

VISION ZER (*) ACTION PLAN



Acknowledgments

Osceola County Commission

Cheryl Grieb Chair, Commissioner District 4

Peggy Choudhry Vice Chair, Commissioner District 1

Viviana Janer Commissioner District 2

Brandon Arrington Commissioner District 3

Ricky Booth Commissioner District 5

Steering Committee

Joshua DeVries, AICP Osceola County Transportation and Transit

Nick Hartley, PE Osceola County Transportation and Transit

Isai Chavez Osceola County Transportation and Transit

Gary Yeager Osceola County Transportation and Transit

Cori Carpenter Osceola County Community Development

Marianne Arneberg Osceola County Transportation and Transit/PIO

Ron Cole Osceola County Sheriff's Department

Jerry Weiland Osceola County Sheriff's Department

Larry Collier Osceola County Fire & Rescue

Orville Watson Osceola County School Board

Ashley Cornelison City of Kissimmee

Tammy Reque City of St. Cloud

Cody Johnson LYNX

Ana McDougall Florida Department of Health – Osceola

Patrick Panza Bike Walk Central Florida

Vince Dyer Bike Walk Central Florida

MetroPlan Orlando

Adriana Rodriguez, PE Senior Transportation Engineer

Slade Downs Transportation Planner

Consultant Team

Kimley-Horn and Associates, Inc.

Jim Wood, AICPConsultant Team Project Manager

Mike Vaudo, AICP Project Planner

Lindsay Slautterback, AICP Project Planner

Wendy Krehbiel, PE, RSP 2I Project Engineer

Shayna Eaton Project Planner

Emanuelle Rodríguez Muñiz, PE, IMSA I Project Engineer

Alta Planning + Design

Alia Awwad, PE

Stephanie Garcia

Preparation of this plan was funded by a \$3.79 million Safe Streets and Roads for All Federal grant that was awarded to MetroPlan Orlando, creating 1 Regional, 3 County and 19 Local Vision Zero Action Plans.

Statement of Protection of Data from Discovery and Admissions

Disclaimer: Reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning matters in relation to this Vision Zero Action Plan shall not be: i) subject to discovery, ii) admissible as evidence in court proceedings, or iii) considered for any purposes in any action for damages arising from occurrences at locations identified or addressed therein. 23 U.S.C.A. §407. Further, no implications are intended regarding locations or issues not specifically identified or addressed by the Vision Zero Action Plan.

Prior to the implementation of any recommendations contained herein, which are conceptual in nature, a detailed analysis of specific local conditions should be conducted and reflected as appropriate in relevant design and construction documents.

Key Terms

Crash/Collision – An occurrence where a road user collides with another road user, such as a car or truck, motorcyclist, bicyclist, pedestrian, or other moving or stationary object, such as an animal, road debris, tree, pole, or building, that may result in injury or loss of life, trauma, and/or property damage. Crashes can involve a single-party or multiple parties.

High Injury Network (HIN) – A collection of streets where a disproportionate number of crashes that result in someone being seriously injured or killed occur.

Kinetic Energy – In the safety context, Kinetic Energy refers to the combination of mass and speed of a vehicle or other road user, like a bicyclist, involved in a collision. Depending on the angle of the crash, the higher the combination of mass and speed, the more likely the crash is to result in a serious injury or death, with the impact severity increasing exponentially as the speed a vehicle is driven increases.

KSI Crash – A crash that results in someone being killed or seriously injured.

Safe System Approach – A guiding safety approach that builds and reinforces multiple layers of protection to both prevent crashes from occurring and minimize the harm caused to those involved when a crash does occur.

Serious injury – May also be referred to as an incapacitating injury or a severe injury. Serious injuries may include broken bones, severed limbs, burns or internal injuries. These injuries usually require hospitalization and transport to a medical facility.

Transportation Underserved Communities – Communities where people experience greater transportation inequities to access jobs, housing, food, health care, education, and other destinations due to overlapping factors, including demographics, features of the built environment, and in some instances a lack of prior investment in the transportation system.

Vision Zero – A road safety philosophy which states that no loss of life or incapacitating injury due to traffic crashes is an acceptable price to pay for mobility.

Vulnerable Road User – For the purposes of this Action Plan, a person outside of a car or truck, which includes pedestrians, bicyclists, or motorcyclists. This also includes people in wheelchairs and on e-mobility devices, like scooters.

List of Abbreviations

ADA - Americans with Disabilities Act

CIP - Capital Improvement Plan

DUI – Driving Under the Influence

EMS - Emergency Medical Services

FDOT – Florida Department of Transportation

FHWA - Federal Highway Administration

HIN – High Injury Network

ITS - Intelligent Transportation Systems

KSI - Killed or Seriously Injured

MPO – Metropolitan Planning Organization

NHTSA – National Highway Traffic Safety Administration

RRFB – Rectangular Rapid Flashing Beacon

SRTS – Safe Routes to School

SS4A – Safe Streets and Roads for All

USDOT – United States Department of Transportation

VZAP - Vision Zero Action Plan



RESOLUTION #24-189R

- A RESOLUTION OF THE BOARD OF COUNTY COMMISIONERS OF OSCEOLA COUNTY TO ADOPT THE OSCEOLA COUNTY VISION ZERO ACTION PLAN WITH THE GOAL OF ELIMINATING TRAFFIC DEATHS AND SERIOUS TRAFFIC RELATED INJURIES IN OSCEOLA COUNTY BY 2050; AND PROVIDING FOR AN EFFECTIVE DATE.
- **WHEREAS**, traffic crashes are among the leading causes of fatalities and serious injuries within the United States, the State of Florida, and Osceola County; and
- **WHEREAS**, during the five-year period from 2018 to 2022, 329 individuals lost their lives and 1,434 were seriously injured due to traffic crashes in Osceola County; and
- WHEREAS, pedestrians and bicyclists are the most vulnerable road users, and traffic crashes involving pedestrians are the highest proportion of all fatal crashes in Osceola County; and
- WHEREAS, the County recognizes that these crash statistics are not acceptable for residents, commuters, and tourists who live, work, and play in Osceola County; and
- WHEREAS, if these crash trends continue, they put in jeopardy the future growth of the residential population and employment base and reputation of the County as a desirable place to live for future generations; and
- WHEREAS, measures to make Osceola County streets safer for all road users, particularly those who are most physically vulnerable, such as seniors, youth, and people with disabilities, will further encourage people of all ages and abilities to walk, bike, and take transit; and
- **WHEREAS**, the U. S. Department of Transportation has adopted the Safe System approach and the Florida Department of Transportation has adopted a Target Zero Initiative; and
- **WHEREAS,** Vision Zero is a data-driven strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all; and
- WHEREAS, Vision Zero is founded on a Safe System approach that recognizes that people will make mistakes and roadway systems and policies should be designed to protect them through redundancies and shared responsibilities; and
- WHEREAS, Vision Zero should create opportunities to invite meaningful input from the community, including residents that are disproportionately burdened by traffic collisions, and historically have been underserved; and
- **WHEREAS,** the Osceola County Board of County Commissioners adopted Resolution #22-142R on March 7, 2022 establishing a 2040 target for elimination of fatalities and serious injuries and directing the Transportation & Transit Department to create a Vision Zero Action Plan; and
- WHEREAS, the Orlando Urbanized Area Metropolitan Planning Organization (MPO), d.b.a. MetroPlan Orlando, is the agency designated to conduct a continuing, coordinated, and comprehensive transportation planning process in Orange, Osceola, and Seminole counties; and
- WHEREAS, MetroPlan Orlando received a federal Safe Streets and Roads for All grant for the development of Vision Zero Action Plans for each county and municipality within the three county planning area; and
- WHEREAS, Osceola County, in partnership with MetroPlan Orlando, developed a Vision Zero Action Plan with meaningful public input, as well as with guidance from a multi-disciplinary Vision Zero

Steering Committee comprised of organizations and agencies with expertise in transportation, engineering, education, enforcement, public health, emergency response, equity, transit, biking, and walking; and

WHEREAS, MetroPlan Orlando has adopted a regional Vision Zero goal of eliminating traffic deaths and serious injuries by 2050 based upon factors including consistency with the time horizon of the 2050 Metropolitan Transportation Plan and to encapsulate the range of local agency Vision Zero goals;

NOW THEREFORE, BE IT RESOVED, by the Osceola County Board of County Commissioners, that:

SECTION 1. RECITALS. The above recitals are true and correct and are hereby incorporated herein by reference.

SECTION 2. ADOPTION. Osceola County hereby adopts the Osceola County Vision Zero Action Plan which includes a revised goal of eliminating traffic deaths and serious injuries by 2050 based upon the Action Plan and in alignment with the Vision Zero goal for the region.

SECTION 3. IMPLEMENTATION. The Osceola County Board of County Commissioners directs the Transportation & Transit Department to lead implementation of the Vision Zero Action Plan to ensure a comprehensive and collaborative approach to achieving the plan's goals.

SECTION 4. SEVERABILITY. If any clause, section or other part of this resolution shall be held by any court of competent jurisdiction to be unconstitutional or invalid, such unconstitutional or invalid part shall be considered as eliminated and in no way affecting the validity of the other provisions of this resolution.

SECTION 5. EFFECTIVE DATE. This Resolution shall take effect immediately upon its adoption. **DONE AND ADOPTED** this 4 day of November, 2024.

BOARD OF COUNTY COMMISSIONERS OF OSCEOLA COUNTY, FLORIDA

(SEAL)

Chair/Vice Chair

ATTEST:

OSCEOLA COUNTY CLERK OF THE BOARD

By:

Frances y. Mason

Clerk/Deputy Clerk of the Board

As authorized for execution at the Board of County Commissioners meeting of: ______//04/2024

Table of Contents

SECTION/TITLE	PAGE
Executive Summary	9
Chapter 1: Introduction	22
Chapter 2: Understanding the Crash Trends	31
Chapter 3: Listening to the Community	52
Chapter 4: Toolkit of Strategies	64
Chapter 5: Project Development and Prioritization	74
Chapter 6: Plan of Action	129
Chapter 7: Implementation and Tracking	141
Appendices	151
Appendix A: HIN Development and Corridor Fact Sheets	152
■ Appendix B: Crash Analysis	198
■ Appendix C: Public Engagement Plan	209
Appendix D: Policy Benchmarking	218
Appendix E: Strategies and Action Items	257

Figures

Executive Summary



These numbers are unacceptable for the residents, commuters, and visitors who live, work, and play in Osceola County. They also jeopardize the County's growth, employment base, and reputation as a desirable place to live for future generations.

In recognition of statistics like these, the Osceola County Board of County Commissioners adopted a resolution in 2022 directing the creation of a Vision Zero Action Plan. In 2023, MetroPlan Orlando pursued and obtained a \$3.79 million Safe Streets and Roads for All (SS4A) grant that provided funding to develop Vision Zero Action Plans across its three-county region. This funding enabled Osceola County to fulfill its directive to create this Vision Zero Action Plan (VZAP or Action Plan).

See Chapter 1, Introduction, for additional background.

EXECUTIVE SUMMARY 10



Through approval of this Action Plan and its companion resolution, the Board of County Commissioners adopts a goal of eliminating traffic deaths and serious injuries on roadways within Osceola County by 2050. This target is based upon analysis from this Action Plan and is in alignment with the Vision Zero goal for the region.

The Vision Zero philosophy and Safe System Approach are foundational to this

Action Plan. Vision Zero is a road safety philosophy which states that no loss of life or incapacitating injury due to traffic collisions is acceptable. The Safe System Approach acknowledges the vulnerability of the human body should be considered when designing and operating a transportation network to minimize serious consequences of crashes. The six Safe System principles are adopted in support of the Vision for this Action Plan.

See Chapter 1, Introduction, for more information about Vision Zero and the Safe System Approach.

Vision

Provide Safe, Equitable Mobility for All Road Users in Osceola County and Eliminate Traffic-Related Deaths and Serious Injuries

Safe System Principles

- Death and Serious Injuries are Unacceptable
- Humans Make Mistakes
- Humans are Vulnerable
- Responsibility is Shared
- Safety is Proactive
- Redundancy is Crucial

This Action Plan uses a data-driven approach to identify roads where the highest incidence of crashes with fatalities and serious injuries are occurring. These are referred to as KSI crashes for individuals Killed or Seriously Injured. The roads identified through this approach are "High Injury Network" or HIN roadways that are the cornerstone for the VZAP's identification of actionable projects and solutions. Twenty-seven (27) corridors were identified.

See Chapter 2, Understanding the Crash Trends, for a complete summary of trends, the HIN, and the top collision profiles in Osceola County.

Key Statistics At A Glance:

- Crashes involving vulnerable uses
 (pedestrian, bike, or motorcycle) are
 20 times more likely to result in a
 fatality than vehicular crashes.
- Left-turn crashes make up the highest proportion of crashes resulting in fatality or serious injury.
- 48% of fatal and serious injury crashes occurred at nighttime.
- 63% of intersection pedestrian crashes were caused by a motorist failing to yield.

60% of all traffic fatalities and serious injuries happen on just 3% of our road network in Osceola County. This 3% comprises our High Injury Network.

The three most prevalent collision profiles on Osceola County's High Injury Network are:



EXECUTIVE SUMMARY

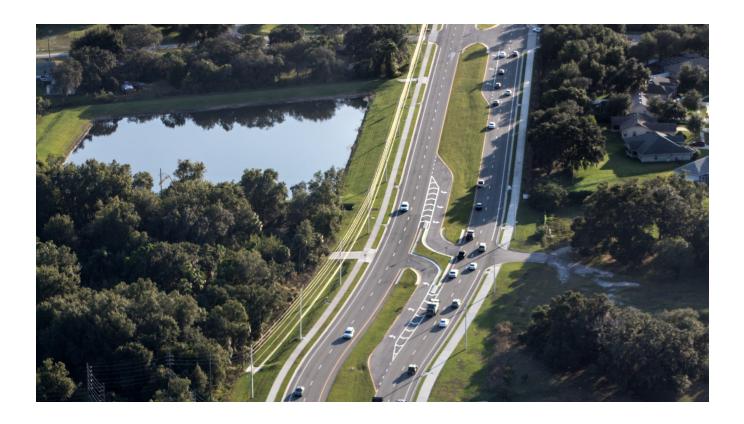
Hearing directly from the community and key stakeholders was critical to the development of the Action Plan.

Engagement took place with nearly 150 people through six public Open Houses and two Pop-up Events. Outreach also included an online presence (Osceola County Vision Zero Action Plan Website) and social media outreach. A multidisciplinary Steering Committee provided advisory support and diverse stakeholder perspectives to help shape the Action Plan. This outreach was accompanied by parallel engagement activities and support that took place through the Vision Zero Central Florida initiative led by MetroPlan Orlando.

See Chapter 3, Listening to the Community, for more information.

What do residents in Osceola County have to say about traffic safety:

- Safety issues are personally observed along multiple High Injury Network locations such as Pleasant Hill Road, Poinciana Boulevard, US 192, and others.
- Providing safe facilities for bicyclists and pedestrians is very important.
- Unsafe driver behavior such as excessive driver speeds in locations like school zones is frequently observed.
- High congestion and periods of delay lead to driver frustration which may encourage some drivers to be less safe.



Countermeasures are strategies to address specific issues and shape the solutions within HIN Network

roadways. A countermeasure is defined as a strategy that is effective in reducing roadway fatalities and serious injuries on our roads. Countermeasures include both engineering and non-engineering solutions. Comprehensive toolkits were developed for these respective types of countermeasures by MetroPlan Orlando and are available on their hub site at VisionZeroCFL.gov under the Resources tab. This Action Plan draws from those and other sources to focus on key countermeasures applied as strategies within Osceola County.

See Chapter 4, Toolkit of Strategies, for more information.

Some of the potential countermeasures proposed in the Osceola County projects include:

Signing and Striping

- Stop for Pedestrians Signage
- Flexible Backplates
- Curve Warning Signs and Raised Pavement Markers (RPMs)

Pedestrian Facilities

- High Visibility Crosswalks
- Crosswalks at Stop-controlled Approaches
- Pedestrian Refuge Islands
- Completion of Sidewalk Gaps and Missing Crosswalk Legs

Other Engineering Strategies

- Intersection Lighting
- School Zone Upgrades



High Visibility Crosswalk



Pedestrian Refuge Island

The HIN Network provided the basis for identification of the top corridors in Osceola County to develop the prioritized project plan that is core to this Action Plan. The original 27 HIN corridors were analyzed to determine which are the most appropriate to develop as projects. Of those, 15 candidate project corridors were identified and then prioritized, drawing from the regional prioritization approach. Table 1 and Figure 1 provide an overview of the HIN roadways that form the program of projects.

See <u>Chapter 5, Project Development and Prioritization</u>, for more information including the complete profiles on the 15 projects.

Table 1. Priority Project Corridors

ROADWAY	FROM	то	PRIORITY ORDER
N Poinciana Blvd	Siesta Lago Dr	US 192	1
Clay St	Dawes Ave	S Thacker Ave	2
E Carroll St	US 17/441 (OBT)	Michigan Ave	3
E Osceola Pkwy	US 17/441 (OBT)	Coralwood Cir/ Plumwood Cir	4
Buenaventura Blvd	Simpson Rd	County Line	5
Pleasant Hill Rd	South of Granada Blvd	Knowles Blvd	6
S Poinciana Blvd	Eagles Trl	Woodmont Blvd/Red Blossom Ln	7
Koa St	Marigold Ave	San Remo Rd	8
N Doverplum Ave	Country Club Rd/Towne Center Dr	Koa St	9
S Narcoossee Rd	Lillian Black Rd	Jack Brack Rd	10
E Osceola Pkwy	1/4-mi W of Buenaventura Blvd	Sandalwood Dr	11
Pleasant Hill Rd	Old Pleasant Hill Rd	Spinning Reel Ln/ Wilderness Trl	12
S Narcoossee Rd	US 192	Lillian Lee Rd	13
Nolte Rd	W of Michigan Ave	Southern Vista Loop	14
Canoe Creek Rd	Indian Lakes Blvd	500' N of Hyleigh Way	15

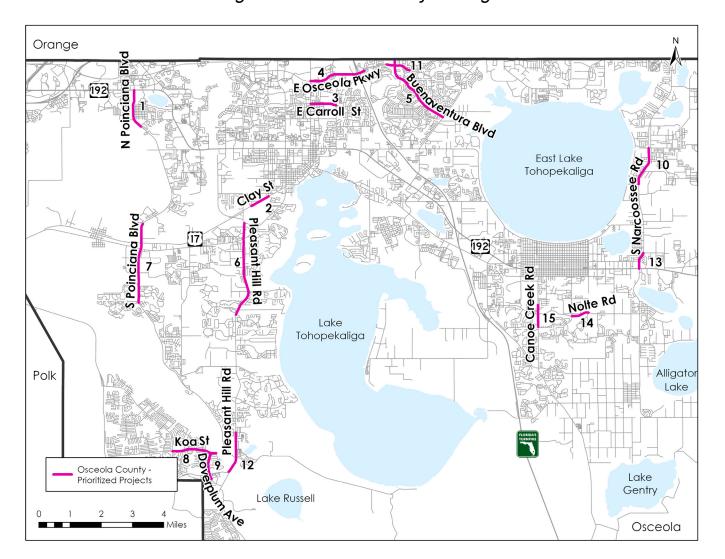


Figure 1. Prioritized Project Segments

Action Plan development included a comprehensive policy and plan review to identify opportunities for strategies and actions to help reach Vision Zero. This comprehensive review led to identification of 15 separate actions under a framework of five strategies to evaluate and explore based upon current and future resources:



Safer People:

Targeted High-Visibility Enforcement and Training

Actions to explore are focused on:

- Establishing a safety enforcement team
- Expanding existing enforcement campaigns
- Creation & deployment of new targeted campaigns
- Crafting Targeted Safety Training Program



Safer Roads:

Safety Improvements Implementation

Action to explore are focused on:

- Implementing a pilot & demonstration program for lowcost safety countermeasures
- Leveraging Capital Improvement Plan (CIP) project development process to integrate HIN safety improvements
- Facilitating safety improvements near transit
- Diversification of funding sources
- Updating Design Guidance, Roadway Design Standards, and codes to align with latest safety standards and practices

18

EXECUTIVE SUMMARY



Safer Speeds:

Speed Management

Actions to explore are focused on:

- Target speed-setting policy in planning and design
- Adoption and implementation of Pedestrian Priority Zones (PPZs)
- School Zone
 Speed Safety
 Camera Program
 implementation



Safer Vehicles:

Safety Technology

Actions to explore are focused on:

- Advancing safety technology on publicly owned fleet vehicles
- Partnering with technology vendors to install nearmiss technology at intersections



Post Crash Care:

Post Crash Collaboration

Actions to explore are focused on:

 Establishment of multi-agency fatal crash evaluation team

See Chapter 6, Plan of Action, for the complete framework of strategies and actions.

Monitoring our progress is an important part of the process. On an annual basis, we will reflect on our progress towards zero through summary monitoring of the crash trends from the prior year and comparing them to the trends documented in the action plan.

See Chapter 7, Implementation and Tracking, for additional details.

Chapter 1:

Introduction



SAVING LIVES. That's what it's all about. The only acceptable number for traffic deaths is zero, because everyone deserves to travel safely around Central Florida and in Osceola County.

No one entity can fix road safety problems alone. This Vision Zero Action Plan results from a coordinated planning effort led by MetroPlan Orlando in partnership with Osceola County and other agencies. The Osceola County Board of County Commissioners, recognizing that the rate of fatalities and serious injuries on roadways within the county is unacceptable, adopted an initial Vision Zero resolution in 2022 (#22–142R) that directed the creation of a Vision Zero Action Plan. The intent of an Action Plan is to help make streets safer for all road users, particularly those who are most physically vulnerable, such as seniors, youth, and people with disabilities. Improved safety is also intended to encourage people of all ages and abilities to walk, bike, and take transit, which improves quality of life.

MetroPlan Orlando is the Metropolitan Planning Organization (MPO) designated to conduct a continuing, coordinated, and comprehensive transportation planning process in Orange, Osceola, and Seminole counties. In 2023, MetroPlan Orlando pursued and obtained a \$3.79 million Safe Streets and Roads for All (SS4A) grant that provided funding to develop Vision Zero Action Plans for the region (Regional Action Plan), the 3 counties, and 19 municipalities. This funding enabled Osceola County to fulfill its directive to create a Vision Zero Action Plan. Within the County, the SS4A grant also provided funding for the Kissimmee and St. Cloud plans which were developed in parallel to this Action Plan.



ON AVERAGE IN OSCEOLA COUNTY...

- Someone is involved in a crash every hour
- Someone is incapacitated in a crash every other day
- Someone is killed in a crash *every week*

In Osceola County, 329 people lost their lives through traffic crashes between 2018 and 2022. Of these fatalities, approximately 38% (124 fatalities) were considered vulnerable road users (VRUs), and were killed while biking, walking, or riding a motorcycle. In addition to these deaths, there were 1,434 serious injuries on roadways within Osceola County during this same timeframe.

By 2050, Osceola County commits to eliminate traffic fatalities and serious injuries within the County. To achieve this goal, Osceola County has developed a thorough, implementable Vision Zero Action Plan consistent with Vision Zero and the Safe System Approach.

What is Vision Zero?

Vision Zero is a road safety philosophy which states that no loss of life or incapacitating injury due to traffic collisions is acceptable. A Vision Zero community sets a clear goal to eliminate traffic fatalities and severe injuries. It also defines actionable strategies and engages key departments representing diverse disciplines. Commitment of elected officials is crucial.

Definition:

Vision Zero is an international movement to reach zero traffic fatalities. Vision Zero Central Florida's goal is simple: saving lives. Zero traffic deaths. Everyone should be able to travel safely around Central Florida without the fear of death or serious injury.

Vision Zero recognizes that humans make mistakes and therefore the transportation system should be designed to minimize the consequences of human error. The Vision Zero approach is fundamentally different from the traditional traffic safety approach in American communities in **six key ways**.

How do we get to Vision Zero?

Vision Zero is holistic and includes a variety of strategies, including behavior, infrastructure, legislative, and policy changes.

Vision Zero evaluation establishes a high injury network (HIN) where most serious crashes happen and identifying root causes of crashes that may be infrastructure or behavior based.

Vision Zero also identifies short-term fixes and strategies where they're most needed, along with long-term projects that will transform infrastructure.



What is the Safe System Approach?

The Safe System Approach aims to eliminate fatal and serious injuries for all road users by keeping impacts on the human body at tolerable levels and accommodating human mistakes.

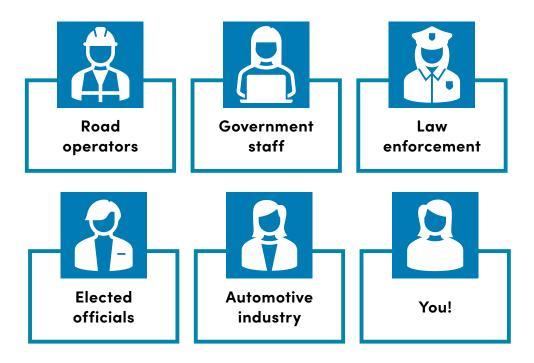
Making a commitment to zero deaths means addressing every aspect of crash risks across the entire road system. It differs from the traditional approach in the primary ways shown below.

The Safe System Approach acknowledges the vulnerability of the human body should be considered when designing and operating a transportation network to minimize serious consequences of crashes.

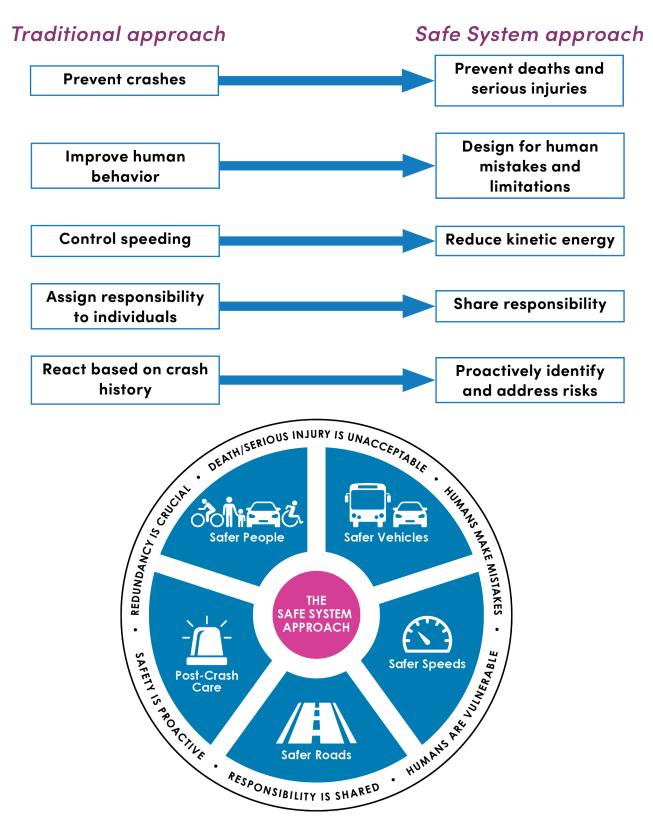
Creating a Safe System means shifting some responsibility from road users to those who plan and design the transportation system. While road users are responsible for their own behavior, there is a shared responsibility with those who design, operate, and maintain the transportation network, including the key partners shown below.

In a Safe System, road system designers and operators take on the highest level of ethical responsibility to design and build our transportation system in a way that encourages safer behavior and provides redundancies. The Safe System Approach is built on the six principles and five elements described on the following pages.

Key partners for a safe system include:



The Safe System Approach is different from traditional road safety:



Source: Adapted from Federal Highway Administration, 2024

The Safe System Approach emphasizes a focus on reducing and eventually eliminating crashes that result in a fatality or serious injury on our roadways. It takes a holistic view of the transportation system that anticipates human mistakes and seeks to keep impacts of crashes at levels the human body can withstand.

Vision Zero advocates for implementing this approach, which focuses on five elements of a safe transportation system, that together can provide layers of protection against death and serious injuries on our roadways:



Safer People

The Safe System Approach considers the safety of all road users including those who walk, bike, drive, ride transit, and travel by other modes.



Safer Roads

The Safe System Approach advocates for the use of a series of proven countermeasures to make our roads safer through design. Some examples of countermeasures include providing a separated bicycle facility, improving the visibility of pedestrian crosswalks, and installing rumblestrips to prevent lane departures.



Safer Vehicles

Vehicles should be designed thoughtfully and appropriately regulated to limit the severity of crashes and ensure that technology related to safety measures is adequately incorporated.



Safer Speeds

High-speed crashes raise the risk of severe injury or death exponentially as vehicle speed increases. The Safe System Approach encourages traveling at speed limit, following the laws of the road, and promoting design that allows drives to stop in time and have enhanced visibility.



Post-Crash Care

Post-Crash Care considers all of the systems in place to provide support when a crash has occurred. This includes law enforcement, emergency responders, forensic analysis at the crash site, and traffic incident management.



The Safe System is built on Six Principles:

Death and serious injury are unacceptable

This plan focuses on eliminating crashes resulting in death and serious injuries within Osceola County by 2050, which is in alignment with MetroPlan Orlando's goal of 2050.

Humans make mistakes

Everyone (people walking, bicycling, driving, etc.) makes mistakes that can lead to a crash. The goal of the Safe System Approach is to design and operate our transportation system to ensure these mistakes don't have life-altering impacts.

Humans are vulnerable

Human bodies can only withstand a limited amount of impact from a crash before death or serious injuries occur.

Responsibility is shared

Every person in the transportation system, from elected officials to everyday users, has a role to play in reaching zero fatalities and serious injuries.

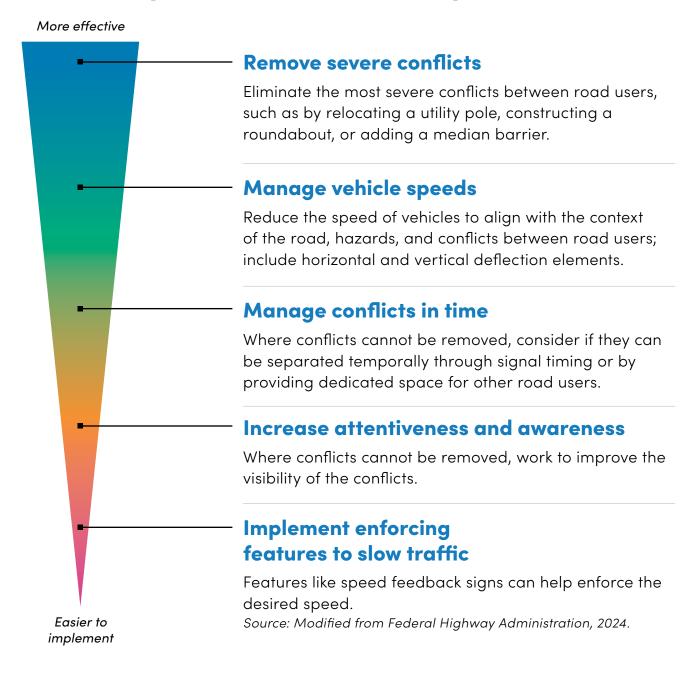
Safety is proactive

Rather than waiting for crashes to occur, transportation agencies should seek to proactively identify and address dangerous situations.

Redundancy is crucial

A transportation system needs multiple layers of protection working together towards safer outcomes, so that if one layer fails, people are still protected.

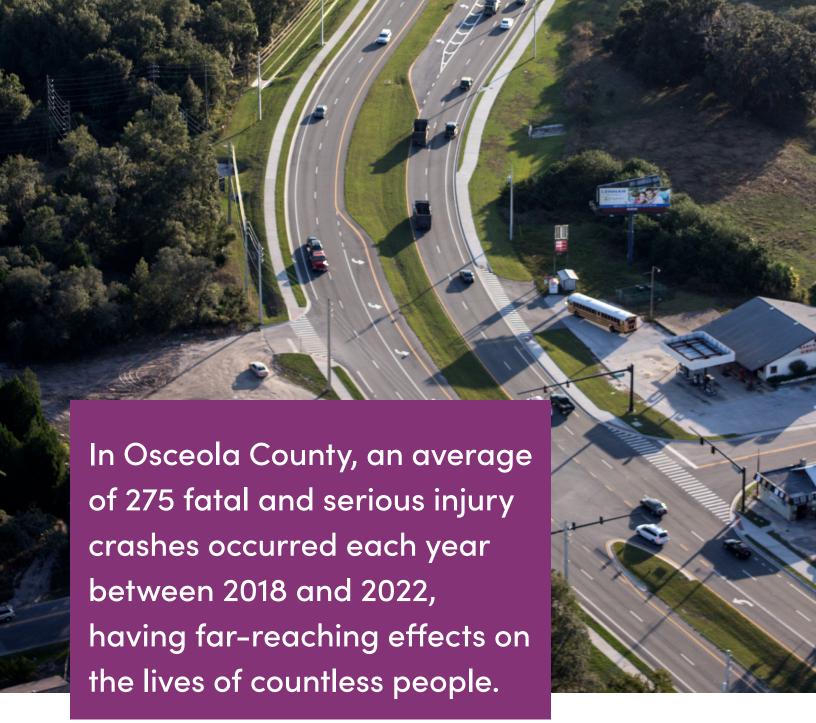
The Safe System solutions hierarchy seeks to:



Source: Federal Highway Administration, 2024

Chapter 2:

Understanding the Crash Trends

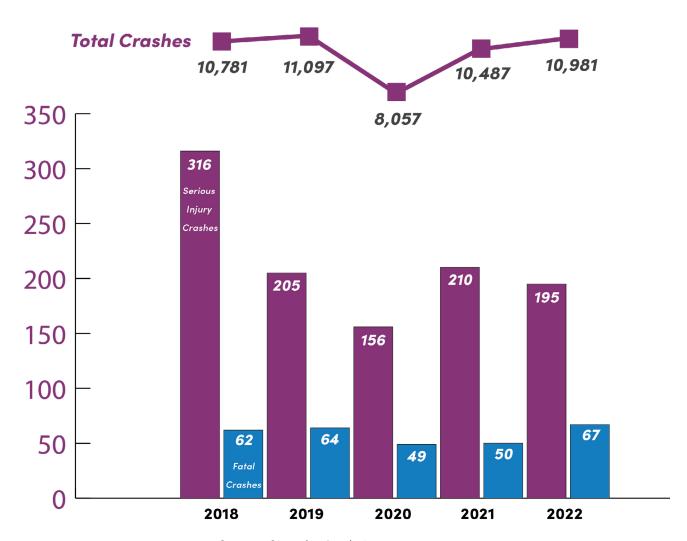


The Crashes

During the period from 2018 to 2022, over 50,000 crashes occurred on roads throughout Osceola County. During that same timeframe, 1,374 of those crashes resulted in people being killed or seriously injured, averaging approximately 275 fatal or serious injury crashes occurring in our county per year. Trends regarding fatal and serious injury crashes in the county have held steady over the last five years outside of a high in 2018 and a dip likely related to a change in driving trends during the COVID-19 pandemic in 2020.

Crashes involving vulnerable road users, which include pedestrians, bicyclists, and motorcyclists, accounted for nearly 32% of all fatal and serious injury crashes in Osceola County between 2018 and 2022.

Figure 2. Crashes Each Year in Osceola County



Source: Signal 4 Analytics, 2018-2022

Figure 3. Osceola County Crashes Based on Who is Involved:

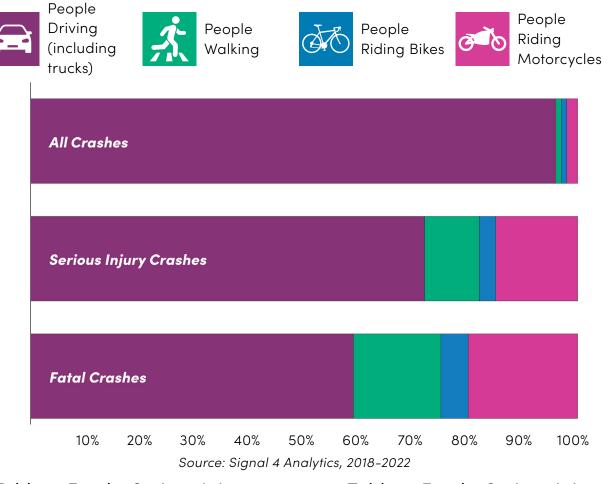


Table 2. Fatal + Serious Injury Crashes by Year

YEAR	FATAL + SERIOUS INJURY CRASHES
2018	378
2019	269
2020	205
2021	260
2022	262
TOTAL	1,374

Table 3. Fatal + Serious Injury Crashes by Year

MODE	FATAL + SERIOUS INJURY CRASHES
Bicycle	48
Pedestrian	138
Motorcycle	204
Vehicular	984
TOTAL	1,374

^{*} Includes limited-access interstate, toll, and private roads

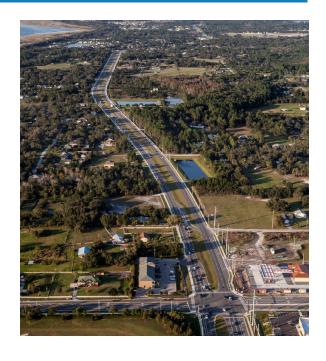
The People

When looking at historical crash data for the five-year period between 2018 and 2022, most alarming is the fact that **329 people were killed** in these crashes, an appalling reality that has ended far too many lives and significantly altered the lives of countless others. Analysis of the data also reveals another troubling trend and that is the proportion of those who have lost their lives as vulnerable road users, which includes pedestrians, bicyclists, motorcyclists, and those using wheelchairs, scooters, or other mobility devices. Of the **329 people that were killed, 50 were walking, 13 were biking, and 61 were riding a motorcycle**, accounting for nearly 40% of fatalities.

WHY FOCUS ON FATAL AND SERIOUS INJURY CRASHES?

Focusing on fatal and serious injury crashes is important because even *one death on our transportation network is too many*. Emphasizing these types of crashes can help our community *reduce the severity of crashes* on our roadways and prioritize and protect the lives and wellbeing of all users regardless of the mode they are using.

Nearly 40% of fatalities involved someone walking, biking, or riding a motorcycle in Osceola County between 2018 and 2022. Crashes involving vulnerable users are 20 times more likely to result in a fatality than vehicular crashes.



The Roadway Characteristics

Similar to other communities throughout the state of Florida, fatal and serious injury crashes are more common along high-volume, high-speed corridors, that have several lanes of traffic and inadequate multimodal facilities. Based on the crash analysis, roads with the following characteristics are more likely to have a higher proportion of fatal or serious injury crashes:

Roads with 4-6+ lanes



Parallel travel lanes mean more opportunities for drivers to unintentionally depart from lanes creating increased safety issues.

Roads with speeds limits ranging from 40 to 55 miles per hour



Higher speeds increase driver reaction times which can contribute to more fatal and serious crashes.

Roads with the classification "Principal Arterial"



These roads carry a lot of traffic at higher speeds and provide access to a multitude of destinations, increasing the potential for crashes.

Roads with FDOT Context Classification of C3C, or Suburban Commercial



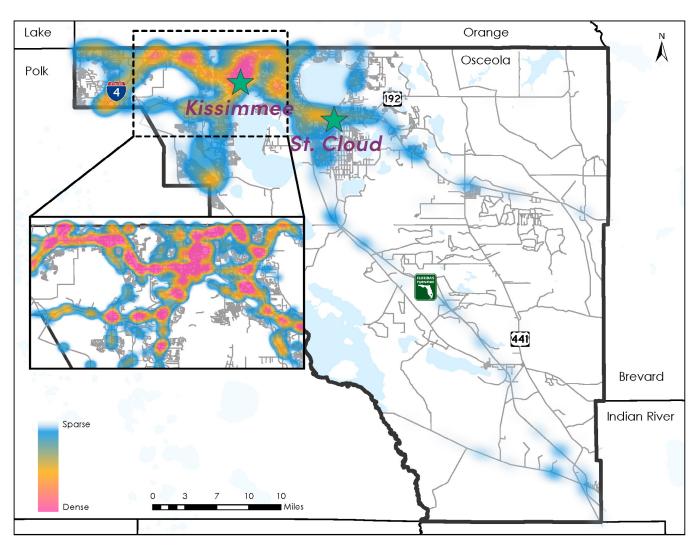
High density land uses and diversity of roadway users in these contexts increase the potential for conflicts.

Roads with Annual Average Daily Traffic (AADT) of 15,000-30,000+



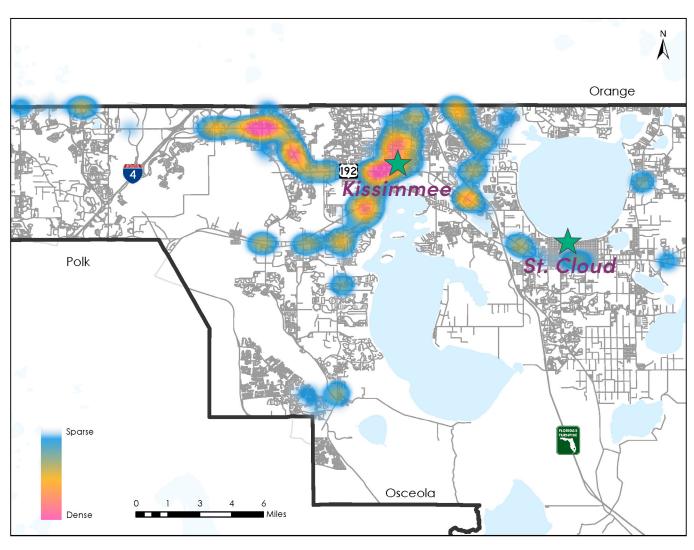
These high volume corridors often have peak periods of significant congestion which may lead to driver frustration and unsafe driving behaviors.

Figure 4. Density Map of Fatal and Serious Injury Crashes in Osceola County, 2018–2022



Source: Signal 4 Analytics

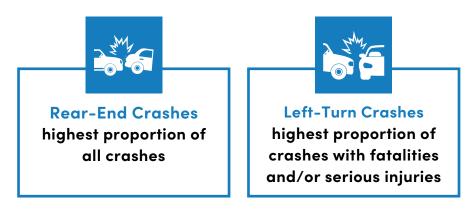
Figure 5. Density Map of Fatal and Serious Injury Crashes involving a Vulnerable Road User in Osceola County, 2018-2022



Source: Signal 4 Analytics

The Crash Types & Contributing Factors

To better understand the different contributing factors to fatal and serious injury crashes in Osceola County, crash data was reviewed to identify significant trends. This review looked at crash types, behaviors, time of day, emphasis area, and age-related data. These factors are not mutually exclusive; for example, a serious injury crash can have occurred as a result of distracted driving, involving a teen driver, at nighttime. The graphics below detail the most prevalent trends and behaviors occurring for all crashes occurring on non-limited access public roadways in Osceola County, and more importantly, for fatal and serious injury crashes.



- 38% of fatal and serious injury crashes involved distracted driving; 30% of all crashes involved distracted driving.
- 34% of fatal and serious injury crashes were intersection-related; 25% of all crashes were intersection-related.
- 48% of fatal and serious injury crashes occurred at nighttime; 24% of all crashes occurred at nighttime.
- Notably, while alcohol and drug use accounted for just a small percentage of total crashes (1% and .5% respectively), fatalities and serious injuries were more likely to occur when these substances were involved (15% of alcohol related crashes resulted in a fatality or serious injury while nearly 25% of all drug-related crashes did).
- Aging drivers were slightly more likely (16%) to be involved in a fatal or serious injury crash compared to teenage drivers (12%); however, teenage drivers make up less than 6% of the licensed driver population.
- While a crash is most likely to occur between 3 and 6 pm during peak traffic, a fatal or serious injury crash is more likely to occur between 6 pm and midnight.

^{*}Crash trend analysis based on historical crash data for the years 2018 to 2022 is excluding limited-access interstate, toll, and private roads. Detailed crash tables can be found in the Appendices of this plan.

The Collision Profiles

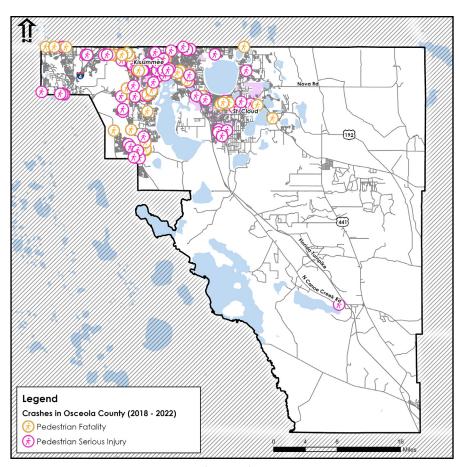
Based on crash trends and contributing factors over the study period, collision profiles were developed to summarize the main safety issues observed across Osceola County roadways. These profiles are critical to identify appropriate improvements to roadways that address the specific safety concerns seen at each location. For the purposes of the Action Plan, the top profiles identified included three main areas of concern: crashes involving pedestrians, intersection crashes, and crashes on two-lane roads. The project team analyzed these profiles to dig deeper into the crash data and identify specific behaviors or contributing factors occurring on specific types of corridors or in the case of specific types of crashes.

