle speeds and improved post-crash care.

How does Vision Zero fit?

- The overall U.S. crash death rate is more than double that of other high-income nations. Pedestrian and cyclist injuries and deaths have risen significantly since 2010. From 2014 to 2018,

Florida had the second highest number of fatal car crashes – 12,670 – almost 20% more than Texas.

- In response, many communities are adopting ambitious safety goals and strategies as part of the Vision Zero movement. The basis of this movement is that human mistakes should not have fatal consequences – one death is too many.
- The traditional approach assumes that traffic deaths are inevitable, relies on perfect human behavior, emphasizes individual responsibility, and views saving lives as costly. In contrast, the Vision Zero approach recognizes that traffic deaths are preventable, accounts for human error, focuses on a systemic approach to prevent severe and fatal crashes, and considers saving lives to be cost-effective.
- A primary responsibility for roadway safety lies with the facility designers and operators. The Safe Systems Approach was developed to recognize this greater accountability. New design elements – called “countermeasures” – are implemented that can modify human behavior, reduce physical impact, align vehicle speeds to their proper context, and help to protect vulnerable users.
- Mount Dora received their own SS4A grant; this grant is for Lake County exclusive of Mount Dora.

Steps to Success

1. Align and Define Approach
 - a. Confirmed strategic planning approach and timeframe
 - b. Identified key internal and external stakeholders
 - c. Designed data collection materials and methods
 - d. Confirmed focus areas and scope for environmental scan
2. Collect and Analyze Data
 - a. Conducted external data analysis and developed environmental assessments
 - b. Executed scans for leading practices
 - c. Collected subject matter expertise and data through focus groups and interviews
3. Prioritize and Plan
 - a. Conduct a series of facilitated sessions with leadership to align on strategic direction and priorities
 - b. Develop a draft strategic plan document and iterate to ensure alignment and buy-in
4. Build and Implement
 - a. Engage internal and external stakeholders as needed to validate the Strategic Plan
 - b. Build an implementation plan and identify owners for key activities under each strategy
5. Monitor and Evaluate
 - a. Build initial performance measures to track progress against the Strategic Plan
 - b. Develop an approach to facilitate buy-in and adoption of the plan
 - c. Design materials to communicate the Strategic Plan broadly

SMART

- **Specific** – Make your goal specific and narrow for more effective planning
- **Measurable** – Make sure your goal and progress are measurable
- **Achievable** – Make sure you can reasonably accomplish your goal within a certain time frame
- **Relevant** – Your goal should align with your values and long-term objectives
- **Time-based** – Set a realistic but ambitious end date to clarify task prioritization and increase motivation

Goals and Objectives Examples

1. What is a goal? A brief description of a desired outcome.
 - a. Reduce conflicts between roadway users
 - b. Make roadway safety a government-wide priority and responsibility
 - c. Adopt Safety First processes to prevent future problems from arising
 - d. Reduce influence of speed in crash severity
 - e. Promote a safety culture via the budget process
2. What is an objective? An action to achieve the desired outcome
 - a. Prohibit right turn only (RTOR) at high conflict intersections
 - b. Multi-agency road safety audit (RSA) after every killed/seriously injured (KSI) crash
 - c. Include Vision Zero review as part of the development approval process
 - d. Adopt lower night-time speed limits
 - e. Earmark a set percentage of capital spending on roadway safety projects

Next Steps

1. Set goals and objectives for the action plan
2. Share data collection results and analysis

Questions

1. *Is the \$800,000 broken down into specific categories or will the money be allocated based on the priority of the goals?*
 - a. The \$800,000 is to fulfill the grant which is creating an action plan and the conceptual design for the prioritized locations. The document will show how to proceed as well as the locations that were identified (High Injury Network). These are corridors or intersections where we are seeing high number of killed or serious injury accidents. We are looking specifically at schools, parks, community centers where there are a higher number of amenities.
2. *Who will manage the \$800,000 and allocate where this money will be spent? Who will maintain control of it?*
 - a. The \$800,000 is just for planning and design. The money that would go into the prioritization project is the next phase and would be a different grant. To get the money for the next phase, you must go through this stage first.

3. *Is this focusing on any roads in Lake County?*
 - a. Yes, this includes county and city roads, except for Mount Dora, which received its own SS4A grant.

