



Transportation Advisory Board Regular Meeting

Agenda

June 17, 2024 @ 4:00 PM

City Hall Commission Chambers
401 S. Park Avenue

welcome

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please note

Times are projected and subject to change.

-
- 1. Call to Order**
 - 2. Consent Agenda**
 - a. Approve the minutes of the April 1, 2024 regular meeting. 1 minute
 - 3. Public Comments (for items not on the agenda): Three minutes allowed for each speaker**
 - 4. Action Items**
 - a. Vision Zero Safety Action Plan 30 minutes
 - 5. Non-Action Items**
 - 6. Staff Updates**
 - a. RRFB Update 5 minutes
 - b. Brick Repair Update 5 minutes
 - c. Paving Project Update 5 minutes
 - d. SR426 & Cortland Ave Signal 5 minutes
 - e. Quail Hollow Update 5 minutes
 - f. Denning Trail Continuation Update 5 minutes
 - 7. Board Comments**
 - 8. Upcoming Agenda Items**
 - 9. Adjournment**



Transportation Advisory Board

agenda item 2.a

item type

Consent Agenda

meeting date

June 17, 2024

prepared by**approved by**

Kim Breland, Deputy City Clerk

subject

Approve the minutes of the April 1, 2024 regular meeting.

motion | recommendation**background****alternatives | other considerations****fiscal impact****attachments**

1. TAB-min-040124 draft



Transportation Advisory Board Regular Meeting Minutes

April 1, 2024 at 4:00 PM

City Hall Commission Chambers
401 S. Park Avenue

Present

Jeffrey Sievers, Jeffrey Osleeb, Catherine Reischmann, Ruben A. Paige, Michael Sasse, and Rachel Andre. Absent: Jennifer Adams. Staff: Director of Public Works Charles Ramdatt. Staff: Engineer III Hong Lim, Transportation Planner Keith Moore

Call to Order

Chair Osleeb called the meeting to order at 4:00 p.m.

1. Consent Agenda

- a. Approve the minutes of the December 4, 2023, regular meeting.

Motion made by Katie Reischmann to approve the December 4, 2023, regular meeting minutes, seconded by Michael Sasse. Motion carried unanimously with a 5-0 vote.

2. Public Comments (for items not on the agenda)

3. Action Items

4. Non-Action Items

- a. SunTRAIL Connectivity

Mr. Michael spoke about the history of bike/ped trails throughout Central Florida. He noted that he assisted the Florida Greenways Commission as the chair of the nine county Central Florida Regional Task Force, helping define the statewide trails plan. In addition, in 1992, he founded the Winter Park Market Trail with FDOT. He is working on the proposed bike/ped trail project being presented today with winter park resident and former city commissioner, Peter Knowles Gottfried.

Mr. Michael spoke about the city's partnership with FDOT and other agencies beginning in 1977 to develop and improve existing trail systems throughout Winter Park. He presented a list of trail projects he has worked on in Winter Park and statewide. The proposed trail plan was presented to the Department of Environmental Protection (DEP) and the FDOT for consideration as a two-phase approach. He said Winter Park is eligible to apply for funding and consideration by FDOT. He is seeking support from the Transportation Advisory Board and City Commission to move forward.

Mr. Michael provided a diagram of existing trails (Cross Seminole Trail, Cady Way Trail and Seminole Wekiva Trail) and identified the proposed trail connection: Phase 1 -5.5 miles from the Cady Way Trail to Winter Park Station area and Phase 2 – 14 miles from Winter Park Station area to the West Orange Trail. He presented an image of the Winter Park Trail Plan from 1977 and identified the proposed trail connection. He presented a

draft of the city's ongoing bike/ped projects for the past five years and said it is important for DOT to know that the city has had a commitment on the table for the last five years and since 1977.

Mr. Michael presented a map of Phase 1 which reflects the 1977 plan including the area funded by Secretary Downs in 2018 and a stretch to the north that connects to Maitland and the Phase 2 connection to the west. He said the top priorities of the trail are safety, Sun Trail multimodal connectivity, ability to get to and from cultural events and place and economic development. He presented MetroPlan bike/ped crash and fatality statistics from 2018 to 2022 and spoke in depth about issues related to bike/ped safety in the city.

Mr. Michael said the proposed trail plan complies with the city's Transportation Master Plan, Sustainability Action Plan and Comprehensive Plan. He said the proposed plan falls within the 5-mile corridor for Cady Way and is eligible for funding up to \$11M. He spoke about additional funding options on the federal and state level. He noted that trail management funding is available. He spoke about the FDOT "toolbox" and said the city's focus should be on what a toolbox would look like for the trails/corridor.

Mr. Michael summarized by asking the board for a motion to support the proposed trail plan.

Chairman Osleeb noted a lot of the city's bike/ped trails are of very antiquated architecture and asked if the proposed trail would include the latest technology and what space would be available for implementation. Mr. Michael said the intent is to have a complete streets approach that would look at the entire city right of way with any adjustments needed for adequate width. He said the complete street view will look at the Cady Way Trail to the downtown area out to the city border and 17-92 at the train bridge. He said staff will obtain the MetroPlan toolbox that includes all of its safety features as well as assistance from Vision Zero.

Director of Public Works Charles Ramdatt said the city went through city and state policy prescribed processes and selected Patel and Green Consultants to work with staff and the board to develop a Transportation Master Plan (TMP). The TMP was presented to the board, the public and commission to develop a plan that addresses the same issues in Mr. Michael's proposed plan. The city has a comprehensive plan to address bike/ped movement and how those modes interact.

Mr. Ramdatt spoke about the bridge at the 17-92/Maitland and said the staff has been in discussions with regional partners and believes the improvements will be done in conjunction with FDOT and City of Maitland. He addressed the FDOT's 426 project which looked at comprehensive mode management for traffic on 426 going through the Lakemont area to Park Avenue. The FDOT has completed its work and the city is slated to participate financially in the resurfacing project. He noted that when projects like this are done, the FDOT tries to bring the corridor up to speed.

Mr. Ramdatt noted that the city is working with another consultant selected through the prescribed process, to lead at developing a trail, with similar elements to Mr. Michael's proposal, that would go east toward Lakemont and connect across and down to Cady Way Trail. He said the city has gone through a very structured, prescribed, and inclusive process of developing a master plan which includes all these elements.

Mr. Ramdatt spoke about the Vision Zero initiative and said the city's master planners have determined that the TMP is agile enough to facilitate of the proposed ideas out of the "toolbox" that will be available ensure intersection crossings and other initiatives are done safely. The city has been in discussions with FDOT about joint and regional funding. He noted that Mr. Lim is the Vice Chair of the Technical Committee at MetroPlan Orlando and is poised to assist the city work through the MetroPlan prioritization process to access a lot of this funding.

Mr. Ramdatt added that many elements of the proposed trail are similar to those in the TMP being discussed and prioritized for funding and listed areas being addressed including: Denning trail connections, grade crossings on shared pedestrian paths, on street lanes, and rail crossings at complicated intersections. He noted that all of these elements were looked at compressively by Patel and Green Associates and Kimley Horn.

Mr. Ramdatt said he is unsure how Mr. Michael and Mr. Gottfried could be integrated into the plan other than as citizen advisors to the process since the city has already gone through the required, legal, procurement process. At this time, the city has a slate of consultants selected for continuing services.

Mr. Ramdatt commended Mr. Michael and Mr. Gottfried's efforts. He reiterated that the consultants, the public, the board, and commission provided a number of similar ideas that were consolidated into the approved TMP. He appreciates the proposed comments and comprehensive presentation, but staff is not in a position to select consultants outside of the proper procurement process. He said staff would welcome them as stakeholder advisors as staff moves toward implementation.

Mr. Osleeb would like to see a map with the TMP plan superimposed on to Mr. Michael's plan before any decision can be made.

Mr. Michael said the map in the proposal is an overlay with the TMP. He added that he has spoken with staff's continuing service engineers and they are interested in the proposal but would rely on Mr. Ramdatt's recommendation that they be added to the existing contracts as sub-consultants. He said the trail proposal will be presented to the commission on April 10th and would like an opportunity to speak with Mr. Ramdatt and Mr. Lim.

Discussion followed on the map for the proposed trails, intersection illustrations, design for the proposed trail overpass for the 17-92 bridge improvements and bike/ped safety. Mr. Ramdatt said these items were considered in the TMP planning process and there will be a design process for specific improvements. Those options will be presented to the board, commission, MetroPlan Orlando, and FDOT.

5. Staff Updates

- a. RRFBs Update RRFBs were added in the following areas:

Publix crosswalk (Winter Park Village) on Canton Avenue

Lakemont Avenue at the hospital (South of Aloma)

Staff has received positive impact from the community about the RFB devices in both locations.

Mr. Paige asked if the flash feature can be added to the RRFB at Mount Moriah Church at Pennsylvania Avenue. Mr. Ramdatt explained the process for determining where the flashers are placed. Staff will reassess and determine if it is financially feasible to put a flasher can be placed in that location. Discussion followed on traffic safety for the area, specifically on Sundays during church service hours.

b. Vision Zero Update

There are two meetings left in the scope, one with TAB and one with the commission, to develop the Vision Zero Safety Action Plan. Originally, the consultant planned to present to TAB this month, but it was decided that it was better to wait until the full draft report is completed at the end of May. Mr. Lim proposed combining the May and June TAB meetings to June 3, 2024, to accommodate the MetroPlan's schedule for presenting the full draft report to the board. Agreed by consensus. Mr. Lim spoke about public engagement events for the Vision Zero project (Run 4 Love, Orange County Vision Zero event, and Winter Park Farmer's Market). Each event received a great turn out and positive feedback.

Mr. Lim said the Vision Zero Group has had 3 work sessions to discuss high injury network and countermeasures to develop the draft report. A dedicated Vision Zero page has been added to the city website for the Public Works and Transportation division pages.

c. Fairbanks Ave/Denning Dr Turn Lane Update

The turn lane has been added at Denning Avenue and Fairbanks Avenues. Mr. Lim showed photos of the new turn lane and said the two remaining tasks on this project cannot be completed until June:

Sod - Hydro seeding has been added but takes 4–6 weeks to be rooted and sprout and grass should be fully grown by June.

Traffic signal cabinet - Due to supply chain issues, the cabinet will not be available until the end of June.

In response to questions, Mr. Lim said the city has not determined what will be done with the parcel at the corner at this time. He said some signal timing upgrades and optimization were done for the traffic light. MetroPlan Orlando is in the process of re-timing all of the traffic lights on 426 from I-4 to St. Andrews in the city limits.

d. Quail Hollow Project

Mr. Lim said the intent of this project is to pave the entire neighborhood during the summer. Prior to paving, staff will ensure all sidewalks are ADA compliant and curbs are upgraded.

Mrs. Reishmann left the meeting at 5:10 p.m.

e. Park Ave Countdown Pedestrian Signals

The project to convert the pedestrian signal infrastructure for the countdown system for all four signals on Park Avenue from Lyman Avenue to Canton Avenue has been completed. Pedestrians are now able to see the signal countdown when crossing. Staff

met with Lighthouse Central Florida to discuss potential routes for visually impaired people who are traversing the same patterns every day on Park Avenue. Lighthouse will be providing a citywide map of where the visually impaired are walking daily and identify areas staff should consider to improve walkability. Staff will work with Lighthouse to disseminate this information to the public.

f. Traffic Studies Update

Mr. Lim provided updates on the following traffic studies:

- Banchory Road / Worthington Drive - At the request of residents, staff is conducting a four-way stop study to see if it is warranted at this intersection
- Maryland Avenue - Speeding assessment is being conducted for this area
- Rouen Avenue - Speeding assessment is being conducted for this area
- Sylvan Drive - Staff received complaints from residents regarding people exiting Aloma Avenue onto Sylvan in the wrong direction (at the Y shaped intersection). Counter hoses have been placed to determine the number of people violating the motor traffic directions.
- Palmer Avenue/Phelps Avenue - A four-way stop is being assessed for this area.
- Via Tuscany - Staff has completed a volume and speeding analysis in the area (North of Cypress and Howell Branch) and determined there is a problem. Instead of adding a traffic calming device in the area, the residents have asked staff to look at the entire as a whole. Staff will be conducting a traffic analysis of the neighborhood followed by a community meeting once the results are complete.
- Carver Street - Staff will be installing speeding tables and will coordinate with Mr. Paige to discuss locations.

g. New York Ave/Morse Blvd

As part of the city's New York Avenue Streetscape Project, the southeast corner at New York Avenue and Mores Blvd. has been retrofitted with ADA complaint truncated domes and at the northeast corner, the curb ramp has been adjusted along with sidewalk repairs. In addition, Urban Forestry will be planting a tree on the available green space at the northeast corner.

Mr. Lim said this intersection is completer and the last intersection to be completed before the paving/repaving and striping operation begins is Welbourne Avenue.

Discussion was held about improvements for the Lyman Avenue/New York Avenue intersection (at the railroad tracks). Staff is meeting with SunRail to find solutions for safe pedestrian crossing in the area.

h. Upcoming Transportation Projects

- Denning trail north of Webster Avenue to Solana

Mr. Lim said this is a funded CRA project approved by the Community Redevelopment Agency and City Commission. Staff is proposing a 10 ft. wide trail and landscape buffer on the west side of the road that will provide the opportunity to plan shade trees. He

explained that while most trails are on the east side, this trail will be placed on the west side to avoid impacts with residential driveways. He showed a site plan of the trail and said the next section will be Solana Avenue as the city moves forward with the plan to connect to Maitland. Staff has proposed adding an RRFB near Carver Street as part of the bike/ped trail. Discussion followed on the plan to connect the west side to Denning, Webster and Railroad and future plans to connect to Solana.

i. Downtown Parking Study

At the request of the commission, staff is revisiting the Kimley Horn 2013 and 2016 downtown parking studies, mainly to update the 2013 study. He presented a slide showing identifying zones and limits of the studies. He provided a summary and outcome of the previous studies.

6. Board Comments

7. Upcoming Agenda Items

a. Upcoming TAB Meeting May and June

Mr. Lim explained that the Vision Zero team is still working on the final draft of the action plan and has asked to present to TAB in early June prior to presenting to the Commission. Mr. Lim suggested combining the May and June regular meetings into one to be held on June 3. Agreed by consensus.

8. Adjournment

The meeting adjourned at 5:43 p.m.