Crashes Involving Pedestrians

Pedestrian crashes make up the highest proportion of fatal crashes.

Profile 1: Midblock Pedestrian Crashes

- 38% of midblock pedestrian crashes resulted in fatality or serious injury
- 60% of midblock pedestrian crashes occurred in the dark
- 40% of midblock pedestrian crashes were caused by a pedestrian failing to yield



Source: Signal 4 Analytics, 2018-2022

Profile 2: Intersection Pedestrian Crashes

- 63% of intersection pedestrian crashes were caused by a motorist failing to yield
- 42% of all pedestrian crashes occurred at or related to intersections

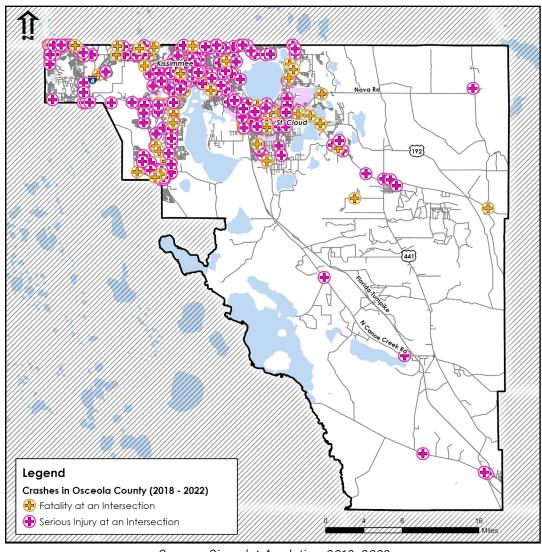
Intersection Crashes

Profile 3: Left Turns

- Left-turn crashes make up the highest proportion of crashes resulting in fatality or serious injury
- 33% of all and 42% of KSI intersection-related crashes involved left turns
- 3% of all and 24% of KSI left-turn crashes involved a motorcycle

Profile 4: High-Speed On Principal Arterials

- Principal arterials comprise 6% of the roadway network yet experienced 40% of intersection-related KSI crashes
- Roadways with 40-55 mph speeds comprise 15% of the roadway network yet are the location of 70% of intersection-related KSI crashes



Source: Signal 4 Analytics, 2018-2022

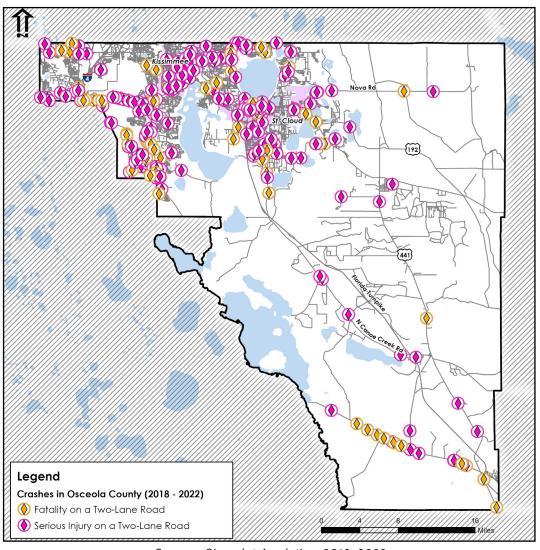
Crashes on Two-Lane Roads

Profile 5: Off-Road Crashes (No Shoulders)

- 47% of off-road crashes occur in dark conditions
- 48% of off-road crashes occur on 2-lane roads and 25% of those have unpaved shoulders
- 46% of off-road crashes involved trees, utility/light poles, and ditches

Profile 6: Head-On Crashes (Undivided)

- 46% of head-on crashes occur on undivided 2-lane roads
- 66% of KSI head-on crashes on undivided 2-lane roads involve speeds of 55-60+ mph



Source: Signal 4 Analytics, 2018-2022

Considering Equity

As part of the Safe Streets and Roads for All (SS4A) program, there is a heavy emphasis on prioritizing roadway safety within and surrounding transportation underserved communities.

WHAT IS AN UNDERSERVED COMMUNITY?

An underserved community is a broad term that encompasses several components to effectively evaluate the needs and lack of access experienced by people throughout the country. An underserved community may face any of the following:

- Transportation Insecurity
- Environmental Burden
- Social Vulnerability
- Health Vulnerability
- Climate Disaster Risk and Burden

In Osceola County, approximately 30% of residents live in underserved census tracts, which are concentrated in various locations including southern rural areas of the county, but also urban areas including within the City of Kissimmee and associated with the City of St. Cloud, Poinciana, and along I–4. The main component attributing to this designation is Transportation Insecurity.



Throughout the region as a whole, fatal and serious injury crashes are more likely to occur within or in areas surrounding transportation underserved communities. That is consistent in Osceola County, with nearly 43% of all fatal and serious injury crashes occurring within or surrounding (within 100 feet) these designated census tracts. These statistics provide a compelling case for focusing on these communities from a roadway safety perspective.

A FOCUS ON TRANSPORTATION UNDERSERVED COMMUNITIES

Every community has its unique transportation advantages and disadvantages based on land use, characteristics of the road network (like whether there are sidewalks and streetlights), demographics, and other factors. Considering the USDOT definitions of Transportation Underserved, approximately 25% of the regional population is considered Transportation Underserved. When areas that also meet the Regional Climate and Economic Justice Screening Tool (CEJST) definition of disadvantaged, approximately 41% of the total regional population is considered transportation underserved in general. Fatal and serious injury crashes disproportionately occur in Transportation Underserved Communities. To offset the disproportionate impacts that people in these communities experience, safety improvements will be prioritized in Transportation Underserved Communities.

Source: Regional Action Plan, 2024

The High Injury Network

WHAT IS THE HIGH INJURY NETWORK?

The High Injury Network, or "HIN," is a subset of the county's transportation network that represents segments and intersections where a disproportionate number of fatal and serious injury crashes have occurred.

60% of all traffic fatalities and serious injuries happen on just 3% of our road network in Osceola County. This 3% comprises our High Injury Network. These represent some of our most dangerous corridors for motorists as well as vulnerable road users. Identifying the HIN is the first step toward developing a comprehensive list of locations to prioritize when it comes to implementing safety projects in our community that will have the most impact. In Osceola County, there are 3,011 centerline miles of roadway, approximately 3% of which were identified in our High Injury Network. On these 3% of roadways, 60% of all traffic deaths and serious injuries occur.

Two HINs were developed for Osceola County utilizing a methodology consistent with the Regional Action Plan. The All Roads HIN includes all roads within the County regardless of roadway ownership or maintenance, and the County Roads HIN specifically identifies roadways maintained by the County. Two separate lists were developed to allow Osceola County to prioritize projects on roads under their own jurisdiction, while also identifying opportunities for partnership with other agencies and jurisdictions, including the Florida Department of Transportation (FDOT), the City of St. Cloud, and the City of Kissimmee.

All Roads High Injury Network

The All Roads High Injury Network in Osceola County includes over 50 miles of roadway segments. Over one third (40%) of all fatal and serious injury crashes in Osceola County occurred on these corridors. When it comes to vulnerable road users, over 53% of all fatal and serious injury crashes involving a bicyclist, pedestrian, motorcyclist, scooter, or wheelchair user were located on these segments. The All Roads HIN corridors are listed below in Table 4 and shown in Figure 6.

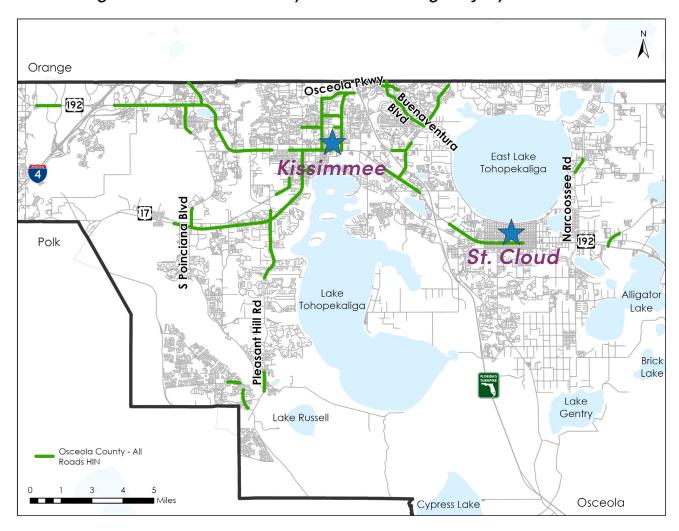
Table 4. Osceola County - All Roads HIN Corridors

	ROADWAY	FROM	то
1	Simpson Road/ Fortune Road	Grande Boulevard	Marisol Loop/Winners Circle
2	Pleasant Hill Road	Shopping center entrance	South of Spinning Reel Lane
3	Donegan Avenue	John Young Parkway	US 441
4	E Bronson Highway/13 th Street/Vine Street	Shopping Center Entrance	Magic Landings Boulevard
5	Michigan Avenue	W. Vine Street/US 192	E. Osceola Parkway
6	Oren Brown Road	Short segment at intersection with US 192	
7	Osceola Parkway	Shopping Center Entrance	Sandalwood Drive
8	Royal Street	Short segment at intersection with US 192	
9	Main Street/US 441	US 192/Vine Street	Osceola Parkway
10	S. Orange Blossom Trail/ John Young Parkway	West of Avenue A	W. Emmett Street
11	SR 600/CR 525/John Young Parkway	US 192	W. Emmett Street
12	SR 535; SR 539 to Orange	US 192	Orange County Line
13	Simpson Road	Buenaventura Boulevard	Amberley Park Road
14	Buenaventura Boulevard	Simpson Road	Orange County Line
15	Carroll Street	US 441	Michigan Avenue
16	Pleasant Hill Road	South of Granada Boulevard	Shingle Creek Court

	ROADWAY	FROM	то
17	Clay Street/Thacker Avenue	Dawes Avenue	W. Penfield Street
18	Donegan Avenue	Rail tracks to Michigan Avenue	Thacker Avenue to W. Penfield Street
19	E Bronson Highway/13th Street/Vine Street	Main Street	N. Carson Avenue
20	Koa Street	Hunter Road	West of San Remo Road
21	Doverplum Avenue	South of Koa Street	West of Old Pleasant Hill Road near shopping center entrance
22	Locksley Lane	US 192	End
23	Narcoossee Road N	Sunset Road	Yukon Street
24	Old Dixie Highway	Short segment at intersection with Carroll Street	
25	Osceola Parkway	US 441	Bill Beck Boulevard
26	Poinciana Boulevard	Hwy 17	Woodmont Boulevard
27	Poinciana Boulevard	Siesta Lago Drive	US 192
28	W Emmett Street	John Young Parkway	N. Beaumont Avenue
29	San Remo Road	Short segment at intersection with Doverplum Avenue	
30	Siesta Lago Drive	Short segment at intersection v	with US 192
31	Simpson Road	US 441	Fortune Road
32	SR 530	West of shopping center entrance	Secret Lake Drive
33	The Oaks Boulevard	Short segment at intersection with John Young Parkway	
34	US 192/Vine Street	SR 429	Inspiration Drive/ Black Lake Road
35	US 192/Vine Street	Reedy Creek Boulevard	World Drive
36	US 192/Vine Street	Parkway Boulevard/ Celebration Place	N. Plantation Road

	ROADWAY	FROM	то
<i>37</i>	US 192/Vine Street	N. Thacker Avenue	Main Street/US 441
38	Vintage Street	Short segment at intersection with Hwy 17	
39	E Bronson Highway/13 Street/Vine Street	St. Cloud Village Court	Michigan Avenue
40	Nova Road	US 192	Dumbleton Place/ Thorn's Run

Figure 6. Osceola County - All Roads High Injury Network



County Roads High Injury Network

The County Roads High Injury Network includes approximately 38 miles of roadway throughout Osceola County. While these segments represent a lower proportion of all fatal and serious crashes (25%) and vulnerable road user fatal and serious injury crashes (28%) than the All Roads HIN, these corridors are extremely important in the local road network under the County's jurisdiction. The County Roads HIN corridors are listed in Table 5 and shown in Figure 7.

Details of how the All Roads HIN and County Roads HIN were calculated are provided in the <u>Appendix E</u>.

Table 5. Osceola County - County Roads HIN Corridors

	ROADWAY	FROM	то
1	N Doverplum Ave	Country Club Rd/Towne Center Dr	Koa St
2	E Osceola Pkwy	US 17/441 (OBT)	Coralwood Cir/ Plumwood Cir
3	Neptune Rd	Will Barber Rd/Kings Hwy	Stroupe Rd
4	Simpson Rd	US 192	County Line
5	N John Young Pkwy	Lyndell Dr	W Carroll St
6	W Donegan Ave	Highland Ave/N Central Ave	Michigan Ave
7	E Carroll St	US 17/441 (OBT)	Michigan Ave
8	Michigan Ave	US 192	E Osceola Pkwy
9	Koa St	Marigold Ave	San Remo Rd
10	Osceola Polk Line Rd	1-4	Sullivan Rd
11	Pleasant Hill Rd	Old Pleasant Hill Rd	Spinning Reel Ln/ Wilderness Trl
12	N Poinciana Blvd	Siesta Lago Dr	US 192
13	S Narcoossee Rd	Lillian Black Rd	Jack Brack Rd
14	Buenaventura Blvd	Simpson Rd	County Line

	ROADWAY	FROM	то
15	S Poinciana Blvd	Eagles Trl	Woodmont Blvd/Red Blossom Ln
16	S Poinciana Blvd	Reaves Rd	Crestone Rd
17	Pleasant Hill Rd	South of Granada Blvd	Knowles Blvd
18	S Thacker Ave	Clay St	Mabbette St
19	E Osceola Pkwy	1/4-mi W of Buenaventura Blvd	Sandalwood Dr
20	Clay St	Dawes Ave	S Thacker Ave
21	Fortune Rd	Grande Blvd	Simpson Rd
22	Nolte Rd	W of Michigan Ave	Southern Vista Loop
23	Canoe Creek Rd	Indian Lakes Blvd W	500' N of Hyleigh Way
24	Old Canoe Creek Rd	500' S of Sawyer Cir	King Oak Cir
25	S Narcoossee Rd	US 192	Lillian Lee Rd
26	Marigold Ave	San Lorenzo Rd	Peabody Rd
27	Nova Rd	US 192	Dumbleton PI/Thorns Run

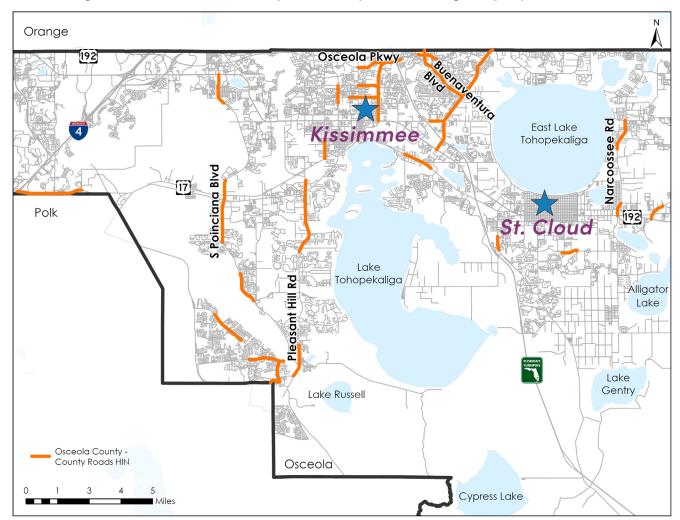


Figure 7. Osceola County - County Roads High Injury Network

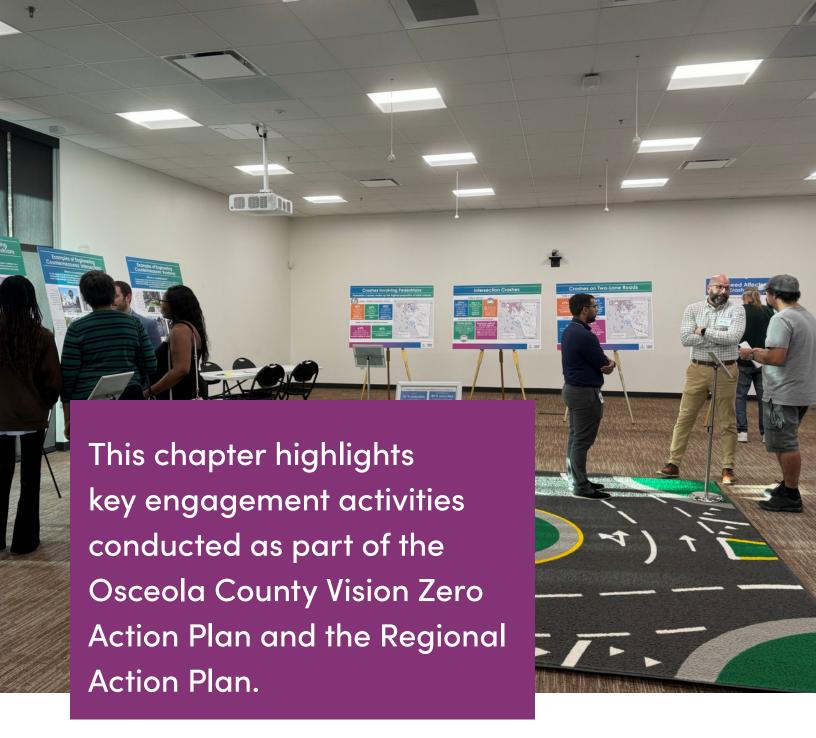
Relationship to Regional and City High-Injury Networks

A High Injury Network was developed for the MetroPlan region and for each jurisdiction in the region. Each jurisdictional HIN included an All Roads HIN and a Local Roads HIN. More inforamtion can be hfound at https://www.visionzerocfl.gov/pages/high-injury-networks

Two roadway segments identified on the Regional HIN are located in Osceola County. The Regional HIN segments overlap the Osceola County All Roads HIN on the segment of US 192 from Celebration Avenue to Four Winds Boulevard and overlap the Osceola County County Roads HIN on Poinciana Boulevard from US 192 to Siesta Lago Drive.

Chapter 3:

Listening to the Community



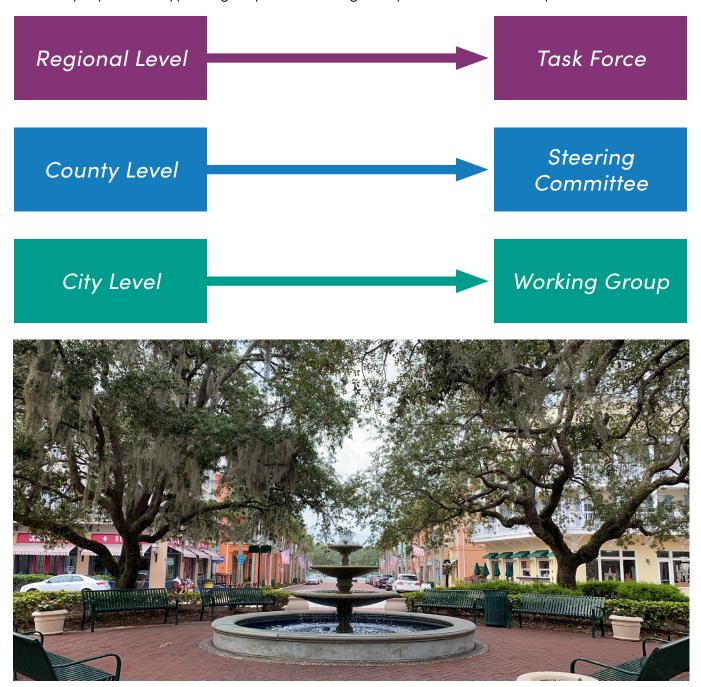
Meaningful community and stakeholder engagement are critical for an effective Vision Zero Action Plan. This Action Plan included its own outreach which was accompanied by parallel engagement activities that took place for the Regional Action Plan. The engagement strategies for the Regional Action Plan were designed to complement strategies at the county and local Action Plan levels for broader reach and impact than could be realized by any single agency. The full extent of regional engagement is outlined in the Regional Action Plan. Select regional efforts are highlighted at the end of this section including the Regional Hub Site, Elected Officials Guide, and Transportation Safety Activity Book.

Osceola County Vision Zero Action Plan Engagement

Engagement strategies target two audiences: stakeholders and the public.

Stakeholder engagement was intended to engage local agency staff, elected officials, and partner agencies and organizations. Public engagement strategies were aimed at providing opportunities to hear from the community and help them learn about Vision Zero and the Action Plan.

Each Action Plan within the region had a continuing stakeholder group that provided advisory input. The type of group was contingent upon the level of the plan:



Stakeholder Engagement

The Osceola VZAP Steering Committee was formed in the Fall of 2023 and consisted of members representing a range of perspectives including:

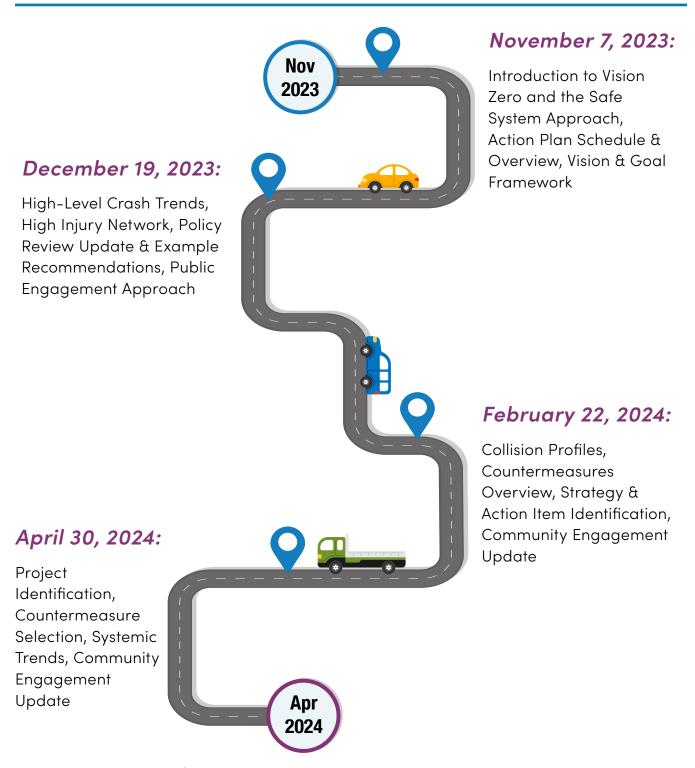


Representatives for the City of Kissimmee and City of St. Cloud also served on the Steering Committee since these local agencies were developing parallel Action Plans. Reciprocally, an Osceola County representative served on each of the respective city Action Plan Working Groups. See Page 1 at the front of the Action Plan for the specific membership of the Steering Committee.



The Vision Zero Action Plan received media coverage from various outlets like this interview with Univision at the St. Cloud public open house.

The Steering Committee convened for four separate meetings to learn about and provide advisory input regarding the noted topics below:



The Steering Committee's advisory input was instrumental in helping to shape this Action Plan.

Community Engagement

Hearing directly from the community was an important component of developing the Action Plan. Engagement took place through six public Open Houses, two Popup Events, an online presence, and social media outreach. A key element was ensuring to engage the county's Hispanic population through the use of Spanish translations for social media posts and materials and the presence of a Spanish speaking Action Plan team member at all public events. Since multiple pop-up events were conducted during the same timeframe for the Kissimmee and St. Cloud action plans, they provided the benefit of additional community input within the county.





Open House dates and locations

- St. Cloud Community Center February 27, 2024
- ChampionsGate March 6, 2024
- Valencia College/Poinciana March 7, 2024
- Osceola Heritage Park May 20, 2024
- Embassy Suites Lake Buena Vista South – May 21, 2024
- Valencia College/Poinciana May 23, 2024

Pop up Event dates and locations

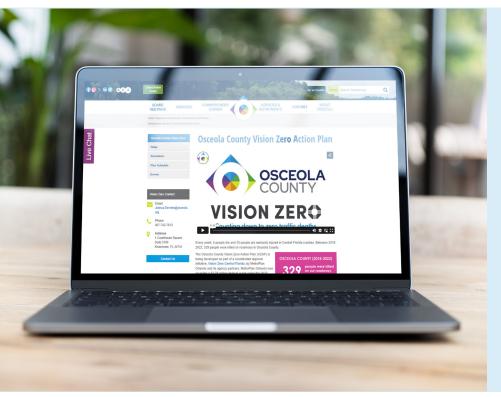
- Osceola County Sheriff's
 Community Appreciation Day
 March 2, 2024
- KowTown Festival March 23, 2024

Across the Open Houses and Pop-up Events, the Action Plan team engaged with nearly 150 different individuals. Example themes from the public input include:

- Personal observations were shared regarding safety issues along multiple of the High Injury Network corridors and intersections. HIN roadways frequently referenced by the public included Pleasant Hill Road, Poinciana Boulevard, and US 192.
- Providing safe facilities for bicyclists and pedestrians was noted by several people as being very important.
- There were many concerns expressed regarding unsafe driver behavior such as excessive driver speeds in multiple locations including within school zones.
- Some shared the perspective that roadways with high congestion and periods of delay lead to driver frustration which may encourage some drivers to be less safe.

Community input affirmed multiple of the High Injury Network roadways as areas where the public observes and experiences safety issues, and by extension helped to inform countermeasure identification for projects.

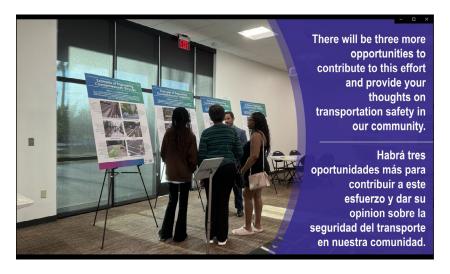
As part of community outreach, Osceola County hosted a **Vision Zero Action Plan Website:**Osceola County Vision Zero Action Plan. This provided key crash statistics, information about development of the Action Plan, and included notices about the public open houses.
The site also included an **Osceola County Vision Zero Action Plan Fact Sheet**.





Promotional materials for the Open Houses were provided in English and Spanish.







Excerpts from a promotional video for the second round of open houses.

What Is Vision Zero Central Florida & Why Do We Need to Take Action?

Every week, 5 people die and 35 people are seriously injured in Central Florida crashes. Vision Zero is an international movement to reach zero traffic fatalities.

Vision Zero Central Florida's goal is simple: saving lives. Zero traffic deaths. Everyone should be able to travel safely around Central Florida without the fear of death or serious injury.

This coordinated planning effort led by MetroPlan Orlando in partnership with local agencies will result in a comprehensive Vision Zero Safety Action Plan for our three-county region (Orange, Osceola, Seminole), as well as additional action plans tailored for each county and city.



This work is being funded by a \$3.79 million Safe Streets and Roads for All federal grant.

What will the Vision Zero Safety Action Plan Include?

The regional plan and each county or city action plan will include the following:

- High Injury Network: Analyzing data to identify places on the transportation system with the highest risk for fatal and serious injury crashes so that we can focus on our most important problem areas.
- Equity Component: Identifying and prioritizing efforts in disadvantaged communities that are disproportionately affected by traffic crashes.
- List of Priority Streets and Intersections:
 Producing a list of feasible projects
 that have the most safety impact for
 the region.
- Educational and Enforcement Programs:
 Identifying key behavioral changes needed to reduce crashes and methods for encouraging those changes.
- Sustained Effort: Establishing a defined process and identifying an organization responsible for carrying out, updating, and monitoring progress.
- Public Meetings: Public engagement is a key part of the study.

Outcome: Identified projects will be included in MPO or local jurisdiction priority projects list for funding/implementation.

3-COUNTY REGION (2018-2022)

325,775 total crashes

1,466 deaths

9,500 serious injuries

OSCEOLA COUNTY (2018-2022)

329

people were killed on our roadways, including:

50 pedestrian deaths

6 1 motorcyclist deaths

5 13 bicyclist deaths



Osceola County Vision Zero Action Plan Fact Sheet

Regional Action Plan Engagement

MetroPlan Orlando developed a regional transportation safety hub site as a part of the regional plan to share information throughout the community.

The hub site provides an overview of the Safety Action Plan purpose and process. It supplements information provided on the MetroPlan Orlando website, creating a central repository of safety information that helped counties and local agencies develop their own Safety Action Plans.

The Hub Site also includes an interactive safety data dashboard, where users can view the High-Injury Network and crash data by jurisdiction, including Osceola County.

MetroPlan Orlando also hosted a region-wide online survey to collect feedback, as well as a Speaker Series with safety experts sharing best practices from around the country. MetroPlan Orlando developed a social media and public relations campaign to further coordinate and distribute the regional and local jurisdiction efforts.



Visit the hub site at VisionZeroCFL.gov







Elected Officials Guide

Elected Officials have a critical role to play in how our communities evolve and implement safety strategies. Through their role in approving community budgets, land uses, and a host of other activities, they have a unique opportunity to implement transportation safety improvements.

The Elected Officials Guide includes information on:



Why we need Vision Zero and tools to support safety

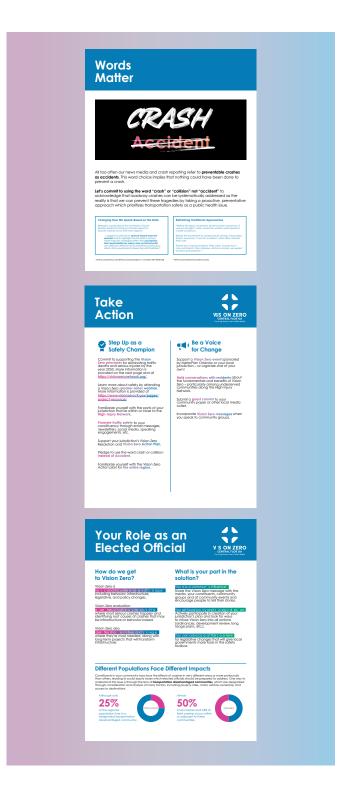


An elected official's role in supporting



Glossary of safety terms and concepts

Note: A copy of the guide is available from MetroPlan Orlando and can be found on their hub site at <u>VisionZeroCFL.gov</u> under the resources tab.



MetroPlan Orlando produced **Path to Safety Central Florida, A Transportation Activity Book** that was a useful resource to share at community events to help engage children regarding transportation safety. Path to Safety Central Florida, Transportation Activity Book can be downloaded here from the hub site: metroplanorlando.gov



Chapter 4:

Toolkit of Strategies



A key part of a successful Vision Zero Action Plan is adopting a Safe System Approach across the entire transportation system. To achieve this, strategies and action items with specific metrics should then be developed to monitor and evaluate progress over time. A toolkit, a comprehensive set of strategies, is envisioned to cover both non-engineering strategies (policy, design, programmatic recommendations) and engineering countermeasures that directly address systemic safety issues in Osceola County.

As part of its Regional Vision Zero initiative, MetroPlan Orlando developed both Engineering and Non-Engineering Countermeasure Toolkits to establish a common framework to address roadway safety issues throughout the region. The Osceola County toolkit of strategies will serve as an implementable component to support achievement of zero traffic deaths and serious injuries by 2050.

The countermeasure toolkits are available from MetroPlan Orlando at the following locations: Non-Engineering Countermeasure Toolkit and Engineering Countermeasure Toolkit. These toolkits include an extensive suite of potential countermeasures for use in implementing projects and are both incorporated by reference into this Action Plan.

Toolkit of Strategies

Non-engineering countermeasures

NON-ENGINEERING COUNTERMEASURES aim to influence users by changing the social environment to encourage or enforce the desired behavior. Strategies can be employed at scale to influence large segments of the community via marketing campaigns and high-visibility enforcement which affect the social environment by increasing the perceived risk of being caught or can be focused on specific roadway user types like teen drivers or motorcyclists. Non-engineering countermeasures fall under the Vision Zero Core Elements of **Authentic Engagement**, **Strategic Planning**, **Project Delivery**, **Equity-Focused Analysis and Program**, and **Proactive**, **Systemic Planning**.

The non-engineering countermeasures included in the toolkit are organized into the categories of the five elements of the Safe Systems Approach as depicted below:

Non-engineering countermeasure toolkit organization



Safer people

- Public information, social marketing, and educational campaigns
- Enforcement



Safer speeds

- Speed limit setting
- High-visibility enforcement
- Automated enforcement



Safer vehicles

- Emergency technology
- Vehicle maintenance



Safer roads

- Improved data sharing
- Pilot and demonstration projects
- Road maintenance and maintenance of traffic
- Policies and standards
- Grant opportunities



Post-crash care

- Emergency medical services
- Trauma care
- Fatal crash response team
- Traffic incident management
- Post-crash strategies

This toolkit provides data-driven strategies for addressing the most prominent crash trends in Osceola County grouped into the five elements of the Safe System Approach:

SAFE	SYSTEM APPROACH ELEMENTS	STRATEGIES
	SAFER ROADS: Prioritize roadway design changes.	Facilitate Safety Improvements Implementation by leveraging existing programs, establishing a pilot program, prioritizing safety enhancements along the HIN and near transit, updating design guidance, and actively seeking funding.
†	safe, responsible driving and behavior by people who use our roads and create conditions that prioritize their ability to reach their destination unharmed.	Consider conducting High-Visibility Enforcement to target dangerous driver behavior and Targeted Training to educate partners and professionals for a safer culture.
	safer speeds: Use a multidisciplinary approach that induces drivers to travel at speeds appropriate for the context that will reduce injuries even when human error leads to crash.	Foster the implementation of a target-speed setting approach, expand the use of speed cameras, and consider the establishment of Pedestrian Priority Zones in high pedestrian activity areas.
	safer vehicles: Proactively plan for a connected and autonomous vehicle fleet and encourage the purchase of vehicles that feature crash prevention technology.	As fleet vehicles age out, upgrade fleet to accepted crash-prevention technology, and partner with technology vendors to install intersection safety improvements such as near-miss technology.
	POST-CRASH CARE: Partner with law enforcement and emergency response to identify ■ strategic investments in crash response, crash assessment, and crash reporting.	Consider the establishment of a multi- agency fatal crash evaluation team to evaluate engineering, behavioral, vehicular, and land use.

The non-engineering countermeasures included in this toolkit are not intended to be an exhaustive list of strategies but serve as a framework for identification of non-engineering countermeasures as a part of the Action Plan's development.

Engineering Countermeasures

Engineering countermeasures are employed on roadways to modify undesirable behavior, such as speed reduction and managing congestion. The purpose of the Engineering Countermeasure Toolkit is to provide key strategies that address roadway safety issues in Osceola County and align with the Safe System Approach.

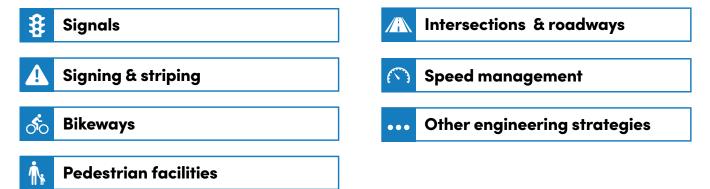
KEY OBJECTIVES OF THE TOOLKIT ARE TO:

- Provide Osceola County with safety treatment options and their appropriate uses and contexts
- Communicate safety tools using easy-to-understand language and graphics
- Facilitate coordination between staff, contractors, developers, and the community when discussing transportation safety improvements
- Create a shared understanding of and realistic expectations around safety treatments

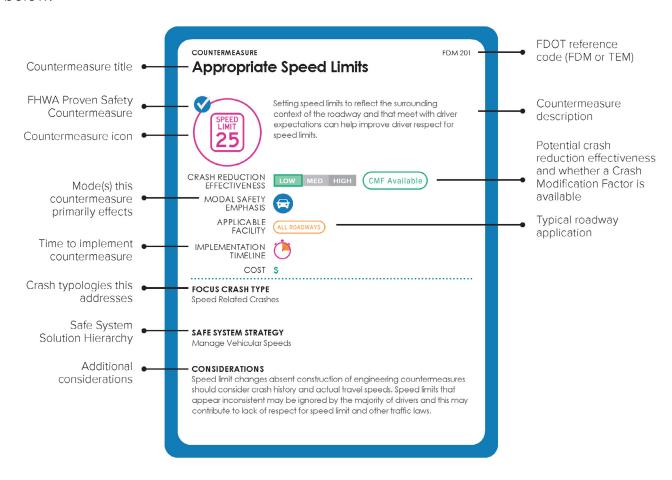
The toolkit describes a variety of engineering countermeasures, how they can be applied to address safety, and their expected effectiveness i.e., crash reduction, when available. The expected crash reduction is based on Crash Modification Factors from the Federal Highway Administration's (FHWA) Crash Modification Clearinghouse or other published studies. The toolkit also includes general information about each tool's application, typical placement, estimated costs, and delivery timelines. The Engineering Countermeasure Toolkit is not intended to be a menu from which community members can request safety tools for their street. Before a specific countermeasure is selected, analysis must be conducted to understand the existing safety issue.

The countermeasures are organized into the following categories:

Engineering countermeasure toolkit organization



An example of an engineering countermeasure profile included in the Toolkit is shown below.



Technology

Technology has an important role to play in improving transportation safety outcomes, in preventing crashes from happening, contributing to faster emergency response times, and providing more detailed analytics about why crashes are happening so that the most appropriate countermeasure can be employed.

Osceola County for years has incorporated technology to enhance traffic safety, mobility, and congestion, and plans to continue expanding these programs:

- The County's **Red-Light Safety Camera Program** is dedicated to reducing redlight violations and their potential for crashes and injuries. Red-light and speed camera enforcement was provided at 7 intersections in Osceola County.
- The County previously identified school zone locations that warrant additional enforcement procedures such as **speed limit detection systems**.

Pilot Program: Near-miss analysis.

In 2023, the Osceola County Board of Commissioners approved the utilization of video analytics and Artificial Intelligence technologies to drastically improve intersection safety. This pilot program provides the County and the Florida Department of Transportation (FDOT) with information about near-miss collisions to help proactively identify potential safety solutions.



"Our goal here is to look at the crashes that almost happened, which are identified by the artificial intelligence, observing the intersection in real time, and make sure all those almost-crashes help guide our dollars in improving the transportation network, to prevent that catastrophic crash from happening in the first place." Assistant Director of Transportation, Nicholas Hartley, PE.

Policy Benchmarking

As a part of the MetroPlan Orlando Regional Vision Zero Action Plan, Policy Benchmarking Guidance was developed to outline a process to benchmark existing policies. To help further establish the Osceola County's Vision Zero Action Plan baseline, a benchmarking assessment was performed to the existing policies and guidelines and against the Vision Zero core elements. The benchmarking process was comprised of the following steps:



1

Identify and review relevant documents and procedures



2

Review and Refine benchmarks



3

Conduct initial benchmarking



4

Identify opportunities for policy enhancements and barriers to change



5

Incorporate findings into Action Plan

The assessment helped to identify current plan and policy elements that need to be augmented as part of the Action Plan.

Using the policy benchmarking guidance, the following documents were reviewed to help inform the plan of action.

- Osceola County Vision Zero Resolution
- Osceola County Comprehensive Plan Elements
 - » Future Land Use
 - » Transportation
 - » Capital Improvement Element (CIE)
 - » Housing
 - » Parks And Recreation Element
- Osceola County Land Development Code

- Osceola County Conceptual Master Plans (Comprehensive Plan Elements)
 - » East of Lake Toho (ELT)
 - » South of Lake Toho (SLT)
 - » Alligator Chain of Lakes (ACL)
- Traffic Calming Devices Application Policy & Procedures
- Golf Carts on Public Roads, Policy, and Procedure
- Micro-Mobility Devices Ordinance

- Red-Light Safety Camera Program
- Osceola County Street Lighting Policy
- Osceola County Design Standards
- Strategic Plan 2023-2028
- Strategies for a Sustainable Future Report
- Community Health Improvement Plan 2020-2025
- Osceola County Sheriff's Office S.M.A.R.T Motorcycle Safety Program
- 2021 Osceola County Crosswalks Best Foot Forward
- Operation Best Foot Forward: Back to School

- Best Foot Forward for Pedestrian Safety (BFF) program
- ADA Transition Plan (2021)
- Regional Complete Streets Policy
- 2045 MTP Tech Series 9 Pedestrian
 & Bicyclist Needs Assessment
- Bicycling Facilities, Crash Types & Bicyclist Risk
- Bicyclist Safety Action Plan Osceola, Orange, and Seminole Counties, Florida
- Pedestrian Safety Action Plan Osceola, Orange, and Seminole Counties, Florida

The policy review and benchmarking assessment is summarized in Tables 1 and 2 in Appendix D. Key takeaways include:

- Undersigned by the County Commission's 2022 Vision Zero Resolution, there is clear public, high-level, and ongoing commitment to achieve a safer future for Osceola roadway users.
- An initial American with Disabilities Act (ADA) Transition Plan, establishing prioritization metrics for improving accessibility through and ADA framework, has been produced.
- Feasibility studies have been conducted for multiple high-volume corridors to evaluate improvements that will reduce crashes, speeding, and traffic congestion.
- The 2019 bicycle and pedestrian safety action plan for Osceola, Orange, and Seminole Counties identified and categorized countermeasures by type: behavioral, design, and control.
- The County has demonstrated strong project delivery by prioritizing funding for safer, multimodal infrastructure through its Comprehensive Plan (Capital Improvements Element), installing red-light running cameras at key intersections, and implementing safety countermeasures such as curb extensions and roundabouts.
- The Transportation Element of the Comprehensive Plan defines Complete Streets and commits to the development of a safe, convenient, comfortable, and integrated connected network of mobility options for people.

Key opportunities that Osceola County will continue, expand, or consider pursuing include:

- Continue prioritizing multimodal infrastructure funding that emphasizes safety, consistent with the Comprehensive Plan and Strategic Plan.
- Expand the red-light cameras program at key intersections of the High Injury Network (HIN) in collaboration with the cities of Kissimmee and St. Cloud and implement safety countermeasures such as curb extensions and roundabouts.
- Continue promoting smart growth communities, and smart growth principles to reduce vehicular trips, improve walkability, and slow down traffic.
- Review and update County design standards and county road design construction specifications to reflect New Manual on Uniform Traffic Control Devices (MUTCD) updates and include new street design elements.
- Revise the Traffic Calming Policy and Street lights policy, with consideration that HIN Corridors should, where appropriate, qualify for traffic calming treatment and streetlight upgrades.
- Expand existing safety training program, enforcement, and education campaigns including programs such as the Osceola County Sheriff's Office S.M.A.R.T Motorcycle Safety Program to support the Vision Zero principles and core elements.
- Work with partners to develop appropriate benchmark strategies that are not already in place.



Chapter 5:

Project Development and Prioritization



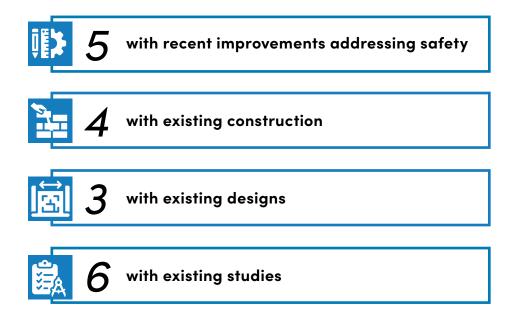
This chapter summarizes the approach to defining and prioritizing implementable projects based on identification of appropriate countermeasures. Profiles for the top corridors are included.

Identification of Countermeasures and Project Development

Beginning with the County Roads HIN, a more in-depth review and analysis of the crash data helped to identify potential countermeasures that could be implemented along each respective corridor to reduce fatal and serious injury crashes. In order to place emphasis on segments that could most benefit from future implementation funds, it was important to identify where the County has already made investments in improving safety on the HIN.

In collaboration with County staff and the Steering Committee, the 27 segments on the County Roads HIN were also reviewed to identify any existing or programmed projects on those segments.

Based on this review, fifteen (15) of the 27 HIN segments had existing projects identified:



There are 12 HIN segments where recent improvements have been constructed, are currently undergoing construction, or have programmed projects in the design phase that will be constructed in the near-term future with an expected positive effect on crashes. These segments will be monitored for a post-construction period to evaluate the before/after changes in crash typologies prior to pursuing additional safety enhancements. The remaining 15 segments, including the 6 segments where studies have been performed but have not progressed to design or construction, were analyzed to determine safety countermeasures targeting the historic crash trends.

The evaluation of these segments included reviewing:

- Overall Crash Characteristics
- Fatal and Serious Injury Crashes
- Emphasis Areas
- Crash Locations by Type and Severity
- Selective Crash Report Narratives
- Aerial Imagery and Street View History

The 15 candidate projects resulting from this analysis are detailed on the profile sheets included at the end of this chapter.

The following process was used to identify specific crash reduction countermeasures:

1. Identify Systemic Countermeasures

A high-level screening helped identify locations where countermeasures can potentially be implemented across the entire transportation network. For example, bus stops with many nearby pedestrian crashes and no marked pedestrian crossings could be candidates for enhanced crossing treatments like pedestrian hybrid beacons. Intersections with many crashes related to red-light running may be candidates for a red-light camera or signal timing modifications. Crash trends and crash types in Osceola County helped inform this analysis.