APPENDIX C

Prioritized Projects List



To: Alia Awwad & Stephanie Garcia, DRMP

From: Ryan Denker, Sarah Littlefield, Anna Dearman – Alta

Date: April 30, 2026

Re: Lake County Safe Streets for All (SS4A) Project Prioritization and Identification

Introduction

The project team conducted a prioritization analysis to help identify future safety projects that can be implemented by Lake County. This analysis combines the results from previously completed safety and existing conditions analyses to score individual roadway segments on a 100-point scale, with higher scores indicating segments where safety improvements should be prioritized.

The quantitative analysis generated a prioritization score for each County-maintained roadway segment in Lake County and served as the first step for future project identification and selection. Segment-level data was then aggregated multiple times in combining segments, with each successive grouping of segments designed to better approximate the typical scope of a roadway improvement project and align with existing planning work. The final output includes complete scores for all segments as well as a recommended 100 project County Priority List based on the results of the prioritization analysis. Future engineering review by DRMP and CPH will be conducted to determine the feasibility of safety improvement projects along high-priority corridors, the final project extents, and ultimately, the countermeasures recommended for specific priority projects.

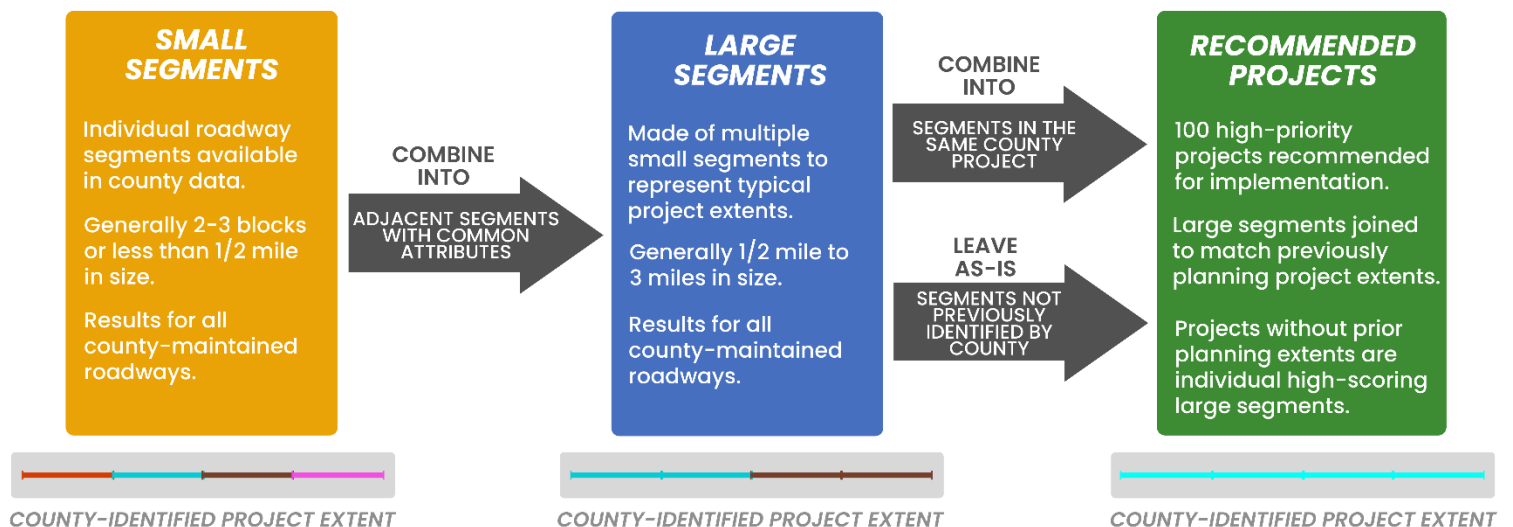
Project Scoring Methodology

To generate scores for all roadway segments and consolidate them into typical project-length extents, the project team used the following three-part methodology (**Figure 1**) to develop the final recommended County Priority List:

1. **Small-Segment Scoring:** Individual County-maintained roadway centerline segments represent the most granular unit of roadway data made available. These segments were scored using the prioritization criteria listed in **Table 1**. Scores were assigned to segments spatially based on the crash history, proximity to destinations, proximity to areas of need, and other roadway characteristics.

2. **Large-Segment Scoring:** Individual segments which share relevant contextual characteristics with adjacent segments (including roadway name, number of lanes, speed limits, and municipality) were aggregated into a single “large segment.” The large segments are designed to connect similar segments and better approximate the typical extent of a roadway improvement project. Manual adjustments were made following aggregation to ensure that all projects were no longer than 5 miles. To develop large-segment project scores, Alta weighed small-segment priority scores by the length of each segment and summed the length-weighted priority scores for each large segment. The unique Project ID associated with each large segment represents its ranked final priority score, with the highest-scoring large segment assigned a Project ID of 1, the second-highest large segment assigned a Project ID of 2, and so on.
3. **High-Priority Projects:** A recommended High-Priority Project List was developed by combining the large-segment scoring results with a list of projects identified by Lake County as associated with prior or ongoing planning efforts, especially the 2025 Lake-Sumter MPO List of Priority Projects (LOPP). This list includes 100 high-priority projects, with the top 15 projects considered “highest priority.” To match the extent of an existing plan, some high-priority projects are made up of multiple large-segment Project IDs.