Regards,

Kim Breland
Deputy City Clerk



Transportation Advisory Board

agenda item 4.a

item type

Action Items

meeting date

June 17, 2024

prepared by

Hongmyung Lim, Engineer II

approved by

Kim Breland, Deputy City Clerk

subject

Vision Zero Safety Action Plan

motion | recommendation

Approval

background**alternatives | other considerations****fiscal impact****attachments**

1. Winter Park VZAP_DRAFT_20240612

JUNE 2024

WINTER PARK VISION ZERO ACTION PLAN



Draft 1 TAB Review Only

Draft 1 TAB Review Only

Winter Park Vision Zero

Action Plan

Table of Contents

●●●●●●●●

Executive Summary

●●●●●●●●

1

Chapter 1: Introduction

●●●●●●●●

2

Chapter 2: Crash Trends and Analysis

●●●●●●●●

3

Chapter 3: Public Engagement

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4

Chapter 4: Policy Review

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5

Chapter 5: Toolkit and Prioritization

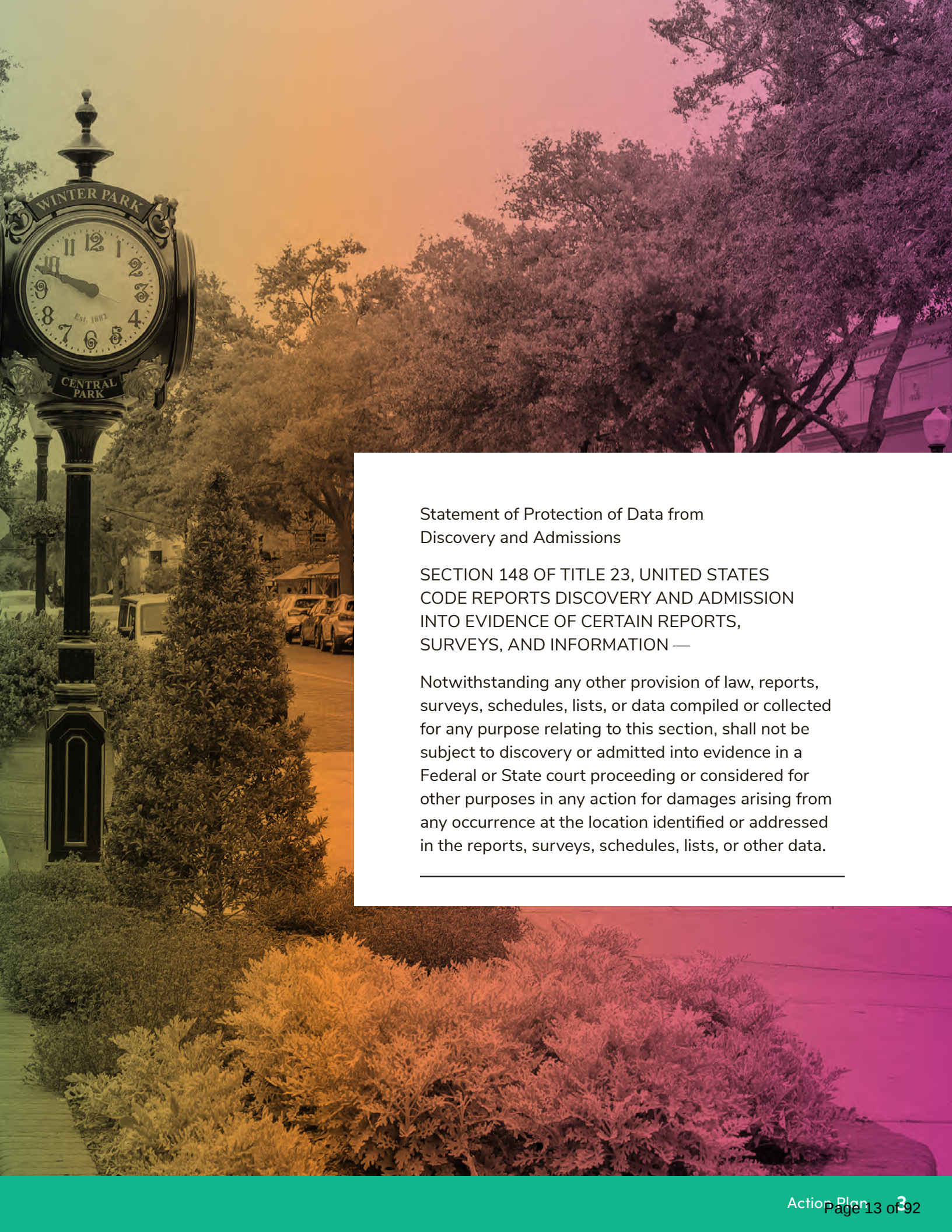
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Chapter 6: Plan Recommendations

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Appendix



Statement of Protection of Data from Discovery and Admissions

SECTION 148 OF TITLE 23, UNITED STATES CODE REPORTS DISCOVERY AND ADMISSION INTO EVIDENCE OF CERTAIN REPORTS, SURVEYS, AND INFORMATION —

Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section, shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at the location identified or addressed in the reports, surveys, schedules, lists, or other data.



EXECUTIVE SUMMARY

In 2023, MetroPlan Orlando secured a \$3.8 million federal Safe Streets for All (SS4A) grant to address serious safety concerns within the region. These funds are being utilized to cover the cost of coordinated Vision Zero Action Plans in their three-county service area, including the City of Winter Park, with the goal of reducing traffic fatalities and severe injuries and creating safer roads for both the 2.2 million residents and 75 million tourists who visit Central Florida annually.

The Orange-Kissimmee-Sanford metro area continues to rank as one of the deadliest areas, and the average yearly deaths continue to rise. (Dangerous by Design, 2022) **In 2022 there were 3 fatalities and 26 severe injuries on Winter Park's roadways.** (Signal 4 Analytics)

This Action Plan was developed using a data-driven analysis to understand where the the City of Winter Park may strategically deploy its resources to attain our collective goal. This data analysis revealed that a large proportion of crashes where someone is killed or severely injured, referred to as KSI crashes, happen on a small percentage of our overall roadway network. Roads where KSI crashes disproportionately occur tend to have more than four vehicle travel lanes, posted speeds between 40 and 50 mph, and have active land uses, such as shopping centers, apartments, transit stops and other uses that generate trips made by people walking, bicycling, and taking transit. While most crashes only involve people in motor vehicles, crashes that result in a fatality or severe injury disproportionately involve someone walking, bicycling, or riding a motorcycle.



Vision Zero seeks to eliminate traffic fatalities and severe injuries on the transportation system by providing a proactive and preventive approach.

Vision Zero believes loss of life is not an acceptable price to pay for mobility.

The goal of Vision Zero is to integrate safety principles during the planning and implementation of transportation programs countywide.

Winter Park's Goal is to reduce the number of fatalities and severe injuries on the transportation system to zero by 2050.

Need for a safety plan

Within the analysis period of 2018-2022 there were 7 fatalities and 58 serious injuries on Winter Park's roadways (Signal 4 Analytics). With these realities in mind, designing mobility in cities with safety and variance in mind is a key component towards systematically eliminating fatalities and promoting a higher quality of life in Winter Park, and across the Central Florida region. 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, Winter Park Vision Zero Action Plan has been developed, rooted in the core elements of **Vision Zero** and the **Safe System Approach**.

Vision Zero is a road safety philosophy which states that no loss of life or incapacitating injury due to traffic crashes is acceptable. How we can reach zero in the region is through following the core elements of Vision Zero within the Safe System Approach, which acknowledges the vulnerability of the human body 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. More information about Vision Zero and the Safe System approach is provided in [Chapter 1](#).

What are the transportation safety issues?

A large proportion of crashes where someone is killed or severely injured, referred to as KSI crashes, happen on a small percentage of our overall roadway network. Roads where KSI crashes disproportionately occur tend to have more than 4 vehicle travel lanes, posted speeds between 40 and 50 mph, and have active land uses, such as shopping centers, apartments, transit stops and other uses that generate trips made by people walking, bicycling and taking transit. While most crashes only involve people in motor vehicles, crashes that result in a fatality or severe injury disproportionately involve someone walking, bicycling, or riding a motorcycle. Additional details about crash trends in the City are provided in [Chapter 2](#).

Community outreach was a core component of identifying transportation safety issues within the City and developing a consistent foundation for all local agencies in the region. City staff and leadership advocated for the Vision Zero Action Plan by supporting the plan development process and educating the public about the importance of traffic safety and the goal of reducing traffic fatalities to zero. [Chapter 3](#) describes the public engagement that was conducted as a part of this plan, and how that feedback was incorporated.

How will we get to zero traffic deaths and serious injuries?

There is no one solution to reach zero traffic deaths and serious injuries. Rather, it will require a multidisciplinary and collaborative approach. **Chapters 4, 5 and 6** provide details on the engineering and non-engineering countermeasures, where improvements will be prioritized and recommendations for specific actions that Winter Park can take in collaboration with other agencies in the region.

A foundational element of developing this plan lies in analyzing crash trends, community and roadway characteristics to understand road user behavior and elements of the built environment that are leading to severe crashes. Data was compiled, analyzed, and mapped to more identify causational relationships and then corresponding solutions to empower decision makers to thoroughly understand safety concerns and take action to mitigate them. By identifying and focusing on high-incidence locations or recurring types of accidents, In addition to physical changes to the roadway system including lighting upgrades, intersection improvements, pedestrian or bicycle improvements, additional behavioral interventions like public safety campaigns are shared in this report.

How will we track our progress?

Monitoring our progress is an important part of the process. On an annual basis, we will reflect on our progress towards zero through an assessment of the crash trends from the prior year and comparing them to the trends documented in the action plan. Progress will be shared at an Annual Safety Summit hosted by MetroPlan Orlando where best practices and lessons learned from across the region will be shared.

What action does the City need to take?

This Action Plan is firmly grounded on a rigorous and comprehensive data-driven approach and vetted in feedback received from important stakeholders of the community and City staff. Through the data-driven process and conversations with key stakeholders of the community, the City of Winter Park has identified priority areas and design-appropriate safety countermeasures across the state roadway system's most dangerous corridors, as outlined in next table. By identifying specific countermeasures and focusing on high-incidence locations, the City of Winter Park is well-equipped to pinpoint areas where investment of resources will have the most significant impact in terms of lives saved and injuries prevented. These solutions will help empower decision makers to thoroughly understand safety concerns and take action to mitigate them.



Proposed Engineering Countermeasures

- Assess a reduction in posted speed limits
- Employ speed feedback signs for short recurring periods
- Propose lane narrowing or lane reduction
- Implement speed sensitive rest on red at nighttime
- Conduct sight line reviews and evaluate need to remove obstructions at driveways or stop signs
- Update worn pavement markings
- Evaluate opportunities to consolidate driveways
- Consider median installation
- Reduce curb radii / turning radii
- Install backplates with retroreflective borders where needed
- Consider the installation roundabouts at intersections
- Consider opportunities for intersection reconstruction
- Consider prohibition of specific turning movement
- Extend median nose into crosswalk at non-signalized and signalized locations
- Provide separated bicycle lanes or provide additional buffer to existing bicycle lanes
- Add "Bicycle May use Full Road" signage
- Reconfigure crosswalk or upgrade to high-emphasis crosswalks at intersections
- Upgrade crosswalk striping
- Complete sidewalk gaps or widen sidewalks where right-of-way permits
- Install median islands with dedicated crosswalks at strategic locations
- Install midblock crossings with visibility enhancements and pedestrian refuge islands with key community assets
- Install PHBs, RRFBs, or other pedestrian signalization at midblock crossings
- Upgrade to audible push button ped crossing signals
- Co-locate bus stops with crosswalks at midblock crossings and intersections, locate bus stops to far side of signalized intersections
- Consider transit infrastructure (benches, shelters, etc.)
- Prohibit turns when ped signal is activated
- Install leading pedestrian intervals
- Address lighting upgrades at segments and intersections
- Conduct Road Safety Audit to identify safety countermeasures



CHAPTER 1

Introduction





CHAPTER 1: INTRODUCTION

The purpose of the City of Winter Park's Vision Zero Action Plan is to articulate its commitment towards achieving zero road fatalities and serious injuries in Winter Park and continue to collaborate with Orange County and neighboring municipalities to accomplish the same. This plan outlines a comprehensive, data-driven approach to improving road safety for all users, utilizing the **Safe System Approach**. We acknowledge that every life is valuable, and no loss of life is acceptable on our roads. Our vision is not just to reduce but to systematically eliminate fatalities and serious injuries (KSI) caused by road traffic crashes. We pledge to put safety at the core of our decision-making processes, working collaboratively with local partners, stakeholders, and the community to achieve our collective goal.

No one entity or agency can fix road safety problems alone. This **Vision Zero Action Plan** results from a coordinated planning effort led by **the City of Winter Park's Public Works and Transportation Department** in partnership with Orange County, MetroPlan Orlando, the Florida Department of Transportation, and other local stakeholder groups. With this Action Plan, Winter Park has joined communities around the world that are working to stop traffic deaths through the Safe System Approach. This plan:

- **Identifies High Injury Networks** –roads with the highest risk of death and serious injury crashes. **The identified High Injury Network Roadways are comprised of approximately 14.8 centerline miles and includes 68.6% of all crashes and 84.6% of KSI crashes that occurred in Winter Park.**

- **Layers a qualitative analysis** by engaging stakeholders and the community and incorporating their feedback and review of the HIN and safety concerns.

- **Identifies barriers and opportunities** to reaching zero in reviewing existing and proposed policy.

- **Accounts for transportation underserved communities** that have been disproportionately affected by traffic crashes.

- **Prioritizes feasible projects** that will have the greatest safety impacts. Winter Park will work with our regional partners to implement changes and monitor long-term progress on safety.

Safe System Principles

The Safe System Approach acknowledges the vulnerability of the human body 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 automotive industry, law enforcement, elected officials, and government agencies. 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 Is Built On The Following Principles:

DEATH AND SERIOUS INJURY ARE UNACCEPTABLE

This plan focuses on eliminating crashes resulting in death and serious injuries in Winter Park by 2050.



HUMANS MAKE MISTAKES

Everyone (people walking, bicycling, driving, etc.) makes mistakes that can lead to a crash. The goal of the SSA 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, to planners and engineers, has a role to play in reaching zero fatalities and serious injuries.



SAFETY IS PROACTIVE

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



REDUNDANCY IS CRUCIAL

Redundancy means making sure there are multiple layers of the transportation system working together towards safer outcomes so that if one layer fails, people are still protected.



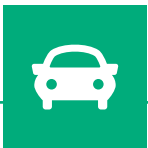
Five Elements of the Safe System Approach

The SSA addresses the five elements of a safe transportation system—safer people, safer vehicles, safer speeds, safer roads, and post-crash care—in an integrated manner, through a wide range of interventions.



SAFER PEOPLE

Encourage safe, responsible driving and behavior by people who use our roads and create conditions that prioritize their ability to reach their destination unharmed.



SAFER VEHICLES

Proactively plan for a connected and autonomous vehicle fleet and encourage the purchase of vehicles that feature crash prevention technology.



POST-CRASH CARE

Partner with law enforcement and emergency response to identify strategic investments in crash response, crash assessment, and crash reporting.



SAFER ROADS

Prioritize roadway design changes throughout the MetroPlan Orlando region that address the factors contributing to severe injury and fatal crashes.



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.

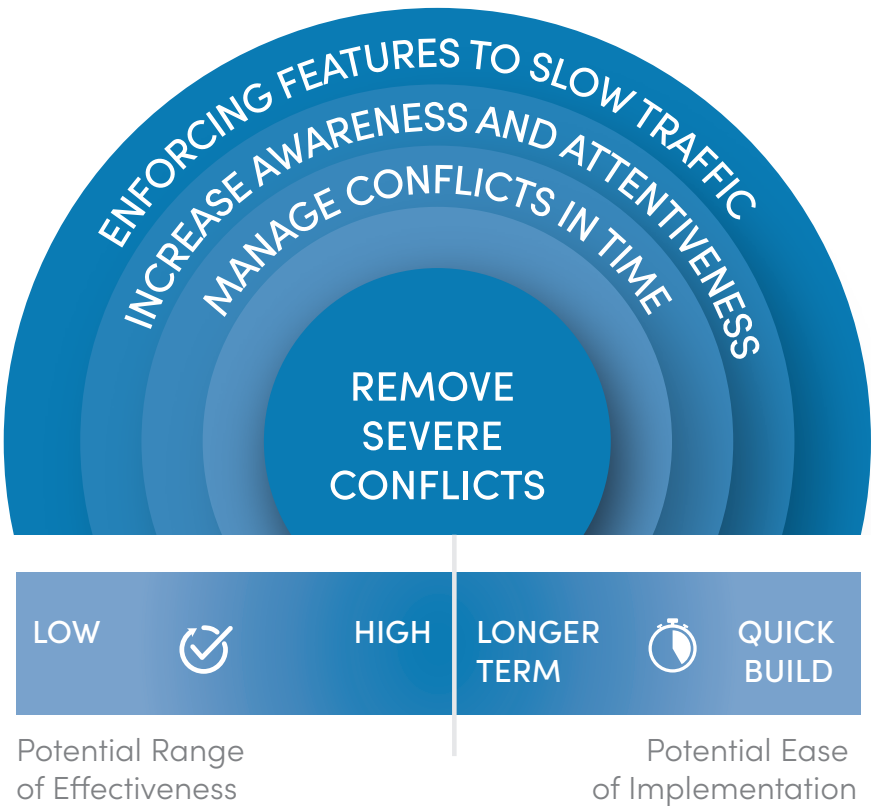
Source: Adapted from Federal Highway Administration, 2024.

Safe System Strategy

Consistent with the Safe System Approach Framework, the planning, design, and operation of facilities within the City of Winter Park should anticipate human error and consider human vulnerabilities. The Institute of Transportation Engineers (ITE) and the Road to Zero Coalition's Safe Systems Explanation and Framework articulate that to anticipate human mistakes, a Safe System seeks to:

- ⦿ Separate users in space by providing road users moving at different speeds or different directions, such as turning vehicles, dedicated space to minimize conflicts with other road users.
- ⦿ Separate users in time when road users need to occupy the same space on the roadway, such as an exclusive pedestrian crossing phase or a dedicated turn phase.
- ⦿ Alert users to potential hazards – through strategies that increase visibility and increase attentiveness, as well as reducing impairment.
- ⦿ Accommodate human injury tolerance through interventions that reduce speed or impact force, like physical design treatments and occupant protection.