2. Analyze High Injury Locations

A more detailed analysis of select HIN segments was conducted, including crash summaries, and other contextual information that was readily available, and analysis of intersections along the High Injury Network.

3. Identify Planned Improvements

For each road segment or intersection included in the countermeasure selection process, any planned projects along the segment were identified. For example, there may be a planned maintenance or capacity project that could be leveraged to incorporate safety improvements. The schedule of planned improvements was noted so that projects where final design is completed and construction is imminent could be removed from consideration.

4. Identify Potential Countermeasures

For each segment corridor, potential countermeasures were identified using the Engineering Countermeasures Toolkit, Florida Department of Transportation and Federal Highway Administration guidelines, as well as professional judgment to identify preliminary countermeasures. This process does not obligate Osceola County to implement a specific improvement, but serves as a starting point for further discussions.

5. Prioritize Projects

Based on the final prioritization process, prioritize projects for implementation and other purposes, such as grant applications.

Systemic Improvements

The following list of systemic safety countermeasures have been identified through analysis of the countywide crash trends as described in Chapter 2. Countermeasures typically considered for systemic implementation are associated with roadway features rather than being location-specific based on crash history. They are generally low-cost and appropriate for implementation at multiple locations with similar characteristics across the network. These systemic countermeasures could be implemented proactively by the County or established as a standard element of other County projects, based on the scope of the project or as funding permits. The Countermeasure Toolkits described in Chapter 4 include more information on some of these proposed systemic countermeasures.

- Speed Management
- Flexible Backplates
- Special Emphasis Crosswalks
- Stop for Pedestrian Signs
- Completion of Sidewalk Gaps and Missing Crosswalk Legs
- Crosswalks at Stop-controlled Approaches
- Intersection Lighting
- Curve Warning Signs and Raised Pavement Markers (RPMs)
- Restricted Median Openings in Curves
- School Zone Upgrades

Project Prioritization Process

Project prioritization criteria were developed as a part of the regional Vision Zero Action Plan to outline a consistent set of criteria to prioritize transportation safety improvements across Central Florida. These criteria were developed based on guidance and feedback from the Regional Vision Zero Task Force, which included a representative from Osceola County. The prioritization criteria, including a description and score weighting, is outlined in the table below. Osceola County primarily utilized the criteria as developed for the regional Vision Zero Action Plan, with the exception of the Safety Benefit and Implementation Timeline criteria which were modified slightly.

Table 6. Summary of Project Prioritization Criteria

CRITERIA	DESCRIPTION	WEIGHT
Safety Score	This is based on the safety score calculated for each corridor and intersection. It prioritizes projects where the most fatal and serious injury crashes occur.	50%
Transportation Underserved	This considers where people might be disproportionately affected by traffic crashes and benefit the most from transportation safety improvements.	
Safety Benefit	This considers the potential benefit of identified improvements.	15%
Regional Benefit	If a project is on multiple High Injury Networks, it is likely to have a regional benefit.	10%
Implementation Timeline	Projects start saving lives when they are implemented, so projects that can be implemented quickly are prioritized.	10%

High-priority projects identified through this process may also be considered for inclusion in MetroPlan Orlando's 2050 Metropolitan Transportation Plan (MTP) or incorporated into an already planned project in the Prioritized Project List or Transportation Improvement Program. Additionally, the County can incorporate these projects into other plans and initiatives as appropriate.

Table 7 provides a summary of Osceola County's fifteen candidate projects and their associated prioritization scoring.

Table 7. Osceola County Prioritized Projects

	Table 7. Osceola Coully I Hornizea I Tojecis								
PROJECT ROADWAY	BEGIN LIMIT	END LIMIT	SAFETY SCORE	TRANSPORTATION UNDERSERVED SCORE	SAFETY BENEFIT SCORE	REGIONAL BENEFIT SCORE	IMPLEMENTATION TIMELINE SCORE	TOTAL PRIORITY SCORE	PRIORITY ORDER
N Poinciana Blvd	Siesta Lago Dr	US 192	50	11.25	15	10	5	91.25	1
Clay St	Dawes Ave	S Thacker Ave	50	11.25	15	10	5	91.25	2
E Carroll St	US 17/441 (OBT)	Michigan Ave	37.5	11.25	11.25	10	7.5	77.5	3
E Osceola Pkwy	US 17/441 (OBT)	Coralwood Cir/Plumwood Cir	37.5	11.25	11.25	10	7.5	77.5	4
Buenaventura Blvd	Simpson Rd	County Line	37.5	7.5	15	10	5	75	5
Pleasant Hill Rd	South of Granada Blvd	Knowles Blvd	25	7.5	15	10	5	62.5	6
S Poinciana Blvd	Eagles Trl	Woodmont Blvd/Red Blossom Ln	25	7.5	11.25	10	5	58.75	7
Koa St	Marigold Ave	San Remo Rd	12.5	11.25	15	10	7.5	56.25	8
N Doverplum Ave	Country Club Rd/Towne Center Dr	Koa St	12.5	11.25	15	10	7.5	56.25	9
S Narcoossee Rd	Lillian Black Rd	Jack Brack Rd	12.5	7.5	15	10	10	55	10
E Osceola Pkwy	1/4-mi W of Buenaventura Blvd	Sandalwood Dr	25	7.5	7.5	10	5	55	11
Pleasant Hill Rd	Old Pleasant Hill Rd	Spinning Reel Ln/Wilderness Trl	12.5	11.25	15	10	5	53.75	12
S Narcoossee Rd	US 192	Lillian Lee Rd	12.5	7.5	7.5	10	10	47.5	13
Nolte Rd	W of Michigan Ave	Southern Vista Loop	12.5	7.5	7.5	10	10	47.5	14
Canoe Creek Rd	Indian Lakes Blvd W	500' N of Hyleigh Way	12.5	7.5	7.5	5	10	42.5	15

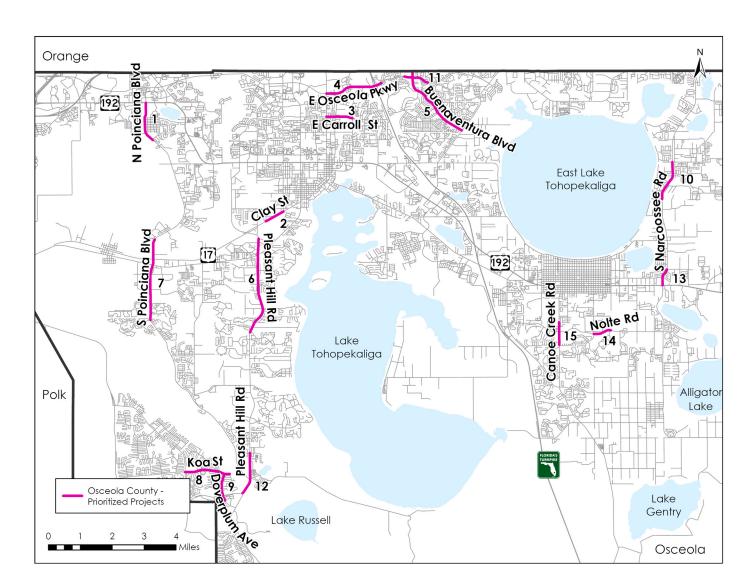


Figure 8. Prioritized Project Segments

Kissimmee and St. Cloud Vision Zero Action Plan Projects

As part of the regional Vision Zero initiative, the cities of Kissimmee and St. Cloud also developed their own Vision Zero Action Plans. Development of these Action Plans was consistent with the process and methodology utilized for Osceola County's Vision Zero Action Plan.

Similar to Osceola County, two HINs were developed for each city – an All Roads HIN which included some Osceola County roadways and a Local Roads HIN which only includes roadways maintained by the city. Based on an analysis of the Local Roads HIN crash trends and context, a list of projects was developed and prioritized. These project lists for Kissimmee and St. Cloud are included here for reference. To the extent possible, the County will look for opportunities to partner with both cities to support the goals of the County and City Action Plans and collaborate on future improvements where feasible.

The complete City of Kissimmee and City of St. Cloud Vision Zero Action Plans which include information on each city's All Roads and City Roads HINs and project development process can be found on their respective websites.

City of Kissimmee Priority Projects

- Mabbette St. (West Extent to N. Thacker Ave.)
- Dyer Blvd. (W. Carroll St. to W. Donegan Ave.)
- Dovetail Ave. (W. Carroll St. to Needlepoint St.)
- Nebraska Ave. (E. Columbia Ave. to US 192)
- N. Randolph Ave. (North Extent to Emmett St.)
- N. Alaska Ave. (MLK Blvd. to Emmett St.)
- Dyer Blvd. (W. Osceola Pkwy. to West of N. Thacker Ave.)

City of St. Cloud Priority Projects

- Sergeant Graham Ave. (Neptune Rd. to US 192)
- Old Canoe Creek Rd. (US 192 to Neptune Rd.)
- 12th St. (Columbia Ave. to California Ave.)
- Commerce Center Dr. (Henry C. Yates Ln. To Pemberly Pines Cir.)
- 6th St. (Illinois Ave. to Wyoming Ave.)
- Illinois Ave. (3rd St. to 7th St.)
- Michigan Ave. (Michigan Ct. North to 10th St.)

For state roads included on the All Roads HIN, the County plans to collaborate with FDOT, MetroPlan Orlando, and other potential partners to identify and advance safety improvement, as well as to submit multi-jurisdictional SS4A grant applications as appropriate.

HIN Factsheets and Project Profiles

For the County Roads HIN, a more detailed crash review was conducted to identify prevailing crash trends and support the identification of countermeasures. Corridor-specific summaries of this analysis are included on the Candidate Project Profiles on the following pages and the HIN Factsheets provided in <u>Appendix A</u>.

The HIN Factsheets include the following details:

- Summary of Crash Statistics
- Contributing Factors and Actions
- Roadway information, such as jurisdiction, context classification, speeds, and transit information
- Map of corridor with locations of KSI crashes

The Candidate Project Profiles include the same details as the HIN Factsheets, with the following additional information:

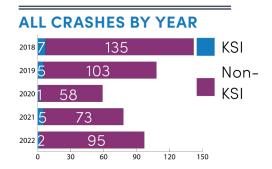
- Identification of Planned Projects (if applicable)
- Identification of Potential Countermeasures
- Planning-Level Cost Estimate (Estimates are based on generalized costs for standard countermeasures with escalation factors applied. This information is derived from FDOT historic project costs as a baseline.)
- Project Prioritization Score

PRIORITIZATION SCORE: 91.25

N. Poinciana Boulevard

From Siesta Lago Drive to US 192

JURISDICTION	Osceola County
TRAVEL LANES	4-lane / Grass median
LENGTH	1.28 miles
POSTED SPEED	40-45 mph
85TH PERCENTILE SPEED	64 mph
MULTIMODAL FACILITIES?	Partial sidewalks, no transit



MODAL SPLIT



TOTAL CRASHES











20

TOTAL FATAL & SERIOUS INJURY CRASHES





















CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	2	190	192	40%
Left Turn / Angle	7	103	110	-
Sideswipe	0	69	69	14%
Right Turn	0	19	19	-
Pedestrian	3	3	6	-
Bicycle	2	1	3	-
Run off the Road	2	44	46	10%
Head On	0	3	3	-
Other	4	25	29	6%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	7	7	1%
Alcohol/Drugs	0	3	3	1%
Distracted Driving	5	150	155	32%
Intersection	7	152	159	33%
Aging Driver	2	49	51	11%
Teen Driver	2	74	76	16%
Signal Controlled				28%
Dark Conditions	12	137	149	31%
Wet Road Surface	2	78	80	17%

PRIORITIZATION SCORE: 91.25

N. Poinciana Boulevard

From Siesta Lago Drive to US 192

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Install high visibility crosswalks, pedestrian refuge islands, and pedestrian hybrid beacons (PDH) where appropriate
- Address sidewalk gaps
- Enhance signage and pavement markings
- Install median barrier at curves
- Upgrade lighting
- Convert protected-only left turns

Programmed Improvements

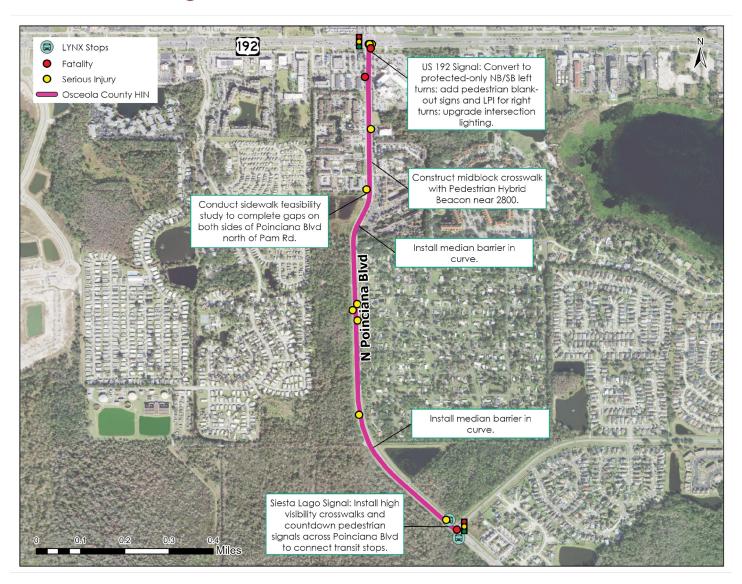
- TSM&O candidate (asked for dual NBL) and pedestrian improvements
- Draw attention to constraints and feasibility needs prior to implementation

- Include High-visibility pedestrian warning signs to increase driver awareness of pedestrians.
- Create a plan to upgrade light fixtures and provide adequate pedestrian scale lighting.
- Use of speed trailers and speed feedback signs to control the speed of motorized vehicles.
- High visibility speed enforcement
- Conduct feasibility study for addressing sidewalk connectivity

PRIORITIZATION SCORE: 91.25

N. Poinciana Boulevard

From Siesta Lago Drive to US 192



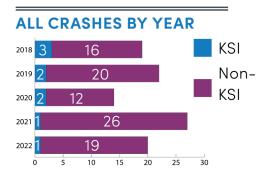
Planning Level Cost Estimate: \$2,773,750

PRIORITIZATION SCORE: 91.25

Clay Street

From Dawes Avenue to S. Thacker Avenue

JURISDICTION	Osceola County
TRAVEL LANES 2-lane / Undivided	
LENGTH	0.59 miles
POSTED SPEED	40 mph
85TH PERCENTILE SPEED	53 mph
MULTIMODAL FACILITIES?	Partial sidewalks, transit stops



MODAL SPLIT



TOTAL CRASHES











TOTAL FATAL & SERIOUS INJURY CRASHES













CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	0	37	37	36%
Left Turn / Angle	5	23	28	_
Sideswipe	1	9	10	10%
Right Turn	-	-	-	_
Pedestrian	0	1	1	_
Bicycle	1	0	1	-
Run off the Road	0	3	3	
Head On	0	2	2	-
Other	1	11	12	12%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	1	1	1%
Alcohol/Drugs	0	1	1	1%
Distracted Driving	1	26	27	26%
Intersection	3	12	15	15%
Aging Driver	0	14	14	14%
Teen Driver	1	16	17	17%
Signal Controlled	0	2	2	2%
Dark Conditions	4	23	27	26%
Wet Road Surface	2	10	12	12%

PRIORITY PROJECT 2

PRIORITIZATION SCORE: 91.25

Clay Street

From Dawes Avenue to S. Thacker Avenue

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Redesign intersection
- Install high visibility crosswalks where appropriate

Programmed Improvements

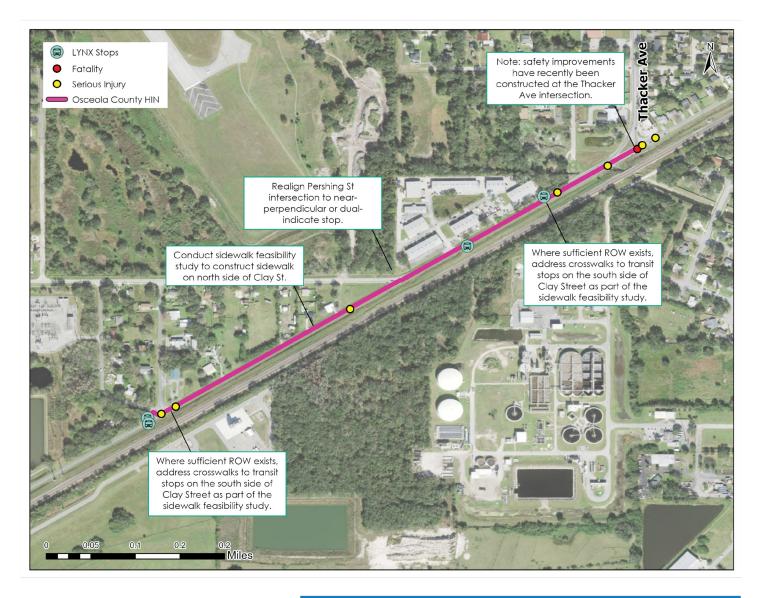
 Clay Street and Thacker Avenue Intersection Improvements recently completed removed channelized right and extended sidewalk

- Coordinate with LYNX to audit accessibility and safety on transit stops and implement improvements.
- Consider lighting at intersections to increase visibility.
- Use of speed trailers and speed feedback signs to control the speed of motorized vehicles.
- Conduct feasibility study for addressing sidewalk connectivity

PRIORITIZATION SCORE: 91.25

Clay Street

From Dawes Avenue to S. Thacker Avenue



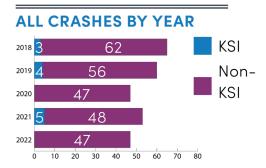
Planning Level Cost Estimate: \$1,225,000

PRIORITIZATION SCORE: 77.5

E. Carroll Street

From US 17/441 (OBT) to Michigan Avenue

JURISDICTION	Osceola County
TRAVEL LANES	2-lane and 4-lane
LENGTH	0.77 miles
POSTED SPEED	35 mph
85TH PERCENTILE SPEED	48 mph
MULTIMODAL FACILITIES?	Partial sidewalk, no transit



MODAL SPLIT



TOTAL CRASHES











TOTAL FATAL & SERIOUS INJURY CRASHES













CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	1	109	110	40%
Left Turn / Angle	10	82	92	33%
Sideswipe	0	26	26	10%
Right Turn	0	9	9	_
Pedestrian	0	2	2	-
Bicycle	0	1	1	
Run off the Road	1	13	14	5%
Head On	0	2	2	-
Other	0	13	13	-

TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
0	1	1	0%
0	1	1	0%
1	84	85	31%
10	131	141	52%
1	37	38	14%
0	34	34	13%
8	125	133	49%
6	49	55	20%
3	33	36	13%
	1	0 1 0 1 1 84 10 131 1 37 0 34 8 125 6 49	0 1 1 0 1 1 1 84 85 10 131 141 1 37 38 0 34 34 8 125 133 6 49 55

PRIORITY PROJECT 3

PRIORITIZATION SCORE: 77.5

E. Carroll Street

From US 17/441 (OBT) to Michigan Avenue

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Install high visibility crosswalks, pedestrian refuge islands, and harden centerlines where appropriate
- Address sidewalk gaps
- Install flexible backplates where appropriate
- Restripe corridor and crosswalks
- Evaluate signal timing optimization and update signal

Programmed Improvements

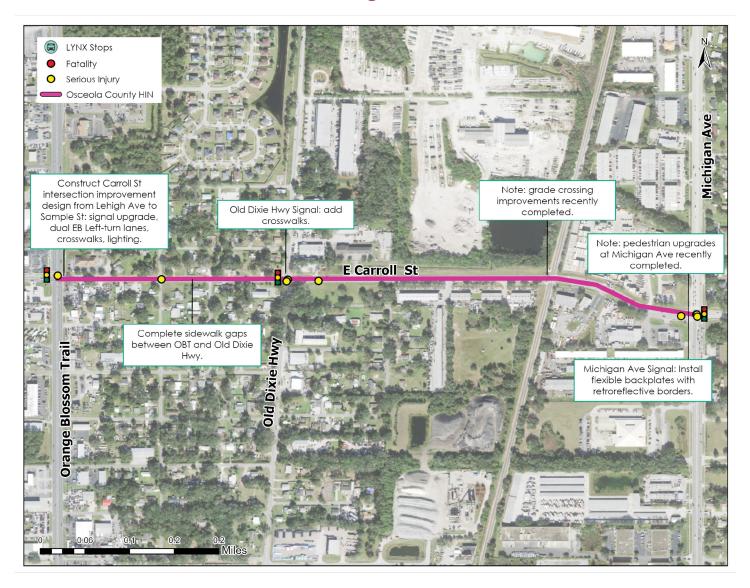
- Planned project on Carroll Street from John Young Parkway to Michigan Avenue (on hold)
- Michigan Avenue Safety Study is planned to recommend pedestrian improvements

- Red-light Camera Enforcement
- Create a plan to upgrade light fixtures and provide adequate lighting
- Use of speed trailers and speed feedback signs to control the speed of motorized vehicles
- High visibility enforcement for excessive speeding

PRIORITIZATION SCORE: 77.5

E. Carroll Street

From US 17/441 (OBT) to Michigan Avenue



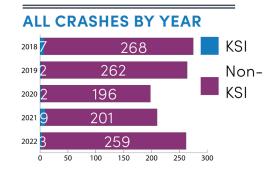
Planning Level Cost Estimate: \$11,026,852

PRIORITIZATION SCORE: 77.5

E. Osceola Parkway

From US 17/441 (OBT) to Coralwood Circle/Plumwood Circle

JURISDICTION	Osceola County	
TRAVEL LANES 6-lane / Raised median		
LENGTH	1.70 miles	
POSTED SPEED	45 mph	
85TH PERCENTILE SPEED	54 mph	
MULTIMODAL FACILITIES?	Partial sidewalk on both sides, no transit	



MODAL SPLIT





























CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Left Turn / Angle	8	161	169	14%
Sideswipe	0	234	234	19%
Right Turn	-	-	-	-
Pedestrian	1	10	11	-
Bicycle	4	2	6	-
Run off the Road	2	23	25	-
Head On	0	2	2	-
Other	0	82	82	6%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	20	20	2%
Alcohol/Drugs	1	12	13	1%
Distracted Driving	8	343	351	29%
Intersection	11	297	308	25%
Aging Driver	6	187	193	16%
Teen Driver	4	140	144	12%
Signal Controlled	8	370	378	31%
Dark Conditions	8	260	268	22%
Wet Road Surface	3	128	131	11%

PRIORITIZATION SCORE: 77.5

E. Osceola Parkway

From US 17/441 (OBT) to Coralwood Circle/Plumwood Circle

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Install high visibility crosswalks, pedestrian refuge islands, and harden centerlines where appropriate
- Address sidewalk gaps
- Install flexible backplates where appropriate

Programmed Improvements

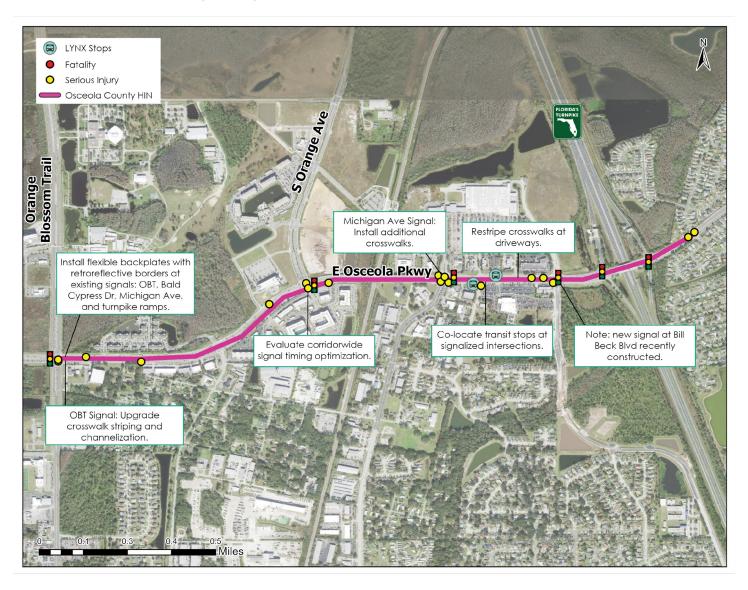
 Arterial study from Orange Blossom Trail to Coralwood Circle / Plumwood Circle (not funded)

- Public awareness and education campaigns: Distracted driving, Speeding and Pedestrian Safety.
- Use of speed trailers and speed feedback signs to control the speed of motorized vehicles.
- Create a plan to upgrade light fixtures.
- Coordinate with LYNX to audit bus stops and implement accessibility and safety improvements. Relocate bus stops.

PRIORITIZATION SCORE: 77.5

E. Osceola Parkway

From US 17/441 (OBT) to Coralwood Circle/Plumwood Circle



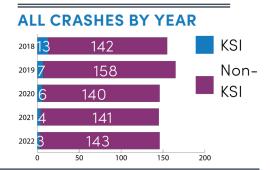
Planning Level Cost Estimate: \$136,500

PRIORITIZATION SCORE: 75

Buenaventura Boulevard

From Simpson Road to County Line

JURISDICTION	Osceola County
TRAVEL LANES	4-lane / Grass median
LENGTH	2.58 miles
POSTED SPEED	35-40 mph
85TH PERCENTILE SPEED	50 mph
MULTIMODAL FACILITIES?	Partial sidewalks, transit stops



MODAL SPLIT

























CRASH TYPES

715

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	5	203	208	27%
Left Turn / Angle	10	268	278	37%
Sideswipe	0	89	89	12%
Right Turn	0	27	27	_
Pedestrian	2	10	12	_
Bicycle	2	8	10	-
Run off the Road	6	44	50	-
Head On	0	9	9	-
Other	5	57	62	8%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	6	6	1%
Alcohol/Drugs	2	3	5	1%
Distracted Driving	17	272	289	38%
Intersection	12	343	355	47%
Aging Driver	3	151	154	20%
Teen Driver	8	123	131	17%
Signal Controlled	7	234	241	32%
Dark Conditions	18	183	201	27%
Wet Road Surface	2	69	71	9%

PRIORITIZATION SCORE: 75

Buenaventura Boulevard

From Simpson Road to County Line

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Install midblock pedestrian crossings where appropriate
- Install flexible backplates where appropriate
- Install pedestrian enhancements including rectangular rapid flashing beacons (RRFBs) and cross walk upgrades.
- Enhance signage and pavement markings
- Reduce speed limit and implement speed management including lane width reduction and feedback signs
- Evaluate access management opportunities

Programmed Improvements

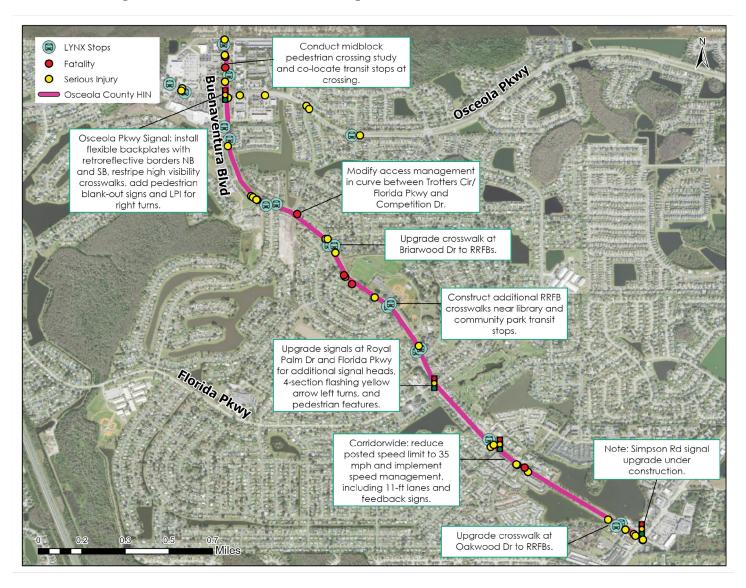
- Buenaventura Complete Streets project beginning design
- Simpson Rd widening
 - Shared use path, median, lighting

- Coordinate with LYNX to audit transit stops and implement improvements.
- Create a plan to upgrade light fixtures and provide adequate lighting.
- Use of speed trailers and speed feedback signs to control the speed of motorized vehicles.

PRIORITIZATION SCORE: 75

Buenaventura Boulevard

From Simpson Road to County Line



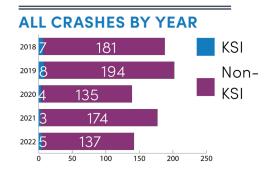
Planning Level Cost Estimate: \$3,594,410

PRIORITIZATION SCORE: 62.5

Pleasant Hill Road

From South of Granada Boulevard to Knowles Boulevard

JURISDICTION	Osceola County
TRAVEL LANES	4-lane / Grass and raised median
LENGTH	3.17 miles
POSTED SPEED	45 mph
85TH PERCENTILE SPEED	64 mph
MULTIMODAL FACILITIES?	Partial sidewalks, transit stops



MODAL SPLIT



TOTAL CRASHES









19



27

TOTAL FATAL & SERIOUS INJURY CRASHES

















CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	5	417	422	50%
Left Turn / Angle	7	143	150	18%
Sideswipe	0	127	127	15%
Right Turn	0	38	38	_
Pedestrian	3	8	11	-
Bicycle	1	5	6	_
Run off the Road	4	29	33	
Head On	3	7	10	_
Other	3	36	39	5%

CONTRIBUTING FACTORS

3

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	2	10	12	1%
Alcohol/Drugs	6	10	16	2%
Distracted Driving	15	246	261	31%
Intersection	10	269	279	33%
Aging Driver	10	160	170	20%
Teen Driver	2	125	127	15%
Signal Controlled	5	151	156	18%
Dark Conditions	13	168	181	21%
Wet Road Surface	7	79	86	10%

PRIORITIZATION SCORE: 62.5

Pleasant Hill Road

From South of Granada Blvd to Knowles Boulevard

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Install high visibility crosswalks where appropriate
- Install flexible backplates where appropriate
- Enhance signage and pavement markings
- Install curve warning signage and enhanced delineation
- Directionalize median openings to address limited sight distance

Programmed Improvements

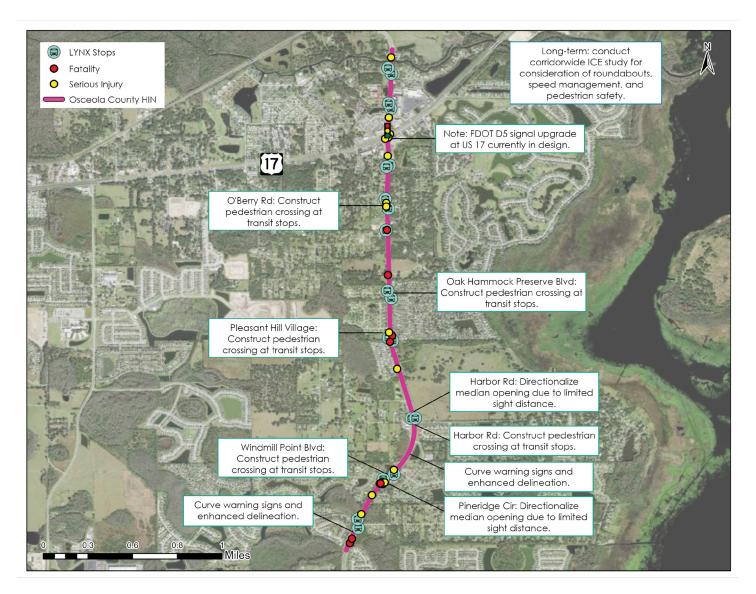
- FDOT D5 signal upgrade at US 17
- Reference access mgt study for findings
- Story Creek Road under construction will be signalized

- Coordinate with LYNX to audit transit stops and implement improvements.
- Create a plan to upgrade light fixtures and provide adequate lighting.
- Use of speed trailers and speed feedback signs to control the speed of motorized vehicles.
- Conduct corridor study to evaluate roundabout, speed management, and pedestrian safety

PRIORITIZATION SCORE: 62.5

Pleasant Hill Road

From South of Granada Blvd to Knowles Boulevard



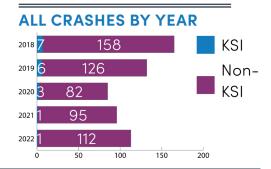
Planning Level Cost Estimate: \$2,231,250

PRIORITIZATION SCORE: 58.75

S. Poinciana Boulevard

From Eagles Trail to Woodmont Boulevard/Red Blossom Lane

JURISDICTION Osceola County		
TRAVEL LANES	4-lane / Grass median	
LENGTH	2.63 miles	
POSTED SPEED	45-55 mph	
85TH PERCENTILE SPEED	62 mph	
MULTIMODAL FACILITIES?	Partial sidewalks, no transit	



MODAL SPLIT



TOTAL CRASHES













TOTAL FATAL & SERIOUS INJURY CRASHES















CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	4	277	281	48%
Left Turn / Angle	8	145	153	26%
Sideswipe	0	70	70	12%
Right Turn	0	13	13	_
Pedestrian	1	2	3	-
Bicycle	0	7	7	-
Run off the Road	4	24	28	5%
Head On	1	1	2	-
Other	0	25	25	_

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	5	5	1%
Alcohol/Drugs	1	3	4	1%
Distracted Driving	12	216	228	39%
Intersection	10	237	247	42%
Aging Driver	2	71	73	12%
Teen Driver	3	89	92	16%
Signal Controlled	7	186	193	33%
Dark Conditions	10	167	177	30%
Wet Road Surface	1	63	64	11%

PRIORITIZATION SCORE: 58.75

S. Poinciana Boulevard

From Eagles Trail to Woodmont Boulevard/Red Blossom Lane

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Install midblock pedestrian crossings where appropriate
- Install flexible backplates where appropriate
- Install pedestrian enhancements including rectangular rapid flashing beacons (RRFBs) and cross walk upgrades.
- Enhance signage and pavement markings
- Reduce speed limit and implement speed management including lane width reduction and feedback signs
- Implement left-turn phase restrictions

Programmed Improvements

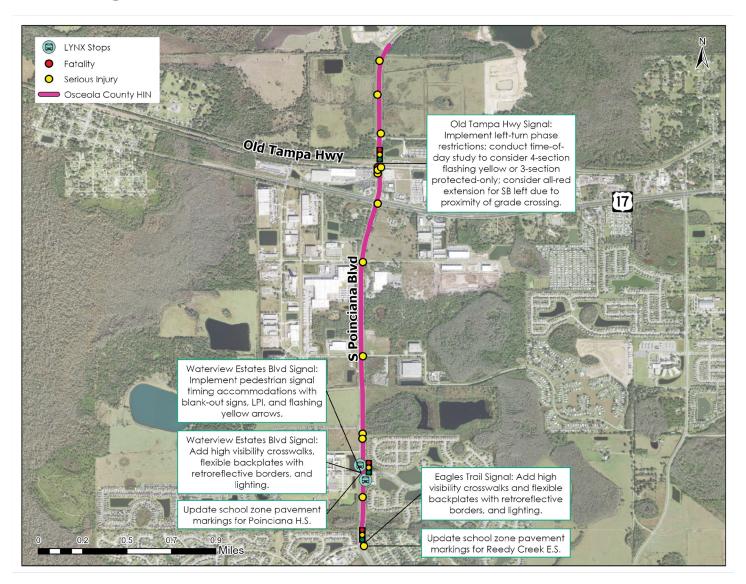
 Poinciana Blvd widening from Trafalgar Blvd to Pleasant Hill Rd widening with multimodal under construction south of segment

- Implement speed camera enforcement.
 These are allowed in school zones.
- Conduct a road safety audit of each school zone to identify improvements.
- Coordinate with LYNX to audit transit stops and implement improvements.
- Create a plan to upgrade light fixtures and provide adequate lighting.
- Use of speed trailers and speed feedback signs to control the speed of motorized vehicles.
- Craft a traffic campaign targeting teen drivers
- Conduct time of day study to consider signal changes at signalized intersections

PRIORITIZATION SCORE: 58.75

S. Poinciana Boulevard

From Eagles Trail to Woodmont Boulevard/Red Blossom Lane



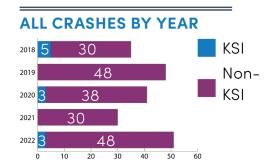
Planning Level Cost Estimate: \$1,347,500

PRIORITIZATION SCORE: 56.25

Koa Street

From Marigold Avenue to San Remo Road

JURISDICTION	Osceola County
TRAVEL LANES	2-lane / Undivided
LENGTH	0.89 miles
POSTED SPEED	45 mph
85TH PERCENTILE SPEED	50 mph
MULTIMODAL FACILITIES?	Partial sidewalks, transit stops



MODAL SPLIT



TOTAL CRASHES











TOTAL FATAL & SERIOUS INJURY CRASHES















CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	0	81	81	40%
Left Turn / Angle	7	68	75	36%
Sideswipe	0	13	13	6%
Right Turn	-	-	-	-
Pedestrian	1	2	3	-
Bicycle	1	2	3	-
Run off the Road	2	9	11	-
Head On	0	6	6	-
Other	0	12	12	6%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	1	1	2	1%
Alcohol/Drugs	0	1	1	1%
Distracted Driving	6	64	70	34%
Intersection	9	95	104	51%
Aging Driver	1	35	36	18%
Teen Driver	0	31	31	15%
Signal Controlled	2	36	38	19%
Dark Conditions	5	50	55	27%
Wet Road Surface	2	30	32	16%

PRIORITY PROJECT 8

PRIORITIZATION SCORE: 56.25

Koa Street

Marigold Avenue to San Remo Road

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Install high visibility crosswalks, pedestrian refuge islands, and harden centerlines where appropriate
- Address sidewalk gaps
- Install flexible backplates where appropriate
- Restripe corridor and crosswalks
- Enhance signage and pavement markings
- Conduct signal warrant study

Programmed Improvements

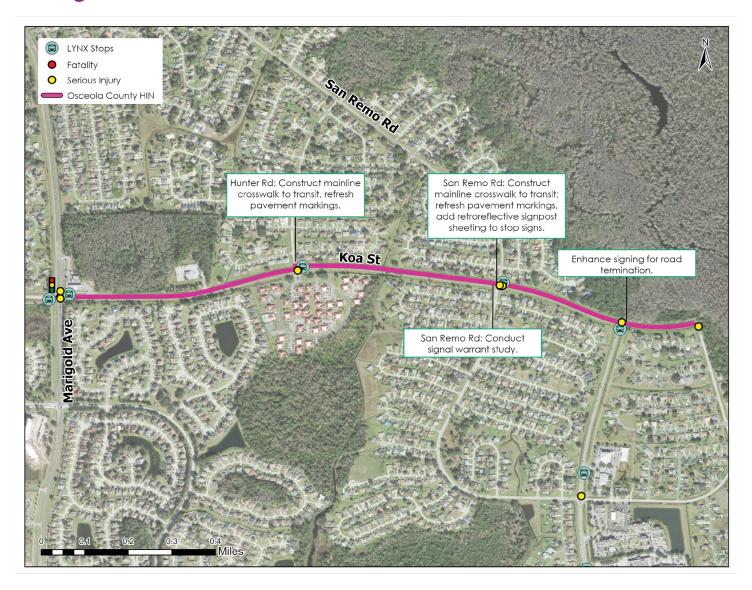
 San Remo Road is included in Osceola County 10-year work-program but not yet funded

- Coordinate with LYNX to audit accessibility and safety on transit stops and implement improvements.
- Include High-visibility pedestrian warning signs in the approach of transit stops to increase driver awareness of pedestrians.
- Use of speed trailers and speed feedback signs to control the speed of motorized vehicles.
- Create a plan to upgrade light fixtures.

PRIORITIZATION SCORE: 56.25

Koa Street

Marigold Avenue to San Remo Road



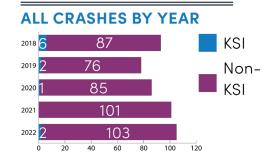
Planning Level Cost Estimate: \$883,750

PRIORITIZATION SCORE: 56.25

N. Doverplum Avenue

From Country Club Road/Towne Center Drive to Koa Street

JURISDICTION	Osceola County		
TRAVEL LANES	2-lane / Undivided		
LENGTH	0.9 miles		
POSTED SPEED	45 mph		
85TH PERCENTILE SPEED	50 mph		
MULTIMODAL FACILITIES?	Partial sidewalks, transit stops		



MODAL SPLIT













TOTAL FATAL & SERIOUS INJURY CRASHES















CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	2	191	193	42%
Left Turn / Angle	6	115	121	26%
Sideswipe	0	41	41	9%
Right Turn	0	39	39	8%
Pedestrian	2	7	9	-
Bicycle	0	6	6	-
Run off the Road	1	21	22	-
Head On	0	5	5	-
Other	0	20	20	-

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	9	9	2%
Alcohol/Drugs	0	3	3	1%
Distracted Driving	7	140	147	32%
Intersection	4	170	174	38%
Aging Driver	2	134	136	29%
Teen Driver	1	73	74	16%
Signal Controlled	1	50	51	11%
Dark Conditions	4	83	37	19%
Wet Road Surface	3	57	60	13%

PRIORITIZATION SCORE: 56.25

N. Doverplum Avenue

From Country Club Road/Towne Center Drive to Koa Street

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Install high visibility crosswalks, pedestrian refuge islands, and harden centerlines where appropriate
- Install flexible backplates where appropriate
- Address sidewalk gaps
- Enhance signage and pavement markings
- Restripe corridor and crosswalks

Programmed Improvements

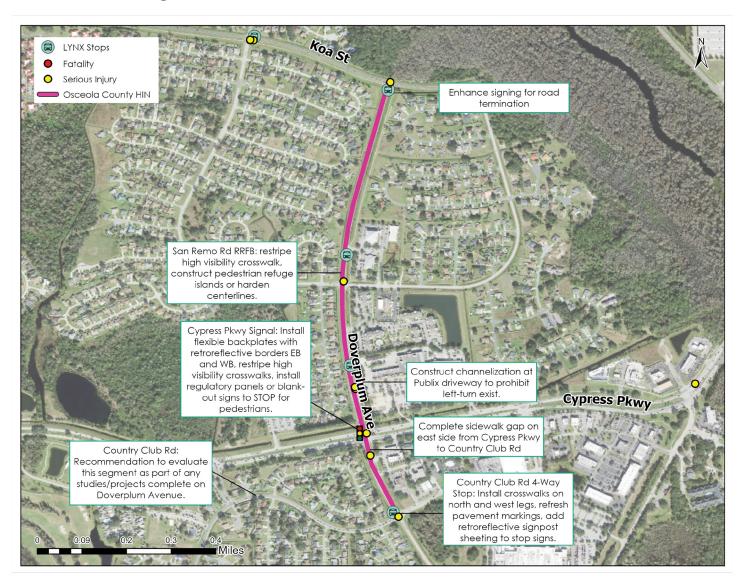
- No improvements currently programmed
- Intersection of Country Club Rd / Towne Center Dr is currently ranked #6 on the County Signalized Intersection Priority List; meets Traffic Signal Warrants 1A, 2, and 7
- Intersection of San Remo Rd is currently ranked #9 on the County Signalized Intersection Priority List; meets Traffic Signal Warrants 1B, 2, and 7

- Conduct a Road Safety Audit (RSA).
- Multilingual Public outreach campaign targeting unsafe behaviors.
- Formal Courses for Older Drivers (classroom + on-road feedback).
- Develop a policy for access management to reduce driveway conflicts.
- High visibility enforcement for speeding.
- Coordinate with LYNX to audit bus stops and implement accessibility and safety improvements. Relocate bus stops.