Figure 1: Segment Aggregation Process Diagram



Prioritization Criteria (Small-Segment)

To generate Lake County segment-level prioritization scores, the project team scored all County-maintained roadway segments on a 100-point scale. Segments are awarded full or partial points utilizing the following data inputs:

- **Safety History and Crash Risk (75%):**
 - **Crash Severity Index (25%):** The High Injury Network, or **HIN**, was developed to identify roadway segments responsible for a disproportionate share of crashes, particularly fatal or serious injury crashes, countywide. Segments will be scored based on the composite crash severity index value generated as part of this analysis, with a higher severity index corresponding to a higher priority *[Segments receive up to 25 points]*.
 - **Overlap with Crash Profiles (25%):** In addition to the HIN, **crash profiles** were developed to represent the crash types and contextual crash factors associated with higher severity crashes. Crash profile data is a point dataset representing instances of crashes associated with one or more profiles. Segments will receive a higher priority score for greater frequency and severity of crash profile crashes occurring nearby *[Segments receive up to 25 points]*.
 - **Posted Speed Limits (25%):** Higher vehicle speeds result in a higher crash injury during a collision, impacting the severity level of the associated collision. A significant increase in the likelihood of fatality or serious injury becomes observable around 30 MPH and rises continuously.¹ Roadways with posted speeds above 30 MPH present a higher risk to road users, particularly vulnerable road users. Segments will receive a higher priority score for posted speeds above 30, 40, and 50 mph. *[Segments receive up to 25 points]*.
- **Need (25%):**
 - A **Demographics Analysis** was conducted to identify underserved communities and guide safety investments in areas where residents have limited transportation options. A composite Areas of Transportation Need score was generated for all block groups within Lake County; segments located within a high-scoring block group will receive a higher priority score *[Segments receive up to 25 points]*.

¹ Federal Highway Administration, *Self-Enforcing Roadways: Chapter 2. Relationship Between Speed and Safety*. Pub. No. FHWA-HRT-17-098. FHWA, January 2018.



MEMORANDUM

Table 2: Lake County Project Prioritization Criteria

Criterion	Description	Scoring	Points
High Injury Network Crash Severity Index	Top ranking crash severity segments. HIN segments ranked by their severity index percentile.	Severity index, percentile scaled and ranked.	0 – 25
Overlap with Crash Profiles	Segments with more crashes corresponding to the crash profiles. Use crash weighting from HIN (K, A crashes = 4x; C, B crashes = 1x; O crashes = 0.25x) to get weighted number of crashes meeting profiles. Scores for each profile will be summed, and then percentile scaled and ranked.	Weighted number of crashes corresponding to profiles occurring within 100 feet of segment, percentile scaled and ranked.	0 – 25
Posted speed limits	Segment has a posted speed limit of 30 MPH or higher. Segments with a posted speed limit of 40 MPH or higher and 50 MPH or higher will receive additional points.	30 – 40 MPH = 5 pts 40 – 50 MPH = 15 pts 50+ MPH = 25 pts	0 – 25
Areas of Transportation Need	Areas of Transportation Need score is a composite Demographic Analysis value available at the block group level. Segments are assigned the value of the block group they are contained within, and are ranked by percentile.	Areas of Transportation Need score of nearest adjacent block group, percentile scaled and ranked.	0 – 25
Maximum Possible Score			100 points

Prioritization Results (Large-Segment)

Map 1 includes large-segment prioritization scores for all county roadways organized by percentile rank. While segment scores are weighted by length, the highest-scoring segments are generally longer segments of major urban or suburban roads, which experience the vast majority of roadway injuries and fatalities and have the closest proximity to Lake County’s schools, parks, and population centers.