These elements provide a system with built-in redundancies to eliminate or greatly reduce the likelihood of death or serious injury when a crash occurs. However, strategies have varying levels of effectiveness, feasibility, and implementation timeframes. FHWA has further developed a draft Safe Systems Solutions Hierarchy (January 2024) within the Safe System elements of Safe Roads. Following this framework, the most effective strategies are those that remove severe conflicts and minimize conflict and speed, providing adequate reaction time for drivers to make adjustments and save lives.





CHAPTER 2

Crash Trends and Analysis





WINTER PARK CRASH TRENDS

The following represents an overview of the crash trends on the roadway network in Winter Park:

YEARS OF CRASH DATA: 2018-2022	TOTAL CRASHES: 6,578	TOTAL FATAL CRASHES: 7	TOTAL SERIOUS INJURY CRASHES: 58
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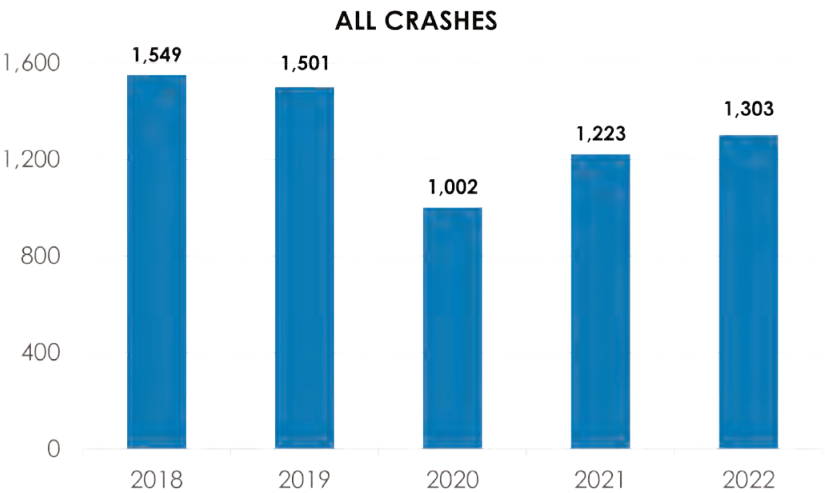
A comprehensive strategy to improve roadway safety requires an understanding of local crash trends and the various factors contributing to such incidents. The primary data for this analysis was sourced from the University of Florida's Signal Four (S4) Analytics crash data, offering a solid foundation for the Project Team's research. This crash data was supplemented with data from the Florida Injury Surveillance System (FISS) and the Florida Department of Transportation (FDOT) Modal Office, to provide more detailed injury information for non-motor vehicle injuries.

Other relevant contextual information was incorporated with the base data. This involved factors such as road conditions, aspects of the constructed surroundings, or social vulnerability factors which can influence both traffic accidents and guide the demand for specific measures. These layers of data helped to understand crash patterns better and sort different crashes into a group of 'collision profiles' that show the factors most common for crashes resulting in fatalities or serious injuries.

CRASHES BY YEAR:

Overall, the city has seen progress in the last 5 years towards lowering total crashes, while simultaneously seen setbacks with KSI crashes increasing.

Over the 5-year analysis period, the total number of crashes varied slightly with the highest number of crashes (1,549) occurring in 2018. The lowest number of annual crashes (1,002) was in 2020, likely due to the lower number of trips that occurred in the pandemic year. In review of KSI crashes, a different trend is noted, with the highest number of KSI crashes (15) occurring in 2021 and the lowest number of KSI crashes in 2018 (9).

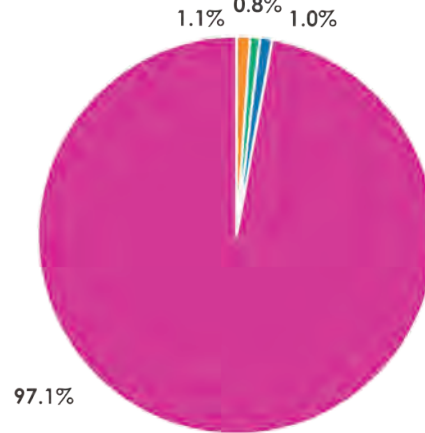


*There has been a **15.9% decrease** in overall crashes in the five year period.*

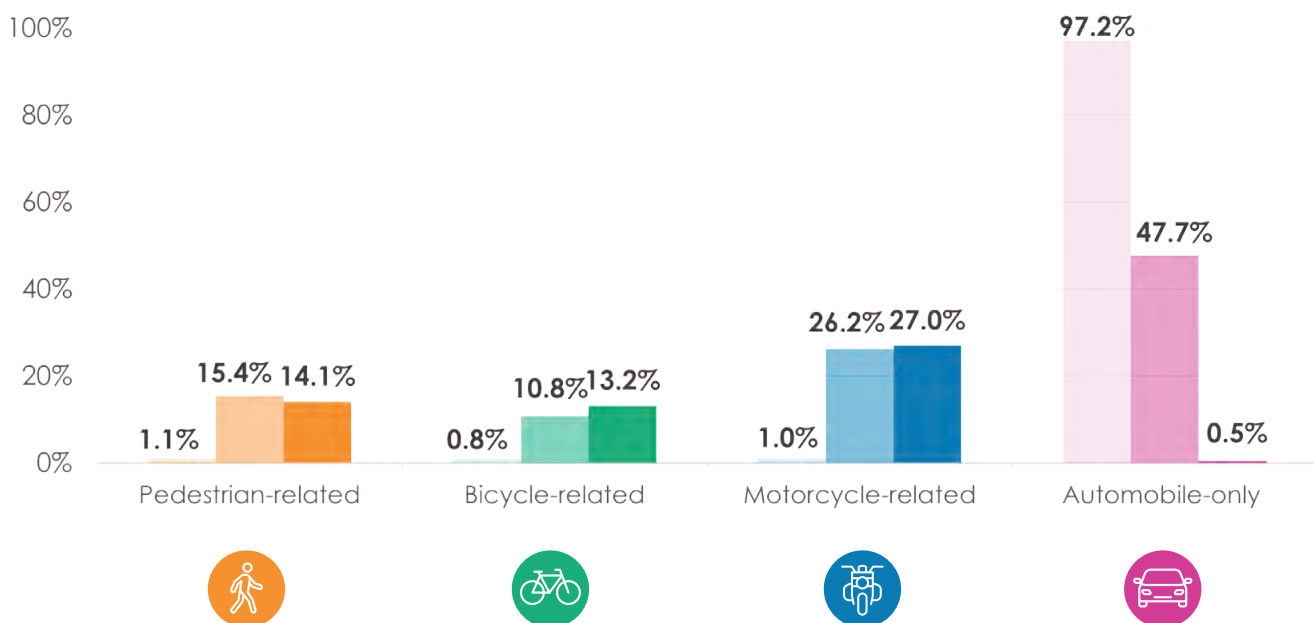
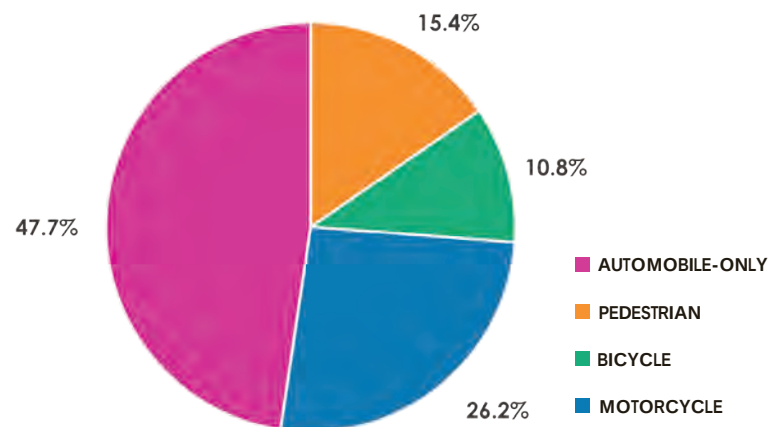
CRASHES BY MODE:

- ⦿ Pedestrian:** Pedestrian-involved crashes made up 1.1% of all crashes, but 15.4% of KSI crashes, and 14.1% of every pedestrian-involved crash resulted in a fatality or serious injury.
- ⦿ Bicycle:** Bicycle-involved crashes made up 0.8% of all crashes and 10.8% of KSI crashes, but 13.2% of every bicycle-involved crash resulted in a fatality or serious injury.
- ⦿ Motorcycle:** Motorcycle-involved crashes made up 1.0% of all crashes, but 26.2% of KSI crashes, and 27.0% of every motorcycle-involved crash resulted in a fatality or serious injury.
- ⦿ Automobile-Only:** crashes involving automobiles made up 97.2% of all crashes and 47.7% of KSI crashes, but only 0.5% of automobile-only crashes resulted in a fatality or serious injury.

PERCENT SHARE OF CRASHES



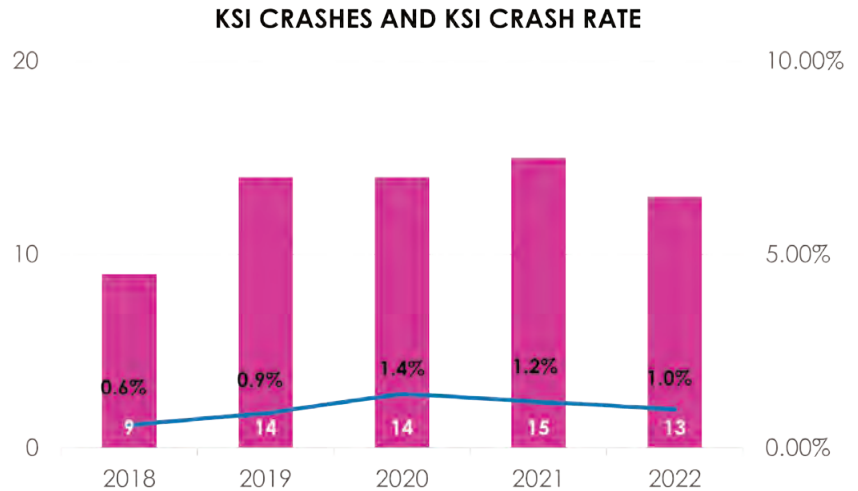
PERCENT SHARE OF KSI CRASHES



■ ■ ■ ■ PERCENT OF CRASHES RESULTING IN KSI CRASHES
 ■ ■ ■ ■ PERCENT OF KSI CRASHES BY MODE
 ■ ■ ■ ■ PERCENT OF ALL CRASHES

CRASHES BY INJURY SEVERITY:

KSI crashes accounted for just 1% of all crashes in the city; however, as shared in the crash analysis by mode of transportation, pedestrians, bicyclists, or motorcyclists are much more at risk of a fatality or serious injury in instance of a crash.

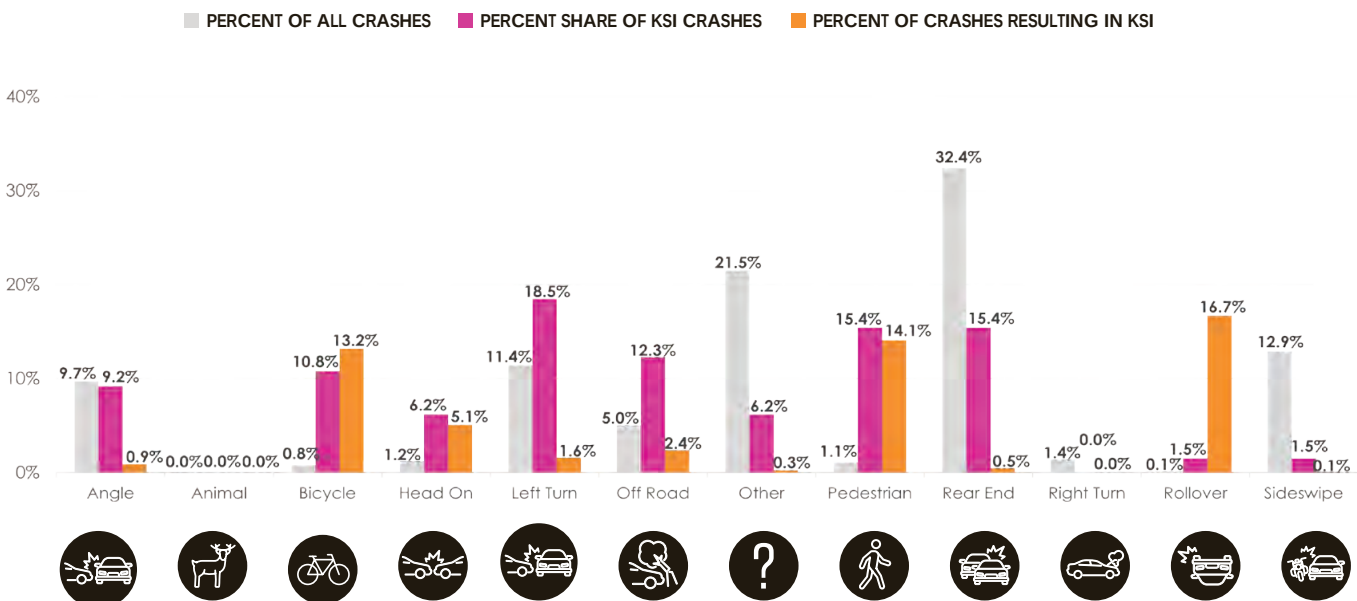


*There has been a **44.4% increase** in KSI crashes in the five year period.*

CRASHES BY TYPE:

Rear end crashes were the most common type of crash with 32.4% of the crashes. Left turn crashes, while comprising 17.1% of total crashes, were the most common to result in a fatality or serious injury, constituting 18.5% of all KSI crashes. The second and third crash types most likely to result

in a KSI crash were rear end crashes (15.4%) and pedestrian crashes (15.4%). The top two crash types to occur that result in a KSI are both motorcycle and then pedestrian crashes, which have an increased likelihood of resulting in a KSI, with 27.0% and 14.1% of this crash type resulting in a KSI, respectively.

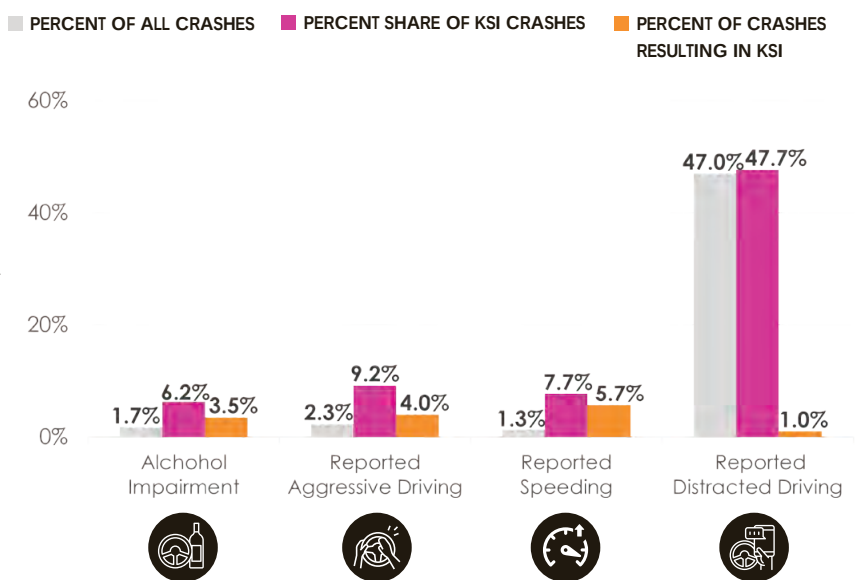


BEHAVIORAL FACTORS:

⊙ **ALCOHOL IMPAIRMENT:** Crashes that involved alcohol impairment comprised 1.7% of all crashes, however, comprised 6.2% of KSI crashes, and 3.5% of every alcohol-involved crash resulted in a fatality or serious injury.

⊙ **SPEEDING:** Crashes that reported speeding comprised 1.3% of all crashes and comprised 7.7% of KSI crashes, and 5.7% of speeding-involved crashes resulted in a fatality or serious injury.