PRIORITIZATION SCORE: 56.25

N. Doverplum Avenue

From Country Club Road/Towne Center Drive to Koa Street



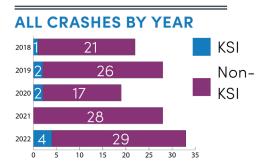
Planning Level Cost Estimate: \$173,250

PRIORITIZATION SCORE: 55

S. Narcoossee Road

From Lillian Black Road to Jack Brack Road

JURISDICTION	Osceola County		
TRAVEL LANES	4-lane / Grass median		
LENGTH	1.29 miles		
POSTED SPEED	45 mph		
85TH PERCENTILE SPEED	60 mph		
MULTIMODAL FACILITIES?	Complete sidewalks, transit stops		



MODAL SPLIT



















CRASH TYPES

121

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	1	44	45	35%
Left Turn / Angle	1	30	31	_
Sideswipe	0	21	21	16%
Right Turn	-	-	-	-
Pedestrian	0	1	1	-
Bicycle	0	4	4	_
Run off the Road	5	8	13	10%
Head On	-	-	-	-
Other	2	7	9	7%

CONTRIBUTING FACTORS

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	2	2	2%
Alcohol/Drugs	0	2	2	2%
Distracted Driving	4	43	47	36%
Intersection	2	55	57	44%
Aging Driver	1	19	20	15%
Teen Driver	3	15	18	14%
Signal Controlled	1	23	24	18%
Dark Conditions	5	27	32	25%
Wet Road Surface	0	9	9	7%

PRIORITY PROJECT 10

PRIORITIZATION SCORE: 55

S. Narcoossee Road

From Lillian Black Road to Jack Brack Road

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Install high visibility crosswalks where appropriate
- Install flexible backplates where appropriate
- Enhance signage and pavement markings
- Install curve warning signage and enhanced delineation

Programmed Improvements

- Jones Rd signal upgrade in Osceola County 10-year work-program
- Jack Brack Road recent signalization

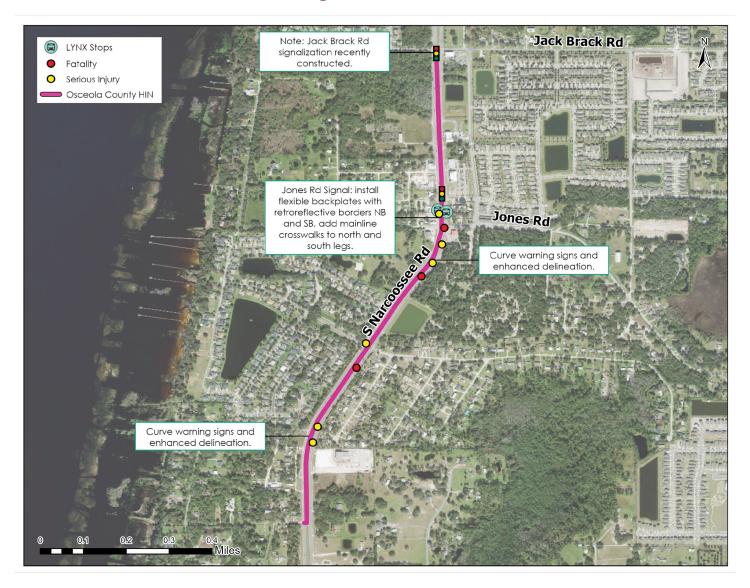
Non-Engineering Countermeasures

Coordinate with LYNX to audit accessibility and safety on transit stops and implement improvements.

PRIORITIZATION SCORE: 55

S. Narcoossee Road

From Lillian Black Road to Jack Brack Road



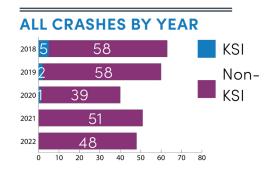
Planning Level Cost Estimate: \$63,000

PRIORITIZATION SCORE:55

E. Osceola Parkway

From 1/4 mile west of Buenaventura Boulevard to Sandalwood Drive

JURISDICTION	Osceola County
TRAVEL LANES	4-lane / Median
LENGTH	0.74 miles
POSTED SPEED	40 mph
85TH PERCENTILE SPEED	55 mph
MULTIMODAL FACILITIES?	Complete sidewalks, transit stops



MODAL SPLIT





























CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	2	88	90	34%
Left Turn / Angle	0	67	67	15%
Sideswipe	0	36	36	14%
Right Turn	0	12	12	-
Pedestrian	2	4	6	-
Bicycle	0	5	5	-
Run off the Road	1	1	2	-
Head On	0	5	5	_
Other	1	34	35	13%

CONTRIBUTING FACTORS

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	3	3	1%
Alcohol/Drugs	0	6	6	3%
Distracted Driving	2	78	80	31%
Intersection	3	115	118	45%
Aging Driver	2	49	51	19%
Teen Driver	0	41	41	16%
Signal Controlled	1	97	98	37%
Dark Conditions	5	68	73	28%
Wet Road Surface	0	22	22	8%

PRIORITY PROJECT 11

PRIORITIZATION SCORE:55

E. Osceola Parkway

From 1/4 mile west of Buenaventura Boulevard to Sandalwood Drive

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Install high visibility crosswalks where appropriate
- Install flexible backplates where appropriate
- Enhance signage and pavement markings
- Install curve warning signage and enhanced delineation
- Upgrade curb ramps and add sidestreet crosswalk markings

Programmed Improvements

None

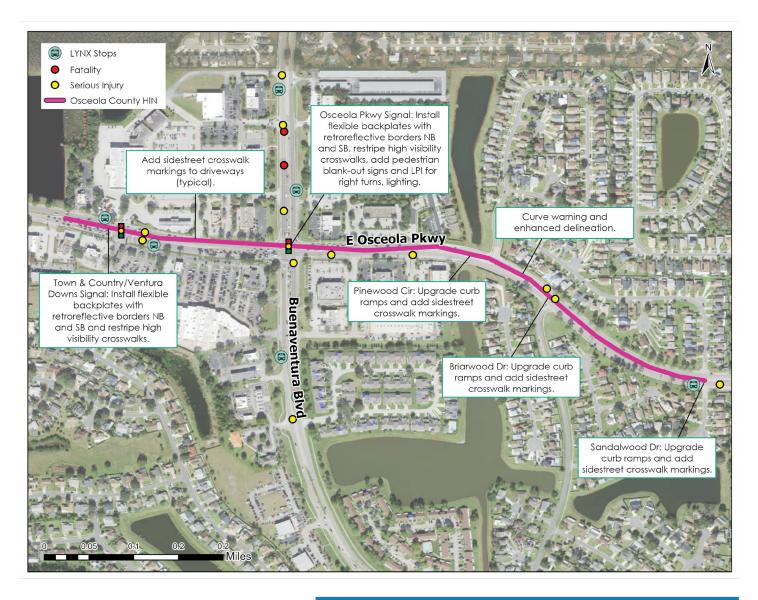
Non-Engineering Countermeasures

- Red-light Camera Enforcement.
- Consider No Right Turn on Red (RTOR) Signs.
- Coordinate with LYNX to audit accessibility and safety on transit stops and implement improvements.
- Consider lighting at intersections to increase visibility.

PRIORITIZATION SCORE:55

E. Osceola Parkway

From 1/4 mile west of Buenaventura Boulevard to Sandalwood Drive



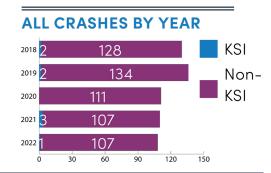
Planning Level Cost Estimate: \$273,700

PRIORITIZATION SCORE: 53.75

Pleasant Hill Road

From Old Pleasant Hill Road to Spinning Reel Lane/Wilderness Trail

JURISDICTION	Osceola County		
TRAVEL LANES	4-lane / 6-lane, raised median		
LENGTH	1.37 miles		
POSTED SPEED	45-55 mph		
85TH PERCENTILE SPEED	63 mph		
MULTIMODAL FACILITIES?	Complete sidewalks, transit stops		



MODAL SPLIT



TOTAL CRASHES











TOTAL FATAL & SERIOUS INJURY CRASHES

















CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	3	330	333	56%
Left Turn / Angle	1	65	66	_
Sideswipe	0	104	104	17%
Right Turn	0	18	18	3%
Pedestrian	3	3	6	_
Bicycle	0	4	4	_
Run off the Road	1	14	15	
Head On	0	2	2	-
Other	0	34	34	6%

CONTRIBUTING FACTORS

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	7	7	1%
Alcohol/Drugs	0	3	3	1%
Distracted Driving	4	188	192	32%
Intersection	4	135	139	23%
Aging Driver	3	130	133	22%
Teen Driver	2	88	90	15%
Signal Controlled	1	144	145	24%
Dark Conditions	4	136	140	24%
Wet Road Surface	0	51	51	9%

PRIORITIZATION SCORE: 53.75

Pleasant Hill Road

Old Pleasant Hill Road to Spinning Reel Lane/Wilderness Trail

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Install high visibility crosswalks, pedestrian refuge islands, and harden centerlines where appropriate
- Install flexible backplates where appropriate
- Enhance signage and pavement markings
- Directionalize median openings to address limited sight distance

Programmed Improvements

- Existing access management studies to be reviewed for other observations/ improvements
- Improving intersection of Pleasant Hill Road and Poinciana Blvd as part of Poinciana widening project

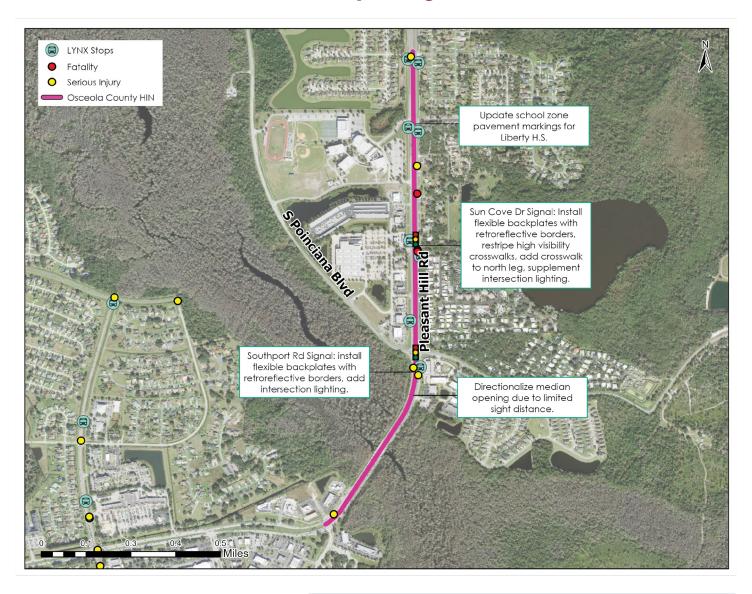
Non-Engineering Countermeasures

- Implement speed camera enforcement.
 These are allowed in school zones.
- Include High-visibility pedestrian warning signs in the approach of transit stops to increase driver awareness of pedestrians.
- Use of speed trailers and speed feedback signs to control the speed of motorized vehicles.
- Create a plan to upgrade light fixtures and include pedestrian scale lighting.

PRIORITIZATION SCORE: 53.75

Pleasant Hill Road

From Old Pleasant Hill Road to Spinning Reel Lane/Wilderness Trail



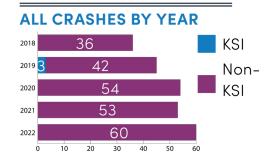
Planning Level Cost Estimate: \$494,375

PRIORITIZATION SCORE: 47.5

S. Narcoossee Road

From US 192 to Lillian Lee Road

JURISDICTION	Osceola County		
TRAVEL LANES	4-lane / Raised and grass median		
LENGTH	0.55 miles		
POSTED SPEED	45 mph		
85TH PERCENTILE SPEED	58 mph		
MULTIMODAL FACILITIES?	Complete sidewalks, transit stops		



MODAL SPLIT























CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	0	155	155	
Left Turn / Angle	2	18	20	-
Sideswipe	0	29	29	-
Right Turn	0	3	3	-
Pedestrian	0	0	0	-
Bicycle	0	3	3	-
Run off the Road	0	5	5	-
Head On	0	4	4	-
Other	1	21	22	_

CONTRIBUTING FACTORS

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	1	5	6	2%
Alcohol/Drugs	0	2	2	1%
Distracted Driving	0	55	55	22%
Intersection	0	64	64	26%
Aging Driver	0	48	48	19%
Teen Driver	0	40	40	16%
Signal Controlled	3	120	123	50%
Dark Conditions	1	48	49	20%
Wet Road Surface	0	25	25	10%

PRIORITY PROJECT 13

PRIORITIZATION SCORE: 47.5

S. Narcoossee Road

From US 192 to Lillian Lee Road

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Coordinate signal timing with nearby arterials
- Install high visibility crosswalks, pedestrian refuge islands, and harden centerlines where appropriate
- Install flexible backplates where appropriate

Programmed Improvements

 MetroPlan Orlando evaluated signal timing and recommendations will be implemented in the future

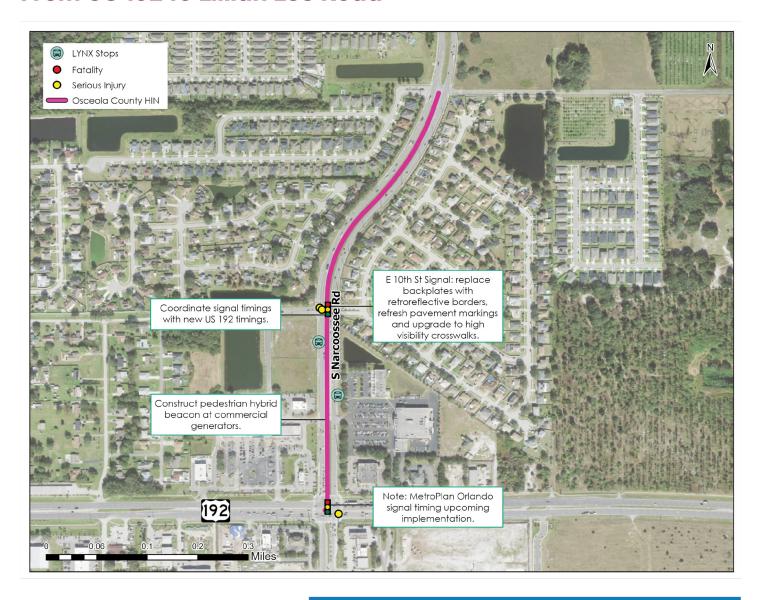
Non-Engineering Countermeasures

 Consider lighting at intersections to increase visibility

PRIORITIZATION SCORE: 47.5

S. Narcoossee Road

From US 192 to Lillian Lee Road



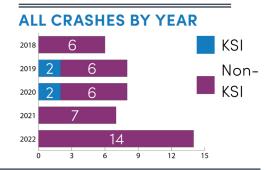
Planning Level Cost Estimate: \$490,000

PRIORITIZATION SCORE: 47.5

Nolte Road

From west of Michigan Avenue to Southern Vista Loop

JURISDICTION	Osceola County		
TRAVEL LANES	4-lane / Grass median		
LENGTH	0.62 miles		
POSTED SPEED	45 mph		
85TH PERCENTILE SPEED	59 mph		
MULTIMODAL FACILITIES?	Partial sidewalks, no transit		



MODAL SPLIT







4









CRASH TYPES

38

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	0	10	10	23%
Left Turn / Angle	2	17	19	45%
Sideswipe	1	0	1	_
Right Turn	0	1	1	_
Pedestrian	0	0	0	-
Bicycle	0	1	1	
Run off the Road	1	1	2	5%
Head On	0	1	1	-
Other	0	7	7	16%

CONTRIBUTING FACTORS

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	1	0	1	2%
Alcohol/Drugs	0	0	0	0%
Distracted Driving	0	5	5	12%
Intersection	0	12	12	28%
Aging Driver	1	7	8	19%
Teen Driver	2	7	9	21%
Signal Controlled	3	16	19	44%
Dark Conditions	3	6	9	21%
Wet Road Surface	1	1	2	5%

PRIORITY PROJECT 14

PRIORITIZATION SCORE: 47.5

Nolte Road

From west of Michigan Avenue to Southern Vista Loop

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Install high visibility crosswalks
- Install curve warning signage and enhanced delineation
- Install signal improvements and upgrades at intersections

Programmed Improvements

None

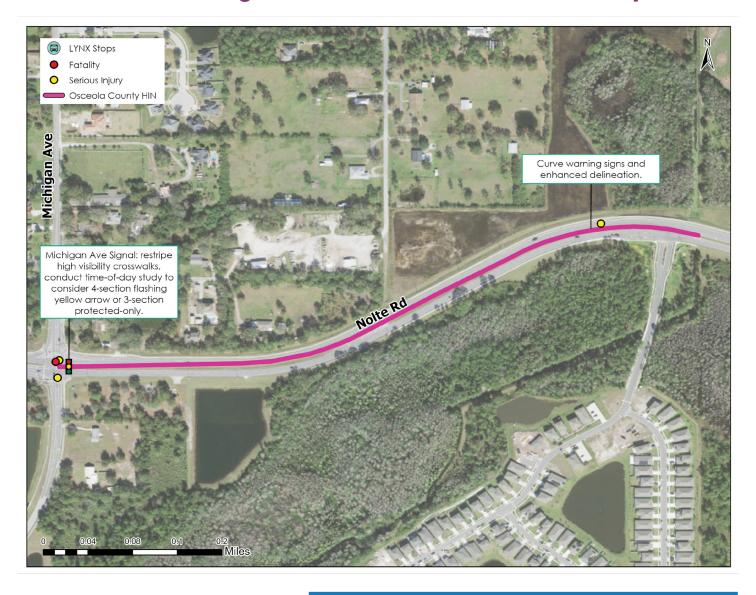
Non-Engineering Countermeasures

- Consider lighting at intersections to increase visibility.
- Use of speed trailers and speed feedback signs to control the speed of motorized vehicles.
- Conduct time of day study to consider signal changes at signalized intersections

PRIORITIZATION SCORE: 47.5

Nolte Road

From west of Michigan Avenue to Southern Vista Loop



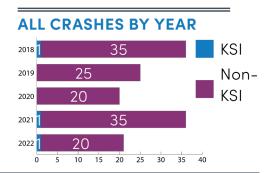
Planning Level Cost Estimate: \$385,000

PRIORITIZATION SCORE: 42.5

Canoe Creek Road

From Indian Lakes Boulevard to 500 feet north of Hyleigh Way

JURISDICTION	Osceola County
TRAVEL LANES	2-lane
LENGTH	0.73 miles
POSTED SPEED	45 mph
85TH PERCENTILE SPEED	54 mph
MULTIMODAL FACILITIES?	Partial sidewalks, no transit



MODAL SPLIT













CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	1	79	80	59%
Left Turn / Angle	6	27	33	24%
Sideswipe	4	0	4	3%
Right Turn	0	2	2	-
Pedestrian	0	0	0	-
Bicycle	0	0	0	-
Run off the Road	-	-	-	-
Head On	0	1	1	-
Other	0	11	11	8%

CONTRIBUTING FACTORS

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	6	6	4%
Alcohol/Drugs	0	4	4	4%
Distracted Driving	0	42	42	31%
Intersection	1	29	30	22%
Aging Driver	0	26	26	19%
Teen Driver	0	40	40	30%
Signal Controlled	1	56	57	42%
Dark Conditions	1	24	25	19%
Wet Road Surface	0	15	15	11%

PRIORITY PROJECT 15

PRIORITIZATION SCORE: 42.5

Canoe Creek Road

From Indian Lakes Boulevard to 500 feet north of Hyleigh Way

PROJECT RECOMMENDATIONS

Engineering Countermeasures

- Install flexible backplates where appropriate
- Install signal improvements and upgrades at intersections

Programmed Improvements

 Canoe Creek Rd Improvements Study from Deer Run Rd to US 192 evaluates widening 2-lane to 4-lane

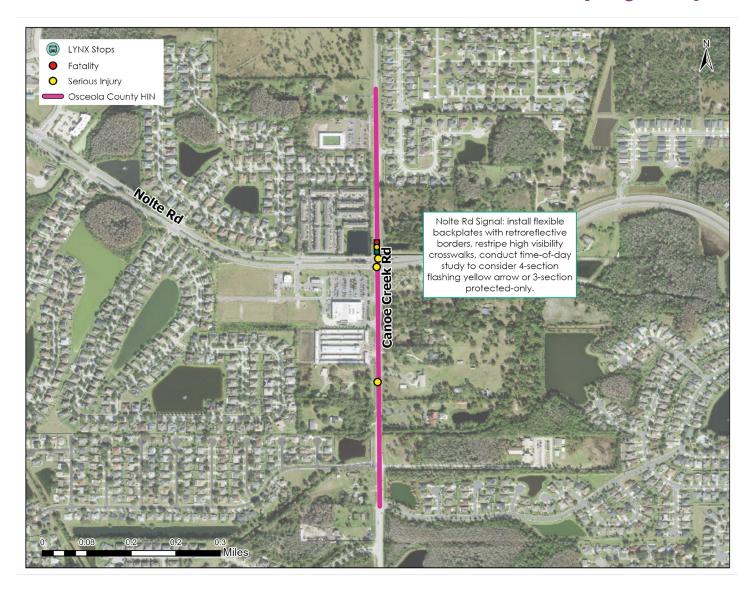
Non-Engineering Countermeasures

- Consider lighting at intersections to increase visibility.
- Conduct time of day study to consider signal changes at signalized intersections

PRIORITIZATION SCORE: 42.5

Canoe Creek Road

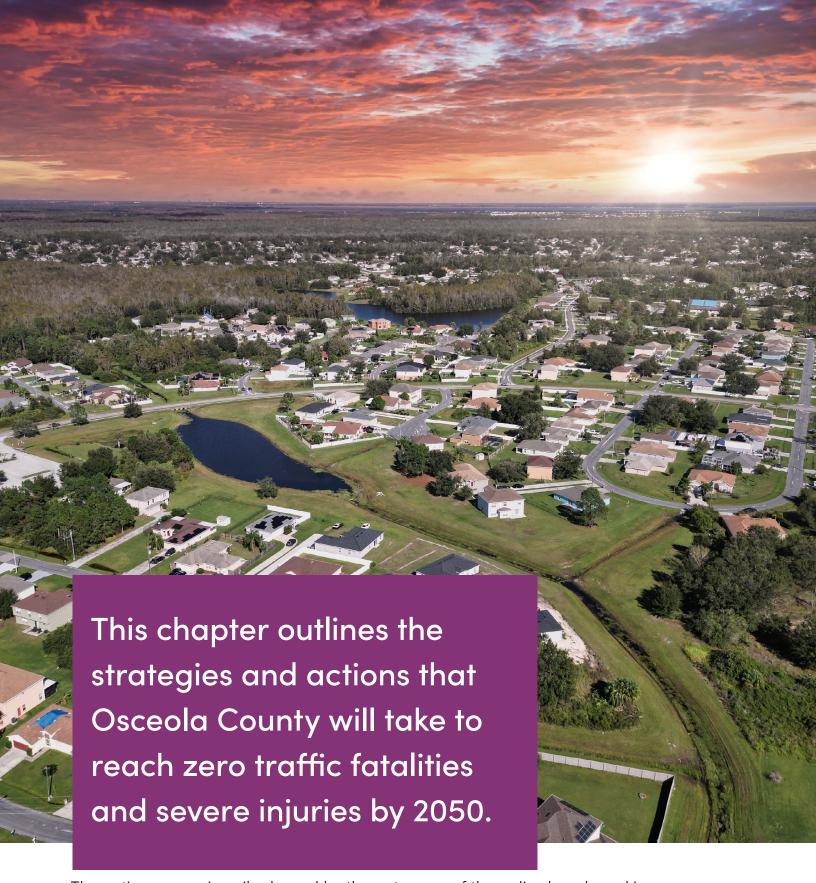
From Indian Lakes Boulevard to 500 feet north of Hyleigh Way



Planning Level Cost Estimate: \$393,750

Chapter 6:

Plan of Action



The actions are primarily shaped by the outcomes of the policy benchmarking assessment (Appendix D) and coordination with the Steering Committee. Each action includes potential partners, a timeline, and performance metrics to track progress.

The Osceola County Vision Zero Action Plan's framework is aligned with the five core elements of the Safe System Approach:

SAFER PEOPLE:



Every road user should be safe using the street, regardless of the mode they use. Consider conducting high-visibility enforcement to target dangerous driver behavior and targeted training to educate partners and professionals for a safer culture.

SAFER ROADS:



Streets should be designed to mitigate the impact of human error to prevent loss of life or life-altering injuries. *Facilitate safety improvements implementation by leveraging existing programs, establishing a pilot program, prioritizing safety enhancements along the HIN and near transit, updating design guidance, and actively seeking funding.*

SAFER VEHICLES:



Promoting vehicles designed and regulated to minimize crashes and their severity is crucial. Foster the implementation of a target-speed setting approach, expand the use of speed cameras, and consider the establishment of Pedestrian Priority Zones in high pedestrian activity areas.

SAFER SPEEDS:



Setting appropriate speed limits, designing roadways for safer speeds, and implementing policies to decrease speed are essential components of reducing crash severity and frequency. As fleet vehicles age out, upgrade fleet to accepted crash-prevention technology, and partner with technology vendors to install intersection safety improvements such as near-miss technology.

POST-CRASH CARE:



Prioritizing data collection to enable first responders to quickly locate crashes, stabilize injuries, and expedite access to emergency medical care is vital. Additionally, using crash data to inform preventative measures can help reduce the frequency and severity of future crashes. Consider the establishment of a multi-agency fatal crash evaluation team to assess engineering, behavioral, vehicular, and land use.

This chapter identifies strategies and actions to be pursued for implementation following adoption of the Action Plan. By focusing efforts on these priority actions, Osceola County aims to make significant strides towards creating safer roadways for all its residents and visitors.

The Transportation and Transit Department will serve as lead for initial implementation and coordination of the respective action items and will partner with the appropriate departments and/or agencies to determine the path forward. Partner agencies and departments, timelines, and resource impacts were identified for the strategies and action items. The implementation process for each action item is defined in steps that are expected to follow these general timeframes:



STEP 1: 1-2 YEARS -

Action is targeted for implementation within one to two years.



STEP 2: 3-5 YEARS -

Action is targeted for implementation within three to five years. These are actions that may require additional resources and collaboration with other agencies.



STEP 3: 5+ YEARS -

Action is targeted for implementation in five or more years.
These actions may be contingent on the completion of prior actions, staff, funding, and other resources, and require significant collaboration with other agencies.

It is recognized that the implementation of some of the action items will be contingent upon the availability of resources. Osceola County and its partners will seek to implement these actions to the fullest extent possible in order to advance Vision Zero in the County. The potential impact on resources for each of the proposed action items is noted in Appendix E.

Strategies and Action Items

Safe System Approach Element: Safer People

Strategy: Targeted High-Visibility Enforcement + Training.

Action. Move towards establishing a safety enforcement team. Through safety enforcement team, facilitate coordination on current programs, build consensus on future campaigns, identify funding, and craft and deploy targeted safety campaigns.



Step 1: Move towards establishment of safety enforcement team following plan adoption.

PARTNERS: Osceola County Government, the Osceola County School District and law enforcement including the Osceola County Sheriff's Office.

PERFORMANCE MEASURE: Establishing a safety enforcement team.

Action. Explore expanding existing enforcement campaigns. Conduct High Visibility Enforcement actions to target specific behaviors, including distracted driving and impaired driving, and to enforce pedestrian and bicycle safety, following the pedestrian crosswalk yield law.



Step 1: Review current safety campaigns as they relate to the Vision Zero Action Plan to align with overarching systemic safety issues in the County.



Step 2: Explore deployment of the expanded targeted safety campaigns.

PARTNERS: Osceola County Government, Best Foot Forward, City of Kissimmee Police Department, St. Cloud Police Department, the Osceola County School District, and law enforcement including the Osceola County Sheriff's Office.

PERFORMANCE MEASURE: Number of expanded traffic safety campaigns deployed; Reduction in KSIs targeted by safety campaign.

Action. Explore the creation & deployment of new targeted campaigns. This initiative seeks to raise awareness and promote safer practices on the roads. Focus along the High Injury Network (HIN) to deter unsafe behavior, thereby decreasing the likelihood of crashes occurring in these high-risk areas.



Step 1: Explore the identification of systemic safety issues not covered by the current safety programs.



Step 2: Explore the creation of a targeted safety campaign addressing these systemic safety issues.



Step 3: Deploy the new targeted safety campaign(s) as applicable.

PARTNERS: Osceola County Government, the Osceola County School District and law enforcement including the Osceola County Sheriff's Office; Best Foot Forward, the Florida Department of Transportation and MetroPlan Orlando.

PERFORMANCE MEASURE: Creation and deployment of new program(s); Reduction in KSIs related to new targeted safety campaign.

Action. Explore crafting a Targeted Safety Training Program.

Recognizing the importance of education, engagement, and a culture of safety, conducting workshops and seminars to educate on effective communication regarding traffic crashes and safety; disseminate best practices for pedestrian, bicycle, and vehicular safety. Trainings aimed at media professionals, county staff, law enforcement officers, and the general public.



Step 1: Explore identification of systemic safety training needs for employees.



Step 2: Procure and implement systemic safety training as applicable.

PARTNERS: Osceola County Government, the Osceola County School District and law enforcement including the Osceola County Sheriff's Office; LYNX, Best Foot Forward, the Police Departments of Kissimmee, and St. Cloud, the Florida Department of Transportation and MetroPlan Orlando.

PERFORMANCE MEASURE: Deployment of training program; Reduction in relevant KSIs.

Safe System Approach Element: Safer Roads

Strategy: Safety Improvements Implementation.

Action. Evaluate implementing a pilot & demonstration program for low-cost safety countermeasures. Prioritize and implement safety treatments along the High Injury Network (HIN), both along corridors and at intersections within the network.



Step 1: Explore the adoption of a Pilot/Demonstration program policy and process in and out of the Urban Growth Boundary, to expedite the delivery of safety projects.



Step 2: Craft and deploy a pilot/demonstration project implementation program.

PARTNERS: Transportation and Transit, Osceola County Government, the City of Kissimmee, the City of St. Cloud, the Osceola County School District, the Florida Department of Transportation, and MetroPlan Orlando.

PERFORMANCE MEASURE: Establishment of the Pilot/Demonstration program; Number of pilot/demonstration projects along the HIN.

Action. Evaluate leveraging the CIP project development process to integrate safety improvements along the HIN. Improvements should correspond to the crash data and can include improved illumination, alternative intersections, pedestrian crossing treatments, intersection treatments, roadway geometric or surface improvements, or streetscape elements such as curb extensions, medians, bikeways, etc., which slow traffic.



Step 1: Evaluate current projects in concept or preliminary design to integrate safety and safety-related operational improvements (ex: restriping, midblock crossings, bollards).



Step 2: Evaluate programmed project scopes to integrate low-cost, high-impact safety improvements.

PARTNERS: Osceola County Government, the Florida Department of Transportation, and MetroPlan Orlando.

PERFORMANCE MEASURE: Number of projects with integrated low-cost, high-impact safety improvements.

Action. Facilitate improvements near transit. Improve safe access to transit by auditing bus stops along transit routes with high pedestrian crash rates to identify short and long-term improvements needed.



Step 1: Collaborate with local transit agencies to establish maintenance & implementation responsibilities of adjoining infrastructure (ex: midblock Crossings, sidewalk gaps).



Step 2: Inventory non-compliant transit infrastructure.



Step 3: Program, fund, and implement safety improvements near transit.

PARTNERS: Osceola County Government, the City of Kissimmee, the City of St. Cloud, the Florida Department of Transportation, LYNX and MetroPlan Orlando.

PERFORMANCE MEASURE: Establishing meeting with transit agencies; Inventorying infrastructure near transit for compliance; Number of access to transit projects programmed and implemented.

Action. Explore diversifying funding sources. Diversify funding sources for long-term funding availability and maximize the efficient use of existing funding opportunities, including Safe Streets for All (SS4A), Rebuilding American Infrastructure with Sustainability & Equity (RAISE) grants, and Highway Safety Improvement Program (HSIP) funding.



Step 1: Work with the County Grant Services Coordinator to identify diverse funding sources. Examples include:

- » Public-Private Partnerships (PPPs).
- » Bonds (for larger-scale projects).
- » User fees.
- » Special Assessment Districts.
- » Insurance company partnerships.



Step 2: Engage other departments and agencies as needed to procure funding sources.



Step 3: Allocate funding to safety improvements along the HIN.

PARTNERS: Osceola County Government, the Florida Department of Transportation, and MetroPlan Orlando.

PERFORMANCE MEASURE: Projects implemented as a result of alternative funding sources.

Action. Update Design Guidance, Roadway Design Standards, and local codes to align with the latest safety standards and practices. This includes reviewing traffic calming policies and site design standards to incorporate safety countermeasures, with a focus on the High Injury Network (HIN).



Step 1: Consider reviewing the Osceola County Street Lighting Ordinance to align with the Comprehensive Plan's and Vision Zero Action Plan's lighting recommendations. Consider proactive midblock crossing requirements that are proactive and less dependent on crash history.



Step 2: Revise design standards to match revised policies as applicable based on above review.



Step 3: Apply revised policies and standards to new and reconstruction projects.

PARTNERS: Osceola County Government.

PERFORMANCE MEASURE: Key policy revisions; Number of safety projects implemented using revised policies and design standards.

Safe System Approach Element: Safer Speeds

Strategy: Speed Management

Action. Explore a target speed-setting policy in planning and design, rather than 85th percentile. To take proactive steps to reassess and update speed limit policies, with a focus on setting appropriate target speeds along HIN corridors and in residential districts.



Step 1: Review existing speed-setting policies and develop new policy language.



Step 2: Adopt revised speed-setting policy.



Step 3: Integrate speed policy priorities into design standards.

PARTNERS: Osceola County Government, the Florida Department of Transportation, and MetroPlan Orlando.

PERFORMANCE MEASURE: Number of projects with target speed parameters; Reduced relevant KSIs.

Action. Explore the adoption and implementation of Pedestrian Priority **Zones (PPZs).** To update roadway design standards to prioritize safety and encourage adherence to speed limits. These zones should be based on crash data and areas with high pedestrian activity.



Step 1: Explore establishing a PPZ policy aligned with the appropriate land use.



Step 2: Collaborate with Cities and departments to designate PPZs as applicable.



Step 3: Leverage resources to implement PPZs.

PARTNERS: Osceola County Government, City of Kissimmee, City of St. Cloud, the Florida Department of Transportation, and MetroPlan Orlando.

PERFORMANCE MEASURE: Implementing PPZs; Reduction in bike and pedestrian KSIs.

Action. Initiate the implementation of the School Zone Speed Safety Camera Program. By increasing the use of red-light safety cameras and speed feedback signs along HIN corridors and exploring alternatives to fines for minor traffic infractions, the county aims to promote compliance with speed limits while fostering a culture of responsible driving.



Step 1: Implement the initial phase of the school zone speed safety camera program.



Step 2: Evaluate future expansion of the speed safety camera program to other areas including the HIN.



Step 3: Evaluate expansion of the school zone speed safety camera program to other school zones within the HIN.

PARTNERS: Osceola County Government, City of Kissimmee, City of St. Cloud, the Florida Department of Transportation, and MetroPlan Orlando.

PERFORMANCE MEASURE: Monitor and evaluate effectiveness of current program

(reduced KSIs); Monitor and evaluate effectiveness of expanded program (reduced KSIs).

Safe System Approach Element: Safer Vehicles

Strategy: Update with Safety Technology

Action. Advance Safety Technology on Publicly Owned Fleet Vehicles.

Osceola County aims to enhance driver safety and mitigate the risk of collisions on its roadways through safety technology in vehicles. As funds become available and vehicles age out, the county plans to purchase vehicles with improved safety technology and/or with the ability to be retrofitted equipment in the future.



Step 1: Inventory current fleet expected lifespan and safety features.



Step 2: As vehicles age out, progressively upgrade fleet with accepted safety technology proven to reduce KSIs.

PARTNERS: Osceola County Government, City of Kissimmee, City of St. Cloud, the Florida Department of Transportation, LYNX and MetroPlan Orlando.

PERFORMANCE MEASURE: Number of vehicles retrofitted with accepted safety technology; Reduction in overall KSIs involving publicly owned fleet.

Action. Partner with technology vendors to install near-miss technology at intersections. By embracing emerging technologies, Osceola County aims to stay at the forefront of transportation innovation and ensure the safety of its residents and visitors.



Step 1: Evaluate vendor technology that can best support the County in detecting near misses.



Step 2: Procure and implement vendor technology.

PARTNERS: Osceola County Government, City of Kissimmee, City of St. Cloud, the Florida Department of Transportation, and MetroPlan Orlando.

PERFORMANCE MEASURE: Reduction in intersection KSIs.

Safe System Approach Element: Post Crash Care

Strategy: Post Crash Collaboration and Evaluation

Action. Explore the establishment of a multi-agency fatal crash evaluation team. Collaborating on emergency response through a holistic approach that evaluates engineering, environmental and contextual elements will help more proactively reduce fatalities and serious injuries in the future.



Step 1: Explore the establishment of a comprehensive fatal crash evaluation team.



Step 2: Plan for deployment, technology needs and monitoring of an evaluation team based upon above exploration.



Step 3: Deploy and monitor evaluation team as determined in previous steps.

PARTNERS: Osceola County Government, Osceola County Sheriff's Office, Emergency Management, Fire Rescue & EM, MetroPlan Orlando, Florida Highway Patrol, the City of Kissimmee, the City of St. Cloud, LYNX and the Florida Department of Transportation.

PERFORMANCE MEASURE: Reduction in KSIs at investigated & improved KSI crash sites.



Chapter 7:

Implementation and Tracking



The annual assessment process serves to track progress on the proposed strategies and actions and this chapter provides a high-level overview of how Osceola County will monitor progress and performance metrics to evaluate success of action items. Osceola County's progress monitoring will be aided by the data gathered at the regional level. The regional crash dashboard on VisionZeroCFL.gov will be updated by MetroPlan Orlando and regional and jurisdictional summaries of key information will be provided.

Implementation and Tracking

Osceola County Vision Zero Action Plan Steering Committee

There are coordinated stakeholder groups operating simultaneously on three separate levels: Region, County and City/town. The Osceola County Vision Zero Action Plan Steering Committee was established within this hierarchy to engage key stakeholders that represent various disciplines and community interests within Osceola County. The Steering Committee met four times to help shape the Action Plan with robust input, incorporating diverse local perspectives. The role of the steering committee members included providing advisory support, participating in meetings, and partnering for future implementation opportunities. The activities of this Steering Committee took place in parallel with the Regional Vision Zero Task Force, which was structured to develop a framework for continued implementation and monitoring.

Osceola Safety Enforcement Team

To continue countywide coordination following plan adoption, Osceola County will move toward establishing a Safety Enforcement Team to help implement action items, provide feedback, identify resources. This will include working with the cities of Kissimmee and St. Cloud on coordinated efforts. This team will be structured to provide input during plan implementation and monitoring. To that end, and consistent with the Vision Zero approach, the Safety Enforcement Team will consist of individuals representing program areas and disciplines reflective of the Steering Committee:

- Transportation
- Community Planning
- Law Enforcement
- Emergency Response

- Public Schools
- Health
- Transit
- Active Transportation

Once established, the **Safety Enforcement Team** will be involved in overseeing the annual safety progress summary report.

Progress Monitoring

Crash data is primarily obtained from Signal 4 Analytics (Signal 4), with Signal 4 data based on data from Florida's statutory custodian of records, the Florida Department of Highway Safety and Motor Vehicles (FLHSMV). Additional data should also be incorporated into the progress monitoring, including:

- Florida Injury Surveillance System (FISS)
- Florida Department of Transportation (FDOT) Modal Office
- Emergency room and other hospital visit data from local hospitals

In July of each year, the annual monitoring process should begin with Signal 4 data for the most recent full year, and the most current data obtained from other sources. Using the data, a variety of metrics should be calculated, as presented in Table 8. In addition to the crash data, a list of safety improvements implemented in the prior calendar year should be developed. Data will be collected and prepared by MetroPlan Orlando and made available through the Regional Hub Site for use by Osceola County and other local agencies to conduct annual monitoring.

Table 8. Annual Progress Monitoring Metrics

PERFORMANCE METRIC	DATA SOURCE	RESPONSIBILITY
Total fatalities by jurisdiction with regional total	Signal 4 (Hub Site)	MetroPlan Orlando
Fatality rate by jurisdiction	Signal 4, Census (Hub Site)	MetroPlan Orlando & Osceola County
Total serious injuries by jurisdiction with regional total	Signal 4 (Hub Site)	MetroPlan Orlando & Osceola County
Serious injury rate by jurisdiction	Signal 4, Census (Hub Site)	MetroPlan Orlando & Osceola County
Non-motorized fatalities and serious injuries by jurisdiction with regional total	Signal 4 (Hub Site)	MetroPlan Orlando & Osceola County
Number of KSI crashes within transportation underserved areas	Signal 4, Census Data (Hub Site)	MetroPlan Orlando & Osceola County
Percentage change in KSI crash types	Signal 4 (Hub Site)	MetroPlan Orlando & Osceola County
KSI crashes by Context Classification / Functional Classification	Signal 4, Roadway Network Data (Hub Site)	MetroPlan Orlando
Occupant Protection Assessment (percent of people killed not wearing a helmet or seatbelt as compared to prior year)	Signal 4 (Hub Site)	MetroPlan Orlando
Impaired Driving Assessment (percent of people killed or severely injured in a DUI crash as compared to prior year)	Signal 4 (Hub Site)	MetroPlan Orlando
Non-Auto involved rail incidents	FDOT Modal Office (Hub Site)	MetroPlan Orlando
Non-auto involved walking and bicycling crashes (including micromobility devices)	FISS, Local Hospitals (Hub Site)	MetroPlan Orlando
Citations for Key Behaviors	Signal 4, Florida Highway Patrol, Local Law Enforcement (Hub Site)	MetroPlan Orlando
Implemented safety improvements in prior calendar year	All jurisdictions in region	Osceola County
Progress made on specific actions	Safety Action Committee, MetroPlan Orlando, All jurisdictions in region	MetroPlan Orlando & Osceola County
Update Safety Dashboard	Signal 4 (Hub Site)	MetroPlan Orlando
Before/After Study Completion	Various studies	MetroPlan Orlando & Osceola County
Number and outcome of Non-Engineering Countermeasures	FDOT, Best Foot Forward, and local jurisdictions (Hub Site)	MetroPlan Orlando & Osceola County

Source: MetroPlan Orlando, 2024

In conjunction with the data analysis, an assessment of progress on the actions identified in the plan will be conducted. Performance measures were identified for each Action Item in <u>Chapter 6</u>. Progress should be evaluated against those measures for each action that was in-progress or completed in the prior year.

The evaluation process provides an opportunity to determine if actions underway should be continued, augmented, modified, or discontinued, and if completed actions should be repeated, and which actions identified for future years should be brought forward during the next year. The results of annual monitoring through the safety progress summary report will be shared with the **Safety Enforcement Team** for review and will be shared, when appropriate, with the Board of County Commissioners and MetroPlan Orlando.

Action Plan Updates

After plan adoption, Osceola County in partnership with the Safety Enforcement Team will evaluate and determine the appropriate timeframe for refreshing and updating the Action Plan. This timeframe will consider the schedule of the Comprehensive Plan, the Capital Improvement Program (CIP) cycle, and other applicable plans and activities so that results from the Vision Zero Action Plan can be appropriately incorporated. For example, a five-year update cycle will be considered to provide up-to-date crash data and to incorporate new safety best practices and guidelines.

Implementation

Implementing Osceola County's Vision Zero Action Plan will require broad collaboration across many partners and disciplines. In addition to completing the actions noted in Chapter 6, transportation safety projects will be implemented through various efforts, including through Osceola County's transportation planning and project development process (see Connection to other Osceola County Plans) as well as being funded through grant programs.



Connection to Other Osceola County Plans

OSCEOLA COUNTY COMPREHENSIVE PLAN - A Comprehensive Plan is a long-term planning document that requires periodic updates. The Comprehensive Plan identifies the principles, guidelines, standards, and strategies, to guide future decisions in a consistent manner and contain goals, policies, programs, and activities to ensure the Comprehensive Plan is implemented. Through its 2040 Comprehensive Plan (Capital Improvements Element), the County prioritized funding for safer, multimodal infrastructure installing red-light running cameras at key intersections, and implementing safety countermeasures such as curb extensions and roundabouts. The Transportation Element of the Comprehensive Plan defines Complete Streets and commits to the development of a safe, convenient, comfortable, and integrated connected network of mobility options for people. It also identifies metrics to monitor and evaluate progress towards project implementation, such as roadway lane-miles, LYNX route-miles of service, ridership, miles of sidewalk and off-street trail miles.

The Osceola County 2040 Comprehensive Plan was adopted in 2018, with amendments made in 2019. To keep up with changing conditions, it is necessary to review them at least once every five years to identify appropriate updates.

STRATEGIC PLAN - This document outlines planned initiatives for the next five years. The Strategic Plan defines how the County will achieve top goals of growing and diversifying the County's economy, upgrading County infrastructure and the transportation network, creating great neighborhoods for the future, and executing a cost-effective high-performance County government. The County identified reliable financing sources (state and federal funds) and leveraged them to construct high-need projects, as documented in the Strategic Plan 2023-2028.

AMERICANS WITH DISABILITIES ACT (ADA) TRANSITION PLAN - This document discusses county program and facility accessibility, designates the officials responsible for the implementation of the Transition Plan, implement a self-evaluation and prioritization of mitigating identified ADA barriers as well as provides an implementation schedule and funding for ADA barrier mitigation within the Public Right-of-Way (PROW). With the development of the 2021 ADA Transition Plan, there are opportunities identified to enhance the language in the Comprehensive Plan's goals and strengthen ADA-ready infrastructure. The ADA Transition Plan also establishes prioritization metrics for improving accessibility through and ADA framework.

Funding Opportunities

It will take a combination of funding sources to pay for the range of safety improvements identified in this Action Plan. Consistent with actions identified in <u>Chapter 6</u>, Osceola County will identify and seek funding for safety projects. This includes allocating CIP funding, potentially integrating safety improvements into maintenance & repaving projects, and pursuing grant funding for longer term projects.