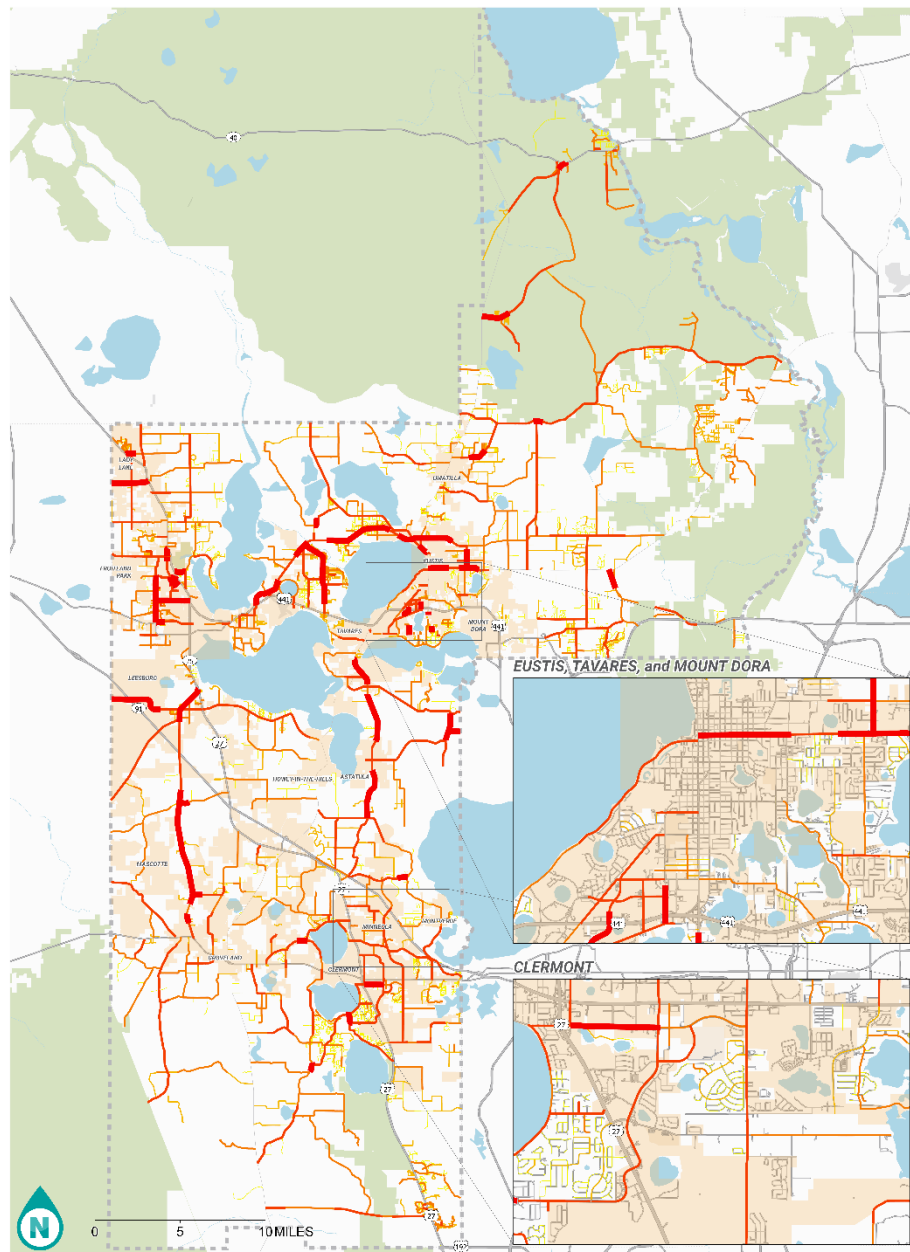
Project Identification (High-Priority Projects)

The County identified 36 project extents related to prior or upcoming local planning efforts which also overlapped substantially with one or more higher-scoring segments in the large-segment scoring process. The project team adapted this list into the quantitative scoring framework and developed a 100-entry High-Priority Project list. Where a county-identified project extent overlapped multiple Project IDs, these segments have been consolidated into a single project for the purposes of this recommendation. The full list of High-Priority Projects is organized into two groups, both sorted by prioritization score ranking:

- County-identified projects which contained one or more large segment with a 95th percentile prioritization score are recommended as “highest priority” (**Table 2**). These projects (15 in total) demonstrate urgent need for safety improvement and are already aligned with existing planning efforts, providing an opportunity to deliver significant safety benefits on an accelerated timeline. Accordingly, these projects have been assigned the top 15 positions on the High-Priority Projects list.
- The remaining projects (85 in total) represent the highest-scoring county roadway segments, forming a 100-entry High-Priority Projects list (**Table 3**). Multiple segments have been consolidated into a single project to align with county-identified project extents where overlap is present. Most identified High-Priority Projects are comprised of a single large segment; the exact extent recommended for these projects may change during future engineering and feasibility studies.