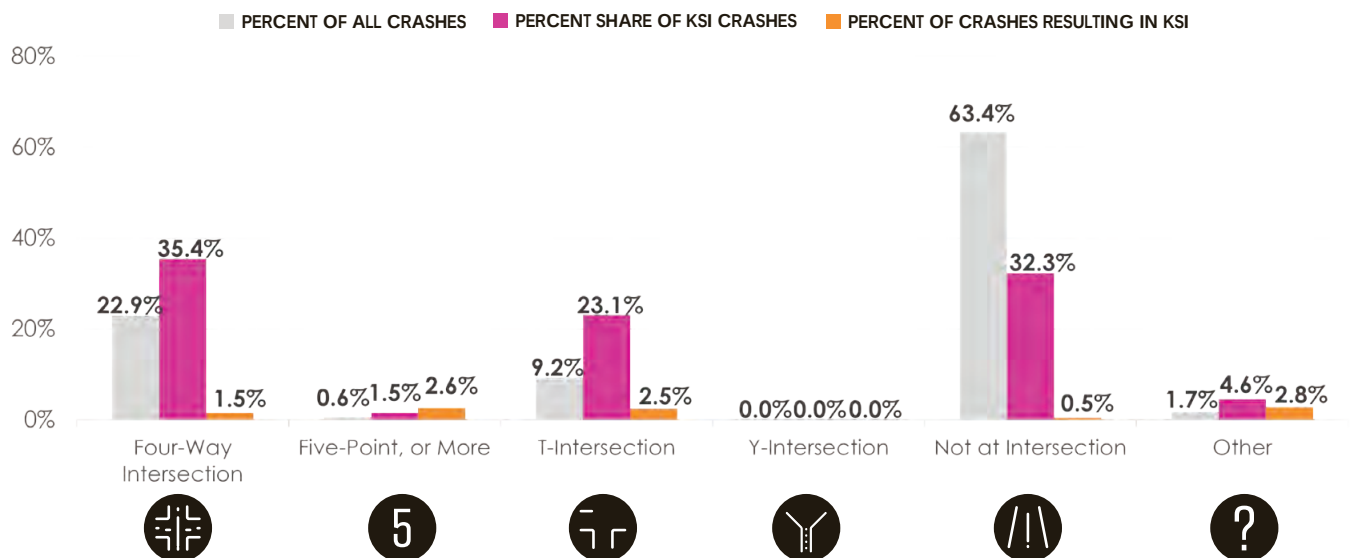
⊙ **AGGRESSIVE DRIVING:** Crashes with reported aggressive driving comprised 2.3% of total crashes and 9.2% of KSI crashes. 4.0% of reported aggressive-driving crashes resulted in a fatality or serious injury.



⊙ **Distracted Driving:** crashes with reported distracted driving comprised 47.0% of all crashes and 47.7% of KSI crashes, 1.0% of reported distracted driving crashes resulted in a fatality or serious injury.

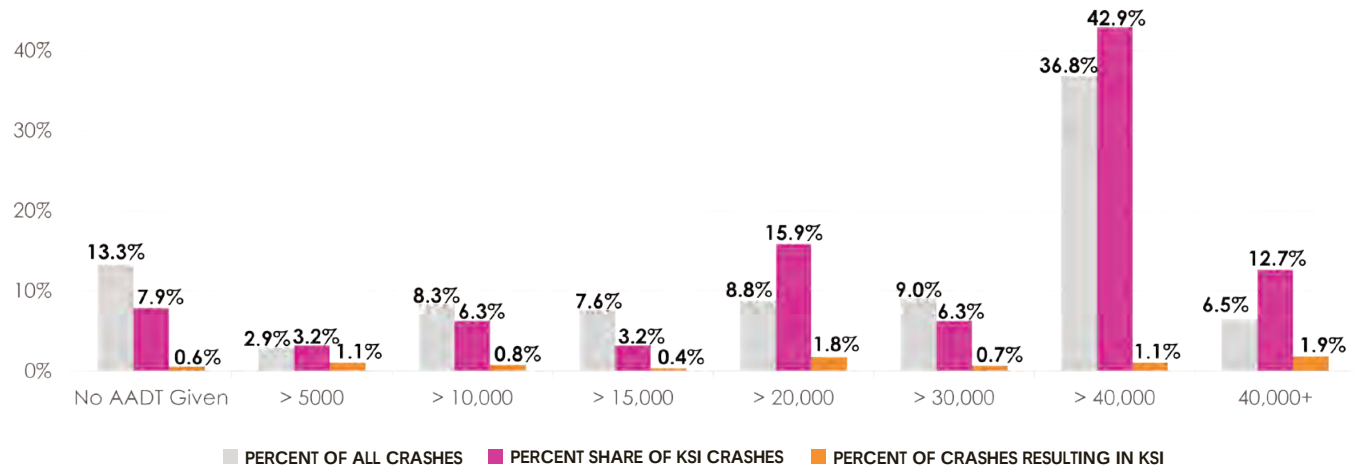
CRASHES BY LOCATION:

⊙ 36.6% of all crashes occurred at an intersection, with crashes occurring at 4-way or T-intersections disproportionately resulting in a serious injury or fatality (approximately 35% and 23% respectively). 63.4% of crashes in Winter Park occurred outside of intersections.



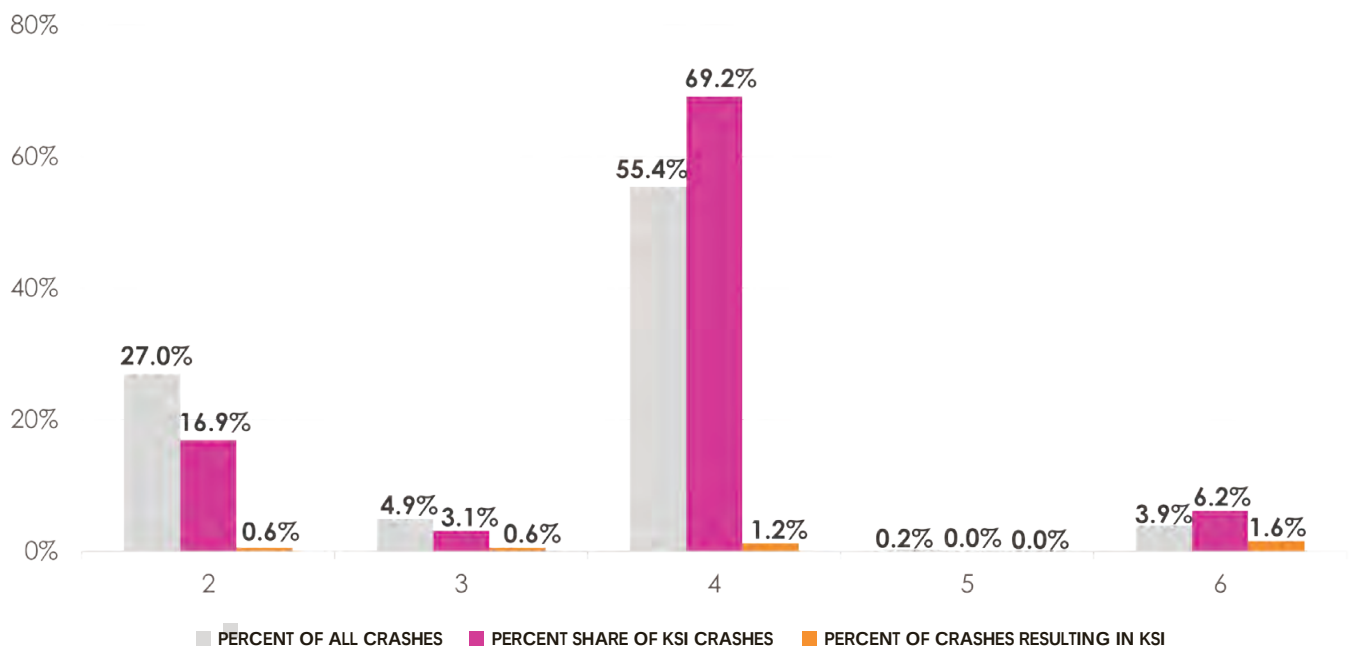
ROADWAY VOLUME (AADT):

Approximately 36.8% of all crashes occurred on roadways with traffic volumes between 30,000 and 40,000 daily trips.



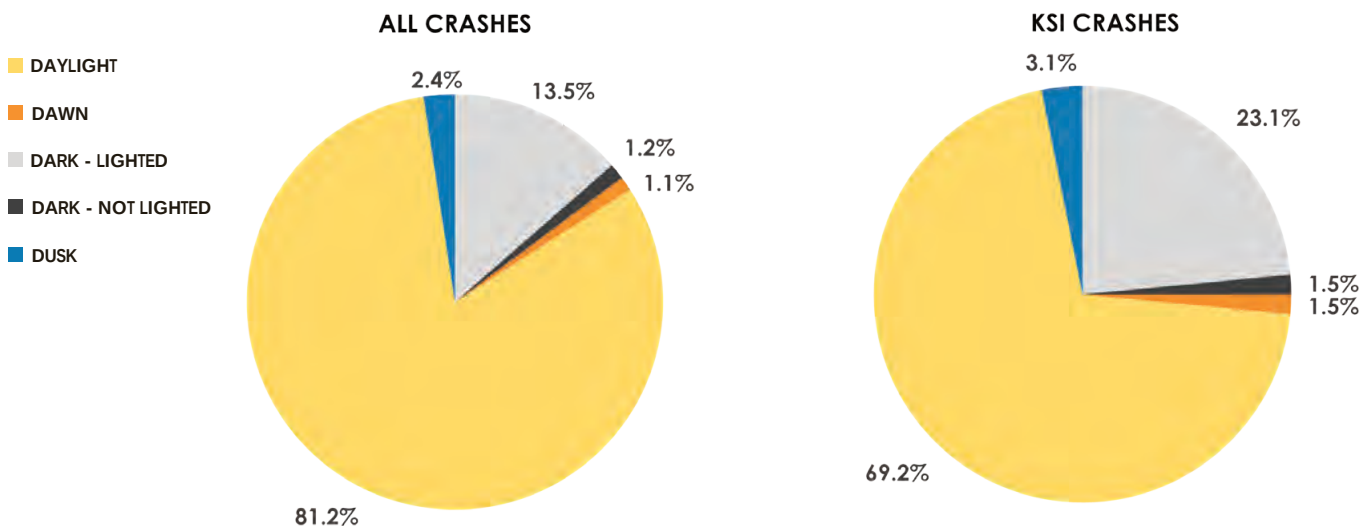
NUMBER OF LANES:

Approximately 55.4% of all crashes in the city of Winter Park occur on roadways with 4 travel lanes. The proportion of KSI crashes also increased as the number of lanes increased, with approximately 69.2% of KSI crashes occurring on roadways with 4 travel lanes.



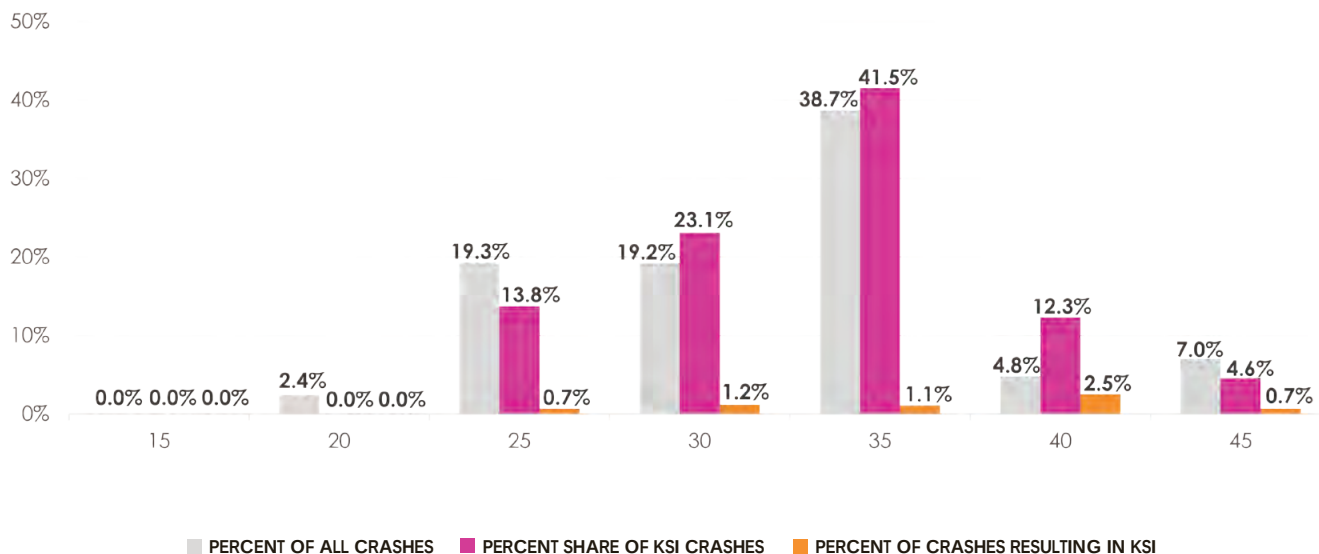
LIGHTING CONDITIONS:

Most crashes occurred during daylight hours (81.2%); however, crashes that occurred during dark conditions were more likely to result in a serious injury or fatality. Dark – lighted conditions were reported for 23.1% of KSI crashes in Winter Park, and dark – not lighted conditions were reported for 1.5% of KSI crashes.



POSTED SPEED LIMIT:

Crashes disproportionately occurred on roadways with higher speeds. With 38.7% of crashes in the County occurring on roadways with a posted speed limit of 35 mph. 58.4% of the County's KSI crashes occur on roadways where the posted speed is 35 mph or greater. Review of both the countywide and unincorporated crash trends reveals that as speeds increase, there was a higher chance that the crash resulted in a KSI, with speeds of <25 miles per hour resulting in less than a 0.7% chance of a KSI; whereas 2.5% of crashes resulted in a fatality or serious injury where the speed limit was 40 mph.



High injury network

The next step in creating the Vision Zero Action Plan was to identify the High-Injury Network (HIN) for the roadways in Winter Park. The HIN is a key tool for prioritizing countermeasures and helps Winter Park target safety improvements where they are most needed. The HIN for Winter Park was based on a thorough review and analysis of crash data to find locations with a high number of severe injuries and fatalities in the past five years (2018-2022). The Project Team also checked the quality and accuracy of crash citation records to verify the location of crashes only on the state roadway system. The approach to developing the HIN, along with a tie the associated collision profiles from the crash analysis, intentionally excludes limited access (LA) facilities such as Interstate 4, or other tolled roadways and corresponding on-off ramps. The top 13 HIN corridors are identified below:

Overall Rank Worst Segment)	Road Name	From	To	Length (mi)	Total Crashes (KSI Crashes)	Automobile Crashes (KSI Crashes)	Pedestrian Crashes (KSI Crashes)	Bicycle Crashes (KSI Crashes)	Motorcycle Crashes (KSI Crashes)
1	SR-527	Berkshire Ave	S. Park Ave	1.41	404 (3)	396 (1)	2 (0)	2 (1)	4 (1)
2	Orlando Ave	Norfolk Ave	Elvin Ave	1.96	844 (9)	814 (4)	8 (3)	10 (1)	12 (1)
3	W Fairbanks Ave	Driver Ave	Pennsylvania Ave	1.75	520 (9)	508 (1)	3 (2)	0	9 (6)
4	Fairbanks / Osceola /Aloma Ave	S Park Ave	Balfour Dr	2.27	638 (7)	619 (0)	5 (1)	1 (0)	13 (6)
5	Pennsylvania Ave	Melrose Ave	SR. 527	0.67	59 (2)	57 (2)	0	1 (0)	1 (0)
6	Lakemont Ave	Glenridge Way	Pine Ave	2.24	218 (3)	211 (2)	4 (0)	3 (1)	0
7	N Denning Dr	Minnesota Ave	SR. 17	1.43	53 (2)	52 (2)	0	0	1 (0)
8	Howell Branch Rd	Horatio Ave	N. Lakemont Ave	0.92	102 (1)	99 (1)	1 (0)	1 (0)	1 (0)
9	Lee Rd	Gloriosa Ave	SR. 17	1.07	202 (1)	198 (0)	2 (0)	2 (1)	0
10	Morse Ave	Denning Dr	S. Park Ave	0.68	69 (0)	65 (0)	3 (0)	1 (0)	0
11	Canton Ave	US 17-92	N. Virginia Ave	0.63	26 (0)	26 (0)	0	0	0

However, many of these crashes occurred on FDOT-controlled roadways where Winter Park has a limited ability to intervene regarding roadway design or function. To prioritize safety projects to locally controlled segments, and encourage local engagement with safety projects, the top 4 non-FDOT roadway segments were identified. Safety improvements at these locations have the most potential to provide the highest crash reductions and enhanced safety for the most vulnerable users, these segments are identified in Chapter 6 of this plan, as these roadways are given the greatest priority for safety improvements.