Some of the local, regional, and state sources include:

- MetroPlan Orlando's Complete Streets Construction Funds
- FDOT's Urban Corridor Improvement program
- Highway Safety Improvement Program (HSIP)
- Ad Valorem Taxes
- Tourist Development Taxes
- Tolls
- State Shared Revenues
- Local Government Half-Cent Sales Taxes
- Infrastructure Sales Tax
- Mobility Fee
- Transportation Improvement Revenue Bonds
- Gas Taxes

Table 9 provides a summary of potential federal funding sources related to transportation safety.

Table 9. Federal Funding Sources

POTENTIAL FUNDING SOURCE	ADDITIONAL INFORMATION
	The SS4A program funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries. The Fiscal Year (FY) 2024 Notice of Funding Opportunity (NOFO) for the SS4A grants offers funding for two distinct types of grants:
Safe Streets and Roads for All (SS4A)	1. Planning and Demonstration Grants: These grants allocate federal funds to develop, complete, or enhance an Action Plan. Demonstration activities are temporary safety improvements that inform comprehensive safety action plans (referred to as "Action Plans") by testing proposed project and strategy approaches to determine future benefits and future scope.
	2. Implementation Grants: These grants provide federal funds to execute projects and strategies outlined in an Action Plan, specifically aimed at addressing roadway safety issues. Eligible projects and strategies may encompass infrastructure, behavioral, and operational activities.
Rebuilding American Infrastructure with Sustainability & Equity (RAISE) Discretionary Grant Program	The program funds multimodal, multi-jurisdiction projects that have significant local or regional impact but are more difficult to support through traditional DOT programs.
Transportation Alternatives Program (TAP)	Provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects; safe routes to school projects; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

Source: MetroPlan Orlando, 2024

POTENTIAL FUNDING SOURCE	ADDITIONAL INFORMATION
Carbon Reduction Program (CRP)	Provides funds for projects designed to reduce transportation emissions, defined as carbon dioxide (CO2) emissions from onroad highway sources.
Infrastructure for Rebuilding America Discretionary Grant Program (INFRA)	Funds available for multimodal freight and highway projects of national or regional significance to improve the safety, efficiency, and reliability of the movement of freight and people in and across rural and urban areas.
Reconnecting Communities Pilot Program (RCP)	Planning grants and capital construction grants, as well as technical assistance, to restore community connectivity through the removal, retrofit, mitigation, or replacement of eligible transportation infrastructure facilities.
Federal Transit Administration Capital Funds (FTA)	Funds transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit.
Areas of Persistent Poverty Program (AoPP)	Funds projects that provide access to transit in disadvantaged communities, including safety improvements.
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	Provides funds to States for transportation projects designed to reduce traffic congestion and improve air quality, particularly in areas of the country that do not attain national air quality standards.
Highway Safety Improvement Program (HSIP)	A core Federal-aid program with the purpose of achieving a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned roads and roads on tribal land. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance.

Source: MetroPlan Orlando, 2024

POTENTIAL FUNDING SOURCE	ADDITIONAL INFORMATION
Railway–Highway Crossings (Section 130) Program (RHCP)	Provides funds for the elimination of hazards at railway-highway crossings.
National Highway Performance Program (NHPP)	Provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a state's asset management plan for the NHS.
Promoting Resilient Operations for Transformative, Efficient, and Cost Saving Transportation (PROTECT)	Used to help make surface transportation more resilient to natural hazards, including climate change, sea level rise, flooding, extreme weather events, and other natural disasters through support of planning activities, resilience improvements, community resilience and evacuation routes, and at-risk costal infrastructure.
Surface Transportation Block Grant Program (STBG)	Provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.
Safe Routes to School Program (SRTS)	Projects that improve safety for students going to school.

Source: MetroPlan Orlando, 2024

Appendices

- Appendix A: HIN Development and Corridor Fact Sheets
- Appendix B: Crash Analysis
- Appendix C: Public Engagement Plan
- Appendix D: Policy Benchmarking
- Appendix E: Strategies and Action Items

Appendix A:

HIN Development and Corridor Fact Sheets

High Injury Network

As part of MetroPlan Orlando's regional effort, High Injury Networks (HIN) were developed at the regional, county, and municipal levels to identify roadways where a disproportionate number of collisions resulted in someone being killed or severely injured (KSI). This appendix includes the *Vision Zero Central Florida – Regional High Injury Network* memorandum which defines the overarching methodology that was used for HIN identification. In addition, the *Preliminary High Injury Network for Osceola County* memorandum is included to illustrate the preliminary HIN. This is followed by individual fact sheets for each of the 27 final HIN corridors (see Table 5 in the Action Plan on pages 49-50).

The final Osceola County HIN corridors (defined in Chapter 2) began with the preliminary HIN from the regional effort and was revised based on County review, input from the Steering Committee and internal online mapping application, and other information. The changes from the preliminary HIN to the final included the following:

HIN Segment	Change(s)
SR 535 from Osceola Parkway to US 192	Segment removed from the County Roads HIN. SR 535 is FDOT facility. Segment to remain on the All Roads HIN.
Clay Street from Thacker Avenue to Dawes Avenue	Segment added to the County Roads HIN. Segment was originally depicted as FDOT facility.
Fortune Road from Grande Boulevard to Simpson Road	Segment added to the County Roads HIN. Segment was originally depicted as FDOT facility.
Narcoossee Road from US 192 to Lillian Lee Road	Segment shown on St. Cloud All Roads HIN. Requested by County to add to County Roads HIN.
Old Canoe Creek Road from S. of Teka Lane to King Oak Circle	Segment shown on St. Cloud All Roads HIN. Requested by County to add to County Roads HIN.
Canoe Creek Road from Indian Lakes Boulevard to N. of Hyleigh Way	Segment shown on St. Cloud All Roads HIN. Requested by County to add to County Roads HIN.
Nolte Road from W. of Michigan Avenue to Southern Vista Loop	Segment shown on St. Cloud All Roads HIN. Requested by County to add to County Roads HIN.
Marigold Avenue from Peabody Road to San Lorenzo Road (S end of loop)	Requested by County to add to County Roads HIN.
Nova Road from US 192 to R S Ranch Road/Thorns Run	Requested by County to add to County Roads HIN.

Draft Memorandum

Date: September 13, 2023

To: Vision Zero Central Florida Partners

From: Mighk Wilson, MetroPlan Orlando

Kathrin Tellez, Fehr & Peers

Subject: Vision Zero Central Florida – Regional High Injury Network





Introduction

The MetroPlan Orlando metropolitan area has the unfortunate distinction of having the one of the highest pedestrian fatality rates in the country, with transportation safety affecting all roadway users as the region has an overall fatal crash rate 15 percent higher than the national average and 10 percent higher than the statewide average. To understand where and why crashes that result in fatalities and serious injuries are most likely to occur and how to reduce the severity and frequency of these crashes, MetroPlan Orlando is preparing a Regional Vision Zero Action Plan, rooted in the core elements of Vision Zero and the Safe System approach. The overall purpose of the Action Plan is to identify projects, programs and strategies that will eliminate fatalities and serious injuries on the regions roadways by taking advantage of implementation funding through the Safe Streets for All (SS4A) grant program. The SS4A program is also funding the preparation of County and Local Vision Zero action plans in the region.

This memo summarizes the methodology to analyze collision trends and develop a high-injury network (HIN) for the MetroPlan Orlando region, with a focus on the non-access-controlled Federal Aid (MPO) network. The HIN is a collection of streets where a disproportionate number of collisions that result in someone being killed or severely injured (KSI) occur. Together, these collision types are referred to as KSI collisions throughout this memo. In addition to identifying corridors where a disproportionate number of KSI crashes occur, top KSI crash intersections are also identified.

This work will culminate in the preparation of a Safety Action Plan for the region. Additionally, separate HINs will be prepared for each County and each local jurisdiction that reflects:

- 1. All roadways within the jurisdiction regardless of ownership
- 2. All roadways maintained by the jurisdiction

Based on the preliminary data analysis, about 47 percent of KSI crashes occur on about 4 percent of centerline miles of non-access-controlled roadways in Orange, Osceola, and Seminole County, and about 13 percent of the Federal Aid System centerline miles.

The following describes the data sources that were used and explains the methodology employed by Fehr & Peers to develop the HIN.

Data Inputs

Roadway Network

The roadway network that served as the basis for this analysis was obtained from the xGeographic Wave database, which is a land use, transportation, environmental and demographic mapping database, usable across GIS mapping platforms, that has been built for the Orlando Metropolitan Area. For the purposes of developing the high injury network, limited access, and toll facilities (e.g., I-4 and the Turnpike) and their corresponding on/off ramps were removed from the network prior to the HIN analysis. Ramp terminal intersections were included in the analysis, including the ramp influence area of 100 feet. Preparation of the initial HIN included all non-limited access facilities in the network with non-Federal Aid roadways removed from the final HIN for the regional HIN. This process identified the primary roadways where a disproportionate number of crashes that result in a KSI occur in the region on roadways where MetroPlan Orlando can provide funding for safety improvements through the Metropolitan Transportation Plan (MTP) process as well as support regional grant applications for implementation funding through future SS4A applications.

Collision Severity Weighting

The goal of Vision Zero within the Safe System approach is to eliminate all serious and fatal injury crashes on roadways within the MetroPlan Orlando region, recognizing that while it is not feasible to prevent all crashes, implementation of safe system strategies can reduce the severity of crashes. To prioritize efforts at locations where crashes result in a fatality or severe injury, KSI crashes where assigned a weight factor. As presented in **Table 1**, collision weights are derived from comprehensive crash costs from the 2023 FDOT Design Manual, with the Highway Safety Manual (HSM) Equivalent Property Damage Only (EPDO) weighting applied.

Comprehensive crash costs include both economic costs and monetized pain and suffering costs. Economic costs are monetary costs associated with emergency services deployment, medical services, productivity loss due to victim injury, insurance, and legal costs, cost associated congestion impacts because of the collision, and property damage costs. Monetized pain and suffering costs are an assumption of the costs associated with lost quality-of-life (or Quality-Adjusted Life Years), accounting for reductions in life expectancy and quality of life changes because of a crash.

Application of the EPDO weighting (dividing the cost of each crash type by the cost of a property damage only crash) approach results in different crash types receiving a different weight factor. As shown in Table 1, application of the EPDO weight results in fatal crashes receiving a significantly higher weight which could skew the HIN. In many instances, a crash that results in a severe injury could have been a fatality under slightly different circumstances, such as a victim with underlying health issues. Conversely, a fatal crash involving someone not wearing a seatbelt could have been injury only if the victim was wearing a seatbelt. Additionally, only fatalities that occur within 30 days are reported in the crash dataset. If a serious injury crash resulted in a fatality more than 30 days after the crash, it would not be reflected in this analysis as a fatality. Consequently, a modified EPDO method was used that groups fatal and serious injury crashes together and groups non-incapacitating injuries together. This approach has been used by agencies across the county. The approach to develop the regional HIN also includes all crashes – given the low weight applied to



property damage only crashes, only locations where there is high frequency of crashes would affect the HIN.

Table 1: Crash Costs¹ and EPDO Weight Factors

Severity	Crash Cost	EPDO Weight	Modified EPDO Weight ²
Fatal (K)	\$10,890,000	1,414	317
Incapacitating Injury (A)	\$888,030	115	317
Non-Incapacitating Injury (B)	\$180,180	23	17
Possibly Injury (C)	\$103,950	14	17
No Injury (0)	\$7,700	1	1

^{1.} Source: FDOT Design Manual, Table 122.6.2 FDOT KABCO Crash Costs

Collision Mode Weighting

In addition to applying a weight factor based on the severity of a crash, a weight factor was developed and applied based on the travel mode of crash victims. Review of the data indicates that people walking, bicycling, and riding motorcycles are disproportionately represented in crashes that result in a KSI. People outside of vehicles are involved in about 3.7 percent of all reported crashes but represent 54 percent of all fatalities, 31 percent of all KSI crashes and 10 percent of all injury crashes. For the region, the resulting weight factor, based on the proportion of overall crashes involving someone outside a vehicle to crashes that resulted in an injury, is 3. All crashes involving a person walking, bicycling, or riding a motorcycle were weighed by a factor of 3 in the development of the Regional HIN for the MetroPlan Orlando region. The factor, while based on local data, is in-line with weight factors used by other jurisdictions in the development of their HINs.

HIN Development

Sliding Window Approach

The HIN analysis was conducted using a sliding window approach, which uses overlapping windows to account for errors in collision location reporting. For a specific window length, performance measures are calculated for that window along a corridor (e.g., the number of fatal or serious injury collisions). The window is shifted along the corridor for a given offset distance and the analysis is repeated for the shifted window. Using this approach, a single location would be evaluated in several different windows, so any inaccuracies inherent within collision location reporting can be accounted for. Windows with the highest values for the segment or facility are identified as candidate HIN locations.



^{2.} Based on an average weighted KA crash cost in Orange, Osceola and Seminole Counties of \$2,438,850 for 2018 – 2022 and an average weighted BC crash cost in Orange, Osceola and Seminole Counties of \$129,725.

Sliding Window Parameters

A 1-mile window length with a 0.2-mile offset distance was chosen for the regional HIN analysis. Analyses prepared for a smaller geography should consider a smaller scale, such as a 0.5-mile window and 0.1-mile offset for a city boundary. Any segment less than 1-mile in length was treated as a single segment without any offset shifting.

Collision Summary for Each Window

Collisions were summarized for each window using a 100-ft search radius. This radius was chosen by inspecting collision locations relative to the centerline network at various locations throughout the network. The collision summary for each window consisted of summing all weighted collision values within the search radius. For example, a window with 15 property-damage only, 10 minor injury collisions and 5 KSI collisions within 100 feet would receive a weighted score of 1,770 (15*1+10*17+5*317), presuming no pedestrians, bicyclists or motorcyclists were involved. For that same window, if a pedestrian, bicyclist, or motorcyclist was involved in 1 of the 15 property-damage only crashes, 3 of the 10 minor injury collisions and 3 of the 5 KSI collisions, that window would receive a weighted score of 3,776 (14*1+1*3*1+7*17+ 3*3*17+2*317+3*3*317).

HIN Development

After summarizing collisions all windows throughout the network, the HIN draft was built using the weighted score of each window. By visualizing the weighted score throughout the network, potential HIN corridors could be identified, as shown on **Figure 1**.

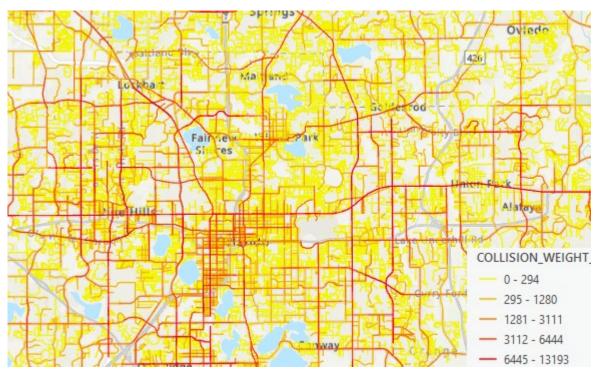


Figure 1: Initial visualization of Collision Weight Summaries Throughout Network



157

The HIN draft was built by using the following iterative process, with the goal of achieving a network that accounted for approximately 50 percent of the KSI collisions in the region:

- 1. Select/flag window segments throughout the network with collision weight values above a certain threshold.
- 2. Adjacent high-scoring windows (flagged in the previous step) are aggregated into longer corridor segments (greater than 1 mile in length) when appropriate.
- 3. Cleaning/reasonableness check:
 - a. Some high scoring windows on local roads which intersect with major ones were removed from consideration if it was discovered that the collision score was being skewed by the number of collisions on the major leg of the intersection.
 - b. Any small gaps (<1/2 mile) in between the aggregated corridor segments in step 2 were added to the draft HIN for continuity.

HIN and HIN Statistics

The resulting HIN can be viewed through this <u>weblink</u>. The MetroPlan Orlando Regional HIN contains about 260 centerline miles and includes roadway segments in all three counties, with a disproportionate number of roadways in Orange County. Crashes that occur on the HIN segments account for 47 percent of all KSI crashes in the region. 61 percent of pedestrian KSI, 50 percent of bicyclist KSI, and 44 percent of motorcyclist KSI crashes also occur on these roadways, as summarized in **Table 2**.

Table 2: MPO Network HIN Statistics

	All Roadways*	All Federal Aid Roadway*	Draft Regional HIN	HIN % All Roadways	HIN % of Federal Aid Roadways
Centerline miles	7,461	1,966	258	4%	13%
All collisions	272,500	229,280	98,987	36%	43%
KSI (All modes)	7,146	6,398	3,378	47%	53%
Ped KSI	949	854	576	61%	67%
Bike KSI	327	285	164	50%	58%
Motorcycle KSI	953	864	416	44%	48%

Source: Signal 4 Analytics, Fehr & Peers.

Notes: * Excluding Toll facilities and access-controlled facilities

The 10 corridors on the HIN that received the highest weighted score on a per mile basis is summarized in **Table 3**, with the full list provided as an attachment.



Table 3: Top 10 HIN Corridors

Roc	adway Name	From	То	Location	Total Weighted Score per Mile
1.	John Young Parkway	SR 50	Orange Center Blvd.	Orlando	17,478
2.	Sand Lake Road/ McCoy Road	Turkey Lake Rd.	Universal Blvd.	Orlando	17,104
3.	Chickasaw Trail	Frontage Rd.	Lake Underhill Rd.	Orange County	14,589
4.	Hiawassee Road	SR 438/Silver Star Rd.	SR 50	Orange County	14,547
5.	Oakridge Road	Millenia Blvd.	S. Orange Blossom Trail	Orlando	14,296
6.	Kirkman Road (SR 435)	SR 50	Raleigh St.	Orange County	14,130
7.	Goldenrod Road (SR 551)	SR 50	Lake Underhill Rd.	Orange County	14,129
8.	Semoran Boulevard (SR 436)	Lee Vista Rd.	TG Lee Blvd.	Orlando	14,088
9.	Pine Hills Road	SR 50	Old Winter Garden Rd.	Orange County	13,941
10.	Alafaya Trail	SR 50	Lake Underhill Rd.	Orange County	13,564

Source: Signal 4 Analytics, Fehr & Peers.

Notes: * Excluding Toll facilities and access-controlled facilities

Top Intersections

In addition to developing a HIN, the intersections with the highest weighted crash were also identified based on a similar process as the HIN development. For this analysis, any crash that was within 250 feet of an intersection was considered as attributed to that intersection, except for crashes in downtown areas where short blocks reduce the intersection influence area. For crashes in those contexts, crashes within 50 feet of an intersection were considered. The top 30 intersections are also shown on the HIN network, with a summary in **Table 4**. Of the top 30 intersections, none are off the HIN. Intersections where a disproportionate share of the KSI crashes involved a person outside a vehicle are noted in **bold italics**.



Table 4: Top 30 HIN Intersections¹

Inte	ersection	Total Weight	Intersection	Total Weight
1.	John Young Parkway at Sand Lake Road ²	10,140	16. Colonial Drive at Econlockhatchee Trail	6,480
2.	Alafaya Trail at Colonial Drive	10,103	17. Powers Drive at Silver Star Road	6,415
3.	Orange Blossom Trail at Holden Avenue	10,055	 Orange Blossom Trail at Conroy Road/Americana Boulevard 	6,401
4.	Hiawassee Road at Silver Star Road	9,630	Old Cheney Highway/Tucker Avenue at Colonial Drive	6,386
5 .	N Poinciana Boulevard at Irlo Bronson Memorial Highway	9,399	20. Goldenrod Road at University Boulevard	6,224
6.	Pine Hills Road at Silver Star Road	8,673	21. Alafaya Trail at Lokanotosa Trail	5,905
7.	Semoran Boulevard at Old Cheney Hwy	8,509	22. Semoran Boulevard at Curry Ford Road	5,504
8.	W Colonial Drive at N Kirkman Road	7,097	23. S French Street at W 25th Street	5,459
9.	Goldenrod Road at Colonial Drive	7,040	24. Hastings Street at Silver Star Road	5,368
10	. Simpson Road at Irlo Bronson Memorial Highway	6,946	25. Orange Blossom Trail at Orlando Central Parkway	5,160
11.	Orange Blossom Trail at Gore Street	6,769	26. Orange Blossom Trail at Michigan Street	4,924
12	. N Kirkman Road at Old Winter Garden Road	6,724	27. Irlo Bronson Memorial Highway at Club Sevilla	4,812
13	. Goldenrod Road at Curry Ford Road	6,715	28. Forsyth Road at University Boulevard	4,722
14	. John Young Parkway at Conroy Road	6,699	29. N French Avenue at W 1st Street (US 17/92)	4,294
15	. Pine Hills Road at North Lane	6,651	30. Orange Blossom Trail at Premier Row	3,919

Source: Signal 4 Analytics, Fehr & Peers.

Note: 1. Intersections where a disproportionate share of the KSI crashes involved a person outside a vehicle are noted in **bold italics**.



^{2.} At the intersection of John Young Parkway at Sand Lake Road, improvements were completed in late 2019/early 2020 to convert an at-grade intersection to a single-point urban interchange (SPUI). The number of KSI crashes per year has reduced from approximately 9 per year (2018/2019) to an average of 3 per year (2020-2022). This intersection could be a candidate for more detailed analysis as part of the County plan to document the safety benefit associated with the SPUI and potentially identify additional countermeasures that could be implemented at the intersection.

Next Steps

Using the same process that was used to identify the Regional HIN, County and Local HINs will be developed, which will include:

- County (all roadways included in the analysis) this will identify the roadways in each county
 where a disproportionate number of fatal and serve injury crashes are reported. This will likely
 overlap with the regional HIN, but this map will provide focus locations for each county and
 the respective local jurisdiction(s). A secondary HIN of only roadways within the County
 jurisdiction will also be prepared.
- Jurisdictional this will identify the roadways in each jurisdiction regardless of ownership where
 a disproportionate number of fatal and serve injury crashes are reported. For example, for the
 City of Kissimmee, an initial HIN may include roadways such as John Young Parkway and Vine
 Street which are maintained by the County. A secondary HIN of only roadways within the city
 jurisdiction will be prepared.
- Top Intersections this will identify the intersections in each jurisdiction where a disproportionate number of fatal and serve injury crashes are reported.

If you have questions, please contact Mighk Wilson at mighk.wilson@metroplanorlando.gov.

Attachments: Roadways in HIN



Central Florida Vision Zero Regional HIN Segments September 2023

Corridor			Total Weighted		
Number	Road Name	Location	Score per Mile	From	То
1	John Young Parkway	Orlando	17,478	SR 50	Orange Center Blvd.
2	Sand Lake Road/McCoy Road	Orlando	17,104	Turkey Lake Rd.	University Blvd.
3	Chickasaw Trail	Orange County	14,589	Frontage Rd.	Lake Underhill Rd.
4	Hiawassee Road	Orange County	14,547	SR 438/Silver Star Rd.	SR 50
5	Oakridge Road	Orlando	14,296	Millenia Blvd.	S. Orange Blossom Trail
6	Kirkman Road (SR 435)	Orange County	14,130	SR 50	Raleigh St.
7	Goldenrod Road (SR 551)	Orange County	14,129	SR 50	Lake Underhill Rd.
8	Semoran Boulevard (SR 436)	Orlando	14,088	Lee Vista Rd.	TG Lee Blvd.
9	Pine Hills Road	Orange County	13,941	SR 50	Old Winter Garden Rd.
10	Alafaya Trail	Orange County	13,564	SR 50	Lake Underhill Rd.
11	Kirkman Road (SR 435)	Orlando	13,466	LB Mcleod Rd.	Major Blvd.
12	Colonial Drive	Orlando	13,415	Orange Blossom Trail N.	N Bumby Ave.
13	North Lane	Orange County	12,946	Westgate Rd.	N Pine Hills Rd.
14	Hiawassee Rd	Orange County	12,344	SR 50	Old Winter Garden Rd.
15	SR 434	Orange County	12,284	McCulloch Rd.	SR 50
16	Oak Ridge Road (CR 506)	Orange County	12,054	S. Orange Blossom Trail	Orange Ave S.
17	John Young Parkway	Orange County	11,972	N. Orange Blossom Trail	N. Wymore Rd.
18	University Blvd.	Orange County	11,938	Semoran Boulevard (SR 43	Lake Mirage Blvd.
19	Rosalind Ave	Orlando	11,526	E. Livingston St.	S. Lucerne Cir.
20	Semoran Boulevard	Orlando	11,419	Lake Underhill Rd.	Lake Margaret Dr.
21	US 192/Vine St	Osceola County	11,347	Celebration Ave.	Four Winds Blvd.
22	Goldenroad Road	Orange County	11,182	Lake Underhill Rd.	Beatty Dr.
23	N Ronald Regan Blvd	Seminole County	10,951	Eldersprings Cir.	Jones Ave.
24	W First Street (US 17/92)	Sanford	10,856	N. Persimmon Ave.	N. Frence Ave.
25	Edgewater Dr/Highland Ave	Orange County	10,652	Clarcona Ocoee Rd.	Lee Rd.
26	Conway Road	Orlando	10,570	Curry Ford Rd.	E. Michigan St.
27	Pershing Ave.	Orlando	10,554	Woodgate Blvd.	Goldenrod Rd. S.
28	John Young Pkwy	Orange County	10,510	SR 528 Ramps	Lazio Ln.
29	East Lake Mary Blvd	Seminole County	10,477	North of Celery Ave.	SR 46
30	Poinciana Blvd	Osceola County	10,431	US 192	Siesta Lago Dr.
31	Holden Ave	Orange County	10,402	Rio Grande Ave. S.	Lake Holden Hills Dr.
32	S Orange Blossom Trail	Kissimmee	10,376	E. Osceola Pkwy.	Ridgewood Ave.
33	US-192/Vine St	Kissimmee	10,356	South of Four Winds Blvd.	N. John Young Pkwy.
34	CR 435/Apopka Vineland Rd	Orange County	10,310	Balboa Dr.	SR 50
35	Texas Ave	Orange County	10,255	Americana Blvd.	W. Oak Ridge Rd.
36	Vineland Road	Orange County	10,156	I-4	South of LBV Factory Shores Dr.
37	Orange Avenue	Orlando	10,131	S. Lucerne Cir.	Gatlin Ave.
38	Orange Blossom Trail	Orange County	9,988	Overland Rd.	Rosamond Dr.
39	Ivey Ln	Orlando	9,944	Edgemoor St.	Raleigh St.
40	Orange Blossom Trail	Apopka	9,928	Drage Dr.	S. McGee Ave.
41	Orange Blossom Trail	Orlando	9,902	Lee Rd.	Shader Rd.
42	Lancaster Road	Orange County	9,900	S. Orange Blossom Trail	Orange Ave. S.
43	Goldenroad Road	Orange County	9,875	North of Dwell Well Way	SR 50
44	John Young Pkwy.	Orlando	9,873	LB McLeod Rd.	W. Sand Lake Rd.
45	US-17/92/Orlando Ave	Seminole County	9,853	South St.	Spartan Dr.
46	S Orange Blossom Trail	Kissimmee	9,546	Ridgewood Ave.	Neptune Rd.
47	Conroy Rd/Americana	Orlando	9,495	West of President Barack Obama Pkwy.	S. Orange Blossom Trail
48	John Young Pkwy	Orange County	9,488	Deerfield Blvd.	South of Town Loop Blvd.
49	University Blvd.	Orange County	9,410	Bibb Ln.	Rouse Rd.

Central Florida Vision Zero Regional HIN Segments September 2023

Corridor			Total Weighted		
lumber	Road Name	Location	Score per Mile	From	То
50	W Colonial Dr/Martin Luther King B	Orange County	9,406	Economic Ct.	Good Homes Rd.
51	Westmoreland Drive	Orlando	9,377	SR 526/Washington Street	W. Gore St.
52	West 25th Street	Sanford	9,328	Club Rd.	S. Mellonville Ave.
53	Osceola Pkwy	Kissimmee	9,281	N. Orange Blossom Trail	Florida's Turnpike
	US-17/92/Orlando Ave/French				
54	Ave	Seminole County	9,122	North of Longdale Ave.	SR 434
55	E Bronson Hwy/13 St/Vine St	Osceola County	9,118	Neocity Way	Pecan St.
56	Semoran Boulevard	Altamonte Springs	9,083	Montgomery Rd.	Palm Springs Dr.
57	Silver Star Road	Orange County	9,070	Mercy Dr.	East of N. John Young Pkwy
58	Orange Avenue	Orange County	9,055	Prince St.	Spruce Ave.
59	Orange Blossom Trail	Orange County	9,038	Consulate Dr.	Town Center Blvd.
60	Old Winter Garden Rd	Orange County	8,868	N. Hiawassee Rd.	Takoma St.
61	SR 434	Seminole County	8,843	West of E. Lake Brantley Dr.	Oak St.
62	Fairbanks Avenue	Winter Park	8,816	Clay St.	Pennsylvania Ave. S.
63	Old Winter Garden Rd	Orlando	8,698	SR 408 Exit Ramp	Orange Blossom Trail N.
64	Aloma Avenue	Orange County	8,691	West of St. Andrews Blvd.	West of Tangerine Ave.
65	SR 434	Orange County	8,672	Pembrook Dr.	Edgewater Dr.
66	Michigan Ave.	Kissimmee	8,545	E. Donegan Dr.	E. Vine St.
67	Powers Drive	Orange County	8,540	Indian Hill Rd.	SR 438
68	Semoran Boulevard	Casselberry	8,485	US 17-92	Kewannee Trl.
69	John Young Pkwy.	Orange County	8,451	Sand Lake Rd.	South of SR 528 Ramps
70	Rio Grande Avenue	Orange County	8,446	W. Gore St.	Holden Ave.
71	US-17/92/French Ave	Sanford	8,421	W. 20th St.	W. 27th St.
72	Chickasaw Trl	Orange County	8,374	SR 50	Valencia College Ln.
73	Curry Ford Rd	Orange County	8,218	West of Frederica Dr.	East of Excalibur Dr.
74	Orlando Avenue	Winter Park	8,217	Lake Ave.	W. Fairbanks Ave.
75	Buenaventura Blvd.	Osceola County	8,171	County Boundary	Simpson Rd.
76	Simpson Rd	Osceola County	8,139	Harbor Town Dr.	US 192
77	Wetherbee Rd	Orange County	8,093	Orange Blossom Trail S.	Orange Ave. S.
78	Clark Road	Ocoee	8,093	Sparrow Song Ln.	White Rd.
79	Hoffner Avenue (SR 15)	Orange County	8,083	Conway Rd.	Goldenrod Rd. S.
80	SR 434	Longwood	8,076	S. Ronald Reagan Blvd.	US 17-92
81	Semoran Boulevard	Orlando	8,053	Lake Margaret Dr.	Hoffner Ave.
82	Lake Underhill Rd	Orange County	7,611	S. Oxalis Ave.	Econlockhatchee Trl. N.
83	Conway Road	Orange County	7,501	Caitlin Ave.	Hoffner Ave.
84	Hiawassee Rd.	Orange County	7,437	Beggs Rd.	SR 438/Silver Star Rd.
85	Semoran Boulevard	Casselberry	7,388	Lake Howell Ln.	County Boundary
86	Colonial Drive	Orange County	7,358	N. Avalon Park Blvd.	SR 520
87	Robinson Street	Orlando	7,204	N. Rosalind Ave.	N. Primrose Rd.
88	John Young Pkwy	Kissimmee	7,052	West of Ham Brown Rd.	Palmetto Ave.
89	Turkey Lake Rd	Orange County	6,854	Toscana Blvd.	South of Hillenmeyer Way
90	Clarcona-Ocoee Rd.	Orange County	6,815	Apopka Vineland Rd. N.	Powers Dr. N.
91	Landstar/Fairway Wds	Orange County	6,702	Fairway Woods Blvd.	County Boundary
91	Sand Lake Rd.	Orange County Orange County	6,682	Dr. Phillips Blvd.	Turkey Lane Rd.
93	Irlo Bronson Memorial Highway	Orange County Orange County	6,653	Westside Blvd.	East of Inspiration Dr.
94	Colonial Drive	Orange County	6,645	Econlockhatchee Trl. N.	N. Avalon Park Blvd.
95	International Drive	Orange County	6,622	West of Universal Blvd.	Destination Pkwy.
,,	michiational Drive	Orange County	0,0 <i>LL</i>	VVCSCOT OTHVCTSat DIVA.	Welch Rd. E.

Central Florida Vision Zero Regional HIN Segments September 2023

Corridor			Total Weighted		
Number	Road Name	Location	Score per Mile	From	То
97	Semoran Boulevard	Orange County	6,531	Sheeler Ave. S.	Bear Lake Rd.
98	Boggy Creek Rd	Orlando	5,949	Tradeport Dr.	E. Wetherbee Rd.
99	Narcoossee Road	Orange County	5,777	Tavistock Lake Blvd.	County Boundary
100	Colonial Drive	Orange County	5,662	N. Bumby Ave.	Econlockhatchee Trl. N.
101	Avalon Park Blvd	Orange County	5,630	SR 50	South of Timber Springs Blvd.
102	US-17/92/Orlando Ave/French Ave	Sanford	5,568	W. 27th St.	W. Lake Mary Blvd.
103	Pleasant Hill Road (SR 531)	Osceola County	5,405	Marsh Rd.	South of Granada Blvd.
104	E Bronson Hwy/13 St/Vine St	St. Cloud	5,168	West of Florida's Turnpike	Eastern Ave.
105	Winter Garden Vineland Road	Orange County	5,147	Fiquette Rd.	Overstreet Rd.
106	Winter Garden Vineland Road	Orange County	4,590	E. Buena Vista Dr.	S. Apopka Vineland Rd.
107	Boggy Creek Rd	Osceola County	4,451	E. Osceola Parkway	Buenaventura Blvd.
108	W Colonial Drive	Orange County	4,233	Apopka Vineland Rd. N.	Orange Blossom Trail N.
109	Apopka Vineland Road	Orange County	4,003	North of Buena Vista Woods Blvd.	North of Vineland Ave.
110	Apopka Vineland Road	Orange County	3,983	Windy Ridge Rd.	Sandberry Blvd.
111	Alafaya Trail	Orange County	3,161	Golfway Blvd.	Innovation Way
112	Silver Star Road (SR 438)	Orange County	3,031	Apopka Vineland Rd. N.	Chantelle Ave.
113	Sand Lake Road	Orange County	2,646	Mandarin Dr.	Jetport Dr.
114	Orange Blossom Trail	Orlando	2,530	SR 50	Holden Ave.
115	Semoran Boulevard	Orange County	2,417	County Boundary	SR 408
116	Orange Blossom Trail	Orange County	2,315	Holden Ave.	Florida's Turnpike
117	Colonial Drive (SR 50)	Orange County	1,667	Fort Christmas Rd S.	County Boundary
118	Pine Hills Road	Orange County	1,410	Pinto Way	SR 50

Memorandum

Date: December 12, 2023

To: Osceola County Vision Zero Action Plan

Steering Committee

From: Osceola County Vision Zero Action Plan

Study Team

Subject: Preliminary High Injury Network for Osceola County

As part of MetroPlan Orlando's regional effort, **high-injury networks (HIN)** were developed at the regional, county, and municipal levels to identify roadways where a disproportionate number of **collisions that result in someone being killed or severely injured (KSI)** have occurred. Additional weight was given to KSI collisions involving vulnerable users (bicyclists, pedestrians, and motorcyclists).

For each jurisdiction, two separate HINs were developed representing two levels of analysis. In addition, the top HIN intersections were identified using a similar methodology. These analyses are represented in the attached tables and maps included for your reference:

Map 1 - All Roads HIN and Top HIN Intersections

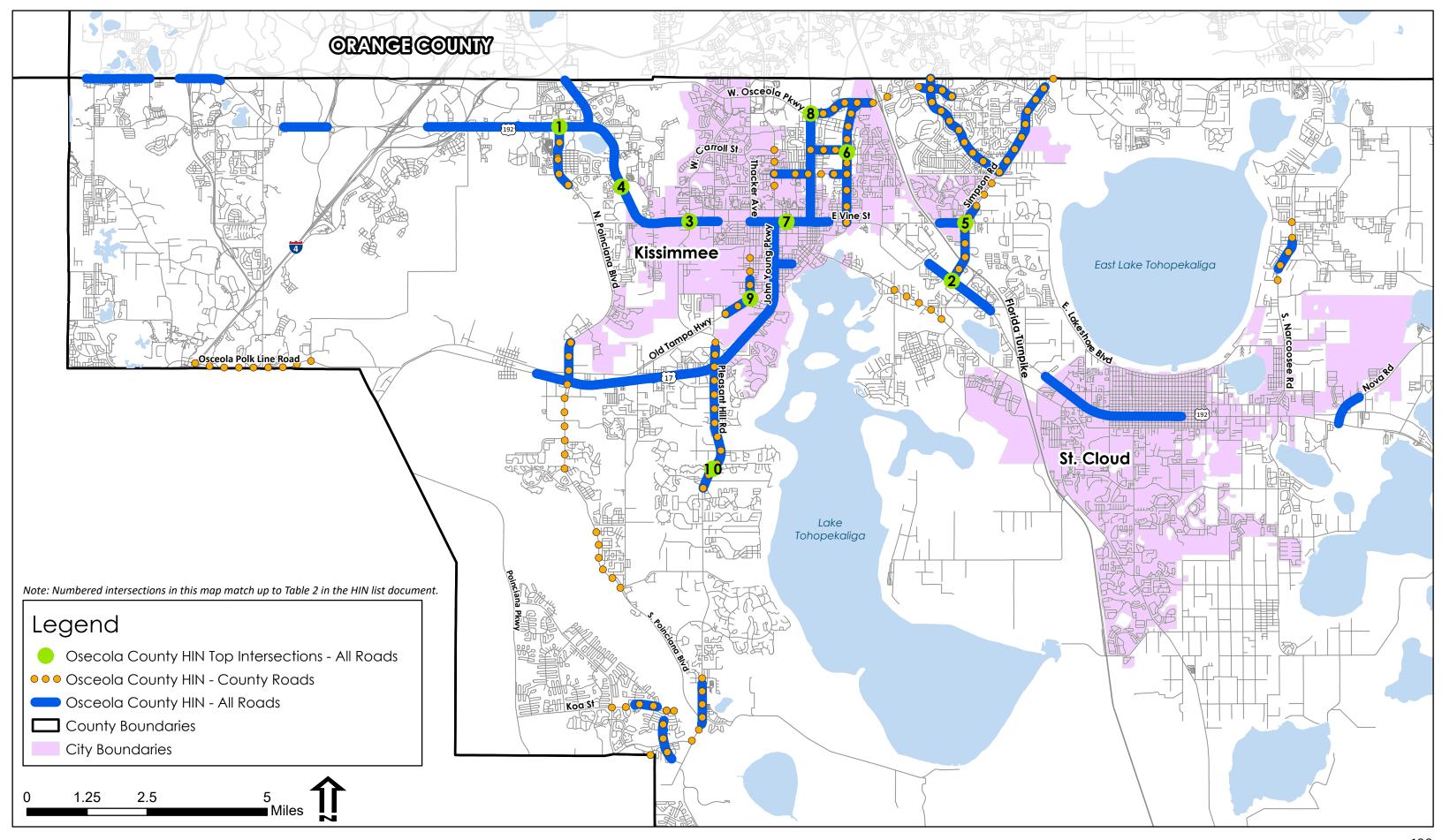
This map illustrates HIN segments on all roads within Osceola County regardless of which agency maintains, manages, and/or owns the road. These segments collectively include roads managed by FDOT, the County, and the cities of Kissimmee and St. Cloud. This is to provide a high-level understanding of the most dangerous road segments in the County regardless of ownership. The list of these segments is included in **Table 1**.

This map also illustrates the intersections in Osceola County with the highest weighted crashes that were identified through the HIN analysis. These intersections are numbered and cross-referenced to **Table 2**.

Map 2 - County Roads HIN

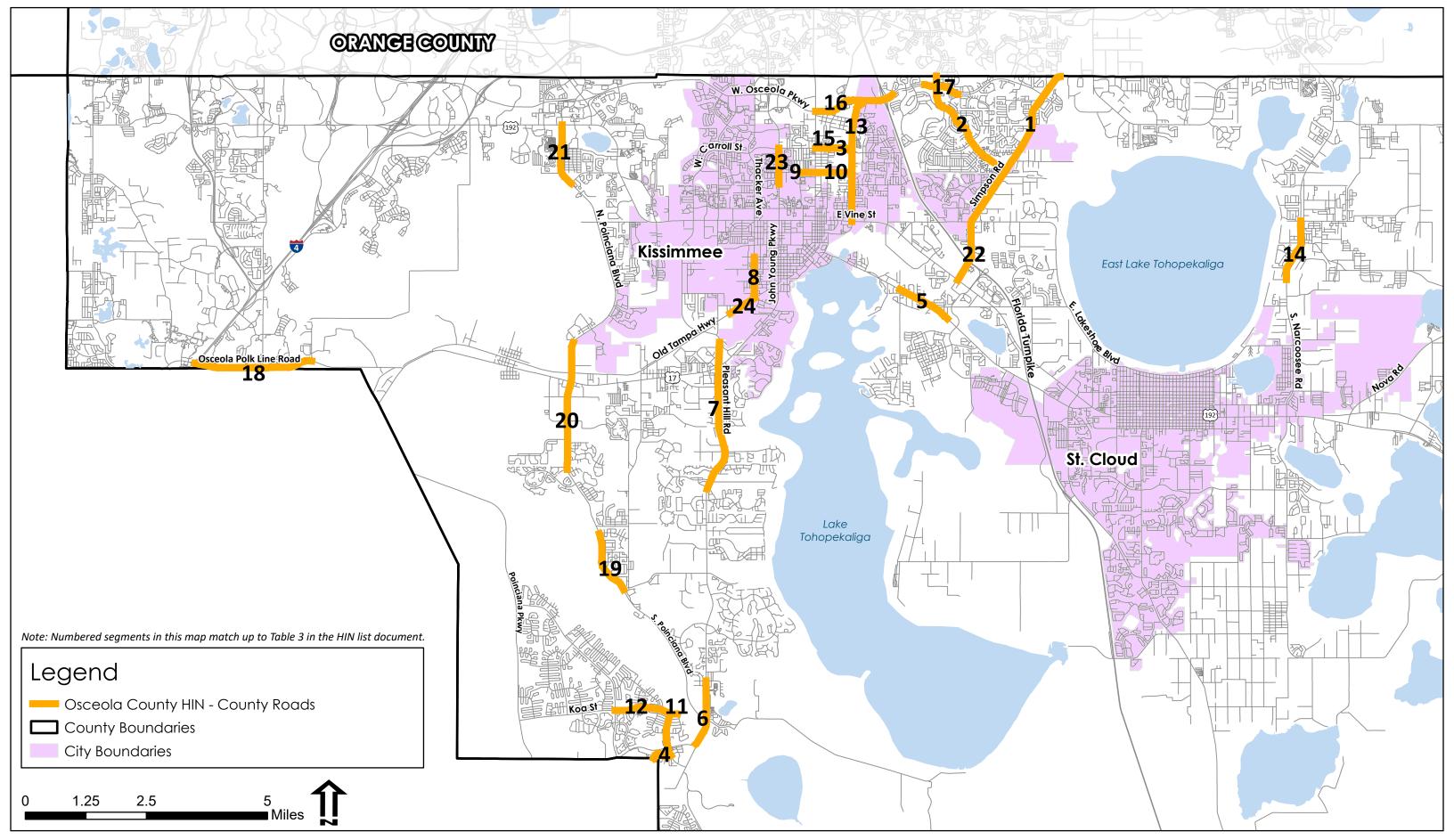
This map illustrates HIN segments considering only County roads. Much of the project identification for the Action Plan will be directed toward a focus on these segments, while giving consideration to the broader context that is illustrated in Map 1. Segments in this map are cross referenced to **Table 3**.