The locations of all High-Priority Projects, including the 15 identified as “highest-priority,” are presented in **Map 2**.

Map 1: Lake County Large-Segment Prioritization Scoring Results

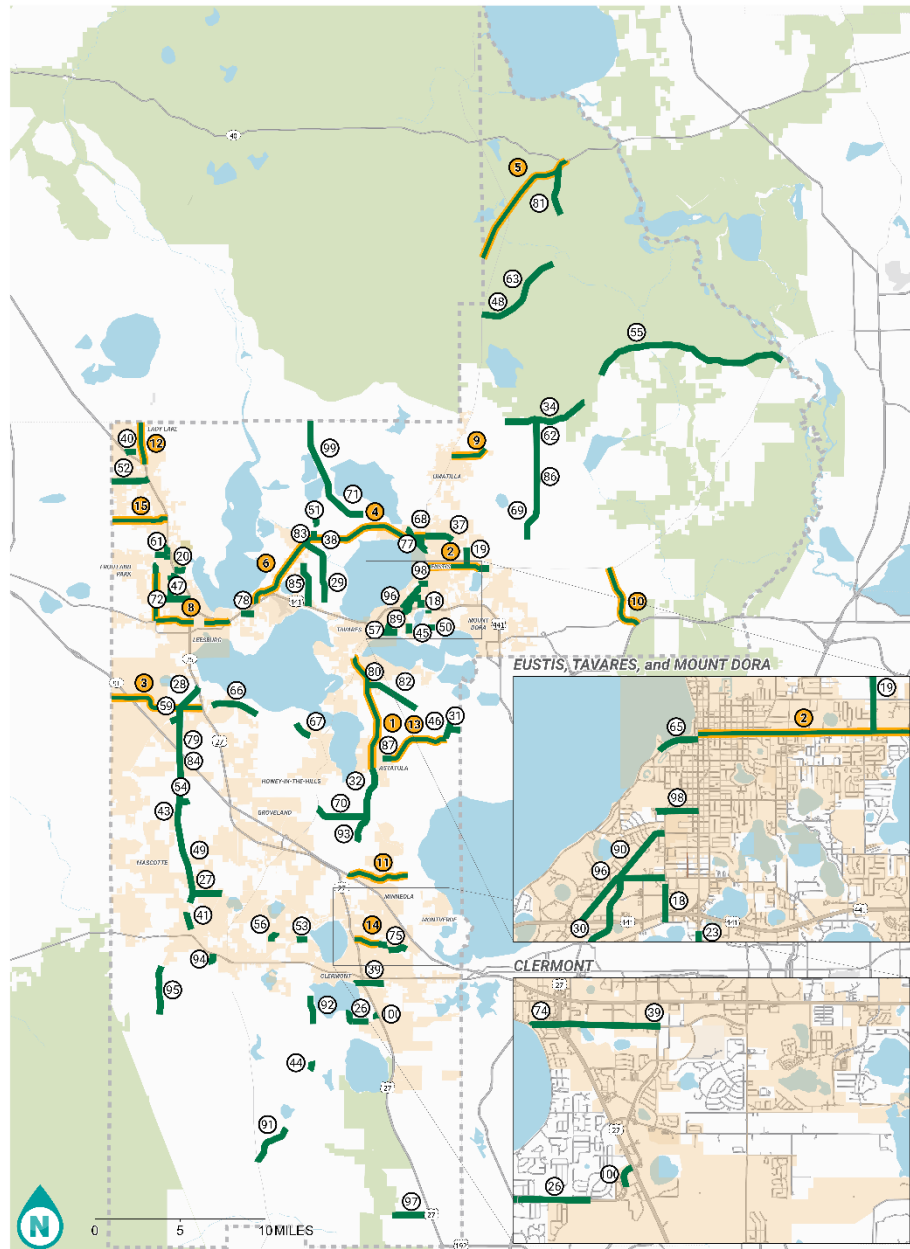


LAKE COUNTY, FL
PRIORITIZATION RESULTS,
LARGE SEGMENTS

Legend
Ranked Final Prioritization Score

- > 98th Percentile
- > 90th Percentile
- > 75th Percentile
- > 50th Percentile
- < 50th Percentile