Crash Profiles

After analyzing the crash trends and the HIN, the Project Team identified 12 collision profiles that show the main causes of fatal and serious injuries on Winter Park's roads. These profiles give more information about the highest risk factors for crashes in Winter Park.

VHB used a decision tree analysis to examine other factors that contributed to the specific cases of KSI crashes for each of the collision profiles identified. A decision-tree analysis is a useful tool that can help understand the complicated interactions between different factors, such as roadway features, socioeconomic factors, and community needs like school proximity and park access. By finding common elements and situations that cause severe crashes, Winter Park can better recognize patterns and trends that allow us to focus on and address specific behaviors, locations, types of road users, and/or times that have higher risks. If a collision profile shows a pattern of left turn accidents in areas without turn lanes, a proposed change could be made for signalization timing or adding protected turn lanes. Instead of treating crashes as separate incidents, the collision profiles show where dangerous collisions are a conjoining of a multitude of factors, allowing us to use resources effectively to deal with systemic issues and offer targeted solutions.

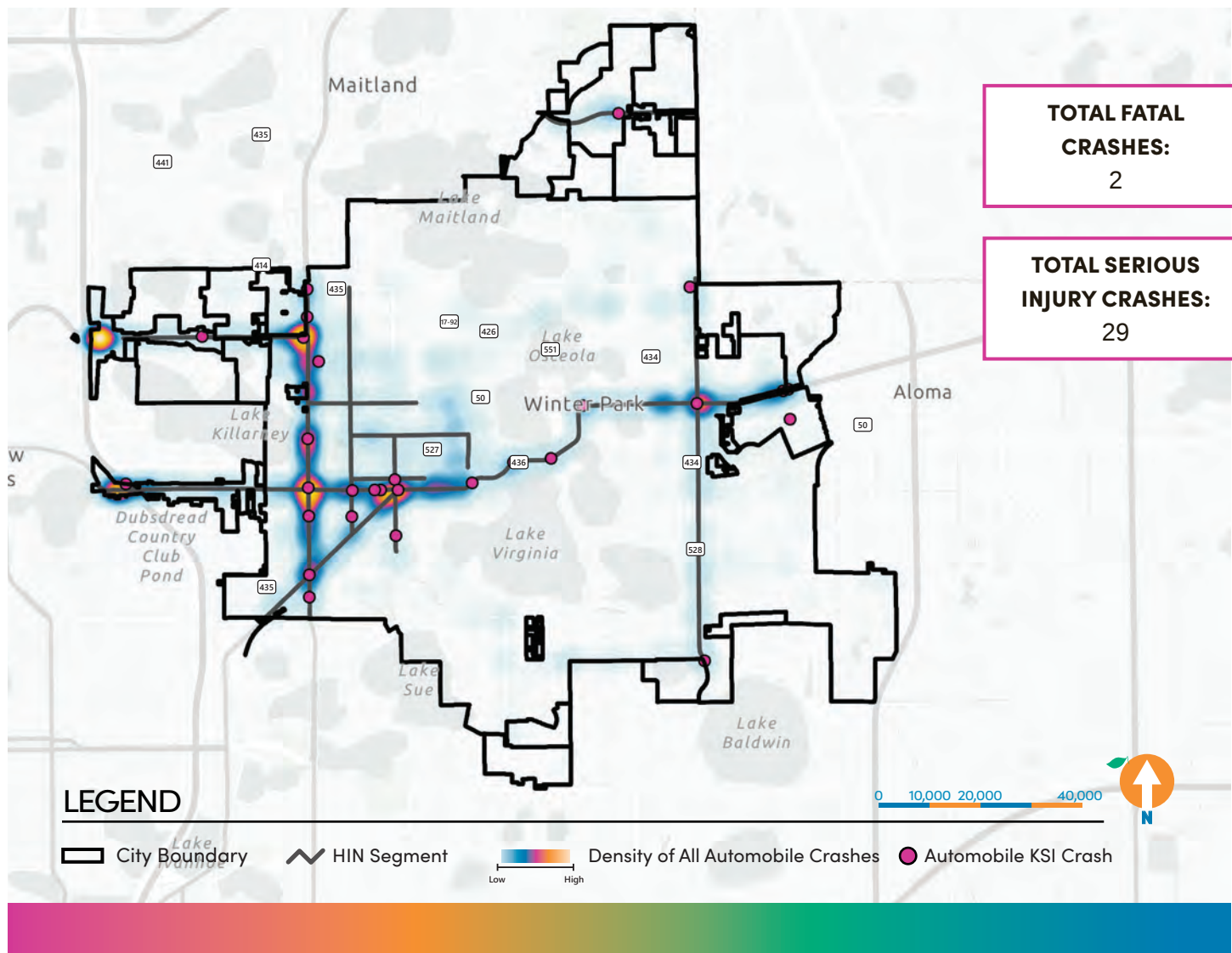
#	Crash Profile	Total Crashes	Percent of Total Winter Park Crashes	KSI	Percent of Total Winter Park KSI Crashes	Percent of Crashes Resulting in KSI
1	Angle	635	9.70%	6	9.20%	0.90%
2	Left Turn	747	11.40%	12	18.50%	1.60%
3	Rear End	2,128	32.40%	10	15.40%	0.50%
4	Bicycle	53	0.80%	7	10.80%	13.20%
5	Motorcycle	63	1.00%	17	26.20%	27.00%
6	Pedestrian	71	1.10%	10	15.40%	14.10%
7	Speed Related	88	1.30%	5	7.70%	5.70%
8	Distract Driving	3,091	47.00%	31	47.70%	1.00%
9	Aging Driver	1,325	20.10%	9	13.80%	0.70%
10	Context Classification C4	4,055	61.60%	45	69.20%	1.10%

Modal Crash Trends

This section provides an overview of crash trends by mode that occurred in the city, revealing the most common factors specific to pedestrian, bicycle, motorcycle, and automobile-only crashes, with emphasis placed on identifying the contributing factors most likely to result in a fatality or serious injury. The maps on the following pages share an HIN specific to each mode, as well as the top contributing factors leading to these crashes.

AUTOMOBILE-ONLY HIN AND CRASH TRENDS

The following represents an overview of the **6,391** automobile-only crashes that occurred in the City of Winter Park.

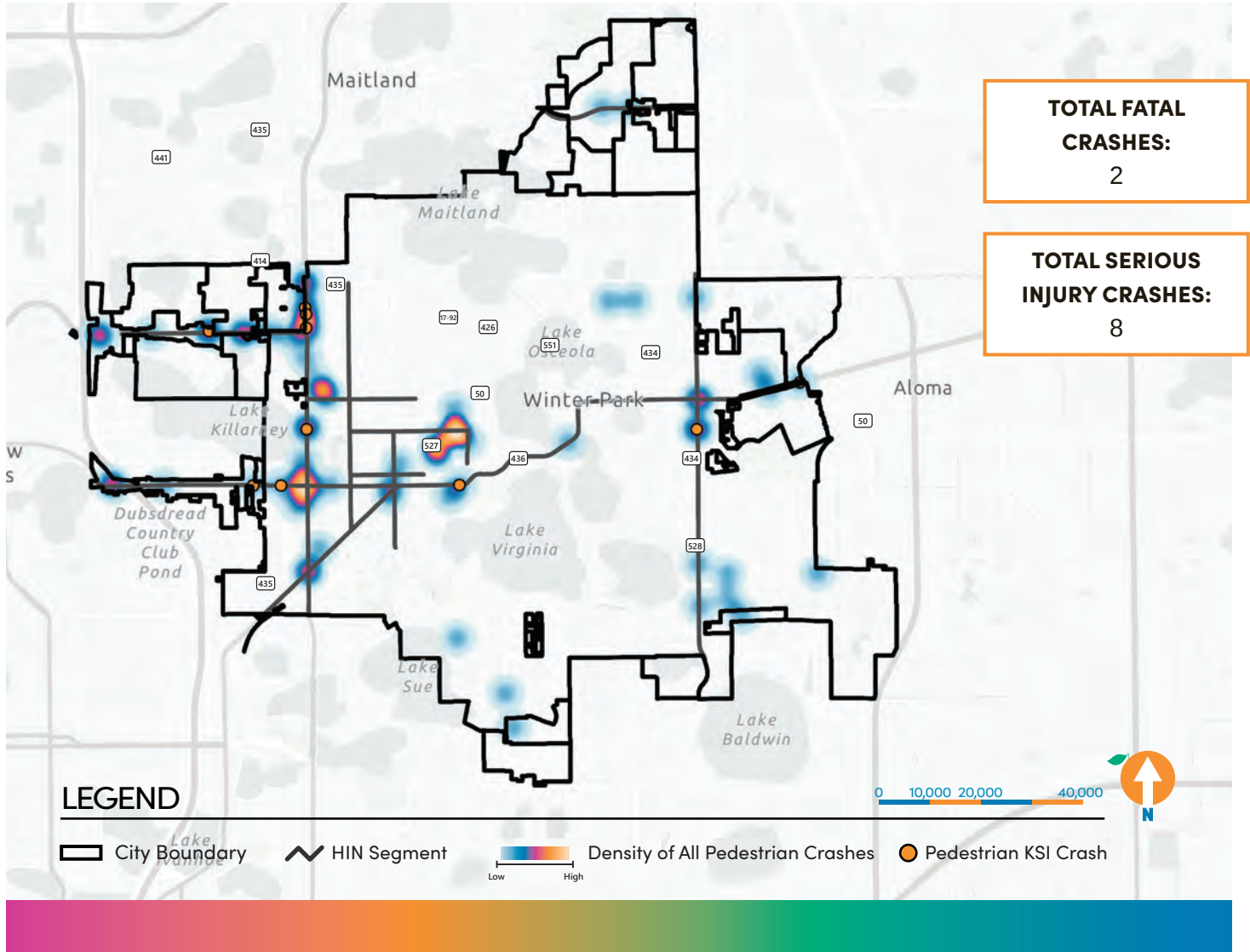


TOP CONTRIBUTING FACTORS FOR AUTOMOBILE-ONLY KSI CRASHES

- Without bicycle lanes, comprising **100%** of all automobile-only KSI crashes
- In the C4 Context Classification, comprising **67.7%** of all automobile-only KSI crashes
- In locations without presence of median, comprising **54.8%** of all automobile-only KSI crashes
- With reported aggressive driving, comprising **51.6%** of all automobile-only KSI crashes
- In locations with posted speed limit of 35 mph, comprising **41.9%** of all automobile-only KSI crashes
- At four-way intersections, comprising **41.9%** of all automobile-only KSI crashes

PEDESTRIAN HIN AND CRASH TRENDS

The following represents an overview of the **71** pedestrian-involved crashes that occurred in the City of Winter Park.

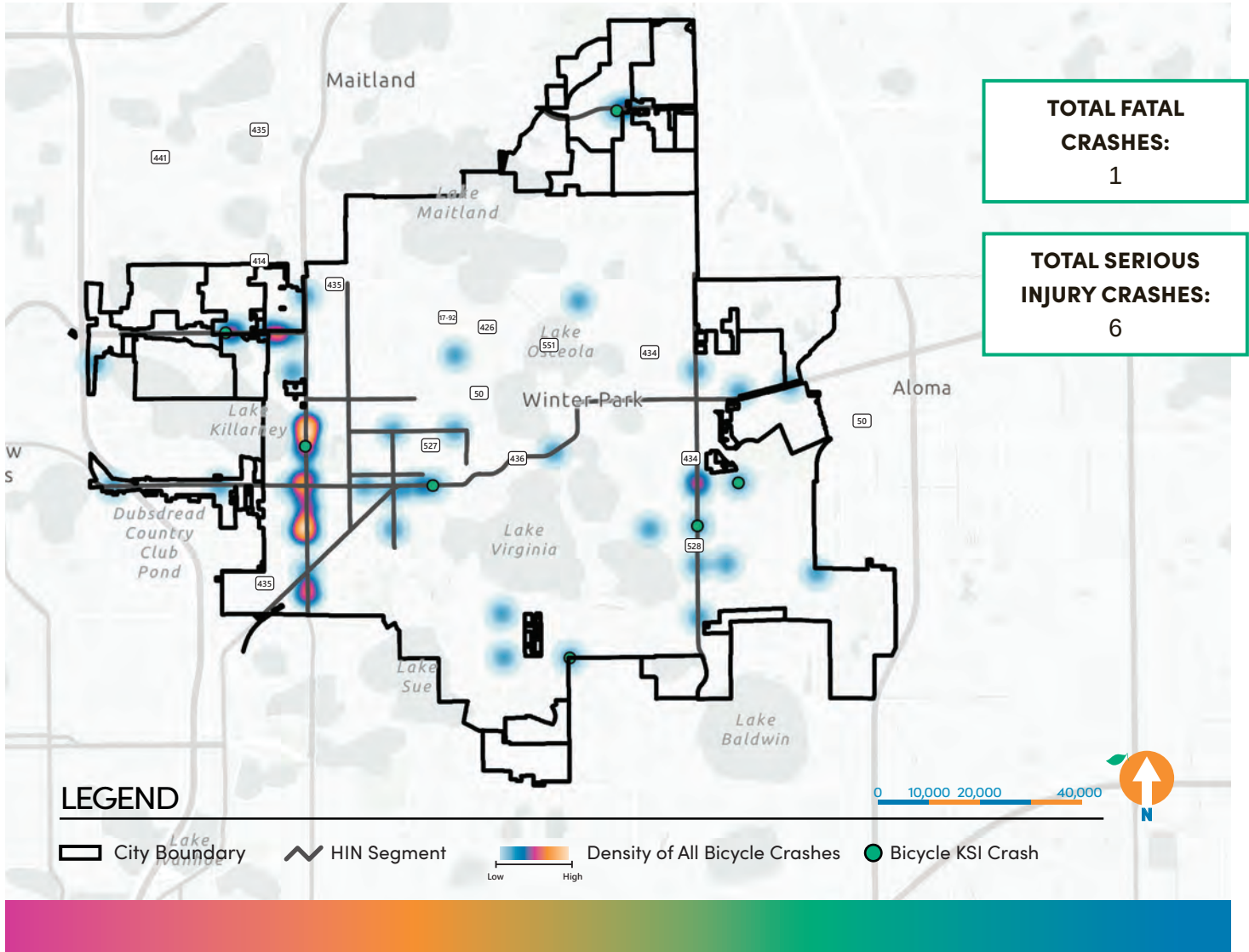


TOP CONTRIBUTING FACTORS FOR PEDESTRIAN-INVOLVED KSI CRASHES:

- ⦿ on roads with the C5 Context Classification, with **100%** of these crashes resulting in a KSI
- ⦿ In dark-unknown or dark-lighted conditions, with **66.7%** of these crashes resulting in a KSI
- ⦿ In locations with posted speed limit of 40 mph, with **57.1%** of these crashes resulting in a KSI
- ⦿ When a motorist failed to yield, comprising **50.0%** of all pedestrian KSI crashes
- ⦿ On roads with 5 lanes, comprising **50.0%** of all pedestrian KSI crashes
- ⦿ On a roadway segment, comprising **40.0%** of all pedestrian KSI crashes

BICYCLE HIN AND CRASH TRENDS

The following represents an overview of the **53** bicycle-involved crashes that occurred in the City of Winter Park.