Map 1. High Injury Network (HIN) - All + County Roads
Osceola County





Map 2. High Injury Network (HIN) - County Roads
Osceola County



<u>Table 1. All Roads HIN Analysis – Segments</u>

	All Roads – Name	Segment Limits
1	SIMPSON ROAD/FORTUNE ROAD	Grande Boulevard to Marisol Loop/Winners Circle
2	PLEASANT HILL RD	Shopping center entrance to south of Spinning Reel Lane
3	DONEGAN AVENUE	John Young Parkway to US 441
4	E BRONSON HWY/13 ST/VINE ST	Shopping center entrance to Magic Landings Boulevard
5	MICHIGAN AVE	W. Vine Street/US 192 to E. Osceola Parkway
6	OREN BROWN ROAD	Short segment at intersection with US 192
7	OSCEOLA PKWY	Shopping center entrance to Sandalwood Drive
8	ROYAL ST	Short segment at intersection with US 192
9	MAIN STREET/441	US 192/Vine Street to Osceola Parkway
10	S ORANGE BLOSSOM TRL/JOHN YOUNG PKWY	West of Avenue A to W. Emmett Street
11	SR 600 / CR 525 / JOHN YOUNG PKWY	US 192 to W. Emmett Street
12	535; SR 530 TO ORANG	US 192 to Orange County Line
13	SIMPSON ROAD	Buenaventura Boulevard to Amberley Park Road
14	BUENAVENTURA BLVD.	Simpson Road to Orange County Line
15	CARROLL STREET	US 441 to Michigan Avenue
16	PLEASANT HILL RD	South of Granada Boulevard to Shingle Creek Court
17	CLAY STREET/THACKER AVENUE	Dawes Avenue to Thacker Avenue to W. Penfield Street
18	DONEGAN AVENUE	Rail tracks to Michigan Avenue
19	E BRONSON HWY/13 ST/VINE ST	Main Street to N. Carson Avenue
20	KOA ST	Hunter Road to west of San Remo Road
21	DOVERPLUM AVENUE	South of Koa Street to west of Old Pleasant Hill Road near shopping center entrance
22	LOCKSLEY LN	US 192
23	NARCOOSSEE RD N	Sunset Road to Yukon Street
24	OLD DIXIE HIGHWAY	Short segment at intersection with Carroll Street
25	OSCEOLA PKWY	US 441 to Bill Beck Boulevard
26	POINCIANA BLVD	Hwy 17 to Woodmont Boulevard
27	POINCIANA BLVD	Siesta Lago Drive to US 192
28	W EMMETT STREET	John Young Parkway to N. Beaumont Avenue
29	SAN REMO RD	Short segment at intersection with Doverplum Avenue
30	SIESTA LAGO DRIVE	Short segment at intersection with US 192

All Roads – Name		Segment Limits
31	SIMPSON RD	441 to Fortune Road
32	SR530; LAKE - OSCEOLA	West of shopping center entrance to Secret Lake Drive
33	THE OAKS BLVD	Short segment at intersection with John Young Parkway
34	US-192/VINE ST	429 to Inspiration Drive/Black Lake Road
35	US-192/VINE ST	Reedy Creek Boulevard to World Drive
36	US-192/VINE ST	Parkway Boulevard/Celebration Place to N. Plantation Road
37	US-192/VINE ST	N. Thacker Avenue to Main Street/441
38	VINTAGE ST	Short segment at intersection with Hwy 17
39	E BRONSON HWY/13 ST/VINE ST	St. Cloud Village Court to Michigan Avenue
40	NOVA RD.	US 192 to Dumbleton Place/Thorn's Run

<u>Table 2. All Roads HIN Analysis - Top HIN Intersections</u>

Map ID	Intersection	Total Weighted Score
1	POINCIANA BLVD. & US-192/VINE ST	9399
2	E BRONSON HWY/13 ST/VINE ST & SIMPSON RD	6927
3	HOAGLAND/CARROLL ST & US-192/VINE ST	5196
4	CLUB SEVILLA & US-192/VINE ST	4812
5	SIMPSON RD & LAKESHORE & FORTUNE	4510
6	CARROLL STREET & MICHIGAN AVE	4250
7	N ROSE AVE & US-192/VINE ST	3772
8	OSCEOLA PKWY & S ORANGE BLOSSOM TRL	3734
9	CLAY ST/RANDOLPH AVE & THACKER	3641
10	PINERIDGE CIR & PLEASANT HILL RD	3636

<u>Table 3. County Roads HIN Analysis – Segments</u>

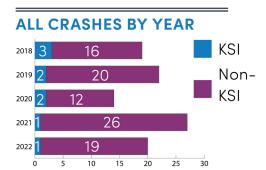
	County Roads – Name	Segment Limits
1	SIMPSON ROAD	Fortune Road to Orange County Line
2	BUENAVENTURA BLVD.	Simpson Road to Orange County Line
3	CARROLL STREET	US 441 to Michigan Avenue
4	COUNTRY CLUB RD	County Line to Doverplum
5	NEPTUNE RD	Will Barber Road/Kings Hwy to west of Cross Prairie Parkway
6	PLEASANT HILL RD	Cypress Parkway to Wilderness Trail
7	PLEASANT HILL RD	South of Granada Boulevard to Knowles Boulevard
8	THACKER AVENUE	Clay Street to Mabbette Street
9	DONEGAN AVENUE	Highland Avenue to 441
10	DONEGAN AVENUE	441 to Michigan Avenue
11	KOA ST	San Remo Road to Doverplum Avenue
12	KOA ST / DOVERPLUM AVENUE	Hunter Road to Country Club Road
13	MICHIGAN AVE	W. Vine Street/US 192 to E. Osceola Parkway
14	NARCOOSSEE RD N	Lillian Black Road to Jack Brack Road
15	OLD DIXIE HIGHWAY	Short segment at intersection with Carroll Street
16	OSCEOLA PKWY	441 to Coralwood Circle
17	OSCEOLA PKWY	West of Shopping center entrance to Sandalwood Drive
18	OSCEOLA POLK LINE RD	I-4 to Sullivan Road
19	POINCIANA BLVD	Reaves Road to Crestone Road
20	POINCIANA BLVD	Brook Road to Woodmont Boulevard
21	POINCIANA BLVD	Siesta Lago Drive to US 192
22	SIMPSON RD	441 to Fortune Road
23	JOHN YOUNG PKWY	Lyndell Drive to Carroll Street
24	CLAY STREET/THACKER AVENUE	Dawes Avenue to Thacker Avenue to W. Penfield Street

PRIORITIZATION SCORE: 91.25

Clay Street

From Dawes Avenue to S. Thacker Avenue

JURISDICTION	Osceola County
TRAVEL LANES	2-lane / Undivided
LENGTH	0.59 miles
POSTED SPEED	40 mph
85TH PERCENTILE SPEED	53 mph
MULTIMODAL FACILITIES?	Partial sidewalks, transit stops



MODAL SPLIT



TOTAL CRASHES











TOTAL FATAL & SERIOUS INJURY CRASHES















CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	0	37	37	36%
Left Turn / Angle	5	23	28	-
Sideswipe	1	9	10	10%
Right Turn	-	-	-	-
Pedestrian	0	1	1	-
Bicycle	1	0	1	-
Run off the Road	0	3	3	-
Head On	0	2	2	-
Other	1	11	12	12%

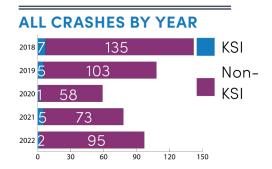
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	1	1	1%
Alcohol/Drugs	0	1	1	1%
Distracted Driving	1	26	27	26%
Intersection	3	12	15	15%
Aging Driver	0	14	14	14%
Teen Driver	1	16	17	17%
Signal Controlled	0	2	2	2%
Dark Conditions	4	23	27	26%
Wet Road Surface	2	10	12	12%

PRIORITIZATION SCORE: 91.25

N. Poinciana Boulevard

From Siesta Lago Drive to US 192

JURISDICTION	Osceola County		
TRAVEL LANES	4-lane / Grass median		
LENGTH	1.28 miles		
POSTED SPEED	40-45 mph		
85TH PERCENTILE SPEED	64 mph		
MULTIMODAL FACILITIES?	Partial sidewalks, no transit		



MODAL SPLIT



TOTAL CRASHES











20

TOTAL FATAL & SERIOUS INJURY CRASHES





















CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	2	190	192	40%
Left Turn / Angle	7	103	110	_
Sideswipe	0	69	69	14%
Right Turn	0	19	19	_
Pedestrian	3	3	6	_
Bicycle	2	1	3	-
Run off the Road	2	44	46	10%
Head On	0	3	3	_
Other	4	25	29	6%

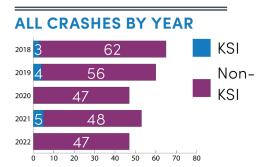
TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
0	7	7	1%
0	3	3	1%
5	150	155	32%
7	152	159	33%
2	49	51	11%
2	74	76	16%
			28%
12	137	149	31%
2	78	80	17%
	12 TOTAL FATAL 5	0 7 0 3 5 150 7 152 2 49 2 74	0 7 7 0 3 SEKIONS INJUNE 5 150 155 7 152 159 2 49 51 2 74 76 12 137 149

PRIORITIZATION SCORE: 77.5

E. Carroll Street

From US 17/441 (OBT) to Michigan Avenue

JURISDICTION	Osceola County
TRAVEL LANES	2-lane and 4-lane
LENGTH	0.77 miles
POSTED SPEED	35 mph
85TH PERCENTILE SPEED	48 mph
MULTIMODAL FACILITIES?	Partial sidewalk, no transit



MODAL SPLIT



TOTAL CRASHES











12

TOTAL FATAL & SERIOUS INJURY CRASHES













CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	1	109	110	40%
Left Turn / Angle	10	82	92	33%
Sideswipe	0	26	26	10%
Right Turn	0	9	9	_
Pedestrian	0	2	2	-
Bicycle	0	1	1	
Run off the Road	1	13	14	5%
Head On	0	2	2	_
Other	0	13	13	_

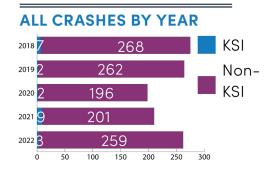
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	1	1	0%
Alcohol/Drugs	0	1	1	0%
Distracted Driving	1	84	85	31%
Intersection	10	131	141	52%
Aging Driver	1	37	38	14%
Teen Driver	0	34	34	13%
Signal Controlled	8	125	133	49%
Dark Conditions	6	49	55	20%
Wet Road Surface	3	33	36	13%

PRIORITIZATION SCORE: 77.5

E. Osceola Parkway

From US 17/441 (OBT) to Coralwood Circle/Plumwood Circle

JURISDICTION	Osceola County
TRAVEL LANES	6-lane / Raised median
LENGTH	1.70 miles
POSTED SPEED	45 mph
85TH PERCENTILE SPEED	54 mph
MULTIMODAL FACILITIES?	Partial sidewalk on both sides, no transit



MODAL SPLIT



TOTAL CRASHES











23

TOTAL FATAL & SERIOUS INJURY CRASHES















CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Left Turn / Angle	8	161	169	14%
Sideswipe	0	234	234	19%
Right Turn	-	-	-	-
Pedestrian	1	10	11	-
Bicycle	4	2	6	-
Run off the Road	2	23	25	-
Head On	0	2	2	-
Other	0	82	82	6%

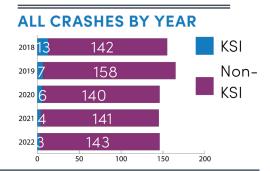
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	20	20	2%
Alcohol/Drugs	1	12	13	1%
Distracted Driving	8	343	351	29%
Intersection	11	297	308	25%
Aging Driver	6	187	193	16%
Teen Driver	4	140	144	12%
Signal Controlled	8	370	378	31%
Dark Conditions	8	260	268	22%
Wet Road Surface	3	128	131	11%

PRIORITIZATION SCORE: 75

Buenaventura Boulevard

From Simpson Road to County Line

JURISDICTION	Osceola County		
TRAVEL LANES	4-lane / Grass median		
LENGTH	2.58 miles		
POSTED SPEED	35-40 mph		
85TH PERCENTILE SPEED	50 mph		
MULTIMODAL FACILITIES?	Partial sidewalks, transit stops		



MODAL SPLIT





























CRASH TYPES

715

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	5	203	208	27%
Left Turn / Angle	10	268	278	37%
Sideswipe	0	89	89	12%
Right Turn	0	27	27	-
Pedestrian	2	10	12	-
Bicycle	2	8	10	-
Run off the Road	6	44	50	-
Head On	0	9	9	-
Other	5	57	62	8%

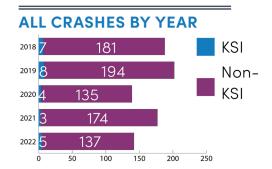
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	6	6	1%
Alcohol/Drugs	2	3	5	1%
Distracted Driving	17	272	289	38%
Intersection	12	343	355	47%
Aging Driver	3	151	154	20%
Teen Driver	8	123	131	17%
Signal Controlled	7	234	241	32%
Dark Conditions	18	183	201	27%
Wet Road Surface	2	69	71	9%

PRIORITIZATION SCORE: 62.5

Pleasant Hill Road

From South of Granada Boulevard to Knowles Boulevard

JURISDICTION	Osceola County
TRAVEL LANES	4-lane / Grass and raised median
LENGTH	3.17 miles
POSTED SPEED	45 mph
85TH PERCENTILE SPEED	64 mph
MULTIMODAL FACILITIES?	Partial sidewalks, transit stops



MODAL SPLIT















27

TOTAL FATAL & SERIOU INJURY CRASHES











INJURIES









CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	5	417	422	50%
Left Turn / Angle	7	143	150	18%
Sideswipe	0	127	127	15%
Right Turn	0	38	38	-
Pedestrian	3	8	11	-
Bicycle	1	5	6	-
Run off the Road	4	29	33	-
Head On	3	7	10	-
Other	3	36	39	5%

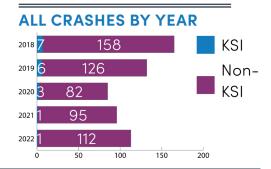
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	2	10	12	1%
Alcohol/Drugs	6	10	16	2%
Distracted Driving	15	246	261	31%
Intersection	10	269	279	33%
Aging Driver	10	160	170	20%
Teen Driver	2	125	127	15%
Signal Controlled	5	151	156	18%
Dark Conditions	13	168	181	21%
Wet Road Surface	7	79	86	10%

PRIORITIZATION SCORE: 58.75

S. Poinciana Boulevard

From Eagles Trail to Woodmont Boulevard/Red Blossom Lane

JURISDICTION	Osceola County
TRAVEL LANES	4-lane / Grass median
LENGTH	2.63 miles
POSTED SPEED	45-55 mph
85TH PERCENTILE SPEED	62 mph
MULTIMODAL FACILITIES?	Partial sidewalks, no transit



MODAL SPLIT



TOTAL CRASHES













TOTAL FATAL & SERIOUS INJURY CRASHES









INJURIES









CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	4	277	281	48%
Left Turn / Angle	8	145	153	26%
Sideswipe	0	70	70	12%
Right Turn	0	13	13	_
Pedestrian	1	2	3	-
Bicycle	0	7	7	
Run off the Road	4	24	28	5%
Head On	1	1	2	-
Other	0	25	25	-

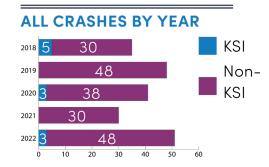
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	5	5	1%
Alcohol/Drugs	1	3	4	1%
Distracted Driving	12	216	228	39%
Intersection	10	237	247	42%
Aging Driver	2	71	73	12%
Teen Driver	3	89	92	16%
Signal Controlled	7	186	193	33%
Dark Conditions	10	167	177	30%
Wet Road Surface	1	63	64	11%

PRIORITIZATION SCORE: 56.25

Koa Street

From Marigold Avenue to San Remo Road

JURISDICTION	Osceola County
TRAVEL LANES	2-lane / Undivided
LENGTH	0.89 miles
POSTED SPEED	45 mph
85TH PERCENTILE SPEED	50 mph
MULTIMODAL FACILITIES?	Partial sidewalks, transit stops



MODAL SPLIT



TOTAL CRASHES











TOTAL FATAL & SERIOUS INJURY CRASHES



















CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	0	81	81	40%
Left Turn / Angle	7	68	75	36%
Sideswipe	0	13	13	6%
Right Turn	-	-	-	_
Pedestrian	1	2	3	_
Bicycle	1	2	3	-
Run off the Road	2	9	11	_
Head On	0	6	6	-
Other	0	12	12	6%

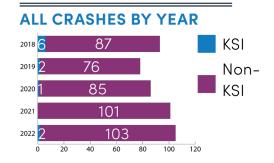
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	1	1	2	1%
Alcohol/Drugs	0	1	1	1%
Distracted Driving	6	64	70	34%
Intersection	9	95	104	51%
Aging Driver	1	35	36	18%
Teen Driver	0	31	31	15%
Signal Controlled	2	36	38	19%
Dark Conditions	5	50	55	27%
Wet Road Surface	2	30	32	16%

PRIORITIZATION SCORE: 56.25

N. Doverplum Avenue

From Country Club Road/Towne Center Drive to Koa Street

JURISDICTION	Osceola County
TRAVEL LANES	2-lane / Undivided
LENGTH	0.9 miles
POSTED SPEED	45 mph
85TH PERCENTILE SPEED	50 mph
MULTIMODAL FACILITIES?	Partial sidewalks, transit stops



MODAL SPLIT

















CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	2	191	193	42%
Left Turn / Angle	6	115	121	26%
Sideswipe	0	41	41	9%
Right Turn	0	39	39	8%
Pedestrian	2	7	9	-
Bicycle	0	6	6	-
Run off the Road	1	21	22	-
Head On	0	5	5	-
Other	0	20	20	_

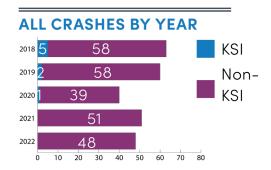
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	9	9	2%
Alcohol/Drugs	0	3	3	1%
Distracted Driving	7	140	147	32%
Intersection	4	170	174	38%
Aging Driver	2	134	136	29%
Teen Driver	1	73	74	16%
Signal Controlled	1	50	51	11%
Dark Conditions	4	83	37	19%
Wet Road Surface	3	57	60	13%

PRIORITIZATION SCORE:55

E. Osceola Parkway

From 1/4 mile west of Buenaventura Boulevard to Sandalwood Drive

JURISDICTION	Osceola County
TRAVEL LANES	4-lane / Median
LENGTH	0.74 miles
POSTED SPEED	40 mph
85TH PERCENTILE SPEED	55 mph
MULTIMODAL FACILITIES?	Complete sidewalks, transit stops



MODAL SPLIT



TOTAL CRASHES











TOTAL FATAL & SERIOUS INJURY CRASHES

















CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	2	88	90	34%
Left Turn / Angle	0	67	67	15%
Sideswipe	0	36	36	14%
Right Turn	0	12	12	-
Pedestrian	2	4	6	-
Bicycle	0	5	5	_
Run off the Road	1	1	2	_
Head On	0	5	5	-
Other	1	34	35	13%

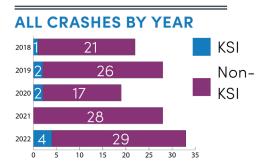
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	3	3	1%
Alcohol/Drugs	0	6	6	3%
Distracted Driving	2	78	80	31%
Intersection	3	115	118	45%
Aging Driver	2	49	51	19%
Teen Driver	0	41	41	16%
Signal Controlled	1	97	98	37%
Dark Conditions	5	68	73	28%
Wet Road Surface	0	22	22	8%

PRIORITIZATION SCORE: 55

S. Narcoossee Road

From Lillian Black Road to Jack Brack Road

JURISDICTION	Osceola County
TRAVEL LANES	4-lane / Grass median
LENGTH	1.29 miles
POSTED SPEED	45 mph
85TH PERCENTILE SPEED	60 mph
MULTIMODAL FACILITIES?	Complete sidewalks, transit stops



MODAL SPLIT



















CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	1	44	45	35%
Left Turn / Angle	1	30	31	_
Sideswipe	0	21	21	16%
Right Turn	-	-	-	-
Pedestrian	0	1	1	-
Bicycle	0	4	4	
Run off the Road	5	8	13	10%
Head On	-	-	-	-
Other	2	7	9	7%

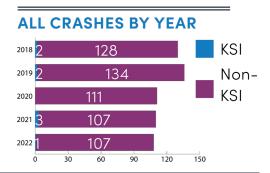
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	2	2	2%
Alcohol/Drugs	0	2	2	2%
Distracted Driving	4	43	47	36%
Intersection	2	55	57	44%
Aging Driver	1	19	20	15%
Teen Driver	3	15	18	14%
Signal Controlled	1	23	24	18%
Dark Conditions	5	27	32	25%
Wet Road Surface	0	9	9	7%

PRIORITIZATION SCORE: 53.75

Pleasant Hill Road

From Old Pleasant Hill Road to Spinning Reel Lane/Wilderness Trail

JURISDICTION	Osceola County		
TRAVEL LANES	4-lane / 6-lane, raised median		
LENGTH	1.37 miles		
POSTED SPEED	45-55 mph		
85TH PERCENTILE SPEED	63 mph		
MULTIMODAL FACILITIES?	Complete sidewalks, transit stops		



MODAL SPLIT



TOTAL CRASHES











TOTAL FATAL & SERIOUS INJURY CRASHES

















CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	3	330	333	56%
Left Turn / Angle	1	65	66	-
Sideswipe	0	104	104	17%
Right Turn	0	18	18	3%
Pedestrian	3	3	6	-
Bicycle	0	4	4	-
Run off the Road	1	14	15	-
Head On	0	2	2	-
Other	0	34	34	6%

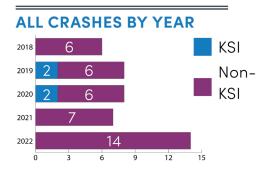
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	7	7	1%
Alcohol/Drugs	0	3	3	1%
Distracted Driving	4	188	192	32%
Intersection	4	135	139	23%
Aging Driver	3	130	133	22%
Teen Driver	2	88	90	15%
Signal Controlled	1	144	145	24%
Dark Conditions	4	136	140	24%
Wet Road Surface	0	51	51	9%

PRIORITIZATION SCORE: 47.5

Nolte Road

From west of Michigan Avenue to Southern Vista Loop

JURISDICTION	Osceola County		
TRAVEL LANES	4-lane / Grass median		
LENGTH	0.62 miles		
POSTED SPEED	45 mph		
85TH PERCENTILE SPEED	59 mph		
MULTIMODAL FACILITIES?	Partial sidewalks, no transit		



MODAL SPLIT













CRASH TYPES

38

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	0	10	10	23%
Left Turn / Angle	2	17	19	45%
Sideswipe	1	0	1	-
Right Turn	0	1	1	-
Pedestrian	0	0	0	-
Bicycle	0	1	1	-
Run off the Road	1	1	2	5%
Head On	0	1	1	-
Other	0	7	7	16%

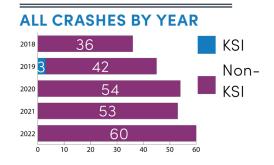
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	1	0	1	2%
Alcohol/Drugs	0	0	0	0%
Distracted Driving	0	5	5	12%
Intersection	0	12	12	28%
Aging Driver	1	7	8	19%
Teen Driver	2	7	9	21%
Signal Controlled	3	16	19	44%
Dark Conditions	3	6	9	21%
Wet Road Surface	1	1	2	5%

PRIORITIZATION SCORE: 47.5

S. Narcoossee Road

From US 192 to Lillian Lee Road

JURISDICTION	Osceola County
TRAVEL LANES	4-lane / Raised and grass median
LENGTH	0.55 miles
POSTED SPEED	45 mph
85TH PERCENTILE SPEED	58 mph
MULTIMODAL FACILITIES?	Complete sidewalks, transit stops



MODAL SPLIT













CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	0	155	155	
Left Turn / Angle	2	18	20	-
Sideswipe	0	29	29	-
Right Turn	0	3	3	-
Pedestrian	0	0	0	-
Bicycle	0	3	3	-
Run off the Road	0	5	5	-
Head On	0	4	4	-
Other	1	21	22	_

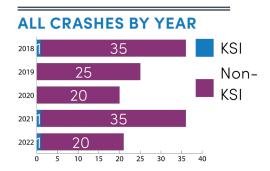
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	1	5	6	2%
Alcohol/Drugs	0	2	2	1%
Distracted Driving	0	55	55	22%
Intersection	0	64	64	26%
Aging Driver	0	48	48	19%
Teen Driver	0	40	40	16%
Signal Controlled	3	120	123	50%
Dark Conditions	1	48	49	20%
Wet Road Surface	0	25	25	10%

PRIORITIZATION SCORE: 42.5

Canoe Creek Road

From Indian Lakes Boulevard to 500 feet north of Hyleigh Way

JURISDICTION	Osceola County
TRAVEL LANES	2-lane
LENGTH	0.73 miles
POSTED SPEED	45 mph
85TH PERCENTILE SPEED	54 mph
MULTIMODAL FACILITIES?	Partial sidewalks, no transit



MODAL SPLIT





5









CRASH TYPES

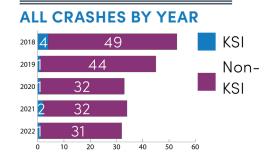
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	1	79	80	59%
Left Turn / Angle	6	27	33	24%
Sideswipe	4	0	4	3%
Right Turn	0	2	2	-
Pedestrian	0	0	0	-
Bicycle	0	0	0	-
Run off the Road	-		-	-
Head On	0	1	1	_
Other	0	11	11	8%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	6	6	4%
Alcohol/Drugs	0	4	4	4%
Distracted Driving	0	42	42	31%
Intersection	1	29	30	22%
Aging Driver	0	26	26	19%
Teen Driver	0	40	40	30%
Signal Controlled	1	56	57	42%
Dark Conditions	1	24	25	19%
Wet Road Surface	0	15	15	11%

Neptune Road

From Will Barber Road/Kings Highway to Stroupe Road

JURISDICTION	Osceola County
TRAVEL LANES	4-lane / Raised median
LENGTH	1.20 miles
POSTED SPEED	40 mph
85TH PERCENTILE SPEED	53 mph
MULTIMODAL FACILITIES?	Partial sidewalk, no transit



MODAL SPLIT













CRASH TYPES

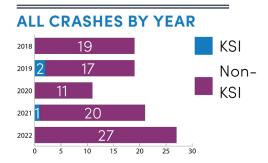
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	2	77	79	40%
Left Turn / Angle	3	47	50	-
Sideswipe	0	27	27	14%
Right Turn	0	6	6	-
Pedestrian	0	0	0	-
Bicycle	1	1	2	-
Run off the Road	0	13	13	7%
Head On	1	0	1	-
Other	1	16	27	9%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	1	1	1%
Alcohol/Drugs	0	1	1	1%
Distracted Driving	3	67	70	36%
Intersection	6	78	84	43%
Aging Driver	0	37	37	19%
Teen Driver	0	25	25	13%
Signal Controlled	5	76	81	41%
Dark Conditions	4	35	39	20%
Wet Road Surface	2	22	24	12%

Old Canoe Creek Road

From 500 feet south of Sawyer Circle to King Oak Circle

JURISDICTION	Osceola County
TRAVEL LANES	4-lane / Raised median
LENGTH	0.52 miles
POSTED SPEED	45 mph
85TH PERCENTILE SPEED	54 mph
MULTIMODAL FACILITIES?	Complete sidewalks, no transit



MODAL SPLIT

















CRASH TYPES

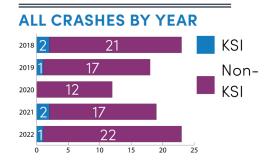
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	0	49	49	51%
Left Turn / Angle	2	18	20	-
Sideswipe	0	5	5	5%
Right Turn	0	2	2	-
Pedestrian	0	0	0	-
Bicycle	0	0	0	-
Run off the Road	0	6	6	6%
Head On	0	1	1	-
Other	1	13	14	14%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	1	2	3	3%
Alcohol/Drugs	0	2	2	3%
Distracted Driving	0	17	17	18%
Intersection	1	22	23	24%
Aging Driver	1	18	19	20%
Teen Driver	1	14	15	15%
Signal Controlled	0	43	43	44%
Dark Conditions	2	14	16	16%
Wet Road Surface	1	7	8	8%

Marigold Avenue

From San Lorenzo Road to Peabody Road

JURISDICTION	Osceola County
TRAVEL LANES	2-lane / Undivided
LENGTH	1.48 miles
POSTED SPEED	30 mph
85TH PERCENTILE SPEED	51 mph
MULTIMODAL FACILITIES?	Partial sidewalks, transit stops



MODAL SPLIT























CRASH TYPES

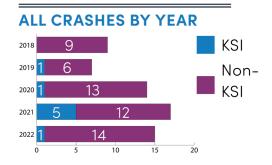
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	2	21	23	24%
Left Turn / Angle	3	49	52	55%
Sideswipe	0	3	3	3%
Right Turn	0	1	1	_
Pedestrian	1	1	2	_
Bicycle	0	3	3	_
Run off the Road	0	3	3	3%
Head On	0	1	1	
Other	0	3	3	-

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	1	1	1%
Alcohol/Drugs	0	1	1	1%
Distracted Driving	5	39	44	46%
Intersection	4	60	64	67%
Aging Driver	0	9	9	9%
Teen Driver	1	19	20	21%
Signal Controlled	0	0	0	0%
Dark Conditions	3	24	27	28%
Wet Road Surface	0	12	12	13%

Nova Road

From US 192 to Dumbleton Place/Thorns Run

JURISDICTION	Osceola County
TRAVEL LANES	2-lane / Undivided
LENGTH	0.73 miles
POSTED SPEED	55 mph
85TH PERCENTILE SPEED	70 mph
MULTIMODAL FACILITIES?	No sidewalks, no transit



MODAL SPLIT

















CRASH TYPES

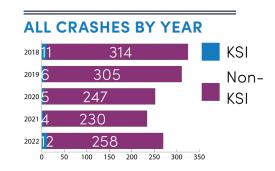
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	0	13	13	21%
Left Turn / Angle	5	25	30	32%
Sideswipe	0	5	5	8%
Right Turn	-	-	-	-
Pedestrian	1	0	1	-
Bicycle	0	0	0	-
Run off the Road	0	1	1	_
Head On	0	2	2	_
Other	0	7	7	8%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	1	1	2%
Alcohol/Drugs	0	2	2	3%
Distracted Driving	2	18	20	32%
Intersection	4	29	33	53%
Aging Driver	2	14	16	26%
Teen Driver	1	11	12	19%
Signal Controlled	0	0	0	26%
Dark Conditions	3	5	8	0%
Wet Road Surface	0	8	8	13%

Simpson Road

From US 192 to County Line

JURISDICTION	Osceola County		
TRAVEL LANES	2-lane and 5-lane / Undivided		
LENGTH	4.90 miles		
POSTED SPEED	45-50 mph		
85TH PERCENTILE SPEED	53 mph		
MULTIMODAL FACILITIES?	Partial sidewalk, transit stops		



MODAL SPLIT











CRASH TYPES

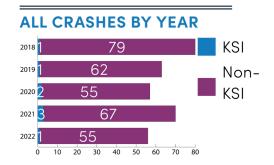
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	12	716	728	52%
Left Turn / Angle	11	315	326	23%
Sideswipe	1	131	132	9%
Right Turn	0	20	20	-
Pedestrian	5	13	18	
Bicycle	0	10	10	-
Run off the Road	1	31	32	-
Head On	6	19	25	-
Other	2	74	76	5%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	7	7	1%
Alcohol/Drugs	1	10	11	1%
Distracted Driving	16	495	511	37%
Intersection	18	455	473	34%
Aging Driver	10	231	241	17%
Teen Driver	7	248	255	18%
Signal Controlled	13	369	382	27%
Dark Conditions	19	311	330	24%
Wet Road Surface	5	139	144	10%

N. John Young Parkway

From Lyndell Drive to W. Carroll Street

JURISDICTION	Osceola County
TRAVEL LANES	6-lane / Grass median
LENGTH	0.75 miles
POSTED SPEED	45 mph
85TH PERCENTILE SPEED	59 mph
MULTIMODAL FACILITIES?	Complete sidewalk, transit stops



MODAL SPLIT













CRASH TYPES

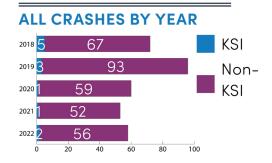
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	0	156	156	48%
Left Turn / Angle	3	56	59	_
Sideswipe	0	34	34	10%
Right Turn	0	7	7	-
Pedestrian	2	3	5	-
Bicycle	0	5	5	
Run off the Road	0	14	14	4%
Head On	-	-	-	-
Other	3	33	36	11%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	3	3	1%
Alcohol/Drugs	1	5	6	2%
Distracted Driving	2	78	80	25%
Intersection	1	65	66	20%
Aging Driver	1	58	59	18%
Teen Driver	0	47	47	14%
Signal Controlled	3	134	137	42%
Dark Conditions	4	93	97	30%
Wet Road Surface	2	33	35	11%

W. Donegan Avenue

From Highland Avenue/N. Central Avenue to Michigan Avenue

JURISDICTION	Osceola County
TRAVEL LANES	2-lane / Center turn lane
LENGTH	1.07 miles
POSTED SPEED	35 mph
85TH PERCENTILE SPEED	43 mph
MULTIMODAL FACILITIES?	Partial sidewalk, no transit



MODAL SPLIT



























CRASH TYPES

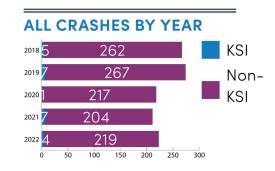
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	1	115	116	34%
Left Turn / Angle	4	70	74	37%
Sideswipe	1	32	33	10%
Right Turn	0	15	15	-
Pedestrian	0	2	2	-
Bicycle	0	3	3	-
Run off the Road	1	13	14	-
Head On	0	1	1	-
Other	2	26	28	8%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	6	6	2%
Alcohol/Drugs	1	3	4	1%
Distracted Driving	10	103	113	33%
Intersection	8	145	153	45%
Aging Driver	2	61	63	19%
Teen Driver	1	27	28	8%
Signal Controlled	1	98	99	29%
Dark Conditions	10	56	66	19%
Wet Road Surface	0	28	28	8%

Michigan Avenue

From US 192 to E. Osceola Parkway

JURISDICTION	Osceola County
TRAVEL LANES	4-lane / Center turn lane
LENGTH	2.53 miles
POSTED SPEED	30-40 mph
85TH PERCENTILE SPEED	53 mph
MULTIMODAL FACILITIES?	Complete sidewalks, transit stops



MODAL SPLIT





























CRASH TYPES

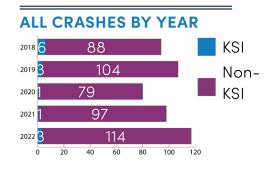
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	3	507	510	43%
Left Turn / Angle	10	253	263	22%
Sideswipe	1	173	174	15%
Right Turn	0	31	31	-
Pedestrian	2	15	17	-
Bicycle	4	12	16	-
Run off the Road	3	26	29	-
Head On	0	15	15	_
Other	1	105	106	9%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	1	22	23	2%
Alcohol/Drugs	1	7	8	1%
Distracted Driving	6	316	322	27%
Intersection	8	249	257	22%
Aging Driver	2	248	250	21%
Teen Driver	1	166	167	14%
Signal Controlled	8	359	367	31%
Dark Conditions	8	176	184	16%
Wet Road Surface	2	154	156	13%
Alcohol/Drugs Distracted Driving Intersection Aging Driver Teen Driver Signal Controlled Dark Conditions	1 6 8 2 1 8	7 316 249 248 166 359 176	8 322 257 250 167 367 184	1% 27% 22% 21% 14% 31% 16%

Osceola Polk Line Road

From I-4 to Sullivan Road

JURISDICTION	Osceola County
TRAVEL LANES	4-lane raised median / 2-lane undivided
LENGTH	2.38 miles
POSTED SPEED	45 mph
85TH PERCENTILE SPEED	55 mph
MULTIMODAL FACILITIES?	Partial sidewalks, no transit



MODAL SPLIT





















CRASH TYPES

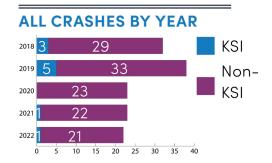
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	2	246	248	50%
Left Turn / Angle	3	113	116	23%
Sideswipe	0	67	67	14%
Right Turn	1	10	10	-
Pedestrian	2	0	2	-
Bicycle	0	0	0	-
Run off the Road	3	16	29	-
Head On	1	1	2	-
Other	0	21	21	4%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	2	246	248	50%
Alcohol/Drugs	3	113	116	23%
Distracted Driving	0	67	67	14%
Intersection	1	10	10	-
Aging Driver	2	0	2	-
Teen Driver	0	0	0	-
Signal Controlled	3	16	29	-
Dark Conditions	1	1	2	-
Wet Road Surface	0	21	21	4%

S. Poinciana Boulevard

From Reaves Road to Crestone Road

JURISDICTION	Osceola County
TRAVEL LANES	2-lane / Undivided
LENGTH	1.34 miles
POSTED SPEED	55 mph
85TH PERCENTILE SPEED	62 mph
MULTIMODAL FACILITIES?	Partial sidewalks, no transit



MODAL SPLIT

















CRASH TYPES

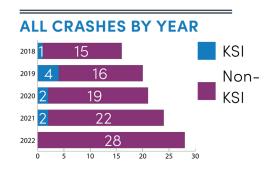
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	1	48	49	36%
Left Turn / Angle	2	21	23	17%
Sideswipe	1	9	10	-
Right Turn	0	6	6	-
Pedestrian	1	1	2	-
Bicycle	0	0	0	-
Run off the Road	0	20	20	14%
Head On	4	7	11	8%
Other	1	9	10	7%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	0	3	3	2%
Alcohol/Drugs	1	1	2	1%
Distracted Driving	6	35	41	30%
Intersection	3	44	47	34%
Aging Driver	2	13	15	11%
Teen Driver	4	14	18	13%
Signal Controlled	1	10	11	8%
Dark Conditions	4	40	44	32%
Wet Road Surface	0	19	19	14%

S. Thacker Avenue

From Clay Street to Mabbette Street

JURISDICTION	Osceola County		
TRAVEL LANES	2-lane / Center turn lane		
LENGTH	0.85 miles		
POSTED SPEED	40 mph		
85TH PERCENTILE SPEED	45 mph		
MULTIMODAL FACILITIES?	Complete sidewalks, transit stops		



MODAL SPLIT













CRASH TYPES

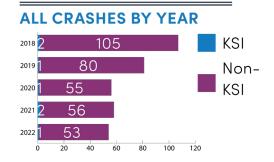
	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	1	42	43	39%
Left Turn / Angle	3	29	32	28%
Sideswipe	2	10	12	11%
Right Turn	-	-	-	-
Pedestrian	1	0	1	-
Bicycle	0	2	2	-
Run off the Road	1	5	6	-
Head On	0	2	2	
Other	1	6	7	6%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	2	1	3	3%
Alcohol/Drugs	0	1	1	2%
Distracted Driving	2	31	33	30%
Intersection	2	24	26	24%
Aging Driver	0	16	16	15%
Teen Driver	2	14	16	15%
Signal Controlled	2	20	22	20%
Dark Conditions	4	24	28	26%
Wet Road Surface	2	13	15	14%

Fortune Road

From Grande Boulevard to Simpson Road

JURISDICTION	Osceola County		
TRAVEL LANES	4-lane / Center turn lane		
LENGTH	0.53 miles		
POSTED SPEED	45 mph		
85TH PERCENTILE SPEED	55 mph		
MULTIMODAL FACILITIES?	Partial sidewalks, transit stops		



MODAL SPLIT























CRASH TYPES

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-FATAL OR SERIOUS INJURY CRASHES	TOTAL	% TREND
Rear End	2	152	154	43%
Left Turn / Angle	3	115	118	33%
Sideswipe	0	39	39	11%
Right Turn	0	1	1	-
Pedestrian	0	6	6	-
Bicycle	0	0	0	-
Run off the Road	0	5	5	-
Head On	1	4	5	-
Other	1	20	21	6%

	TOTAL FATAL & SERIOUS INJURY CRASHES	NON-KSI	TOTAL	% TREND
Aggressive Driving	1	5	6	2%
Alcohol/Drugs	1	4	5	1%
Distracted Driving	2	99	101	28%
Intersection	4	120	124	35%
Aging Driver	1	60	61	17%
Teen Driver	2	72	74	21%
Signal Controlled	4	139	143	40%
Dark Conditions	5	91	96	27%
Wet Road Surface	1	34	35	10%

Appendix B:

Crash Analysis

Osceola County Vision Zero Action Plan

Technical Appendix: Detailed Crash Analysis

This technical appendix is intended to further elaborate on the crash analysis methodology and observed historic crash trends that are presented in the Osceola County Vision Zero Action Plan (VZAP). Regionwide crash data was extracted as part of the MetroPlan Orlando Vision Zero Central Florida Safety Action Plan and provided to each municipality for independent evaluation. The crash data was analyzed to identify trends related to crash characteristics, human behavioral factors, and roadway context contributing to fatal and serious injury crashes. This analysis presents high-level summaries of the relationships between variables and resulting crash frequencies, severities, and impacted users that were used to inform project development and programmatic safety recommendations in the Action Plan.

Methodology and Data Sources

Signal Four Analytics crash data for the entire MetroPlan Orlando regional area was extracted by the Vision Zero Central Florida consultant team for the study period from January 1, 2018 to December 31, 2022. The crash data was aggregated with other datasets from public agencies related to transportation, public health, and population demographics in a GIS mapping platform. The regional VZAP database was then filtered into geographic jurisdictions and dispersed to local municipalities for evaluation to support the local action plans. This County-level crash analysis represents the evaluation of the provided dataset. For additional details on the full methodology, data sources, and limitations, refer to the Vision Zero Central Florida – Crash Analysis and Profiles memorandum dated January 17, 2024.

Note: The total summaries for crashes by year, mode, and crash type are reported separately for crashes on 1) ALL facilities inclusive of limited access, toll roads, private roads, and parking lots and 2) ONLY non-limited access public roads. The remaining statistics and trend analysis for contextual analysis are reported for ONLY the filtered dataset that excludes limited access and private facilities.

Key Findings

Crashes are summarized by the following features:

- Key Findings
- Overall Crash Trends
 - o Year, Mode, Crash Type
- Temporal Crash Trends
 - o Time of Day, Day of Week
- Contextual Crash Trends
 - Environmental Factors
 - Road Surface, Lighting
 - Behavioral Factors
 - Alcohol and Drug Impairment, Teen Driver, Aging Driver, Speeding, Aggressive Driving, Distracted Driving, Hit and Run, Commercial Vehicle Involvement
 - Roadway Factors
 - Intersection Relation, Posted Speed, Number of Travel Lanes, Median Type,
 Functional Classification, Traffic Volumes

Key Findings

- On average, one person per week is killed and four are seriously injured in traffic crashes on Osceola County roadways.
- Crashes involving vulnerable road users (VRUs) pedestrians, bicyclists, and motorcyclists –
 account for only 3% of overall crashes yet makeup 25% of serious injury crashes and 40% of
 fatal crashes.
- Rear-end crashes were the highest frequency crash type overall; left-turn crashes were the
 highest frequency crash type resulting in a serious injury or fatality; and pedestrian crashes
 were the highest frequency crash type resulting in a fatality.
- 29% of run-off-the-road crashes occurred on interstate or turnpike/toll facilities.
- Pedestrian, bicycle, and head-on crashes have the highest rate of resulting in fatal or serious injury crashes, despite the low overall frequency of these crash types.
- The overall peak hour of crashes occurs between 3:00 PM and 6:00 PM; however, KSI crashes
 occur more frequently between the hours of 9:00 PM and 3:00 AM.
- KSI crashes occur more frequently on Saturday and Sunday, especially those involving pedestrians.
- Wet road surfaces were more likely to result in a fatal or serious injury crash when involving pedestrians and bicyclists.
- Dark conditions, either with or without lighting, were involved in a higher percentage of all
 modes of KSI crashes than overall crashes, with particularly high proportions of pedestrian and
 bicycle crashes. 24% of all crashes and 48% of KSI crashes occurred under dark condition while
 46% of all VRU crashes and 68% of KSI VRU crashes occurred under dark conditions.
- Alcohol and drug impairment was reported in less than 2% of overall crashes yet represents 29% of fatal crashes.
- Teen drivers are involved in 14% of overall crashes yet comprise 6% of licensed drivers in the County. Aging drivers are involved in 20% of fatal crashes yet comprise only 15% of licensed drivers in the County.
- Hit and run was reported at nearly double the proportion for pedestrian crashes.
- While 25% of overall crashes were coded as intersection-related, 29% of pedestrian crashes and 46% of bicycle crashes were coded at an intersection.
- The roadway characteristics leading to the highest frequency of crashes (in comparison to the low proportion of roadway network mileage) include: roads with 4-6 lanes, posted speed limits between 40-55 mph, principal arterials, and over 15,000 annual average daily traffic.