Map 2: Lake County Recommended High-Priority Projects



LAKE COUNTY, FL
RECOMMENDED
HIGH-PRIORITY PROJECTS

Legend
 Recommended Projects
 — Highest-Priority
 — High-Priority

Table 2: Lake County “Highest-Priority” Recommended Projects

Project Number	Roadway Name	From	To	City (or unincorporated)	Speed Limit (mph)	Length (miles)	Segment Project IDs
1	CR 561	SR 19	Bates Ln	Astataula, Tavares, uninc.	40 – 50	6.08	1, 7, 32, 89, 159, 160, 314
2	E Orange Avenue	N Bay St	Blue Water St	Eustis	40 – 55	2.64	2, 38, 195
3	CR 470 / CR 48	<i>Sumter County line</i>	US 27	Leesburg, unincorporated	45 – 55	4.98	4, 44, 68, 172, 173
4	CR 44	Emeralda Ave	SR 19	Eustis, unincorporated	50 – 55	6.42	5, 17, 46, 110, 209
5	CR 445A	Veterans Dr	St. Johns River Bridge	Unincorporated	25 – 55	6.88	13, 83, 103, 764
6	CR 44	US 441	Emeralda Ave	Leesburg, unincorporated	45 – 55	4.44	15, 16, 23, 208
7	CR 468	Urick St	SR 44	Leesburg, Fruitland Park, unincorporated	45	2.44	21, 25, 42
8	W Main St, E Main St	SR 44	CR 468	Leesburg	25 – 45	3.30	24, 147, 205, 316
9	CR 450	SR 19	W 5th Ave	Umatilla	35 – 55	1.88	28, 270, 448
10	CR 46A	SR 44	SR 46	Sorrento, unincorporated	45 – 55	3.65	39, 395
11	CR 561A	CR 561	CR 455	Unincorporated	55	3.22	51, 108
12	CR 25	<i>Marion County line</i>	US 27/441	Lady Lake, unincorporated	30 – 35	2.19	67, 82, 100, 101
13	CR 48	Ranch Rd	CR 448A	Astataula, unincorporated	55	3.30	78

14	Old Hwy 50	US 27	Brimming Lake Rd	Minneola, unincorporated	30 – 45	1.30	86, 250, 284
15	Lake Ella Road	Sumter County line	US 27	Lady Lake, Fruitland Park, unincorporated	45 – 55	2.94	105, 111, 374

Table 3: Lake County High-Priority Projects (including 'Highest-Priority')

Project Number	Roadway Name	From	To	City (or unincorporated)	Speed Limit (mph)	Length (miles)	Segment Project IDs
1	CR 561	SR 19	Bates Ln	Astatula, Tavares, unincorporated	40 – 50	6.08	1, 7, 32, 89, 159, 160, 314
2	E Orange Avenue	N Bay St	Blue Water St	Eustis	40 – 55	2.64	2, 38, 195
3	CR 470 / CR 48	Sumter County line	US 27	Leesburg, unincorporated	45 – 55	4.98	4, 44, 68, 172, 173
4	CR 44	Emeralda Ave	SR 19	Eustis, unincorporated	50 – 55	6.42	5, 17, 46, 110, 209
5	CR 445A	Veterans Dr	St. Johns River Bridge	Unincorporated	25 – 55	6.88	13, 83, 103, 764
6	CR 44	US 441	Emeralda Ave	Leesburg, unincorporated	45 – 55	4.44	15, 16, 23, 208
7	CR 468	Urick St	SR 44	Leesburg, Fruitland Park, unincorporated	45	2.44	21, 25, 42
8	W Main St, E Main St	SR 44	CR 468	Leesburg	25 – 45	3.30	24, 147, 205, 316



MEMORANDUM

Project Number	Roadway Name	From	To	City (or unincorporated)	Speed Limit (mph)	Length (miles)	Segment Project IDs
9	CR 450	SR 19	W 5th Ave	Umatilla	35 – 55	1.88	28, 270, 448
10	CR 46A	SR 44	SR 46	Sorrento, unincorporated	45 – 55	3.65	39, 395
11	CR 561A	CR 561	CR 455	Unincorporated	55	3.22	51, 108
12	CR 25	Marion County line	US 27/441	Lady Lake, unincorporated	30 – 35	2.19	67, 82, 100, 101
13	CR 48	Ranch Rd	CR 448A	Astatula, unincorporated	55	3.30	78
14	Old Hwy 50	US 27	Brimming Lake Rd	Minneola, unincorporated	30 – 45	1.30	86, 250, 284
15	Lake Ella Road	Sumter County line	US 27	Lady Lake, Fruitland Park, unincorporated	45 – 55	2.94	105, 111, 374
16	Simon Brown Road	CR 33	Lake Pickett Dr	Unincorporated	50	0.50	3
17	CR 460	Thomas Ave	US 27	Leesburg	35	0.43	6
18	Kurt Street	Ardis Ave	Dora Ave	Eustis	35	0.43	8
19	CR 44	CR 44A	E Orange Ave	Eustis, unincorporated	55	0.96	9
20	Picciola Cutoff Road	US 27	Picciola Rd	Fruitland Park	30	0.60	10
21	S Dixie Avenue	Thomas Ave	US 27	Fruitland Park	40	0.42	11
22	CR 33	3rd St	CR 48	Unincorporated	45	0.50	12