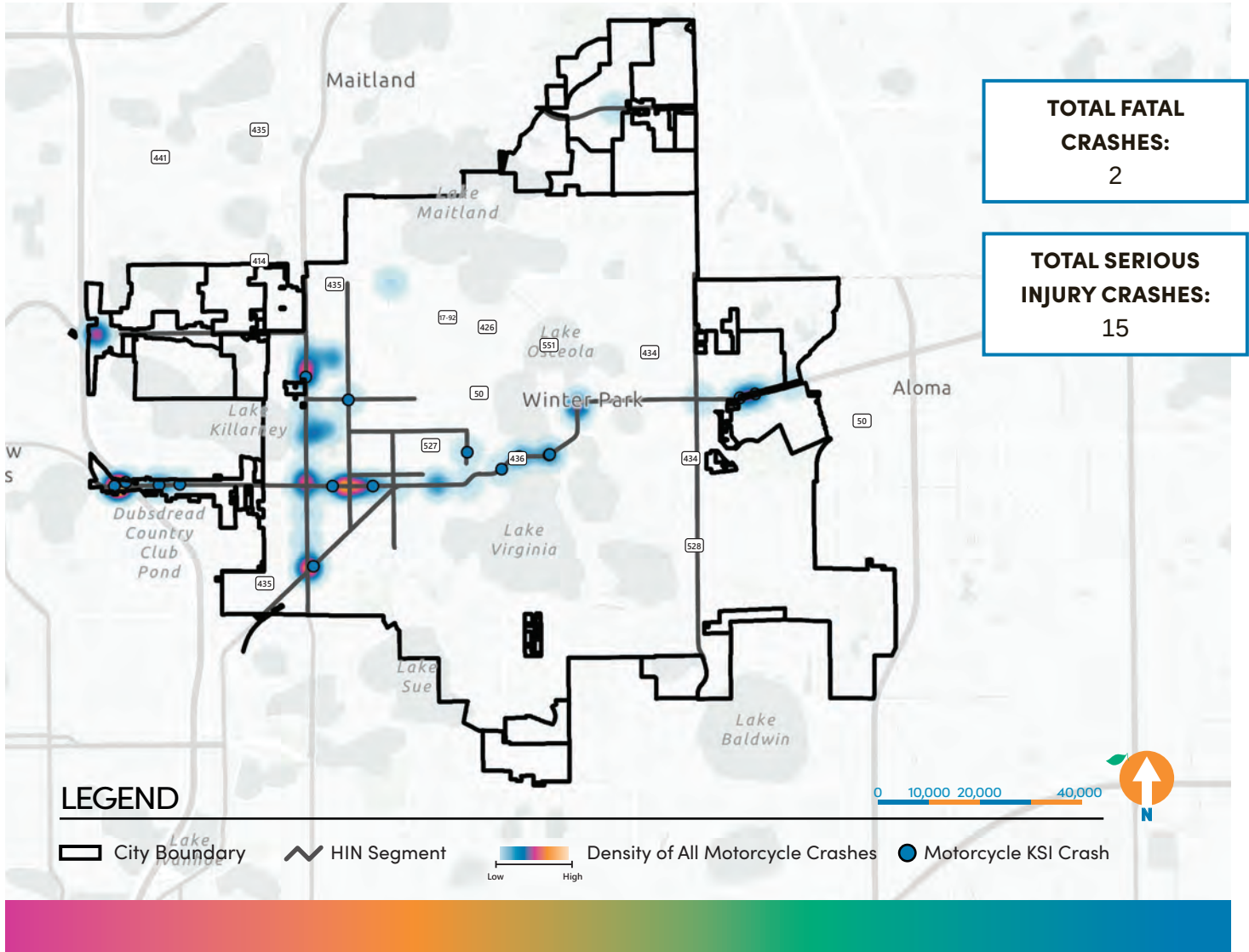


TOP CONTRIBUTING FACTORS FOR BICYCLE-INVOLVED KSI CRASHES

- ⦿ In locations with one bicycle lane, with **100%** of these crashes resulting in a KSI
- ⦿ With reported aggressive driving, with **100%** of these crashes resulting in a KSI
- ⦿ In dark not-lighted conditions, with **33.3%** of these crashes resulting in a KSI
- ⦿ On roads with 3 lanes, with **33.3%** of these crashes resulting in a KSI
- ⦿ On roads with volumes between 10,000-15,000 AADT, with **33.3%** of these crashes resulting in a KSI
- ⦿ At t-intersections, with **30.0%** of these crashes resulting in a KSI

MOTORCYCLE HIN AND CRASH TRENDS

The following represents an overview of the **63** motorcycle-involved crashes that occurred in the City of Winter Park.



TOP CONTRIBUTING FACTORS FOR MOTORCYCLE-INVOLVED KSI CRASHES:

- Without bicycle lanes, comprising **94.1%** of all motorcycle KSI crashes
- With reported speeding, with **80.0%** of these crashes resulting in a KSI
- With reported aggressive driving, with **66.7%** of these crashes resulting in a KSI
- At t-intersections, with **66.7%** of these crashes resulting in a KSI
- Between the hours of 9 PM to 12 AM, with **62.5%** of these crashes resulting in a KSI
- On roads with volumes between 30,000-40,000 AADT, comprising **47.1%** of all motorcycle KSI crashes

Public Engagement



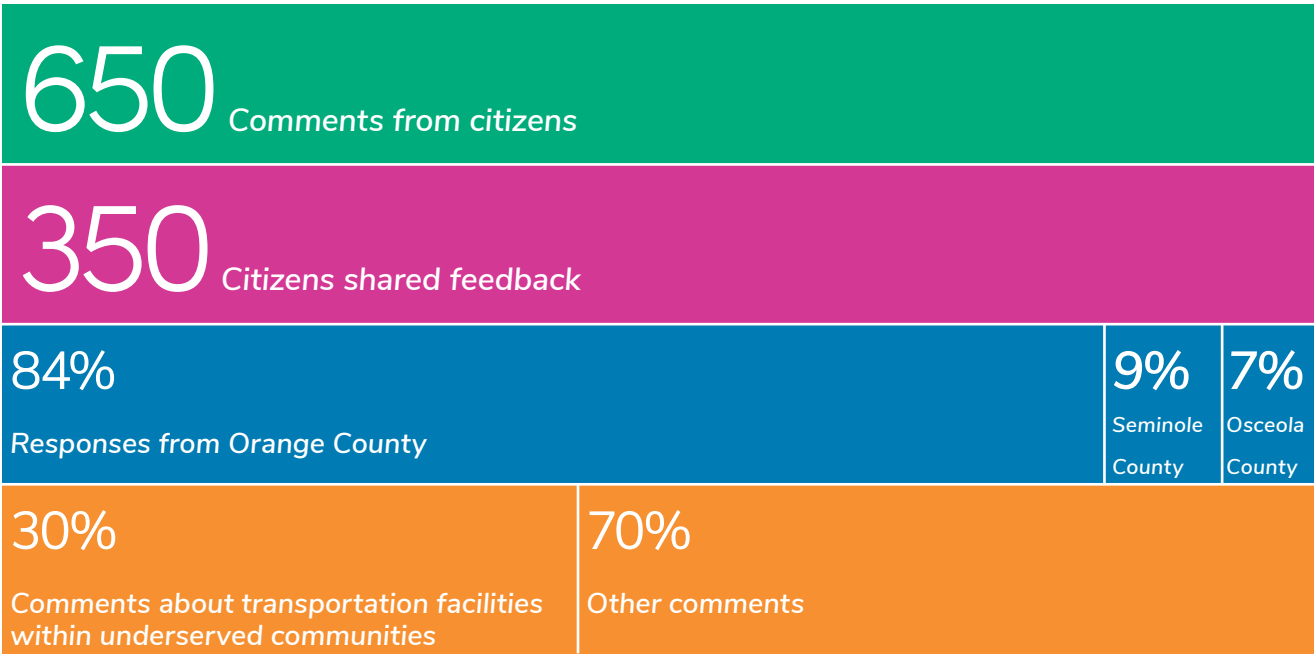


CHAPTER 3: PUBLIC ENGAGEMENT

The Action Plan’s **public engagement plan** is organized around an incremental and layered approach, where members of the project team, established a Working Group made up of key stakeholders, and collaborated with community partners and elected officials. **In-person engagement** was supplemented by **virtual** and **digital campaigns** designed to bring awareness to the plan itself, as well as engagement related activities.

Brand Development

The vision zero brand helps to generate visibility and familiarity in an effort to achieve campaign participation community wide. The Winter Park brand is easily recognizable, incorporating the character of the city into the larger vision zero goal: **to reduce the number of fatalities and severe injuries on the transportation system to zero by 2050.**



Source: Central Florida Regional Vision Zero Action Plan

Project Team

The Project Team was responsible for facilitating the development of the Action Plan and initiating the ongoing implementation of the plan. The Project Team was comprised of City leadership and key staff along with the Consultant Team, creating a successful platform for coordinated efforts and cross-collaboration from a diverse range of perspectives.

Vision Zero Working Group

The Winter Park Working Group consisted of a core group of stakeholders tasked with guiding the implementation of the VZAP and acting as plan ambassadors to ensure the principles of Vision Zero are at the forefront of future transportation planning decisions. These stakeholders should include local agency staff, elected officials, and additional members that represent different perspectives and interests within the City of Winter Park. The outcome of successful engagement strategy encourages ongoing commitment from key elected official and local agency leaders.

The Vision Zero Working Group members are key champions who:

- Provide overall guidance on the VZAP's development
- Facilitate engagement with community members, advocacy groups, and other relevant stakeholders
- Collaborate with the project team to develop strategies and policies that align with Vision Zero goals
- Take ownership of Final VZAP to ensure ongoing commitment and coordination in the implementation of the action plan.



The Working Group convened in five interactive working sessions over the course of the plan development process, providing insight on the following topics:

Meeting 1

Introductions and Overview of the Scope, Vision Zero, and Safe System Approach

Meeting 2

Review of Crash Trends, Draft High Injury Network, and Public Engagement Activities

Meeting 3

Review of Revised High Injury Network and Collision Profiles, and Updates on Public Engagement

Meeting 4

Updates on Policy Review, Review of MetroPlan Orlando Countermeasures Toolkit, and Consideration of Draft Prioritization Criteria

Pop-up Events

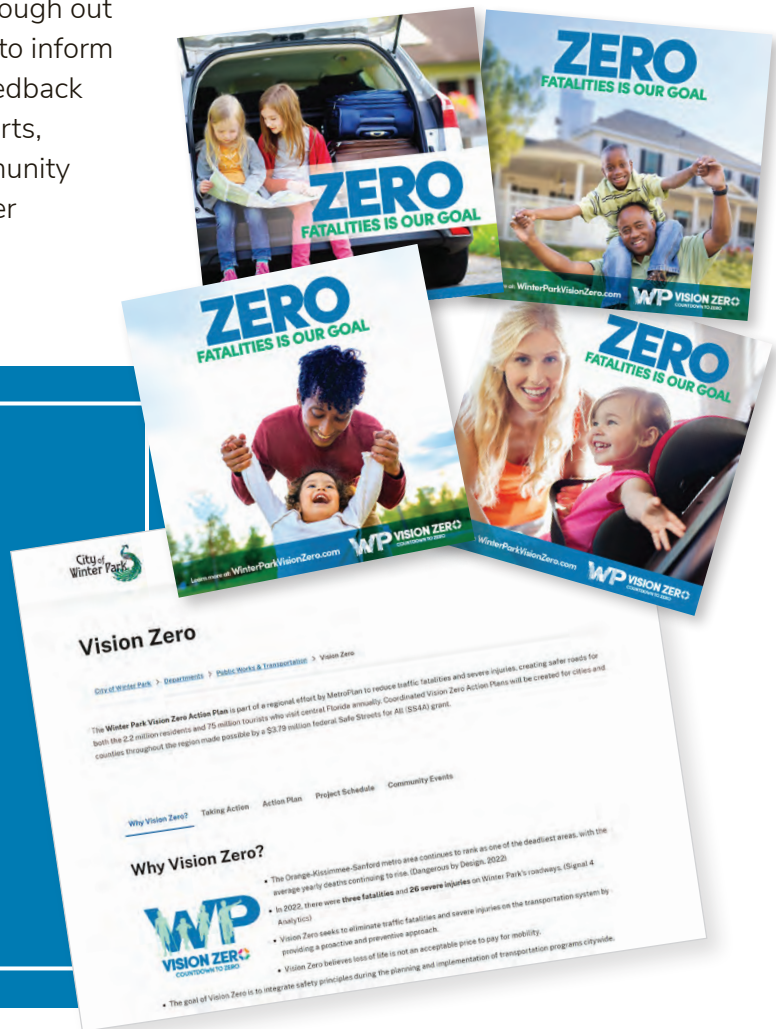
A variety of pop-up events were done through out the City to further engage the community to inform them about the Action Plan and gather feedback on safety concerns. As a part of these efforts, the City participated in a County led community workshop, led by the District Commissioner Bonilla, and hosted it's own "hybird" Town Hall Meeting.

Virtual Events

- Project Website
- Social Media Campaign
- Event Flyers

"Pop-Up" Events

- Run4Love 5K- February 10
- Orange County D5 Community Workshop - February 29
- Farmers Market - March 23
- Hybrid Town Hall - March 36



Virtual Events

WINTER PARK VISION ZERO ACTION PLAN BRAND & WEBSITE

As part of the Public Engagement Process, a website was created for the Vision Zero Action Plan. The website details project background, data analysis and links, and provides important project updates. This website will also be an important avenue for continued engagement with the public after plan implementation.

SOCIAL MEDIA MARKETING CAMPAIGN

In coordination with the Winter Park Communications Department, social media content was generated for spreading awareness of the public meetings on the county's various outlets. The Social Media package is included in the Appendix. Future use of these assets may include ongoing educational and awareness campaigns and notification of public on important project updates and implementation measures.

What we heard...

Would like to see wider bike lanes overall – need the safe space; Weatherbee bike lanes.

Palm Avenue is dangerous – there is cut through traffic and speeding

Palmer and Temple – landscaping overgrown

West Fairbanks between 17-92 is dangerous – no buffer on the sidewalks and the Fairbanks curves.

A good program may be to kickoff safety programs with HOAs – Examples: Toscano drives with respect – stop at stop signs, drive 18 miles per hour, and stop for pedestrians.

Glenridge near Winter Park Road - there is a cross walk, but no speed bumps and traffic moves very quickly. Schools nearby.

Speeding problem on Lockberry Road in between Pine and YMCA.

Palmer and Terrace intersection issues.

As a best practice, would like to see more narrowing of lanes, complete streets, and RRFBs.

Winter Park road towards Corrine Drive. No bike lanes and kids are riding on sidewalks.

Fairbanks/Formosa - lighting and sidewalks needed.

Dartmouth/Pinewood- sidewalks needed.



CHAPTER 4

Policy Review



CHAPTER 4: POLICY REVIEW

In preparing this policy review, the project team conducted a thorough examination of various local policies and plans. The focus was on identifying opportunities to strengthen consistency between these documents and the Vision Zero initiative, as well as pinpointing any barriers to achieving zero fatalities and severe injuries.

The Comprehensive Plan's Transportation Element, Transportation Master Plan, the Land Development Code, and the Intersection Analysis were selected for review because they are relevant to the current and future transportation conditions and challenges in the City of Winter Park. These documents provide guidance and regulations for how the city plans, designs, builds, operates, and maintains its transportation network and facilities. They also reflect the city's vision, goals, objectives, and policies for mobility, accessibility, connectivity, and safety.

These documents were chosen with input from local staff who are familiar with the city's context and needs. They also represent different levels of planning and design, from the broad and long-term perspective of the Comprehensive Plan to the specific and short-term analysis of the intersection. By reviewing these documents, we aim to assess how well they incorporate the principles and practices of a safe systems approach to transportation planning and identify gaps and opportunities for improvement.

Comprehensive Plan Transportation Element-

The City of Winter Park's Transportation Element of the Comprehensive Plan provides a framework for developing and maintaining a balanced and safe transportation system that promotes a walkable, bicycle-friendly environment while also ensuring efficiencies along the roadway network.

Transportation Master Plan- The Winter Park Transportation Master Plan (TMP) is a comprehensive framework aimed at enhancing the city's transportation infrastructure and services. The plan emphasizes multimodal transportation, safety, and efficiency, while addressing current and future transportation needs. Key features include roadway reconfiguration, pedestrian and cyclist safety improvements, technology enhancements, and policies for speed management and traffic calming. The plan also integrates the goals of the city's Comprehensive Plan and aligns with regional and federal transportation initiatives.