Overall Crash Trends

Crash Summary and Severity by Year (All Facilities)

Year	No Ir	No Injury		Injury		Serious Injury		Fatality		Total	K	SI
Teal	#	%	#	%	#	%	#	%	#	%	#	%
2018	7,316	67.9%	3,087	28.6%	316	2.9%	62	0.6%	10,781	21%	378	3.5%
2019	7,601	68.5%	3,227	29.1%	205	1.8%	64	0.6%	11,097	22%	269	2.4%
2020	5,303	65.8%	2,549	31.6%	156	1.9%	49	0.6%	8,057	16%	205	2.5%
2021	7,035	67.1%	3,192	30.4%	210	2.0%	50	0.5%	10,487	20%	260	2.5%
2022	7,603	69.2%	3,116	28.4%	195	1.8%	67	0.6%	10,981	21%	262	2.4%
Total	34,858	67.8%	15,171	29.5%	1,082	2.1%	292	0.6%	51,403	100%	1,374	2.7%

Includes limited access, toll roads, private roads, and parking lots

Crash Summary and Severity by Year (Non-Limited Access Public Roads)

Year	No Ir	No Injury		Injury		Serious Injury		Fatality		Total	K	SI
Teal	#	%	#	%	#	%	#	%	#	%	#	%
2018	6,083	66.8%	2,702	29.7%	270	3.0%	51	0.6%	9,106	21%	321	3.5%
2019	6,283	67.3%	2,823	30.2%	171	1.8%	56	0.6%	9,333	22%	227	2.4%
2020	4,441	65.6%	2,165	32.0%	125	1.8%	43	0.6%	6,774	16%	168	2.5%
2021	5,683	66.1%	2,713	31.6%	163	1.9%	40	0.5%	8,599	20%	203	2.4%
2022	5,885	67.1%	2,680	30.6%	146	1.7%	59	0.7%	8,770	21%	205	2.3%
Total	28,375	66.6%	13,083	30.7%	875	2.1%	249	0.6%	42,582	100%	1,124	2.6%

Crash Summary and Severity by Mode (All Facilities)

Mode	Mode No Injury		Injury		Serious Injury		Fatality		Total	Total	K	SI
Mode	#	%	#	%	#	%	#	%	#	%	#	%
Pedestrian	41	0.1%	381	2.5%	90	8.3%	48	16.4%	560	1%	138	10.0%
Bicycle	39	0.1%	226	1.5%	35	3.2%	13	4.5%	313	1%	48	3.5%
Motorcycle	178	0.5%	470	3.1%	145	13.4%	59	20.2%	852	2%	204	14.8%
Vehicle	34,600	99.3%	14,094	92.9%	812	75.0%	172	58.9%	49,678	97%	984	71.6%

Includes limited access, toll roads, private roads, and parking lots

Crash Summary and Severity by Mode (Non-Limited Access Public Roads)

Mode	Mode No Injury		Injury		Serious Injury		Fatality		Total	Total	K	SI
Mode	#	%	#	%	#	%	#	%	#	%	#	%
Pedestrian	30	0.1%	305	2.3%	74	8.5%	44	17.7 %	453	1%	118	10.5%
Bicycle	34	0.1%	203	1.6%	34	3.9%	13	5.2%	284	1%	47	4.2%
Motorcycle	158	0.6%	431	3.3%	132	15.1%	58	23.3%	779	2%	190	16.9%
Vehicle	28,153	99.2%	12,144	92.8%	635	72.6%	134	53.8%	41,066	96%	769	68.4%

Crash Summary and Severity by Type (All Facilities)

Туре	No Injury	Injury	Serious Injury	Fatality	Total #	Total %	KSI %	KSI:Total Factor
Angle	1,674	1,151	74	12	2,911	5.7%	6.3%	1.11
Animal	204	44	2	0	250	0.5%	0.1%	0.30
Backed Into	1,270	112	0	0	1,382	2.7%	0.0%	0.00
Bicycle	39	226	35	13	313	0.6%	3.5%	5.74
Head On	226	221	35	37	519	1.0%	5.2%	5.19
Left Entering	1,586	1,463	135	21	3,205	6.2%	11.4%	1.82
Left Leaving	763	598	38	16	1,415	2.8%	3.9%	1.43
Left Rear	760	423	27	4	1,214	2.4%	2.3%	0.96
Off Road	2,591	1,194	157	44	3,986	7.8%	14.6%	1.89
Parked Vehicle	1,936	205	13	4	2,158	4.2%	1.2%	0.29
Pedestrian	41	381	90	48	560	1.1%	10.0%	9.22
Rear End	14,530	6,626	252	36	21,444	41.7%	21.0%	0.50
Right/Left	106	20	1	0	127	0.2%	0.1%	0.29
Right/Through	543	203	6	2	754	1.5%	0.6%	0.40
Right/U-Turn	15	6	0	0	21	0.0%	0.0%	0.00
Rollover	265	291	37	13	606	1.2%	3.6%	3.09
Sideswipe - Same Direction	5,308	744	27	2	6,081	11.8%	2.1%	0.18
Sideswipe - Opposing Direction	288	106	9	1	404	0.8%	0.7%	0.93
Single Vehicle	828	491	80	18	1,417	2.8%	7.1%	2.59
Other	1,276	478	51	14	1,819	3.5%	4.7%	1.34
Unknown	609	188	13	7	817	1.6%	1.5%	0.92

Includes limited access, toll roads, private roads, and parking lots

Crash Summary and Severity by Type (Non-Limited Access Public Roads)

Туре	No Injury	Injury	Serious Injury	Fatality	Total #	Total %	KSI %	KSI:Total Factor
Angle	1,557	1,095	72	12	2,736	6.4%	7.5%	1.16
Animal	153	41	1	0	195	0.5%	0.1%	0.19
Backed Into	645	69	0	0	714	1.7%	0.0%	0.00
Bicycle	34	203	34	13	284	0.7%	4.2%	6.27
Head On	206	214	35	36	491	1.2%	6.3%	5.48
Left Entering	1,552	1,448	133	20	3,153	7.4%	13.6%	1.84
Left Leaving	737	586	38	16	1,377	3.2%	4.8%	1.49
Left Rear	721	412	27	3	1,163	2.7%	2.7%	0.98
Off Road	1,585	782	115	31	2,513	5.9%	13.0%	2.20
Parked Vehicle	1,178	139	4	0	1,321	3.1%	0.4%	0.11
Pedestrian	30	305	74	44	453	1.1%	10.5%	9.87
Rear End	12,351	5,622	169	24	18,166	42.7%	17.2%	0.40
Right/Left	102	19	1	0	122	0.3%	0.1%	0.31
Right/Through	525	196	6	2	729	1.7%	0.7%	0.42
Right/U-Turn	15	6	0	0	21	0.0%	0.0%	0.00
Rollover	215	244	25	9	493	1.2%	3.0%	2.61
Sideswipe - Same Direction	4,355	614	18	1	4,988	11.7%	1.7%	0.14
Sideswipe - Opposing Direction	253	102	9	1	365	0.9%	0.9%	1.04
Single Vehicle	551	410	65	17	1,043	2.4%	7.3%	2.98
Other	1,089	415	42	14	1,560	3.7%	5.0%	1.36
Unknown	521	161	7	6	695	1.6%	1.2%	0.71

Temporal Crash Trends

Crash Summary and Mode by Time of Day (All Crash Severities)

Time of Day	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
Midnight - 3 AM	6%	0%	7%	4%	4%
3-6 AM	5%	4%	3%	3%	3%
6 - 9 AM	14%	20%	11%	14%	14%
9 - Noon	9%	13%	11%	14%	14%
Noon - 3 PM	9%	14%	16%	19%	19%
3-6PM	14%	24%	21%	24%	24%
6-9PM	25%	15%	21%	15%	16%
9 PM - Midnight	18%	9%	11%	8%	8%

Crash Summary and Mode by Time of Day (KSI Crashes)

Time of Day	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
Midnight - 3 AM	13%	2%	10%	11%	11%
3 - 6 AM	8%	6%	3%	9%	8%
6 - 9 AM	12%	15%	8%	9%	10%
9 - Noon	5%	2%	11%	7%	8%
Noon - 3 PM	3%	11%	11%	14%	12%
3 - 6 PM	8%	17%	19%	15%	15%
6 - 9 PM	26%	19%	22%	17%	19%
9 PM - Midnight	25 %	28%	15%	17 %	18%

Crash Summary and Mode by Day of Week (All Crash Severities)

Day of Week	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
Monday	14%	18%	13%	15%	15%
Tuesday	17%	14%	12%	15%	15%
Wednesday	15%	15%	13%	15%	15%
Thursday	15%	19%	15%	15%	15%
Friday	15%	18%	15%	17%	17%
Saturday	11%	8%	16%	12%	12%
Sunday	12%	9%	16%	10%	10%

Crash Summary and Mode by Day of Week (KSI Crashes)

Day of Week	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
Monday	7%	21%	14%	14%	14%
Tuesday	14%	13%	12%	12%	12%
Wednesday	15%	15%	12%	16%	15 %
Thursday	16%	26%	13%	15%	15 %
Friday	11%	13%	12%	15%	14%
Saturday	19%	11%	19%	15 %	16%
Sunday	18%	2%	18%	14%	14%

Contextual Crash Trends - Environmental Factors

Crash Summary and Mode by Road Surface (All Crash Severities)

Road Surface	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
Dry	90%	94%	94%	88%	89%
Wet	10%	6%	6%	12%	11%

Crash Summary and Severity by Road Surface (All Crash Severities)

Road Surface	No Injury	Injury	Serious Injury	Fatality	Total
Dry	88%	89%	89%	90%	89%
Wet	12%	11%	11%	10%	11%

Crash Summary and Mode by Road Surface (KSI Crashes)

Road Surface	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
Dry	88%	85%	94%	88%	89%
Wet	12%	15 %	6%	12%	11%

Crash Summary and Mode by Lighting Condition (All Crash Severities)

Lighting Condition	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
Daylight	42%	72%	62%	72%	71%
Dawn	4%	5%	1%	2%	2%
Dusk	4%	2%	4%	3%	3%
Dark - Lighted	33%	11%	22%	17%	17%
Dark - Not Lighted	17%	10%	11%	7%	7%

Crash Summary and Severity by Lighting Condition (All Crash Severities)

Lighting Condition	No Injury	Injury	Serious Injury	Fatality	Total
Daylight	74%	68%	50%	35%	71%
Dawn	2%	2%	1%	4%	2%
Dusk	3%	3%	3%	3%	3%
Dark - Lighted	16%	19%	25%	28%	17%
Dark - Not Lighted	6%	8%	20%	30%	7%

Crash Summary and Mode by Lighting Condition (KSI Crashes)

Lighting Condition	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
Daylight	21%	48%	54%	49%	47%
Dawn	4%	4%	1%	1%	2%
Dusk	5%	2%	4%	2%	3%
Dark - Lighted	43%	20%	20%	25%	26%
Dark - Not Lighted	26%	26%	22%	22%	22%

Contextual Crash Trends - Behavioral Factors

Crash Summary by Impairment for Severity and Mode

Impairment	No Injury	Injury	Serious Injury	Fatality	Total
No Alcohol/Drugs	99%	98%	95%	71%	98%
Alcohol	1%	1%	3%	11%	1 %
Drugs	0%	0%	0%	9%	0%
Alcohol and Drugs	0%	0%	1%	8%	0%

Impairment	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
No Alcohol/Drugs	99%	99%	96%	98%	98%
Alcohol	0%	0%	3%	1%	1%
Drugs	0%	0%	1%	0%	0%
Alcohol and Drugs	0%	0%	0%	0%	0%

Crash Summary by Teen Driver for Severity and Mode

Driver Age	No Injury	Injury	Serious Injury	Fatality	Total
Teen 15-19	14%	15%	14%	6%	14%
Non-Teen	86%	85%	86%	94%	86%

Driver Age	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
Teen 15-19	4%	5%	8%	14%	14%
Non-Teen	96%	95%	92%	86%	86%

Crash Summary by Aging Driver for Severity and Mode

Driver Age	No Injury	Injury	Serious Injury	Fatality	Total
Aging 65+	16%	16%	15%	20%	16%
Non-Aging	84%	84%	85%	80%	84%

Driver Age	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
Aging 65+	12%	12%	14%	16%	16%
Non-Aging	88%	88%	86%	84%	84%

Crash Summary by Speeding for Severity and Mode

Speeding	No Injury	Injury	Serious Injury	Fatality	Total
Yes	1%	1%	2%	5%	1 %
No	99%	99%	98%	95%	99%

Speeding	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
Yes	0%	0%	2%	1%	1%
No	100%	100%	98%	99%	99%

Crash Summary by Aggressive Driving for Severity and Mode

Aggressive Driving	No Injury	Injury	Serious Injury	Fatality	Total
Yes	1%	1%	4%	6%	2%
No	99%	99%	96%	94%	98%

Aggressive Driving	Pedestrian	Pedestrian Bicycle Motorcycle		Vehicle	Total	
Yes	0%	0%	3%	2%	2 %	
No	100%	100%	97%	98%	98%	

Crash Summary by Distracted Driving for Severity and Mode

Distracted Driving	No Injury	Injury	Serious Injury	Fatality	Total
Yes	27%	38%	43%	22%	31%
No	73%	62%	57%	78%	69%

Distracted Driving	Pedestrian	Pedestrian Bicycle		Vehicle	Total
Yes	13%	20%	30%	31%	31%
No	87%	80%	70%	69%	69%

Crash Summary by Hit and Run for Severity and Mode

Hit and Run	No Injury	Injury	Serious Injury	Fatality	Total
Yes	11%	8%	6%	6%	10%
No	89%	92%	94%	94%	90%

Hit and Run	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
Yes	23%	13%	10%	10%	10%
No	77%	87%	90%	90%	90%

Crash Summary by Commercial Vehicle Involvement for Severity and Mode

CMV Involved	No Injury	Injury	Serious Injury	Fatality	Total
Yes	5%	4%	4%	9%	5%
No	95%	96%	96%	91%	95%

CMV Involved	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
Yes	2%	2%	1%	5%	5%
No	98%	98%	99%	95%	95%

Contextual Crash Trends - Roadway Factors

Crash Summary by Intersection Relation for Severity and Mode

Intersection	No Injury	Injury	Serious Injury	Fatality	Total
Yes	23%	29%	34%	32%	25%
No	77%	71%	66%	68%	75%

Intersection	Pedestrian	Bicycle	Motorcycle	Vehicle	Total
Yes	29%	46%	26%	25%	25%
No	71%	54%	74%	75%	75%

Crash Summary by Posted Speed Limit for Severity and Mode

Posted Speed	No Injury	Injury	Serious Injury	Fatality	Total	% of Miles
25 or less	12%	8%	8%	7%	11%	73%
30-35	19%	20%	18%	11%	19%	7%
40-45	51%	51%	48%	39%	51 %	8%
50-55	16%	19%	23%	32%	17%	7%
60 or more	1%	2%	3%	12%	1%	5%

Posted Speed	Pedestrian	Bicycle	Motorcycle	Vehicle	Total	% of Miles
25 or less	14%	11%	10%	11%	11%	73%
30-35	20%	23%	16%	19%	19%	7%
40-45	53%	55%	54%	51%	51 %	8%
50-55	13%	11%	17%	18%	17%	7%
60 or more	0%	1%	3%	1%	1%	5%

Crash Summary by Number of Travel Lanes for Severity and Mode

Travel Lanes	No Injury	Injury	Serious Injury	Fatality	Total	% of Miles
2	44%	43%	46%	44%	43%	93%
4	32%	33%	32 %	34%	32%	5%
6+	25%	24%	22%	22%	24%	2%

Travel Lanes	Pedestrian	Bicycle	Motorcycle	Vehicle	Total	% of Miles
2	47%	48%	43%	43%	43%	93%
4	26%	31%	35%	32%	32%	5%
6+	27%	21%	22%	24%	24%	2%

Crash Summary by Median Type for Severity and Mode

Median Type	No Injury	Injury	Serious Injury	Fatality	Total	% of Miles
None	37%	38%	40%	40%	37%	90%
Grass	34%	35%	36%	35%	34%	7%
Paved	24%	22%	18%	18%	23%	2%
Multiple	5%	5%	6%	7%	5%	1%

Median Type	Pedestrian	Bicycle	Motorcycle	Vehicle	Total	% of Miles
None	47%	49%	40%	37%	37%	90%
Grass	26%	31%	33%	35%	34%	7%
Paved	22%	15%	22%	23%	23%	2%
Multiple	4%	4%	5%	5%	5%	1%

Crash Summary by Functional Classification for Severity and Mode

Functional Class	No Injury	Injury	Serious Injury	Fatality	Total	% of Miles
Principal Arterial	42%	44%	45%	52 %	43%	6%
Minor Arterial	21%	21%	19%	20%	21%	3%
Major Collector	20%	20%	20%	14%	20%	7%
Minor Collector	2%	2%	2%	2%	2%	1%
Local	1%	1%	1%	1%	1%	1%
None	15%	12%	13%	11%	14%	82%

Functional Class	Pedestrian	Bicycle	Motorcycle	Vehicle	Total	% of Miles
Principal Arterial	40%	35%	44%	43%	43%	6%
Minor Arterial	17%	20%	21%	21%	21%	3%
Major Collector	21%	27%	21%	20%	20%	7%
Minor Collector	2%	6%	2%	2%	2%	1%
Local	1%	0%	1%	1%	1%	1%
None	20%	13%	11%	14%	14%	82%

Crash Summary by Traffic Volumes for Severity and Mode

AADT	No Injury	Injury	Serious Injury	Fatality	Total	% of Miles
Less than 15,000	29%	30%	34%	38%	30%	95%
15,000-30,000	31%	31%	34%	29%	31%	3%
More than 30,000	40%	38%	32%	33%	39%	2%

AADT	Pedestrian	Bicycle	Motorcycle	Vehicle	Total	% of Miles
Less than 15,000	32%	38%	31%	30%	30%	95%
15,000-30,000	27%	32%	36%	31%	31%	3%
More than 30,000	41%	29%	33%	39%	39%	2%

Appendix C:

Public Engagement Plan

This Public Engagement Plan was developed at the outset of the Action Plan development process to generally define the potential approach for outreach and engagement. During Action Plan development, some adjustments were made to the schedule and the number and type of activities in response to various factors influencing the most appropriate approach.

Public Engagement Plan

Osceola County Vision Zero Action Plan

Introduction

As part of MetroPlan Orlando's Vision Zero Central Florida initiative, Osceola County is preparing a Countywide Vision Zero Action Plan consistent with the regional effort to refine the high-injury network, identify/prioritize projects, and provide opportunities for robust engagement with key stakeholders including agencies, private sector representatives, elected officials, transportation professionals, and members of the public. This Public Engagement Plan was developed to outline the approach and specific strategies at the county level. This strategy will include the development of a logo and branded materials, stakeholder engagement, and public outreach. These elements are detailed further in this plan. The public engagement phase of this project is anticipated to occur primarily between November 2023 and March 2024, culminating in a comprehensive Safety Action Plan that incorporates diverse and meaningful feedback gained through this initiative.

Public and stakeholder involvement is an integral part of the U.S Department of Transportation's Safe Streets and Roads for All (SS4A) grant program and will positively contribute to project identification and promoting buy-in among residents in Osceola County for a goal of zero roadway serious injuries and fatalities. Funding for the Osceola County Vision Zero Action Plan and the other regional, county, and local agency action plans in the MetroPlan Orlando region is provided by the SS4A grant program.

Core Elements of Vision Zero

The Vision Zero Network approach includes 10 core elements for communities to become a designated Vision Zero community. Three of those elements are related to public and stakeholder engagement. Osceola County will work to incorporate these three core elements into engagement strategies and staff/elected official trainings. These elements are:

- Public, High-Level, and Ongoing Commitment
- Authentic Engagement
- Equity-focused Analysis and Program

Goals

This Public Engagement Plan is intended to achieve the following public and stakeholder engagement goals for the Osceola County Safety Action Plan:

 Goal 1: Inform the public of the Central Florida Vision Zero initiative that is taking place at the regional, county, and local levels;

- **Goal 2:** Provide a variety of opportunities for stakeholders and the public to share meaningful feedback with the project team regarding Vision Zero;
- **Goal 3:** Prioritize engagement and investments in traditionally underserved communities to develop solutions and projects that promote equity within the Vision Zero context;
- **Goal 4:** Develop ongoing opportunities following Action Plan adoption for the public to engage with plan implementation.

Engagement Tools

Logo and Branding

As part of the overarching Public Engagement Plan for Osceola County's Vision Zero Action Plan, a project logo and branding package consistent with the regional vision will be developed to bring recognition to the Vision Zero program and promote this initiative beyond plan development. This initiative will communicate the collaborative nature of the Action Plan on a regional scale, but also the unique conditions and role of Osceola County in pursuing the goal of Vision Zero. This branding will include written and graphic content consistent with other Osceola County logos and branding, adhering to the County's style and branding guide. This branding will appear on both printed and electronic project materials and in anything shared via email, the website, and social media posts.

Web Page

To share information related to the Vision Zero initiative in Osceola County, a project web page will be created on the County's website. The URL will be www.osceola.org/go/visionzero, and will be located on the Transportation and Transit homepage under "Transportation Studies." This page will include background information, graphics, relevant documents, project schedule, and updates regarding upcoming workshops and pop-up events. This web page is intended to provide the public with readily available information on the County's website where they may be already accustomed to finding information related to other County projects. This web page will be updated regularly as information and documents are made available. This web page will be formatted consistently with other County web pages but branded using the final logo and colors identified for the Osceola County Vision Zero Action Plan.

Online Mapping Tool

As part of the Central Florida Vision Zero regional initiative, an online interactive mapping tool will be developed for use as a public engagement tool for soliciting feedback. This tool will be designed to collect and analyze place-based feedback by asking the public to identify locations where issues exist and to share the location of specific improvements they would like to see. The tool will include relevant data for crashes and intersections and segments within the regional, county, and local High Injury Networks (HIN) to support the public input. This tool will be available publicly during the focused engagement phase of this project, currently anticipated to run primarily from January 2024 through March 2024, and will be accessible via a link posted the Osceola County Vision Zero Action Plan webpage. Following completion of the engagement phase, the results and feedback will be compiled and integrated into the final Action Plan.

Survey Tool

A survey tool will be developed to provide an additional opportunity for virtual input with the intent of reaching members of the public who may not be able to participate in in-person pop up events or workshops. Similar to the online mapping tool, this survey is expected to be available on the Osceola County VZAP web page for use during the public engagement phase. Following completion of the engagement phase, the results and feedback will be compiled and integrated into the final Action Plan.

Social Media

Social media will be utilized to provide project updates, share safety related information with the public, and provide notice regarding upcoming public engagement events and opportunities. Social media provides an opportunity to reach a wider segment of the population through a variety of channels and platforms. For the purposes of this plan, a schedule with proposed content was developed for publishing during the engagement phase of this project. Ideally, social media content will be published once a month with content consistent with the current project activities and tasks. Spanish content will also be provided for approval by the County's Project Manager and forwarded to the Public Information Officer (PIO) for posting on the appropriate social media accounts. The potential posting schedule is detailed in the table below:

Post	Proposed Date	Proposed Content	Channels
Post #1	January 2024	This post will be related to project kick-off; it will describe the project, identify milestone tasks, and invite the public to learn more at the Osceola County webpage. This will also utilize the project logo for official advertisement of branding.	
Post #2	January 2024	This post will summarize any engagement that has been completed and upcoming engagement. This post will also encourage the public to review the regional and countywide HIN data, check out the mapping tool, and take the survey.	X, Facebook,
Post #3	February 2024	This post will summarize any engagement that has been completed and upcoming engagement. This post will also encourage the public to review draft collision profiles and provide input at the online mapping tool and survey.	Instagram
Post #4	February/March 2024	This post will summarize any engagement that has been completed and upcoming engagement. This post can also focus on the importance of effective safety policy. The mapping tool and survey will be promoted.	

Post #5	March/April 2024	This post will summarize any engagement that has been completed and upcoming engagement.
Post #6	April/May 2024	This post will summarize any engagement that has been completed and upcoming engagement. This post will also encourage the public to review the draft projects list and strategies and review the Draft Plan.
Post #7	May/June 2024	This post will encourage the public to check out the final Action Plan.
Post #8	June 2024	This post will encourage the public to check out the final Action Plan.

In addition to these posts, social media will be utilized to advertise pop up events and public workshops up to two (2) weeks in advance of each event. Additional posts as the date approaches are also recommended to ensure that stakeholders and the public are adequately notified and reminded of upcoming opportunities for engagement and input. This effort will be coordinated by the County's Vision Zero Project Manager with the County's Public Information Office. All content for social media posts, including differing formats and visual materials, will be provided by the Consultant.

Stakeholder Engagement Techniques

Stakeholder engagement is an integral part of Action Plan development and helps to ensure broad understanding and buy-in of the Vision Zero Action Plan. Much of the strategy for engaging stakeholders is focused on intentional meetings to highlight the unique needs and interests of communities and groups throughout the County. To do this, the Consultant Study Team is supporting Osceola County with facilitation of a Steering Committee, development of training for elected officials and staff, presentations to County Commissioners, and direct outreach to key stakeholders to ensure that they are engaged and are able to provide feedback to development of the Action Plan and its implementation moving forward.

Steering Committee

The Steering Committee is comprised of stakeholders representing various agencies and organizations. The table below summarizes members, affiliation, and their perspective.

Member	Agency/Organization	Perspective
Joshua DeVries	Osceola County Transportation and Transit	Transportation
Isai Chavez	Osceola County Transportation and Transit	Transportation
Gary Yeager	Osceola County Transportation and Transit	Transportation
Cori Carpenter	Osceola County Community Development	Community Planning

Marianne Arneberg	Osceola County Transportation and Transit	Project Mgmt./Tracking
Tom Alexander	Osceola County Public Information Officer	Communications
Ron Cole	Osceola County Sheriff	Law Enforcement
Jerry Weiland	Osceola County Sheriff	Law Enforcement
Larry Collier	Osceola County Fire Rescue & EMS	Emergency Response
Orville Watson	Osceola County School District	Public Schools (Planning)
Ashley Cornelison	City of Kissimmee	County/City Coordination
Tammy Reque	City of St. Cloud	County/City Coordination
Cody Johnson	LYNX	Regional Transit
Ana McDougall	Florida Dept. of Health – Osceola	Public Health
Patrick Panza	Bike Walk Central Florida	Active Transportation
Vince Dyer	Bike Walk Central Florida	Action Transportation

The Steering Committee is structured to ensure that there is a framework for continued action to hold MetroPlan Orlando and other jurisdictions responsible and accountable for the implementation and monitoring phases of the Vision Zero Action Plan. The Steering Committee members are expected to attend the four meetings summarized in the table below as part of this initiative.

Meeting #	Proposed Topics Type	Proposed Format	Proposed Date
Meeting 1	Project Kick-off, VZ and Safe Systems overview, scope and schedule, initial vision, and goals	Virtual	November 2023
Meeting 2	Engagement approach (public workshops, pop-up events) and initial High Injury Network (HIN) discussion of other strategies	Virtual	December 19, 2023
Meeting 3	HIN, collision profiles, and crash hot spots	Virtual	January 30, 2024
Meeting 4	Engineering countermeasures, non- engineering countermeasures, policy recommendations, and input for prioritization	Hybrid (Virtual / In- Person)	February/March 2024

Staff and Elected Official Training

The Consultant Study Team, in coordination with Osceola County staff, will conduct a "Train the Trainer" workshop. This training will ensure program and implementation understanding at various levels of local government. This workshop will describe priorities, opportunities for SS4A funding, and highlights for plan implementation in Osceola County. Following this training, staff will then assist with facilitating a workshop for the Board of County Commissioners.

Additionally, five one-hour training sessions will be conducted with County Staff and the steering committee on foundational safety concepts to disseminate relevant information to their agencies or divisions. Training materials will include PowerPoint slides and videos of the live training sessions. Potential training topics include:

- Safe System Approach
- 4Es of Safety– Engineering, Enforcement, Education, and Evaluation
- Crash Modification Factors and Countermeasure Selection
- Benefit/Cost and Net Present Value analysis and Project Prioritization
- Highway Safety Manual overview and applications
- Complete Streets and Transportation Equity Considerations

Elected Official Outreach

As part of the engagement phase, elected officials will receive periodic updates and be provided with opportunities to give feedback as the plan progresses. This strategy is included to ensure political support and inform local officials of the overall initiative and their role in furthering the goals outlined within the Action Plan related to Vision Zero. This outreach will include presentations to the Board of County Commissioners and/or individual Commissioner briefings, informal presentations as requested, and optional training participation.

Targeted Stakeholder Outreach

An additional opportunity for engaging different perspectives includes targeted stakeholder outreach. In the event that an individual with relevant background or expertise is not a member of the Steering Committee, the project team will engage with them on an informal basis via Teams or a phone call to gain input from a diverse group of stakeholders as necessary. This type of outreach will likely include specific organizations and representatives that have not yet been identified.

Public Engagement Techniques

County-wide Public Workshops (6)

As part of a focused local in-person and/or virtual engagement strategy, six (6) county-wide public workshops will be conducted to gain feedback from the community about their transportation safety concerns and needs. These six events will be divided between three distinct geographic areas in Osceola County, in two (2) series of three (3) meetings with the initial round focused on initial Kick-Off and the second round focused on components of the Draft Action Plan. The table below provides an overview of the proposed meetings by type, location, format, and date.

MEETING #	MEETING TYPE	PROPOSED FORMAT	PROPOSED DATE			
Proposed Location 1: St. Cloud Community Center						
Meeting 1A	Workshop #1: Kick-Off	Facilitated Event	February 2024			
Meeting 2A	Workshop #2: Draft Plan Presentation	Open House	April 2024			
Proposed Location 2: Poinciana Community Center						
Meeting 1B	Workshop #1: Kick-Off	Facilitated Event	February 2024			
Meeting 2B	Workshop #2: Draft Plan Presentation	Open House	April 2024			
Proposed Location 3: West 192/Champions Gate Area (specific location TBD)						
Meeting 1C	Workshop #1: Kick-Off	Facilitated Event	February 2024			
Meeting 2C	Workshop #2: Draft Plan Presentation	Open House	April 2024			

These formats are described as follows:

Workshop #1 - Kick-Off (3 locations): The Kick-Off round of the County-wide Public Workshops will provide an overview of the project and provide safety data applicable to the County that has come out of the regional plan. This is intended to give attendees a baseline understanding of the program, MetroPlan's regional initiative, and the role Osceola County plays. The public will also be able to provide input regarding locations where they have experienced or observed safety challenges and issues.

Workshop #2 – Draft Action Plan Presentation (3 locations): This meeting will provide an overview of key components of the Draft Action Plan for public comment and feedback. This round of meetings will likely occur following the fourth VZ Steering Committee Meeting. Feedback received from the public will be documented and incorporated to better inform VZ Action Plan emphasis areas, goals, and strategies leading to its development.

In the event that these locations are not available, several alternative locations have been identified throughout Osceola County that include parks, community centers, libraries, and schools.

Pop-Up Events

Osceola County's engagement approach includes up to four (4) pop-up events throughout the County. These events are intended to provide informal opportunities for the project team to interact with the public and inform, educate, and receive feedback regarding this project. These events are

intended to be loosely structured around milestones related to the project schedule. The table below provides an overview of how these meetings can be organized.

Meeting	Project Milestone for Info Sharing	Proposed Date Range
Pop Up 1	Introduction to the Plan	January 2024
Pop Up 2	HIN, Crash analysis	February 2024
Pop Up 3	Countermeasures, Projects	March 2024
Pop Up 4	Draft Plan, Implementation	April 2024

At these events, action plan materials and information from the public workshops will be shared and available for review by the public. Opportunities for events include farmer's markets, local festivals, or downtown events in different municipalities throughout the County as appropriate. These events are anticipated to occur throughout the life of the project as they are identified. Specific tools and approaches will be selected based on the context of the event; however, these events are intended to be more informal and will include the survey or online mapping tool to help easily solicit input from interested members of the public.

Appendix D:

Policy Benchmarking

Policy Review and Benchmarking Assessment

The plan and policy review involved assessing current relevant Osceola County policy and programs against the Safe System Approach and Vision Zero benchmarking elements. The table and benchmark approach were developed as part of the regional MetroPlan Vision Zero Action Plan to provide a consistent framework to understand the current state of safety at each local agency. Vision Zero has eight core elements:

- Public, High-Level, and Ongoing Commitment
- Authentic Engagement; Strategic Planning
- Project Delivery
- Complete Streets for All
- Context-Appropriate Speeds
- Equity-Focused Analysis and Programs
- Proactive, Systemic Planning
- Responsive, Hot Spot Planning
- Comprehensive Evaluation and Adjustments.

The document policy review is summarized in **Table 1** (begins on page 2).

Based on the policy review summary, the benchmarking tool was used to provide a high-level assessment of the overall status of how safety is incorporated and prioritized within existing policies and processes. The policy review and benchmarking assessment are summarized in **Table 2** (begins on page 30).

Table 1. Document Review Summary

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
		The County commits to reducing bike and pedestrian crashes by endorsing VZ.	County bike and pedestrian crash data is cited.		Public, High-	The adopted Vision Zero resolution involves all County Departments and directs the Transportation and Transit Departments to create a Vision Zero Action Plan. Vision Zero goal year will be revised to 2050, to align with the MetroPlan region's Vision Zero approach.
Vision Zero (VZ) Resolution 2022	The County adopts Resolution to create a Vision Zero Action Plan.	The County will create a VZ action plan that focuses on safety.	4 Smart Growth America's "Dangerous by Design" reports are referenced.	N/A	Level, and Ongoing Commitment	
		The County commits to eliminating traffic deaths and serious injuries by 2040.	N/A		Public, High- Level, and Ongoing Commitment	
Comprehensive Plan (Future Land Use) (last updated 2019)	Land Use Code from Osceola's 2040 Plan. Establishes goals, zoning districts, with design and street requirements for those districts.	Policy 1-1.2.12 Mixed use districts: primary priority is the creation of a safe, comfortable, and attractive pedestrian environment that emphasizes accessibility; vehicle mobility is secondary. A pedestrian environment is formed through provision of sidewalks, street trees and onstreet parking capable of providing a distinct separation between pedestrians and traffic; an inviting public space is created by streets, sidewalks and buildings, which are arranged in such a way that they are unbroken by surface parking lots; a safe and attractive setting is created with adequate	N/A	Pedestrian Facilities, street trees, buffer separation, lighting, signage, and on- street parking.	Complete Streets for All	All land in the Urban Growth Boundary's Urban Expansion Area is designated as Mixed-Use.

Osceola County Vision Zero Action Plan

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
		lighting and signage which has a pedestrian orientation.				
		Objective 1-1.9: Redevelopment The County will maintain an inventory of communities containing substandard structures and infrastructure such as roads and prioritize redevelopment according to blight.	N/A	N/A	Equity- Focused Analysis and Program	
		Policy 1-1.2.16 Urban infill: To promote integrated environments that encourage walkability and transit use through compact development and design standards.	N/A	Wider sidewalks, on- street parking, traffic calming, appropriate lighting heights and intensity for location and function, landscaping, street furniture, and necessary transit improvements.	Complete Streets for All	

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
Comprehensive Plan (Transportation Element) (last updated 2019)	Transportation Code from Osceola's 2040 Plan. Establishes goals coordination, a multimodal system, funding and implementation, and maps.	Policy 6-1.2.3 Monitoring and Evaluation: The County will document and track the degree to which adopted transportation policies are being implemented year over year. The following variables will be recorded: • Automobile (roadway lane-miles, added miles since previous year), • Public transportation (LYNX route-miles of service, existing ridership, ridership change year-on-year, Sunrail ridership, • Bicycle/Pedestrian (Miles of sidewalk, miles added since previous year, off-street trail miles, added miles since previous year).	Variables and measures, including ridership information and travel data, were not provided.	N/A	Comprehensi ve Evaluation and Adjustments	Capital Improvement programming will be refreshed annually through monitoring and evaluation of variables. Safety variables need to be recorded as well.
		Policy 6-3.3.3: Prioritization for construction of missing and planned sidewalk segments shall be guided by an ADA Framework and Transition Plan and any future updates.	N/A	Pedestrian Facilities.	Strategic Planning	Synergies with ADA transition Plan implementation to complete sidewalk network.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
		Policy 6-3.1.3: Complete Streets. Osceola County will plan for, design, construct, operate, and maintain a safe, convenient, comfortable, and integrated connected network that provides mobility options for users of all ages and abilities regardless of their mode of transportation.	N/A	Complete Streets design elements.	Complete Streets for All	Implement complete streets projects as part of the Vision Zero action plan implementation.
		Policy 6-3.3.2: The County shall minimize potential conflicts between and among automobiles, bicycles and pedestrians.	N/A	Pedestrian Facilities, Bikeways, Intersection and Roadways.	Proactive, Systemic Planning	Implement context-sensitive designs that will safely separate bicyclists and pedestrian from automobile traffic where appropriate.
		Policy 6-4.1.1 Indicators to evaluate functional effectiveness of the network will be: Population, Employment, Travel characteristics (average vehicle commute trips, average non-vehicle commutes, average trip length), transit service weekday average headways to subareas, average residential and employment density within a quarter mile walking distance of a transit route/link, increase in effective network connectivity (percent of street centerlines	N/A	N/A	Comprehensi ve Evaluation and Adjustments	Missing safety data indicators: all collisions, severely injured and killed, speeding, drunk driving, etc.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
		miles within a 1/4 mile of transit).				
		OBJECTIVE 6-4.3 Best Practices for Transit: For corridors identified in this element as higher density and intensity, the County shall focus its premium transit network and promote a system designed to serve high-use areas with greater transit options. The County shall connect high ridership areas and high employment areas, focusing on direct transit routes between these key areas. Transit for Economic Development (areas with most opportunity to increase economic development potential), Transit for Community Development (reinvest in blighted or redevelopment areas and increase property values).	N/A	N/A	Equity- Focused Analysis and Program	High-use, high-intensity areas may not be able to afford a 'premium' transit service. Equity is not specifically named throughout this policy. Important to clarify how this service will respond to specifically low-income, homeless individuals.
		Policy 6-4.1.2: Transportation System Management strategies to maintain accessibility to, efficiency of, and mobility on, existing roads.	N/A	Use Intelligent Transportation Systems, spot roadway improvements, and other traffic controls.	Proactive, Systemic Planning	Does not explicitly mention safety applicability of these tools.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
Comprehensive Plan (Capital Improvements Element) (last	Plan (Capital Osceola County Comprehensive	Policy 14-1.2.3 CIP Project ranking for assigning funds is partly based on the variables set out in 6-1.2.3. Ranking will also be set on the degree of urgency, departmental priority, overall County needs, and consistency with the County's Strategic Plan.	Project ranking will take into account: safety, applicable LOS, required by legislation, efficiency, economic advantage, and other factors.	N/A	Proactive, Systemic Planning	Missing guidance to ensure continued access during construction phase. The County prioritized funding for safer, multimodal infrastructure through its Comprehensive Plan, installing red-light running cameras at key intersections, and implementing safety countermeasures such as curb extensions and roundabouts.
updated 2019)	strategies to deliver the current CIP 2021-2025 on time and within budget.	Policy 14-1.2.7 The Five-Year Schedule of CIPs will further the goals, objectives, and policies of the Future Land Use and Urban Growth Strategy elements of the Comprehensive Plan.	N/A	N/A	Strategic Planning	The Urban Growth zone has the most progressive land use code and strategy (see Osceola County Comprehensive Plan Future Land Use). The County will direct new capital improvements to areas within the Urban Growth Boundary unless a different improvement addresses an existing public safety issue.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
Comprehensive Plan (Housing Element) (last updated 2019)	Housing goals for Osceola County. The County shall endeavor to create housing that is decent, safe, sanitary, accessible, affordable, and available to all.	Policy 7-1.4.1 Affordable Housing Development will be incentivized for public, private, and non-profit sectors. Incentives include parking modifications, impact fees deferred until Certificate of Occupancy, Mobility Fee relief, and expedited development review, approval and permitting process.	N/A	N/A	Equity- Focused Analysis and Program	Affordable housing on or near the HIN can be supported by safety projects.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
Comprehensive Plan (Parks and Recreation) (last updated 2019)	Parks and recreation goals for Osceola County. The County will provide leisure facilities for physical health, relaxation, and quality of life for all County residents and visitors.	OBJECTIVE 8-1.2: Ensure adequate provision of parks and recreation facilities throughout the County and monitor progress.	N/A	N/A	Strategic Planning	Synergies with parks and recreation to provide pedestrian and bicycle facilities.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
		Policy 8-1.2.1 Maintain Land Development Code standards to ensure citizens' ability to walk and bike in their neighborhoods to playgrounds or open space. Close gaps in the bike/ped network to improve access to recreational facilities. A network gap analysis for existing parks shall be incorporated in the planning of any new park facility and needs shall be identified in the Capital Improvements Element for potential funding. Policy 8-1.2.4 The County shall pursue private and public funding sources, such as Florida Recreation Development Assistance Program, Florida Forever, and any suitable foundation grants. 8-1.2.5 Bonds; 8-1.2.6 Parks Impact Fee.	N/A	Pedestrian Facilities and Bikeways.	Strategic Planning	

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
Comprehensive Plan (East of Lake Toho [ELT], South Lake Toho, Alligator Chain of Lakes) (last updated 2019)	Goals for the three development areas in Osceola County. The County will use long-range, large-scale planning consistent with the policies described for Mixed Use Districts (1-1.2.12), to provide a livable place with housing, sustainable economic development, environmental protections, and reduced VMTs.	GOAL 2-1/GOAL 3-1/GOAL 4-1: - ACHIEVING SMART GROWTH. to balance social, environmental, and economic sustainability to form enduring places for people to live and thrive. This goal can be achieved by using long-range, large-scale planning to accommodate sustainable economic development and contribute to a sound tax base, alleviate the pressure for urban sprawl, and reduce vehicle miles traveled by linking road and transit networks.	N/A	N/A	Strategic Planning	The County is promoting smart growth communities, and smart growth principles to reduce vehicular trips both within and external to Mixed Use Districts.
Land Development Code	The Code constitutes a complete codification of the ordinances of Osceola County, Florida.	ARTICLE 3.11 - A Planned Developments are meant to function as integrated units, provide a high quality of living and working environment by being pedestrian and bicycle friendly, being environmentally sensitive, being visually pleasing, containing recreation and functional open space, and being compatible with surrounding land use. 3.11E Transportation and Access - Individual	N/A	Pedestrian Facilities and Bikeways.	Strategic Planning	The policy establishes flexibility for developers to honor the objectives. However, no objectives are established for safety, except for "pedestrian-friendly" developments.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
		development sites will have internal circulation systems sensitive to safety, convenience, and access. Internal roadway design should incorporate sidewalks and bike paths. 3.11F Planned developments will develop internal greenways to provide open space opportunities. They can be used for walkways, recreational pathways, bike paths, or wildlife corridors.				
		ARTICLE 3.13 - Mixed Use District Development Standards are intended to create mixed-use communities consisting of bicycling, pedestrian, and transit-oriented centers of commerce and employment, and walkable residential neighborhoods.	N/A	N/A	Complete Streets for All	No building setbacks, all buildings will have public/private transitional space. Encroachments, like awnings, are allowed to extend into the public sidewalk. Pedestrianoriented lighting
		ARTICLE 4.4 - Access management should match the Comprehensive Plan and Florida Administrative Code. 4.4.5 F -INTERSECTION IMPROVEMENTS. Intersections created by construction of commercial subdivision entrances and roads connecting to existing roadways may require improvements, such as but	N/A	Traffic signals, Signing and striping, driveways, speed change lanes, turn lane alignment, sight distance, access grades, drainage, intersections and roadways.	Complete Streets for All	Clearances, spacing, connectivity are determined based on peak traffic, posted speed. Connectivity should not require numerous turning movements or T intersections.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
		not limited to deceleration/acceleration/lanes, left turn lanes, bypass lanes and signalization. The criteria for determining the need for such improvements will include existing and projected traffic on both roads, horizontal and vertical alignment of the road to which the entrance road is to be connected, future road improvement plans, and sight distance along the ROW. 4.4.5 G - ROADWAY AND MULTIMODAL IMPROVEMENTS. For local streets and avenues/boulevards or Premium Transit Corridors providing access within a development, or adjacent to a development, right-of-way shall be provided, and improvements constructed with the development of the project.				
		ARTICLE 4.7 - TRANSPORTATION STANDARDS: Roadway design standards are mostly determined by Florida and federal rules.	N/A	Pedestrian amenities, buffered bike lanes, on-street parking, intersections, traffic calming, medians, sight distance.	Project Delivery	Sidewalks not required outside UGB and in Rural Enclaves. Complete Streets Policy should be referenced for specifics of road development. Safety, traffic signaling systems, and roundabouts are not mentioned. New MUTCD update includes new street design elements that could