MEMORANDUM

Project Number	Roadway Name	From	To	City (or unincorporated)	Speed Limit (mph)	Length (miles)	Segment Project IDs
23	SR 19A	US 441	Eudora Rd	Mount Dora, unincorporated	40	0.18	14
24	CR 473	CR 44	Cypress Haven Way	Leesburg, unincorporated	45	0.50	18
25	Thomas Avenue	S Dixie Ave	Dr Martin Luther King Jr Blvd	Leesburg, Fruitland Park	35	0.46	19
26	Hammock Ridge Road	Lakeshore Dr	Roper Blvd	Unincorporated	40 – 45	1.46	20, 143
27	CR 33	Prospect St	Car Dan Ln	Unincorporated	55	1.50	22
28	CR 33	US 27	3rd St	Unincorporated	45	1.54	26
29	CR 473	S Haines Creek Rd	Pine Ridge Rd	Unincorporated	40	2.01	27
30	David Walker Drive	T H Poole Rd	Dora Ave	Tavares	35	0.57	29
31	Duda Road	CR 448A	Orange County line	Unincorporated	55	0.59	31
32	CR 561	Bates Ln	CR 455	Astatula, unincorporated	50	2.59	31
33	CR 44C	CR 468	Snowberger Ave	Leesburg, unincorporated	45	0.44	33
34	CR 42	Holmes View Dr	National Forest Service 536	Unincorporated	55	4.45	34, 61, 62
35	N Dixie Avenue	US 27	CR 466A	Fruitland Park	30	0.43	35
36	S Dixie Avenue	CR 466A	W Berckman St	Fruitland Park	30	0.24	36



MEMORANDUM

Project Number	Roadway Name	From	To	City (or unincorporated)	Speed Limit (mph)	Length (miles)	Segment Project IDs
37	CR 44	SR 19	Hicks Ditch Rd	Eustis	45	1.44	37
38	CR 473	Haines Creek Rd	Isaacs Ct	Unincorporated	45	1.00	40
39	Hooks Street	S Grand Hwy	Citrus Tower Blvd	Clermont, unincorporated	40	1.02	41
40	Griffin Avenue	US 441	Jeffrey Dr	Lady Lake	35	0.53	43
41	CR 33	Egg Rd	N Sunset Ave	Mascotte	45	0.50	45
42	CR 452	CR 19A	SR 19	Eustis	40	0.51	47
43	CR 33	Desert Ln	Soto Rd	Unincorporated	55	2.50	48
44	CR 561	Canal Zone Way	Florida Boys Ranch Rd	Unincorporated	55	0.49	49
45	Merry Road	Kellogg Dr	W Old US 441	Unincorporated	35	0.52	50
46	CR 448A	CR 448	CR 48	Unincorporated	45	1.40	52
47	CR 44C	Snowberger Ave	US 27	Leesburg	35	1.32	53
48	CR 445	SR 19	E Deer Rd	Unincorporated	55	1.48	54
49	CR 33	Soto Rd	Prospect St	Unincorporated	55	2.00	55
50	Holly Drive	SR 19A	W Old US 441	Unincorporated	25	0.31	56
51	Goose Prairie Road	Emeralda Ave	Kentucky Ave	Unincorporated	45	0.46	57
52	CR 466	Sumter County line	US 27 / 441	Lady Lake	40	1.90	58
53	CR 565A	Marsh Hammock Way	Lake Minneola Shrs	Clermont	45	0.54	59
54	Bridges Road	CR 33	Usda Rd	Unincorporated	40	0.53	60