Land Development Code- Winter Park's Land Development Code (LDC) Article 3 focuses on zoning regulations. The LDC establishes guidelines and requirements for land use, building specifications, and the overall development process within Winter Park. This includes conditional use approvals, public hearing procedures, and specific standards for various types of land development and use. Regulations within the LDC also outline the processes and standards for subdividing and consolidating lots within Winter Park, including procedural steps for securing approvals, conformance to comprehensive plans, specifications for preliminary and final plats, design standards for lots, blocks, streets, alleys, and easements, as well as parks and recreation dedications. The LDC emphasizes conformance with existing neighborhood standards and comprehensive plans, detailing requirements for lot sizes, street design, utilities, and environmental considerations.

Policy Recommendations

LAND DEVELOPMENT CODE (ZONING)



Parking Regulations that Support Safe Systems (Sec. 58-86 / Individual District Sections): Revise parking regulations to discourage excessive reliance on cars. This could involve reducing minimum parking requirements and encouraging the development of car-free zones or areas with limited parking availability, especially in densely populated or pedestrian-heavy areas.



Incorporate Vision Zero Goals into Conditional Use Criteria (Sec. 58-90/ Individual District Sections): When evaluating conditional use permits, include criteria that assess how the proposed use contributes to Vision Zero goals. For example, developments should demonstrate how they will mitigate additional traffic and enhance safety for all road users.



Require Safe Pedestrian and Cycling Connectivity (Section on Connectivity and Subdivision Design): Implement regulations that require new developments to provide safe and direct pedestrian and bicycle connections to nearby amenities, transit stops, and other neighborhoods. This could involve mandating the construction of sidewalks, bike paths, and safe crossing points in new subdivisions.



Integrate Safe Streets Design (Individual District Sections): Amend zoning categories to include requirements for street designs that prioritize pedestrian and cyclist safety. This could involve mandating features like wide sidewalks, protected bike lanes, street lighting, and pedestrian crossings within certain zoning districts, especially in areas with high pedestrian activity.

Countermeasures

The City of Winter Park implements a variety of countermeasures to address safety issues. The Land Development Code, the Comprehensive Plan's Transportation Element, and the Transportation Master Plan, are all documents that contain countermeasures or have the capability to contain countermeasures.



LAND DEVELOPMENT CODE

The reviewed LDC sections do not explicitly list traffic safety countermeasures.

Zoning regulations can indirectly serve as countermeasures by promoting safer community layouts and land uses that reduce conflict points and encourage non-motorized transportation.

Integration of explicit traffic safety countermeasures and design principles in future revisions could strengthen its alignment with Vision Zero.

TRANSPORTATION MASTER PLAN



Quick-Build Capital Projects:

Allocate funding for quick build traffic safety improvements. Identify high impact, low cost, and scalable solutions.



Speed Feedback Signs:

Implemented in school zones and other critical areas to regulate speed.



Safe Speeds Initiatives: Include broader strategies for speed management beyond targeted areas, possibly integrating automated speed enforcement with equitable enforcement policies.



Pedestrian Countdown Signals and Accessible Pedestrian Signals:

Enhance pedestrian safety at intersections.



Enhanced Post-Crash Care Policies: Develop strategies for improving emergency response and post-crash care systems.



Leading Pedestrian Intervals:

Provide pedestrians a head start at traffic signals to reduce conflicts with turning vehicles.



Safe Vehicles Promotion: Introduce initiatives encouraging the use of advanced safety features in vehicles.



Traffic Management Center: City is actively developing a Traffic/Event Management Center (TMC.)



Complete Streets and Safe Road Design: Emphasizes designs accommodating all modes of transport, especially in high-traffic areas.

COMPREHENSIVE PLAN



Adopt a citywide Vision Zero

Policy: A citywide Vision Zero Policy could commit to eliminating traffic fatalities and serious injuries by 2030.



Enforcement countermeasures:

Involve the use of law enforcement to deter and enforce traffic violations.



Develop a Complete Streets Policy:

A Complete Streets Policy could ensure that all new and existing streets are designed and operated to accommodate the needs of all users, regardless of age, ability, or mode of travel.



Education countermeasures:

Involve raising awareness of traffic safety issues and teaching people how to be safe users of the transportation system.



Implement a Network of Low-

stress Bikeways: These bikeways could connect key destinations and provide safe and comfortable facilities for cyclists of all skill levels.



Technology countermeasures:

Involve the use of technology to improve safety, such as using red light cameras and speed cameras.



Engineering countermeasures: Include physical changes to the roadway or environment, such as installing traffic signals, crosswalks, and bike lanes.



CHAPTER: 5

Toolkit and Prioritization





The **Non-Engineering** and **Engineering Countermeasure Toolkits** were developed to help inform various safety solutions around the region. The toolkits are provided in the appendix with a high-level summary provided in this chapter.

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, high-visibility enforcement and publicized

The toolkit presents non-engineering countermeasures organized into the five categories of the Safe System Approach, which include Safe Road Users, Safe Speeds, Safe Roads, Post Crash Care, and Safe Vehicles. The

non-engineering countermeasures included in the 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 Action Plan development. As agencies implement non-engineering countermeasures, they should consider how they will reach the most vulnerable populations. The toolkit provides references to source documents and users of the guide are encouraged to review applicable source documents related to their specific safety issues and goals.

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**

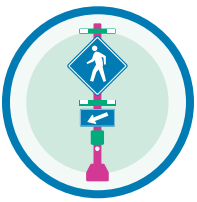
- Emergency medical services
- Trauma care
- Fatal crash response team
- Traffic incident management
- Post-crash strategies

ENGINEERING COUNTERMEASURES

The purpose of the Engineering Countermeasure Toolkit is to establish a shared understanding of key strategies available to address roadway safety issues in our community that align with the Safe System strategy. The key objectives of the Toolkit are to:

1. Inform partner jurisdictions about safety treatment options and their appropriate uses and contexts,
2. Communicate safety tools using easy-to-understand language and graphics,
3. Facilitate coordination between staff, contractors, developers, and the community when discussing transportation safety improvements, and
4. Create a shared understanding 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.



Signing and Striping

Pedestrian safety countermeasures are crucial in creating safe roadways for all users. The implementation of engineering solutions such as crosswalk enhancements (high-visibility crosswalk markings), signal improvements (pedestrian countdown timers, lead pedestrian intervals) together will help to save lives. The introduction of suitable signage and striping to enhance visibility and integration of advanced technology can also support ongoing pedestrian and bicycle safety. Alongside these, education programs and enforcement of traffic laws contribute to cultivating safer behaviors. These countermeasures, when executed in a comprehensive and context-sensitive manner, can significantly improve vulnerable roadway user safety on City of Winter Park streets.

WINTER PARK SIGNING AND STRIPING SAFETY SPOTLIGHT: DENNING DRIVE

The Denning Drive Complete Street project intends to enhance mobility and safety for people outside of cars, through the widening sidewalks, improved pedestrian crossings with signage, and improved connectivity of neighborhoods, parks, and civic destinations. This investment has helped to improve the experience for pedestrians, cyclists, transit users, and drivers alike.





Speed Management

Addressing speed is fundamental to the Safe System Approach to making streets safer, and a growing body of research shows that speed limit changes alone can lead to measurable declines in speeds and crashes. The first step to identifying appropriate speeds involves identifying potential conflicts on the road, which may include sharp bends, high-traffic zones, location of community assets such as schools, or areas with a large number of vulnerable roadway users. Once these potential safety concerns have been identified, comprehensive analyses need to be carried out to identify appropriate design speed and target speed.

Determined safe speeds can be implemented through continuous observation of roads, conditions, and speeds, and making necessary adjustments, thus ensuring careful and considerate driving. Continuous monitoring and enforcement may be undertaken, making sure that the selected speed is suitable for the circumstances. Regular reviewing of the effectiveness of the speed choice is essential, as it will assist in identifying necessary amendments to be made.



Other Engineering Strategies

Other engineering strategies represent cross-cutting transportation safety countermeasures that apply a broad approach to enhance safety across multiple modes of transport, addressing the needs of motorists, cyclists, and pedestrians alike. These countermeasures, implemented in an integrated manner, can contribute significantly to making transportation systems safer and more efficient such as lighting and access management.

Design speed and target speed are two critical terms that come into play when considering traffic safety and road design. Both design speed and target speed play a key role in promoting safe, efficient, and user-friendly transportation systems for all roadway users.

Design speed is essentially the maximum safe speed that can be maintained on a particular section of the roadway when conditions are most favorable. It is the speed used by engineers during the geometric design of a roadway. This encompasses the determination of features such as horizontal and vertical alignment, lane width, and separation distances.

On the other hand, target speed, also known as 'operating speed', refers to the speed at which drivers feel comfortable driving on a certain road segment under normal conditions. It is not necessarily the legal speed limit, but rather, is based on factors such as the route's physical characteristics, surrounding environment, and the vehicle's capabilities.

While design speed ensures the road is constructed to cater to a certain speed, the target speed is essential to understand driver behavior and safety. Therefore, the setting of appropriate target speeds must consider the road environment, roadside development, vulnerable road users, and the function of the road to help traffic move smoothly and safely.

In an ideal scenario, the design speed and target speed should be closely aligned to ensure that the road infrastructure can safely cope with the speeds at which drivers choose to travel. However, if there's a significant disparity between the two, it may lead to increased risks of crashes, necessitating modifications to the road design or adjustments to speed limits and other traffic management measures to enhance safety.



Pedestrian Facilities

Pedestrian safety countermeasures are crucial in creating safe roadways for all users. The implementation of engineering solutions such as crosswalk enhancements (high-visibility crosswalk markings, raised crosswalks, pedestrian refuge islands), signal improvements (pedestrian countdown timers, lead pedestrian intervals) together will help to save lives. The introduction of suitable signage and lighting to enhance visibility and integration of advanced technology can also support ongoing pedestrian safety. Alongside these, education programs and enforcement of traffic laws contribute to cultivating safer behaviors among drivers and pedestrians alike. These countermeasures, when executed in a comprehensive and context-sensitive manner, can significantly improve pedestrian safety on City of Winter Park's streets.

WINTER PARK BIKEWAY SAFETY SPOTLIGHT: GREENWAY ROUTES MASTER PLAN

The City of Winter Park has established a Greenway Routes Master Plan that outlines flexibility with various facilities like sidewalks, shared use paths, and on-street bicycle routes catering to diverse rider needs through the city. These bikeways offer low-speed, low-traffic roads and connect key destinations without needing exclusive bicycle lanes, while also supporting traffic calming efforts and minimizing pass-through traffic in neighborhoods and elevators for accessibility, the bridge is designed to alleviate traffic control needs during large events and serve as a gateway to International Drive.



Bikeways

Ensuring bicycle safety is an essential part of building safer roads. Deploying countermeasures such as the creation of dedicated bike lanes, bike boxes, and bicycle-specific traffic signals can help cater to the need of cyclists on the road and better protect them from harm. Intersection improvements, enhanced signage, and protected paths particularly along popular biking routes are important to ensure good visibility for both cyclists and motorists. Innovative technology and regular road maintenance together can also help to ensure direct, smooth and obstacle-free bike travel to substantially foster safer bike travel. By incorporating these bicycle safety improvements in a comprehensive transportation safety framework, City of Winter Park can become more bike-friendly and safer for all road users.



Intersection and Roadways

Intersection enhancements are a crucial aspect of enhancing road safety since intersections frequently serve as points of conflict among pedestrians, cyclists, and motorized vehicles. Measures such as enhancing lighting, using larger or reflective signage, creating high visibility crosswalks, and removing sight obstructions at intersections can significantly minimize collisions. The geometric design of the intersection, too, plays a pivotal role in road safety. Configurations such as roundabouts, traffic islands, raised intersections, and adequate turning lanes streamline traffic flow and minimize points of conflict.

Roadway countermeasures can be designed specifically to prevent roadway departures, where a vehicle unintentionally strays away from its designated lane. Roadway departures account for over half of all traffic fatalities in the United States. If drivers cannot clearly identify the edge of the travel lanes and see the road alignment ahead, the risk of roadway departure may be greater. Tools such as roadside barriers, which include guardrails and median barriers, play an essential role in preventing vehicles from colliding with fixed objects or veering off steep slopes. Furthermore, the utilization of rumble strips or wider edge lines offer effective methods to alert possibly distracted or fatigued drivers when their vehicle begins to divert out of its lane and space to react accordingly.

WINTER PARK INTERSECTION SAFETY SPOTLIGHT: ORANGE AVENUE IMPROVEMENTS

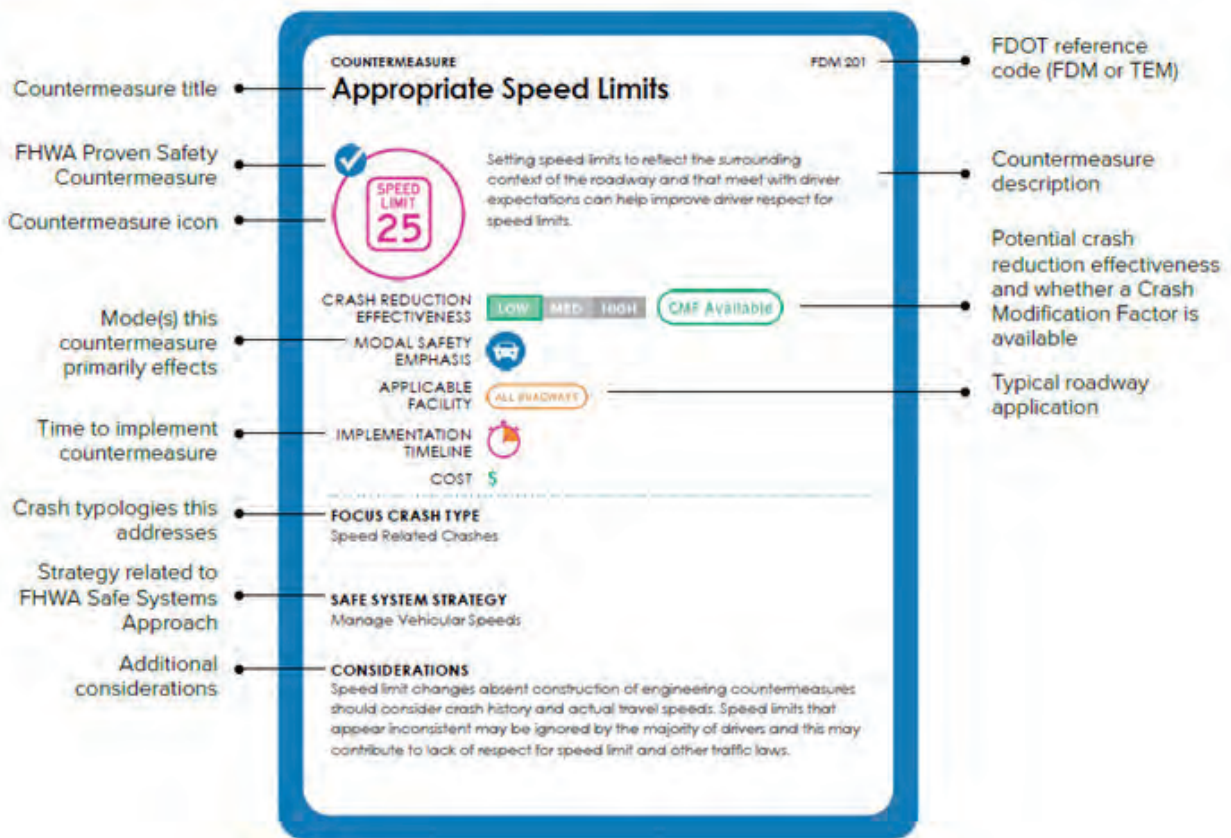
The City of Winter Park will be providing improvements on the Orange Avenue corridor between US 17/92 and Pennsylvania Ave, which has been studied for a complete streets' reconfiguration. Future improvements include lane re-allocation for a center turn lane, along with enhanced pedestrian crossings. The study also includes consideration of a roundabout at the intersection with Denning Drive and Minnesota Avenue.



Signals

Improvements in signalization are a significant factor in ensuring safer roadways. Enhancing elements of traffic control can considerably impact driver behavior, reducing confusion, uncertainty, and errors that may lead to accidents. Safe roadways rely heavily on clear, visible signage and signalization. Updated signs providing drivers with information about road conditions, speeds, and directions are crucial in helping them make informed decisions. Implementing dynamic signs that change based on real-time conditions, such as digital warning signs can further enhance safety.