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
						be incorporated in the county road design construction specifications. Mixed Use, Urban Infill Centers, and Traditional Neighborhood Development areas will rely on "An ITE Recommended Practice manual: Designing Walkable Urban Thoroughfares: A Context Sensitive Approach".
		4.7.3 Traffic Calming. Local streets will include physical measures and visual cues to limit excessive speed, without relying on ticketing. Mixed-use and residential developments will be designed for a target speed of 25mph. Traffic Calming devices will be installed on local streets or avenues and boulevards, where the average daily traffic is <2000 vpd, the roadway is >1500 feet long, the posted speed is 35mph or less, the median speed is at least 25% over the posted speed.	ITE Manual controls are the ones recommended. County Manager's sole opinion can justify installation of any device for maximum safety outcome.	Traffic calming design controls.	Context- Appropriate Speeds	Revise the Traffic Calming Policy, HIN Corridors should automatically qualify for traffic calming treatment.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
		required on all premium transit Sidewalk should be separated from the roadway by the roadside clear zone (minimum 3 feet), or if constrained, the Curb ramps will be installed at	N/A	Pedestrian amenities, curb ramps.	Complete Streets for All	Recommend: making this standard across all intersections.
		Developments within 1/2 mile of mass transit will support the Pay for the installation of transit shelters and lighting, turn-out facilities, super bus stop or transit transfer station, sidewalk fund from transit stop to existing pedestrian network, an approved landscape enhancement. Can also pay the County for these features Install pedestrian crossings with enhanced pedestrian signals. Provide shading. All private sidewalks adjacent to	N/A	lighting, pedestrian landscape, signals, signing and striping, bicycle parking.	Strategic Planning	Developers will be required to select and comply with any 3 of the listed mitigation strategies.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
		shaded. Construct bike-transit center on-site, enhance County trail network for multimodal transportation (trail amenities, bicycle parking, land acquisition, additional entry to the network, pedestrian bridges). Create a transportation demand management plan to encourage employees and residents to use caralternative modes. The developer will provide the County an annual operations report for at least 10 years, especially indicating reductions in SOV trips.				
Traffic Calming Devices Application Policy & Procedures	Policies and procedures for the uniform application of traffic calming measures in Osceola County. Also includes guidance for homeowners applying for traffic calming treatments in their neighborhood.	Apply the least restrictive and least expensive calming design needed to improve outcome.	Traffic Studies per Homeowner petition and requests	Traffic calming.	Proactive, Systemic Planning	No listed proactive approach for identifying traffic calming needs. No listed recommendation for engaging the public. Includes the form for applying for a traffic study but does not include examples or explanations of calming devices.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
Transportation & Transit Golf Carts on Public Roads Policy and Procedure	Osceola County prohibits golf carts on public roads, unless supported by an engineering study and approved by the Board of County Commissioners. Homeowners can apply for a transportation study, costing them up to \$6,500.	Determine whether the local community, neighborhood, or park is safe for golf cart use.	The study includes study limits, historical crash data (minimum 3 years), spot speed study, golf cart operation warrant analysis, and recommendations.	N/A	Proactive, Systemic Planning	The New Jersey Municipal Excess Liability Safety Institute recommends including passive restraints to prevent falls, and downhill driving safety measures.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
Micro Mobility Devices Ordinance (2020)	A county ordinance allowing micromobility device operations on unincorporated County roads. Ordinance was written in response to a recent influx of micro-mobility devices in the County, many of which have been abandoned on public rights-ofway and property, creating potential public safety hazards throughout the unincorporated County.	Sec. 18-132 Micro-mobility devices can only operate on designated roads, sidewalks, and bicycle paths.	Cited risk of increase in accidents with visitors and new micro-mobility users but recognizes value of micro-mobility and wants to encourage alternate modes of transportation. County engineering staff will conduct a traffic study to determine safety of travel in the proposed area. The study includes study limits, historical crash data (minimum 3 years), spot speed study, operating hours, micro-mobility warrant analysis, age restrictions, safety plans, enforcement measures, public awareness, recommendations.		Proactive, Systemic Planning	Create parking facilities for neat pick-up and drop-off of shared micromobility devices.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
Red-Light Cameras Safety Program (2020)	FAQ document illuminating the County's response to the red-light running problem throughout the County.	Increase public safety by reducing red-light crossing violations by drivers.	2019 AAA Foundation data reports more than two people dying every day in red light running crashes.	Speed cameras.	Context- Appropriate Speeds	Verra Mobility provided red- light and speed camera enforcement at 20 intersections in Osceola County. Drivers are served a \$158 fine upon a Notice of Violation. It will turn into a Uniform Traffic Citation if not paid.
Street Lighting Policy (2001)	Policy document and application to establish criteria for installing streetlights. These do not supersede Ordinances in subdivisions or interlocal agreements.	Streetlights should be provided to improve public safety and reduce crashes.	Where a county roadway intersects with another roadway and at least one speed limit is greater than 45mph, or where the County Engineer determines a streetlight would improve public travel safety.	Streetlights, Pedestrian lighting.	Complete Streets for All	Deadly crashes can happen below 45mph, particularly for vulnerable road users like pedestrians. Recommend revising this policy to protect vulnerable road users. Recommend revising section about pre-dawn school bus stops for children to review school bus stop system and street light inventory. Equity issue to wait for significant requests from parents.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
Strategies for a Sustainable Future Report 2017	Report describing the recent achievements and future goals of the sustainability report. The County's transportation projects a	The County's approach to planning is moving away from policy and mitigation toward character-based development standards. Transportation Funding Initiative recognized the lack of available funds for transportation projects and made recommendations to increase transportation economic sustainability. Funding is now based on increased value associated with plan implemented development, instead of prepayment of anticipated impacts through development fees.	N/A	N/A	Project Delivery	It is recommended that safety goals, evaluation metrics, or implementation targets or timelines. County staff does not have to wait for official policies to set standards for specific areas or projects, to achieve the County's transportation planning goals.
Community Health Improvement Plan 2020-2025	Most current installment of the county health assessment undertaken every 3-5 years. The CHIP identifies key health needs and issues and is a long-term, systematic effort to address public health issues.	GOAL SD6.0: Advance environmental conditions that promote well-being. Improve the time it takes for all users (auto, transit, cycling, pedestrian) to reach their destination. Measure trip commutes by mode (auto, transit, cycling, pedestrian) to ensure access is improving	N/A	N/A	Equity- Focused Analysis and Program	Lack of transportation was a barrier to health care access and employment. High rates of inactivity, 80% of middle and high school students have insufficient activity levels, recommend more and better bike/ped infrastructure.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
2021 Best Food Forward: Operation Crosswalks	Expansion of the Best Foot Forward coalition based on success in Orange County. Each year, the Steering Committee chooses a number of crosswalks to monitor and enforce.	Goals: Use partner organizations to spread the word; Get more drivers to yield and stop for pedestrians in crosswalks.	Selected crosswalks to monitor and enforce based on presence in high- crash corridors, proximity to schools, LYNX bus stops, SunRail stations, resident complaints, or other planned countermeasures.	Intersections.	Authentic Engagement	Coalition partners volunteered to help monitor and/or enforce the chosen crosswalks.
Funie Steed Road Corridor Study 2022	Transportation study of a local road and recommendations for safety.	The goal of the study was to determine the need for any improvements to enhance the operational efficiency and safety of motor vehicles, pedestrians, and bicycles at the study intersections.	133 crashes reported within 4 intersections in a 5- year period, with 130 injuries and 0 fatalities.	Traffic signals.	Responsive, Hot Spot Planning	Drivers in the study area were travelling above the posted speed limit in excess of 9-18mph in a 30 and 35mph speed limit corridor. Pedestrian and bicycle volumes were very low, indicating low bike/ped mode use and likely uninviting bike/ped environment.
ADA Transition Plan 2021	Initial transition plan for infrastructure services in the public ROW. Document discusses county program and facility accessibility,	Enhance the Comprehensive Plan, County Ordinances, and Design Standards to further ADA compliance efforts within Osceola County. Implement projects to mitigate ADA barriers through the Capital Improvement Program (CIP).	N/A	Pedestrian amenities, Sidewalks, Curb Ramps, Handrails.	Equity- Focused Analysis and Program	Annual Funding Scheduled, funded, and implemented by Public Works' Capital Improvement Projects. Sidewalk gaps were identified on 12 roadways, with Pleasant Hill Road and Buenaventura Boulevard representing 36% and 26% of the identified sidewalk

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
	designates responsible officials for implementation, self-evaluation, and prioritization. Also sets up a schedule and funding for barrier mitigation.					gaps, respectively. Aside from missing sidewalk, the most predominant barrier identified within existing infrastructure were damages.
Osceola Parkway Arterial Analysis (2020)	This report documents the existing conditions of the corridor.	To provide short-, medium-, and long-term recommendations to address safety, congestion, and operations along a 3.5 mi study area of Osceola Pkwy.	Data collection included travel time and delay studies, a crash analysis, peak-hour traffic counts, condition diagrams, and field observations. 739 crashes from June 2017-June 2019. 238 Injury crashes, 411 injuries including 34 serious injuries, and 2 fatalities. 8 bikeped crashes, most occurred at night.	Lighting, extend or add turn lanes, sidewalk, Adaptive Signal System, ADA connectivity.	Responsive, Hot Spot Planning	Few bicyclists and pedestrians. Significant queues from long signal cycles, especially for left-turn lanes. Short-, medium-, and long-term recommendations are provided, but no prioritization.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
Buaneventura Boulevard Complete Streets Feasibility Study (2020)	The Study evaluated the feasibility of incorporating Complete Streets improvements along Buenaventura Boulevard from Simpson Road to Osceola Parkway. The study concluded in June 2021.	Based on the findings of the safety assessment, potential opportunities were identified to improve safety for bicyclists and pedestrians, as well as reduce the overall frequency and severity of crashes along the corridor.	2014-2019 Crash data and patterns were obtained from Signal Four Analytics database. Highest density at major intersections of Simpson Rd and Osceola Pkwy. 4 crashes involved 1 or more fatalities. 10 bicycle and 9 pedestrian crashes, including one pedestrian fatality.	Lower speed limit, reduce corner radii, pedestrian signals, wider sidewalks, roundabouts, add textured pavement, Access Management.	Context- Appropriate Speeds	Report makes a note that improvements may be phased but does not provide prioritization recommendations. A 60-respondent survey of residents reported 70% of residents considering speeding a problem, and 80% have difficulty turning on or off the boulevard.
Best Foot Forward MetroPlan Pedestrian Safety Program (2022)	Introduces BFF Program and plans for MetroPlan to seek funding, improve safety and eliminate fatalities and serious injuries.	BFF is 3 counties, 11 municipalities, 12 law enforcement agencies and 36 total community partners. Each year, the coalition has graduated crosswalks off the list of highly dangerous (low-driver compliance) crosswalks through low-cost engineering, high-visibility enforcement and consistent education to change driver behavior.	Analysis of Central Florida crash data from 2015-2020 indicates, 2018- 2019 had a 22% increase in pedestrian fatalities from 73 to 89, the highest ever.	N/A	Proactive, Systemic Planning	Four out of five pedestrian deaths occur at night, to working-age adults on high-speed roads with posted speeds above 40mph. Opportunity to partner with BFF on projects, enforcement, and education campaigns implementation. Seeking funding from the Florida Legislation to expand the Best Foot Forward Program.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
Operation Best Foot Forward: Back to School (2023)	Law enforcement and deputies did a two-week pedestrian safety initiative in the three counties to keep students safe on the way to school.	Change behavior: getting more drivers to yield and stop for pedestrians in crosswalks. Officers issued 254 warnings and citations to drivers failing to yield to pedestrians at 21 local crosswalk locations.	Drivers in Central Florida are only yielding to pedestrians in school zones 43% of the time. Child pedestrian mortality have increased 11% since 2013.	N/A	Public, High- Level, and Ongoing Commitment	Operation used plainclothes officers crossing streets and issued a \$164 citation and 3 points on their license. Conflicts with VZ equity recommendation to reduce potential disproportionate enforcement. Crosswalk enforcements were also attended by elected officials, and coalition partners, it was broadcast to local news channels.
Bicyclist Safety Action Plan Osceola, Orange, and Seminole Counties, Florida October 2019	The goal of the Pedestrian and Bicyclist Safety Action Plans are to provide a data driven approach which helps identify countermeasures to reduce all types of pedestrian/bicyclist related crashes. This plan focuses on bicyclist strategies.	Develop safety action plans to improve safety for pedestrians and bicyclists by linking countermeasures to crash types through Critical Safety Success Factors (CSSF)	Historical crash information to identify "hot spots". Pedestrian and Bicyclist crash data was received from MetroPlan Orlando for the 2011 through 2017 time period, including data for each of the three counties in the study area (Osceola, Orange, and Seminole).	Identified and categorized countermeasures by their type: behavioral, design, and control. This plan provides a brief summary of bicyclist and pedestrian crash countermeasures, with expanded countermeasure details.	Proactive, Systemic Planning	Identified Critical Safety Success Factors (CSSFs) for each crash type. Recommends producing implementation plans for the key behavioral, design, and control countermeasures that are identified in the Bicyclist Safety Action Plan.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
Pedestrian Safety Action Plan Osceola, Orange, and Seminole Counties, Florida September 2019	The Pedestrian Safety Action Plan provides an overview of past studies and historical crash information, review crash typing and cause profiling, discuss Critical Safety Success Factors, identify pedestrian countermeasures and opportunity for impact, and review next steps.					
2045 MTP – Tech Series 9 – Pedestrian & Bicyclist Needs Assessment (2023)	This memo summarizes the needs assessment for the bicycle and pedestrian network and identifies potential projects to address those needs as part of the 2045 MTP.	Objective: Eliminate the rate and occurrence of transportation system fatalities, injuries, and crashes with high emphasis on the most vulnerable users.	Data from the East Central Florida Regional Planning Council's (ECFRPC) LOTIS (Land Overlayed on Transportation Information System) was reviewed, analyzed, and mapped. Data can be viewed here: www.MetroPlanOrl ando.org/maps- tools/dataviewer	N/A	Complete Streets for All	Prioritize pedestrian and bicycle infrastructure in major activity centers. Proactively leverage resurfacing to implement/retrofit bicycle and pedestrian facilities and traffic calming. Improve bicycle and pedestrian access around schools.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
Southeast Area Transportation Study (SEATS) Osceola County, Florida (August 2023)	SEATS roadway segment analysis, 2045 buildout of the SEATS developments, and related Phasing Plan.	The goal of the SEATS study is to evaluate the transportation network through the planning horizon year of 2045, identify the impact to the network from the 12 developers and identify the number of lanes that will be needed within the roadway system in 2045.	Traffic projections, roadway network, traffic operations (i.e., Level of Service, volume to capacity ratio). Developed year 2030, 2035, 2040, and 2045 modeling scenarios (socioeconomic data and roadway network), using the approved Osceola 2045 SEATS travel demand model.	N/A	Project Delivery	Coordination with the City of St. Cloud for the JPA Transportation Implementation activities.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
County Trails Feasibility Study (April 2019) & Appendix B. Individual Project Summaries	This Study includes a comprehensive review of the County's existing trail network, proposes new trail routes and evaluates the feasibility of the network improvements.	The goal is to achieve a Trail Network that enables active transportation on a system that embraces existing natural features and includes amenities such as landscaping and other design elements.	Bike/Pedestrian Crash Frequency Years 2011-16 (Graduated scoring based on total bike/pedestrian crashes per mile of the trail corridor) was one of the eight categories for quantitative project scoring to support the prioritization.	Among the recommendations are pedestrian lighting, trail buffer, ADA accessibility, security guidance through CPTED (Crime Prevention Through Environmental Design) principles; wayfinding signage and treatments such as leading pedestrian intervals or dedicated phases, Rectangular Rapid Flashing Beacons, high emphasis crosswalk pavement markings, and curb extensions where practical.	Strategic Planning	A list of eight high priority projects were identified: Bill Beck Trail Vineland Connector Trail Shingle-Poinciana SunRail Trail Partin Settlement Trail Reaves Trail Buenaventura Trail Boggy Creek Trail Neptune Road Path Trail
US 192 Alternatives Analysis Final Report December 2013	US 192 is a corridor of regional significance for Central Florida. This study evaluates alternatives for the potential improvement and expansion of transit service along two	1. Improve Mobility and Transportation Access 2. Enhance the Livability and Economic Competitiveness of the Study Area through an Improved Transportation System 3. Develop the Most Efficient Transportation System, Which Maximizes Limited Resources for the Greatest Public Benefit	FDOT Traffic Database Daily Roadway Volumes and LOS Information. The Florida Department of Transportation reports that there have been 3,780 total crashes with	N/A	Project Delivery	Roadway infrastructure, high speed limits (40 mph to 55 mph) and congestion found in the majority of the corridor present a safety concern for pedestrians and bicyclists. Bus stops within the Study Area are not optimally placed at/near signalized intersections which results in

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
	corridors, primarily located in Osceola County, Florida and results in the selection of a Locally Preferred Alternative (LPA).	4. Develop a Transit System Consistent with Adopted Local and Regional Plans and Policies 5. Preserve and Enhance the Environment, Natural Resources and Open Space	36 fatalities for all modes in the study area between 2007 and 2011.			safety concerns and disincentives to choose transit due to poor accessibility. The data suggests that bicycle / pedestrian safety is a significant problem within the Study Area.
Osceola County Sheriff's Office S.M.A.R.T Motorcycle Safety Program	SMART Training course is designed to help students ride safely by improving control and skill while negotiating commonly found street riding situations.	To educate motorcycle riders from highly skilled motorcycle officers to improve their safety maneuvers.	N/A	N/A	Proactive, Systemic Planning	No classes offered in 2023. Recommend continuing the program as part of Vision Zero non-infrastructure strategies.
Strategic Plan 2023-2028	Developed by the County Commission and endorsed by their board, to present county-wide priorities and projects for the next five years.	Collaboration with regional partners such as FDOT to fund safety projects.	Short term traffic relief project lead by the transportation and transit department.	N/A	Strategic Planning	Demonstrates follow- through on intersection improvements suggested in the Osceola Pkwy Study. Employ traffic signal engineer to review signal timing through a TMC, monitoring intersections and using intersection cameras to move traffic during traffic incidents and emergencies.

Document Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Opportunities for Policy/Process Refinement
Osceola County Site Design and Development Standards (Adopted 2015- 2017)	Document to establish standards to protect the environment, flood damage prevention, access management, stormwater management, lot and block design, transportation, landscaping, utilities, public service requirements, soil excavation and ROW utilization requirements.	Mixed Use Districts and Mixed- Use zoned land should respect standards established by Article 3.13 of the Comprehensive Plan.	N/A	N/A	Comprehensi ve Evaluation and Adjustments	ADA compliance within the Public Right-of-Way and the 11th edition of Manual on Uniform Traffic Control Devices (MUTCD).
Transportation Impact Analysis Procedures & Requirements 2023	Standardized methodology for undertaking a traffic impact analysis for Tier 2 and Tier 3 assessments.	An evaluation of alternative modes such as transit, bicycles, and pedestrians, shall be included to measure and monitor the functional effectiveness for these modes.	Intersection conditions, multimodal assessments, mitigation strategies, propose growth rate for calculation of future traffic, provide dates of any traffic counts used in the analysis.	N/A	Strategic Planning	An evaluation of alternative modes such as transit, bicycles, and pedestrians, shall be included to measure and monitor the functional effectiveness for these modes. The inclusion of safety into the Transportation Impact Analysis will enable the development of safer roadways by highlighting safety issues during the project development phase before any construction is completed.

Table 1. Benchmarking Assessment Tool

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes / Opportunities for Policy/Process Refinement		
Category: Leadership and Commitment							
Public, High- Level, and Ongoing Commitment	Agency leadership has made a public commitment to the goal of eliminating traffic fatalities and serious injuries within a specific timeframe.			х	Osceola County Vision Zero (VZ) Resolution: Adopts a goal of eliminating traffic deaths and serious injuries by 2050 and endorses VZ.		
	Agency leadership is consistently engaged in prioritizing safety via collaborative efforts.		х		Osceola County VZ Resolution: Endorses VZ as an approach that involves all County departments. Directs the Transportation & Transit Department to create a VZ Action Plan.		
	Key stakeholders have made a clear, public statement in support of Vision Zero efforts and timeline.		х		There are specific stakeholders such as MetroPlan Orlando, Best Foot Forward and the Cities of Kissimmee and St. Cloud working towards VZ.		
	An interdepartmental safety working group regularly coordinates with leadership to discuss progress.	х			This is one of the desired strategies of the steering committee.		
Authentic Engagement	The agency conducts outreach to specific communities, interests, and populations.			х			

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes / Opportunities for Policy/Process Refinement
	Public meetings and workshops are hosted regularly and at times and locations convenient for the community.			х	
	The community, including historically disadvantaged communities, trust and feel engaged by the agency.	Ś			
	The stakeholder groups are representative of the community at large.	Ś			
	The agency engages regularly with community-based organizations and leaders.		Х		
	The agency recognizes the value of community input by providing grant opportunities made in partnership with community-based organizations and nonprofits supporting Vision Zero work.	Ś			
Strategic Planning	Crash data is collected regularly and used to inform decisions before plan development.	х			Osceola County is interested in optimizing this procedure and collaborate with the County's Sheriff's office.
	The agency augments traditional crash data from police data with data from other sources, such as hospitals.	х			Osceola County is interested in optimizing this procedure and collaborating with the County's Sheriff's office.

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes / Opportunities for Policy/Process Refinement
	The agency has established an appropriate timeline to reach zero traffic fatalities.			x	Osceola County VZ Resolution: Eliminate traffic deaths and serious injuries by 2050.
	The agency has established near-term and interim goals for achieving zero traffic fatalities.	х			Benchmark will be developed as part of the Vision Zero Action Plan.
	The agency has delineated clear action items to achieve each goal.	х			Benchmark will be developed as part of the Vision Zero Action Plan.
	A lead department or position has been established for each action item.	х			Benchmark will be developed as part of the Vision Zero Action Plan.
	The lead agency for each action item identifies partners to help complete the action.	х			Benchmark will be developed as part of the Vision Zero Action Plan.
	The agency has determined appropriate funding needs for each action item.	х			Benchmark will be developed as part of the Vision Zero Action Plan.
	The agency has maintained a Vision Zero website to inform the public about the initiative's progress; this could include a link to regional resources from the agency's home page.	x			The County created a section dedicated to Vision Zero on the website.
	A third-party audits Vision Zero progress and reports outcomes on the website.	х			
	Departments and staff are provided resources for safety related training and staff development.	Ś			
	Staff at multiple levels and in multiple departments are safety champions to ensure continuity when a safety champion departs.		х		

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes / Opportunities for Policy/Process Refinement
	Adequate policies related to equitable transportation have been formulated.	х			
	The agency has determined suitable performance measures to assess equitable transportation.	х			
	Adequate policies related to multimodal transportation have been formulated.		x		The comprehensive plan includes goals and policies that support and encourage a multimodal transportation system.
	Suitable performance measures to assess multimodal transportation have been established.		х		
	The agency has developed policies to maintain bicycle and pedestrian facilities during construction projects that affect roadway operations.		х		
	The agency has established an efficient citizen request process and a methodology for evaluating requests.		х		The traffic calming and micromobility policy provides for citizen requests. However, there isn't a policy to request complete streets projects or bike/ped infrastructure.
Project Delivery	Adequate policies related to transportation safety have been formulated.	х			Benchmark will be developed as part of the Vision Zero Action Plan.
	The agency has determined suitable performance measures to assess transportation safety.		х		Safety performance measures and indicators need to be more specific and targeted

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes / Opportunities for Policy/Process Refinement
	Transportation safety is incorporated into every Capital Improvement Project to the extent applicable.		Ś		
	FHWA's proven countermeasures are implemented in projects.		х		Not specified in the Comprehensive Plan. The 2019 Bicyclist/Pedestrian Safety Action Plan Osceola, Orange, and Seminole Counties identified countermeasures by their type: behavioral, design, and control.
	The agency implements NHTSA's Countermeasures that Work.		х		Not specified in the Comprehensive Plan. The 2019 Bicyclist/Pedestrian Safety Action Plan Osceola, Orange, and Seminole Counties identified countermeasures by their type: behavioral, design, and control.
	The agency shares project outcomes and effectiveness with the public.			х	
	The agency provides funding for projects that reduce fatal and serious injury collisions.		х		
	There is sufficient funding allocated for future projects that may reduce fatal and serious injury collisions.		х		

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes / Opportunities for Policy/Process Refinement
	The agency applies for grants to fund safety projects from traditional sources.		х		
	The agency applies for grants to fund safety projects from non-traditional sources.		x		
	Projects incentivizing transit, biking, walking, and carpooling over single-occupant vehicles are prioritized and implemented.		х		
Category: Safe I	Roadways and Safe Speeds				
	The agency has allocated adequate funding for complete streets projects.		x		
Complete Streets for All	The agency has a complete streets plan.		x		Osceola County Comprehensive Plan: Transportation 6-3.1.3. and MetroPlan Orlando's Complete Streets Policy but not a Complete streets Plan.
	Complete Streets elements have been incorporated into planning documents.		х		Osceola County Comprehensive Plan: Future Land Use 1-1.2.12, 1-1.2.16.3.
	Vulnerable users are prioritized in project planning and implementation.			х	

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes / Opportunities for Policy/Process Refinement
	The agency actively coordinates with neighboring member agencies and neighboring municipalities to provide connections for people walking and biking.		x		Osceola County Comprehensive Plan: Transportation 6-2.2.7. Coordinates with Kissimmee, St Cloud, MPOs, and FDOT.
	Appropriate practices are followed to set speed limits based on context.		х		
	The agency suggests specific rules to set speed limits near schools and areas with a high number of vulnerable road users.			х	
Context Appropriate	Appropriate procedures are followed to enforce speed limits.		х		The County is working to expand the red lights and speed cameras program.
Speed	There are ongoing education programs/campaigns related to traffic speeds.	x			
	The agency follows proper methods to modify existing roadways to achieve safe speeds.		х		
Category: Data D	riven Approach, Transparency and Accou	ntability			
Equity Focused Analysis and Programs	The agency has developed effective programs and strategies to help people without housing, and lowincome individuals access jobs and services.	ŝ			

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes / Opportunities for Policy/Process Refinement
	Equity is a factor in project prioritization.		х		Osceola County Comprehensive Plan: Future Land Use - 1-1.9.2. Transportation 6-3.3.3.
	Equity is reflected in the agency's vision and goals for safety.	х			
	Geographic inequity is considered in the agency's data analysis.		x		Osceola County Comprehensive Plan: Future Land Use 1-4.
	The agency reports safety outcomes demographically.	х			Benchmark will be developed as part of the Vision Zero Action Plan.
	Data on distribution of stops and ticketing is analyzed demographically.	Ś			
	The agency has formulated effective policies to mitigate the disproportionate impact of fines for minor violations on low-income individuals.	х			
	Important information and education materials are provided in common languages spoken by residents whose first language is not English.	Ś			Documents from the Vision Zero Action Plan will be translated.
	The agency uses data to identify and systematically address trends and risk factors to prevent severe collisions.	х			Benchmark will be developed as part of the Vision Zero Action Plan.
Proactive / Systemic	Common collision patterns have been matched with adequate countermeasures.	х			Benchmark will be developed as part of the Vision Zero Action Plan.
	The agency works to continuously improve the accuracy of crash reports.	х			Benchmark will be developed as part of the Vision Zero Action Plan.
	The agency uses the High Injury Network (HIN) in project prioritization.	х			Benchmark will be developed as part of the Vision Zero Action Plan.

Osceola County Vision Zero Action Plan Page 37 Policy Review and Assessment

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes / Opportunities for Policy/Process Refinement
Reactive / Hot	A demographic analysis of the HIN has been conducted.	х			Benchmark will be developed as part of the Vision Zero Action Plan.
Spot	The agency routinely monitors and reports collision data to the public.	x			
Evaluation and Adjustment	Intersection design and control decisions are evaluated to reduce kinetic energy transfer to vulnerable users.		х		
	Demonstration projects are used to test the strategies and get feedback from the public.	X			The County does not have a policy for interim or demonstration projects.
	The agency has a process to address underreporting of collisions, especially for vulnerable road users.	х			

Appendix E:

Strategies and Action Items



To: Osceola County

Through: Kimley Horn

From: Alta Planning + Design

Date: July 26, 2024

Re: Osceola County VZAP: Strategies + Action Items – Revised Per Comments to Date

Strategies

The Osceola County Vision Zero Action Plan's strategies were developed based on the data collection, coordination, and community engagement efforts undertaken during the Vision Zero Plan process. The targeted strategies and action items are centered around the Safe System Approach principles as follows:

- 1. <u>Safer People:</u> Consider conducting **High-Visibility Enforcement** to target dangerous driver behavior and **Targeted Training** to educate partners and professionals for a safer culture.
- 2. <u>Safer Roads:</u> Facilitate Safety Improvements' Implementation by leveraging existing programs, establishing a pilot program, prioritizing safety enhancements along the HIN and near transit, updating design guidance, and actively seeking funding.
- 3. <u>Safer Speeds:</u> Foster the implementation of a **target-speed setting** approach, expand the use of **speed cameras**, and consider the establishment of **Pedestrian Priority Zones** in high pedestrian activity areas.
- 4. <u>Safer Vehicles:</u> As fleet vehicles age out, **upgrade fleet** to accepted crash-prevention technology, and partner with technology vendors to **install intersection safety improvements** such as near-miss technology.
- 5. <u>Post Crash Care:</u> Consider the establishment of a **multi-agency fatal crash evaluation team** to evaluate engineering, behavioral, vehicular, and land use.

Partner agencies and departments, timelines, and resource impacts were identified for the strategies and action items. Relevant crash statistics and alignment with current policies and programs were also outlined. Policies are revisited if needed, and potential funding and resource needs are identified. The implementation process for each action item is defined in steps that are expected to follow this general framework:

- Step 1: 1-2 Years
- Step 2: 3-5 Years
- Step 3: 5+ Years

The Transportation and Transit Department will serve as lead for initial implementation and coordination of the respective action items and will partner with the appropriate departments and/or agencies to determine the path forward.

It is recognized that the implementation of some of the action items will be contingent upon the availability of resources. Osceola County and its partners will seek to implement these actions to the fullest extent possible in order to advance Vision Zero in the County.

Strategy: Targeted High-Visibility Enforcement + Training





Baseline

- ✓ *Municipal Code, Sec.* 11-2. Chapter 11 Intersection Safety. Authorizes the use of traffic infraction detectors as a means of monitoring and assisting law enforcement when a driver fails to stop at a traffic signal.
- ✓ The Best Foot Forward (BFF) Program is a behavior change-based coalition designed to improve road safety through consistent and persistent education, high-visibility crosswalk enforcement, and low-cost engineering countermeasures at marked crosswalks. Each year, BFF chooses a set of crosswalks to monitor and enforce. Crosswalks are selected based on high-crash corridors, proximity to schools, LYNX bus stops, Sun Rail stations, resident complaints, or other planned countermeasures.
- ✓ The *County's Red-Light Safety Camera Program* is dedicated to reducing red-light violations and their potential for crashes and injuries. The Red-light and speed camera enforcement program currently has 15 red light running camera locations, provided at 7 intersections in Osceola County.
- ✓ Osceola County Sheriff's Office S.M.A.R.T Motorcycle Safety Program created to help mitigate Motorcyclerelated fatalities and motorcycle crashes. The acronym SMART stands for Safe Motorcycle and Rider Techniques.

Relevant KSIs

- Pedestrian crashes make up the highest proportion of fatal crashes.
- 63% of intersection pedestrian crashes were caused by a motorist failing to yield.
- 42% of all pedestrian crashes occurred at or related to intersections.
- 4.5% KSIs are due to aggressive driving, 7.5% of the KSIs are alcohol related and 38.3% due to distracting driving.
- 24% of all left turn KSI crashes involved a motorcycle.



Goals met from Adopted Plans

✓ COMPRENHENSIVE PLAN (CP) GOAL 6-1: INTERNAL COORDINATION, OBJECTIVE 6-2.2 - Intergovernmental Coordination. The County shall maintain communication and joint planning and implementation efforts with its partners to provide the most efficient and safe transportation system.



- ✓ **CP, GOAL 6-3: ESTABLISHMENT OF A MULTIMODAL SYSTEM** To establish safe and convenient multimodal systems, supporting livable communities and economic development, where access and travel choices are increased through new and enhanced public transit, bicycle, pedestrian, and roadway systems.
- ✓ Transportation Systems Management & Operations (TSM&O) component of the 2050 Metropolitan Transportation Plan (MTP) regionwide strategies includes developing and implementing an arterial incident management plan (ATIM) that outlines the roles and responsibilities of each agency in responding to cross-boundary events and resolving incidents that affect multiple jurisdictions.



Partner Departments and Agencies: Transportation and Transit Department, Osceola County Government, the City of Kissimmee, the City of St. Cloud, the Osceola County School District, Best Foot Forward, the Florida Department of Transportation, LYNX and law enforcement including the Osceola County Sheriff's Office and the Police Departments of Kissimmee and St. Cloud.

Strategy: Targeted High Visibility Enforcement + Training								
Action Item#	Action Item	Steps	Performance Metric	Why?	Resource Impact			
					- Staff time, including for meeting on a recurring basis throughout the year.			
2	Explore expanding existing enforcement campaigns		- Number of expanded traffic safety campaigns deployed Reduction in KSIs targeted by safety campaign.	-Red-light cameras implemented in <u>Texas</u> led to an 11% reduction in crashes, and a 25% decrease in redlight related crashes.				
3	Explore the creation & deployment of new targeted campaigns		-Creation + deployment of new program(s) - Reduction in KSIs related to new targeted safety campaign.					
4	Explore Targeted Safety Training Program		-Deployment of training program. Similar programs include #crashnotaccident Reduction in relevant KSIs.					

Strategy: Safety Improvements' Implementation

Safe System Approach Principle: Safer Roads



Baseline

- ✓ The County's Comprehensive Plan states that the use of FDOT or Osceola County standards for roadways within Mixed-Use Districts as per the Land Development Code should not preclude alternative designs, including context-sensitive or Traditional Neighborhood Design (TND).
- ✓ The **2019 Bicyclist/Pedestrian Safety Action Plan** for Osceola, Orange, and Seminole Counties in Florida identified and categorized countermeasures by type: behavioral, design, and control. The Plan linked countermeasures to crash types through Critical Safety Success Factors (CSSF).
- ✓ The County has identified reliable financing sources and leveraged them to construct high-need projects, as documented in the **Strategic Plan 2023-2028**. This includes the Maintenance and Repaving Program, where repaving projects can integrate low-cost, high-impact proven safety countermeasures, as well as ITS projects.
- ✓ Project ranking to inform the assignment of funds to deliver Capital Improvements Projects (CIP) is based on variables such as safety, applicable LOS, required by legislation, efficiency, economic advantage, and other factors.
- ✓ The **Transportation Element of the Comprehensive Plan** defines Complete Streets and commits to the development of a safe, convenient, comfortable, and integrated connected network of mobility options for people.
- ✓ In 2022, The County made a public commitment to eliminate traffic fatalities and serious injuries by 2040 through the **Vision Zero resolution**. The resolution involves all County Departments and directs the Transportation and Transit Departments to create a Vision Zero Action Plan.

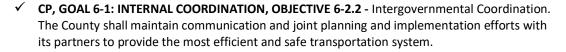
Relevant KSIs

 Principal arterials comprise 6% of the roadway network yet experienced 40% of intersection related crashes.



- 40-55 MPH speeds comprise 15% of roadway network yet are the location of 70% of intersection related KSI crashes.
- 47% of off-road crashes occur under dark conditions. 60% of midblock pedestrian crashes occurred in the dark.

Goals met from Adopted Plans:





- ✓ CP, GOAL 6-3: ESTABLISHMENT OF A MULTIMODAL SYSTEM To establish safe and convenient multimodal systems, supporting livable communities and economic development, where access and travel choices are increased through new and enhanced public transit, bicycle, pedestrian, and roadway systems.
- ✓ CP GOAL 14-1: PROVISION OF PUBLIC FACILITIES. Osceola County shall coordinate its urban growth strategy with the capital financing strategies of the County's multiple facility providers to ensure public facilities needed for the year 2025 are provided in a timely and efficient manner.



Partner Agencies: Transportation and Transit, Osceola County Government, the City of Kissimmee, the City of St. Cloud, the Osceola County School District, the Florida Department of Transportation, and LYNX.

	Strategy: Safety Improvements' Implementation							
Action Item#	Action Item	Steps	Performance Metric	Why?	Resource Impact			
					-Staff time, including for establishment of policy, deployment of program, and pursuit and administration of funding opportunities.			
2	Evaluate leveraging the CIP project development process to integrate safety improvements along the HIN		-Number of projects with integrated low-cost, high-impact safety improvements.		- Staff time and may require additional staff.			
3	Facilitate Improvements near transit							
4	Explore diversifying funding sources		Projects implemented as a result of alternative funding sources.		-Staff time, including for pursuit and administration of funding sources.			

5

Alta Planning + Design, Inc.

Osceola County, FL Vision Zero Action Plan

	Strategy: Safety Improvements' Implementation						
Action Item #	Action Item	Steps	Performance Metric	Why?	Resource Impact		
5	Update Design Guidance + Standards		 -Key policy revisions. -Number of safety projects implemented using revised policies 		-Staff time distributed properly amongst responsible departmentsSafety improvement funding and allocations.		
			and design standards.				

Strategy: Speed Management

Safe System Approach Principle: Safer Speeds

=()

Baseline

- ✓ The Red-Light Safety Camera Program is an effort dedicated to reducing red-light violations and their potential for crashes and injuries. Verra Mobility provided red-light and speed camera enforcement at 20 intersections in Osceola County.
- ✓ Osceola County Code of ordinances (ARTICLE IV. Sec. 22-54) authorizes the use of school zone speed limit detection system on roadways maintained as school zones within the jurisdiction of the county, to promote compliance with speed limits in school zones, as permitted by Chapter 2023-174, Laws of Florida, and general law, as such may be amended from time to time.
- ✓ According to the Comprehensive Plan (Policy 6-2.2.1), the County shall actively coordinate with the cities of St. Cloud and Kissimmee, as well as the School District, to ensure a safe and efficient transportation system Countywide.
- ✓ The **County** previously identified school zone locations (16) that warrants additional enforcement procedures such as speed limit detection systems at 14 schools: Parkway Middle School, Boggy Creek Elementary School, Horizon Middle School, Sunrise Elementary School, KOA Elementary School, Bridge Prep Academy, Deerwood Elementary School, Narcoossee Elementary and Middle Schools, Liberty High School, Bella lago Academy, Mater Brighton Lakes Academy, Reedy Creek Elementary, Poinciana High School, Mater Palms Academy.

Relevant KSIs

- 42% of all pedestrian crashes occurred at or related to intersections.
- 66% of KSI head-on crashes on undivided 2-lane roads involve speeds of 55-60+ mph.
- Roadway context classification (C4, C5, C6) comprised 5.2% of the KSI crashes. Suburban and commercial classification (C3C) comprised 30.7% of KSI crashes.



Goals met from Adopted Plans

✓ **CP, GOAL 6-1: INTERNAL COORDINATION, OBJECTIVE 6-2.2** - Intergovernmental Coordination. The County shall maintain communication and joint planning and implementation efforts with its partners to provide the most efficient and safe transportation system.



- ✓ CP, GOAL 6-2: INTERGOVERNMENTAL COORDINATION To support continued coordination of transportation planning efforts with the County's local partners and municipalities, and its applicable regional and state agencies.
- ✓ **CP, GOAL 6-3: ESTABLISHMENT OF A MULTIMODAL SYSTEM** To establish safe and convenient multimodal systems, supporting livable communities and economic development, where access and travel choices are increased through new and enhanced public transit, bicycle, pedestrian, and roadway systems.



Partner Agencies: Transportation & Transit, City of Kissimmee, City of St. Cloud, the Osceola County School District, and the Florida Department of Transportation.

	Strategy: Speed Management								
Action Item #	Action Item	Timeline	Performance Metric	Why?	Resource Impact				
1	Explore a target speed- setting policy in planning + design (rather than 85th percentile)	Step 1: Review existing speed-setting policies and develop new policy language. Phase 2: Adopt revised speed-setting policy. Phase 3: Integrate speed policy priorities into design standards.	-Number of projects with target speed parameters. -Reduced relevant KSIs.	-The new MUTCD highly encourages adopting the target speed approach over the 85th percentile speedAdopting overarching target speed policy will lead to creating roadways that prevent dangerous speeding by design.	-Staff time.				
				-PPZs reduce pedestrian crash risk by restricting or slowing down vehicular traffic in high pedestrian activity areasCP: Policy 6-1.1.2 Implementation of the Sustainability Plan: Consistent with the Future Land Use Element, the transportation system shall create a pedestrian environment to reduce reliance on automobile travel, as well as to recognize the build-out of the County to a new sustainable vision	-Staff timeFunding resources to implement PPZs as a pilot and/or as permanent zones.				
3	Initiate the implementation of the School Zone Speed Safety Camera Program		-Monitor and evaluate effectiveness of current program (reduced KSIs)Monitor and evaluate effectiveness of expanded program (reduced KSIs).	Speed safety cameras have been shown to reduce overall crashes by 54% and KSIs by 37% on urban arterials. In New York City, speed safety cameras reduced speeding by 63% in school zones.	- Additional staff needed in the Osceola County Sheriff's office to review, evaluate, and issue citationsCamera installation labor and material cost. Note: Funding may be secured through a diverse set of programs, including the Highway Safety Improvement Program (HSIP).				

Strategy: Update with Safety Technology

Safe System Approach Principle: Safer Vehicles

Baseline

- ✓ The Comprehensive Plan supports the use of Transportation System Management (TSM) strategies, including Transportation Demand Management (TDM) strategies, Intelligent Transportation Systems (ITS) and other traffic controls to maintain accessibility, efficiency, and mobility on existing roads.
- ✓ Regarding intersection safety, the Comprehensive Plan authorizes the use of traffic infraction detectors as a supplemental means of monitoring and assisting law enforcement when a driver fails to stop at a traffic signal.
- ✓ The Intelligent Transportation System (ITS) Master Plan includes a section of 'Applicable ITS Strategies' for a system that improves efficiency, reliability, and safety. Osceola County operates and maintains 201 signals, which are interconnected on approximately 123 miles of fiber optic lines.
- ✓ MetroPlan Orlando through the **TSM&O MASTER PLAN** established the vision of 'A regional multimodal transportation network that strategically leverages cost-effective technology and operations to maximize system mobility and safety' for the three-county MPO area. Osceola County is part of the TSM&O Master Plan Steering Committee. This Plan identifies strategies such as Adaptive Signal Control, Traffic Incident Management, Bicycle/Pedestrian Safety Systems, Integrated Corridor Management, Fiber, CCTV, Data Collection, Active Arterial Management, Freight Signal Priority, Freight Parking, Advanced Traffic Management System (ATMS), etc.

Relevant KSIs

- 46% of off-road crashes involved trees, utility/light poles, and ditches.
- Left-turn crashes make up the highest proportion of KSI crashes.
- 45% of KSI crashes occurred on roadways with 3 lanes or less, while 33% of KSI crashes occurred on roadways with 4-5 lanes.

Goals met from Adopted Plans

- ✓ CP, GOAL 6-2: INTERGOVERNMENTAL COORDINATION To support continued coordination of transportation planning efforts with the County's local partners and municipalities, and its applicable regional and state agencies.
- ✓ **CP, GOAL 6-3: ESTABLISHMENT OF A MULTIMODAL SYSTEM** To establish safe and convenient multimodal systems, supporting livable communities and economic development, where access and travel choices are increased through new and enhanced public transit, bicycle, pedestrian, and roadway systems.
- ✓ CP, GOAL 6-4: MANAGEMENT OF THE MULTIMODAL TRANSPORTATION SYSTEM To implement and sustain the County's long-term land use vision by establishing mobility standards consistent with adopted Goals, Objectives, and Policies for the Future Land Use and Conceptual Master Plan Elements.



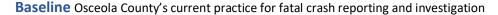
Partner Agencies: Transportation & Transit, Osceola County Government (Fleet Management), MetroPlan Orlando, the City of Kissimmee, the City of St. Cloud, LYNX and the Florida Department of Transportation.



	Strategy: Update with Safety Technology							
Action Item#	Action Item	Timeline	Performance Metric	Why?	Resource Impact			
					-Staff time. -Funding for fleet upgrades.			
2	Partner with technology vendors to install near-miss technology at intersections		-Reduction in intersection KSIs.					

Strategy: Post Crash Collaboration and Evaluation

Safe System Approach Principle: Post Crash Care





Relevant KSIs

 Collaborating and evaluating fatal crashes through a holistic approach that assesses engineering, environmental and contextual elements to help more proactively reduce fatalities and serious injuries in the future.



Goals met from Adopted Plans

✓ COMPRENHENSIVE PLAN (CP) GOAL 6-1: INTERNAL COORDINATION, OBJECTIVE 6-2.2 -Intergovernmental Coordination. The County shall maintain communication and joint planning and implementation efforts with its partners to provide the most efficient and safe transportation system





Partner Agencies: Transportation + Transit, Osceola County Sheriff's Office, Emergency Management, Fire Rescue & EM, MetroPlan Orlando, Florida Highway Patrol, the City of Kissimmee, the City of St. Cloud, LYNX and the Florida Department of Transportation.

	Strategy: Collaborate on Emergency Response								
Action Item#	Action Item	Timeline	Performance Metric	Why?	Resource Impact				
1	Explore the establishment of a multi-agency fatal crash evaluation team	Step 1: Explore the establishment of a comprehensive fatal crash evaluation team. Step 2: Plan for deployment, technology needs and monitoring of an evaluation team based upon above exploration. Step 3: Deploy and monitor evaluation team as determined in previous steps.	Reduction in KSIs at investigated & improved KSI crash sites.	The fatal crash evaluation team could save lives by understanding and improving engineering, environmental and reporting conditions to move towards a more proactive safer infrastructure system.	-Staff time and additional staffAny funding resources necessary to deploy evaluation team and equipment.				