Project Number	Roadway Name	From	To	City (or unincorporated)	Speed Limit (mph)	Length (miles)	Segment Project IDs
55	CR 42	County Squire Dr	SR 44	Unincorporated	55	10.39	63
56	Silver Eagle Rd	Prairie Falcon Dr	Hillcrest Dr	Unincorporated	35	0.60	64
57	CR 19A	Druid Pl	CR 46	Tavares	40	0.95	65
58	CR 468	Pine Ridge Dairy Rd	Urick St	Fruitland Park	35	0.49	66
59	CR 48	S Quarters Rd	CR 33	Unincorporated	45	0.51	70
60	Gateway Dr	SR 19	W Alfred St	Tavares	35	0.19	71
61	CR 466A	Poinsettia Ave	N Dixie Ave	Fruitland Park	35	0.63	72
62	CR 439	CR 42	Double Toe Ln	Unincorporated	55	1.46	73
63	CR 445	E Deer Rd	Alexander Spgs	Unincorporated	55	3.46	74
64	CR 33	N Sunset Ave	Underpass Rd	Mascotte	40	0.41	75
65	Lakeshore Drive	King St	SR 19	Eustis	30	0.47	76
66	CR 48	Meadow Song Dr	Trimpp Rd	Unincorporated	55	2.47	77
67	CR 48	Bella Vista Dr	San Luis Blvd	Howey-in-the-Hills, unincorporated	55	0.99	79, 196
68	CR 452	Yale Retreat Rd	CR 19A	Eustis	45	1.02	80
69	CR 439	Brookside Dr	CR 44A	Unincorporated	55	1.95	81
70	CR 455	SR 19	CR 561	Unincorporated	55	2.72	85
71	CR 452	Lake Yale Baptist Assembly Rd	Apiary Rd	Unincorporated	55	2.56	87



MEMORANDUM

Project Number	Roadway Name	From	To	City (or unincorporated)	Speed Limit (mph)	Length (miles)	Segment Project IDs
72	Thomas Avenue	Dr Martin Luther King Jr Blvd	Mispah Ave	Leesburg	35	0.92	88
73	SR 44	Blue Water St	SR 44B	Unincorporated	55	0.53	90
74	Hooks St	E Lakeshore Dr	S Grand Hwy	Clermont	30	0.45	91
75	Old Hwy 50	Hancock Rd	Balboa Blvd	Clermont	45	0.98	92
76	Old Hwy 50	Brimming Lake Rd	Hancock Rd	Clermont	45	0.47	93
77	CR 19A	Rainbow Rd	CR 452	Eustis	45	0.58	94
78	Old Tavares Rd	Bentbough Dr	Sleepy Hollow Dr	Leesburg	30	0.69	95
79	CR 33	CR 48	Clearwater Way	Unincorporated	55	2.00	96
80	CR 448	CR 561	Southridge Industrial Dr	Tavares	45	0.50	97
81	CR 445	CR 445A	towards Alexander Spgs	Unincorporated	55	2.47	98
82	CR 448	Southridge Industrial Dr	Grand Oak Ln	Unincorporated	55	2.47	99
83	Emeralda Ave	Primrose Ln	CR 44	Unincorporated	45	0.39	102
84	CR 33	Clearwater Rd	Desert Ln	Unincorporated	55	1.50	104
85	Radio Road	Revere Ave	US 441	Unincorporated	35 – 40	2.32	106, 181
86	CR 439	Double Toe Ln	Brookside Dr	Unincorporated	55	2.92	107
87	CR 48	Alamanda Dr	Ranch Rd	Astatula	55	0.47	109
88	Simon Brown Rd	CR 33	CR 565	Mascotte	50	1.00	112

Project Number	Roadway Name	From	To	City (or unincorporated)	Speed Limit (mph)	Length (miles)	Segment Project IDs
89	W Old US 441 / E Alfred Street	N Diston Ave	Valencia Ave	Tavares	45	0.75	113
90	David Walker Drive	Kurt St	T H Poole Rd	Eustis	35	1.14	114
91	CR 561	SR 33	Ott Williams Rd	Unincorporated	55	2.46	115
92	CR 561	Thompson Pl	Ruby Lee Rd	Unincorporated	55	1.48	116
93	CR 561	CR 455	Sugarloaf Mountain Rd	Unincorporated	55	1.47	117
94	Mount Pleasant Road	Ag Rd	SR 50	Groveland	35	0.57	118
95	Bay Lake Road	Sloans Ridge Rd	Twin Lake Dr	Unincorporated	55	2.53	119
96	Mount Homer Road	US 441	Kurt St	Eustis	35	1.19	120
97	CR 474	Yancey Rd	US 441	Unincorporated	55	2.02	121
98	W Atwater Avenue	Pine Grove Rd	SR 19	Eustis	25	0.48	122
99	CR 452	Marion County line	Martin Dr	Unincorporated	55	3.58	123
100	Hammock Ridge Road	Hammock Ridge Rd (Vineyard Apartments)	US 27	Unincorporated	35	0.27	124



Safety Action Plan

2026