What You'll See Inside:



Project Prioritization

Road safety interventions are more effective when they are strategically planned to optimize the use of resources. Corridor prioritization is essential as it helps to achieve the highest possible crash reduction, which in turn saves more lives, reduces more injuries, and lowers economic losses due to crashes. The prioritization of specific corridors for safety projects helps ensure that countermeasures are both meaningful and cost-effective. Moreover, a focus on corridors with high crash rates along with considerations for vulnerable populations can significantly improve community well-being and ensure that the benefits of improved safety are fairly distributed.

This plan ranked road segments based on a scoring system that considered safety and equity factors. It assigned higher scores to segments that had more crashes per mile and higher crash rates, which accounts for roadways with differing traffic volumes. It also favored those segments with more KSI crashes, as well as those roadways with more crashes involving pedestrians, bicyclists, and motorcyclists. These roadways are depicted in this section as aeries that display the location of each crash, the crash type, and top factors associated with crashes in this section. These crash data visualized on these cut sheets, combined with the available roadway information, helps to visualize what specific interventions will be most valuable as well as where they should be located.

Overall Rank Worst Segment)	Road Name	From	To	Length (mi)	Total Crashes (KSI Crashes)	Automobile Crashes (KSI Crashes)	Pedestrian Crashes (KSI Crashes)	Bicycle Crashes (KSI Crashes)	Motorcycle Crashes (KSI Crashes)
1	SR-527	Berkshire Ave	S. ark Ave	1.41	404 (3)	396 (1)	2 (0)	2 (1)	4 (1)
2	Orlando Ave	Norfolk Ave	Elvin Ave	1.96	844 (9)	814 (4)	8 (3)	10 (1)	12 (1)
3	W Fairbanks Ave	Driver Ave	Pennsylvania Ave	1.75	520 (9)	508 (1)	3 (2)	0	9 (6)
4	Fairbanks / Osceola /Aloma Ave	S Park Ave	Balfour Dr	2.27	638 (7)	619 (0)	5 (1)	1 (0)	13 (6)
5	Pennsylvania Ave	Melrose Ave	SR. 527	0.67	59 (2)	57 (2)	0	1 (0)	1 (0)
6	Lakemont Ave	Glenridge Way	Pine Ave	2.24	218 (3)	211 (2)	4 (0)	3 (1)	0
7	N Denning Dr	Minnesota Ave	SR. 17	1.43	53 (2)	52 (2)	0	0	1 (0)
8	Howell Branch Rd	Horatio Ave	N. L emont Ave	0.92	102 (1)	99 (1)	1 (0)	1 (0)	1 (0)
9	Lee Rd	Gloriosa Ave	SR. 17	1.07	202 (1)	198 (0)	2 (0)	2 (1)	0
10	Morse Ave	Denning Dr	S. ark Ave	0.68	69 (0)	65 (0)	3 (0)	1 (0)	0
11	Canton Ave	US 17-92	N. V gina Ave	0.63	26 (0)	26 (0)	0	0	0

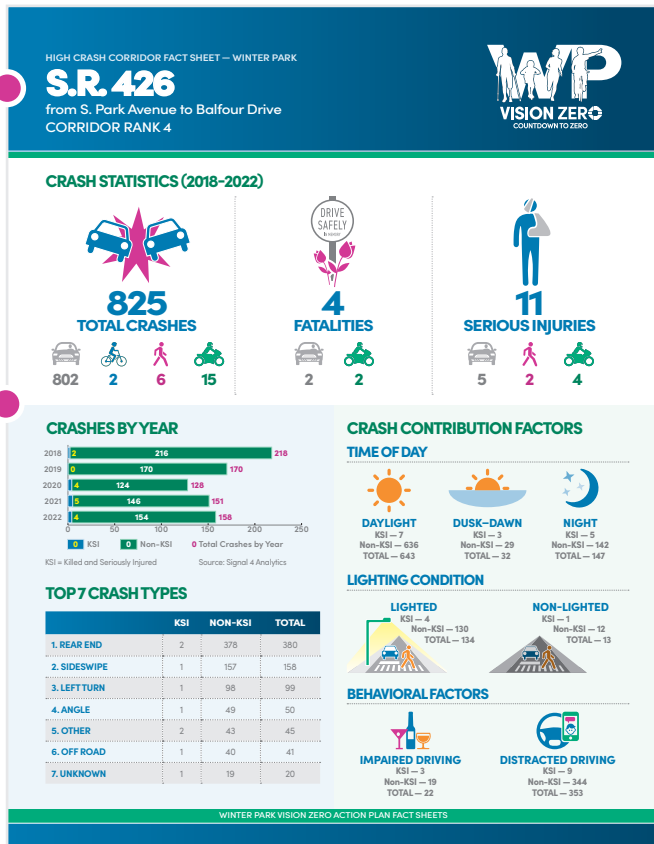
HIN CORRIDOR PROFILES AND PROPOSED COUNTERMEASURES

The following roadway profile pages provide a comprehensive summary of the characteristics, crash data, rankings, and prioritized countermeasures identified in this Vision Zero Action Plan. The pages highlight specific elements of each corridor, such as length, location, design, traffic volume, and other physical characteristics. An overview of crash type data and crash profile

data offers vital insight into the frequency, type and severity of accidents that have occurred on these corridors, along with determining high-risk zones. The profile pages are organized to reflect the rankings, a measure of corridor safety that takes into account various elements identified in the corridor prioritization framework. Lastly, a prioritized list of countermeasures has been identified for future improvement of safety along each corridor.

Roadway Profile and HIN Ranking

Map With Location of Crashes



Crash Statistics and Contribution Factors



Roadway

Proposed Countermeasures



CHAPTER: 6

Plan Recommendations





S.R. 527

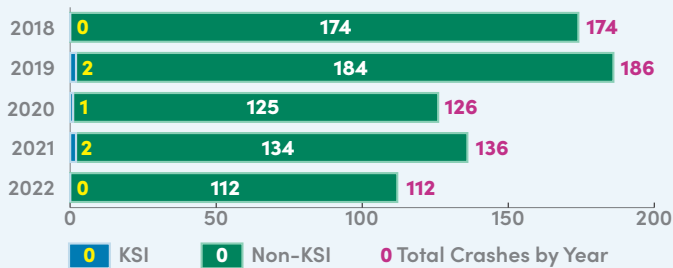
from Berkshire Avenue to S. Park Avenue
CORRIDOR RANK 1



CRASH STATISTICS (2018-2022)



CRASHES BY YEAR



KSI = Killed and Seriously Injured

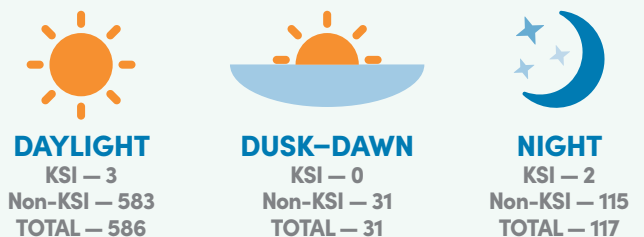
Source: Signal 4 Analytics

TOP 7 CRASH TYPES

	KSI	NON-KSI	TOTAL
1. REAR END	1	277	278
2. SIDESWIPE	0	123	123
3. RIGHT ANGLE	1	86	87
4. PARKED VEHICLE	0	45	45
5. LEFT ENTERING	0	37	37
6. LEFT LEAVING	0	30	30
7. LEFT REAR	0	16	16

CRASH CONTRIBUTION FACTORS

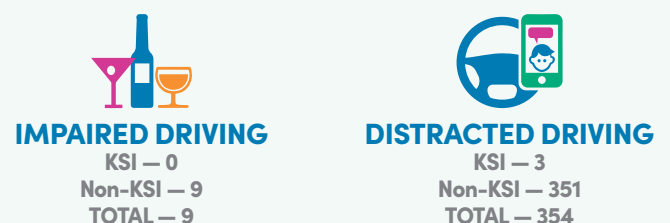
TIME OF DAY

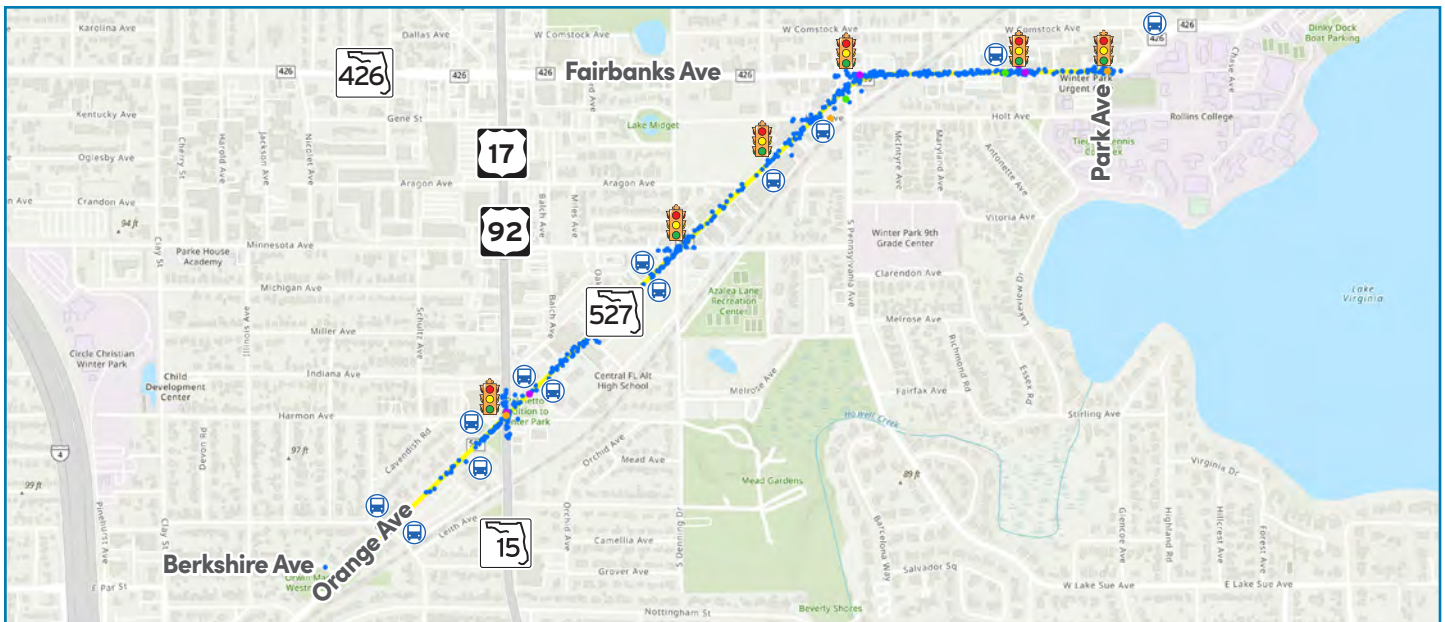


LIGHTING CONDITION



BEHAVIORAL FACTORS





LEGEND

HIN Corridor

Bus Stop

Traffic Signal

KSI Crashes by Mode

Pedestrian

Bicycle

Motorcycle

Motor Vehicle

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

WINTER PARK

FUNCTIONAL CLASSIFICATION

PRINCIPAL ARTERIAL

CONTEXT CLASSIFICATION

URBAN GENERAL (C4)

CORRIDOR LENGTH

1.41 MILES

AVERAGE POSTED SPEED

30 MPH

AVERAGE PREVAILING SPEED

39 MPH

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

55%

TRANSIT ROUTES /ANNUAL BOARDINGS & ALIGHTINGS (2022)

LINK 1, 9, 23 AND 102 / 29,065

TRAVEL LANES / MEDIAN TYPE

4 LANES / UNDIVIDED

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement.

PROPOSED SAFETY COUNTERMEASURES



SIGNALS

- » Install leading pedestrian intervals (\$)
- » Install retroreflective back plates (\$)
- » Prohibit turns when ped signal is activated (\$)
- » Upgrade to audible push button pedestrian crossing signals (\$)



INTERSECTION AND ROADWAYS

- » Reconfigure crosswalks at Orange/Orlando Ave. intersection to shorten ped crossing distances (\$)
- » Consider intersection reconstruction and tightening at Orlando Ave. (\$\$\$)



PEDESTRIAN/BICYCLE FACILITIES

- » Evaluate installing midblock crosswalks with pedestrian hybrid beacons every 660–800 feet. (\$\$\$)
- » Co-locate bus stops with crosswalks at midblocks and intersections (\$)



OTHER ENGINEERING STRATEGIES

- » Lighting upgrades at segments and intersections (\$\$)
- » Relocate bus stops to far side of signalized intersections (\$)
- » Evaluate need to remove obstructions/foliage at driveways (\$)
- » Employ distracted driving awareness and night time visibility limitations through street pop-up events and community events (\$)

ORLANDO AVENUE

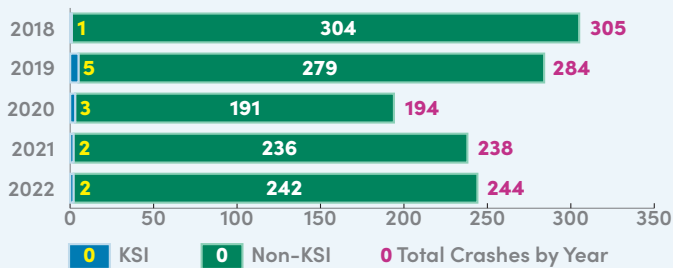
from Norfolk Avenue to Elvin Avenue
CORRIDOR RANK 2



CRASH STATISTICS (2018-2022)



CRASHES BY YEAR



KSI = Killed and Seriously Injured

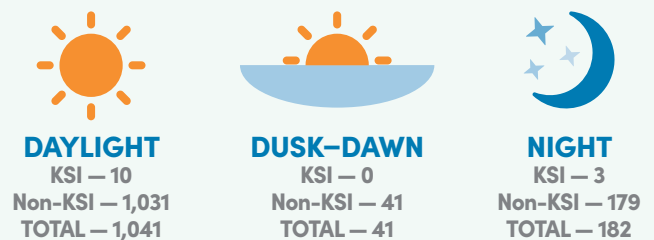
Source: Signal 4 Analytics

TOP 7 CRASH TYPES

	KSI	NON-KSI	TOTAL
1. REAR END	3	572	575
2. SIDESWIPE	0	177	177
3. RIGHT ANGLE	1	101	102
4. LEFT ENTERING	0	78	78
5. LEFT LEAVING	2	61	63
6. LEFT REAR	0	49	49
7. BACKED INTO	0	45	45

CRASH CONTRIBUTION FACTORS

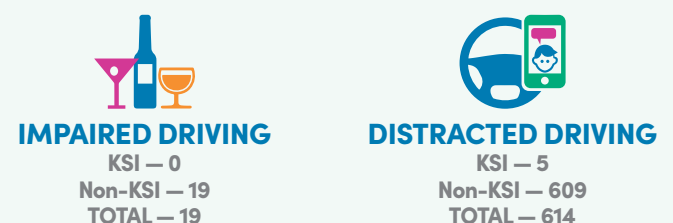
TIME OF DAY



LIGHTING CONDITION



BEHAVIORAL FACTORS



HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

WINTER PARK

FUNCTIONAL CLASSIFICATION

PRINCIPAL ARTERIAL

CONTEXT CLASSIFICATION

URBAN GENERAL (C4)

CORRIDOR LENGTH

1.96 MILES

AVERAGE POSTED SPEED

35 MPH

AVERAGE PREVAILING SPEED

45 MPH

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

92%

TRANSIT ROUTES /ANNUAL BOARDINGS & ALIGHTINGS (2022)

LINK 1, 9 AND 102 / 22,700

TRAVEL LANES / MEDIAN TYPE

4 LANES / TWO-WAY LEFT TURN LANE

PROPOSED SAFETY COUNTERMEASURES



SIGNALS

- » Upgrade to audible push button ped crossing signals (\$)
- » Prohibit turns when ped signal is activated (\$)



INTERSECTION AND ROADWAYS

- » Consider permanent channelization alternatives at RR crossing — raised median on both sides of crossing (\$)
- » Ensure crossing is adequately lit and verify all signs and pavement markings are MUTCD compliant (\$)
- » Tighten curb radii at intersections (\$\$\$)
- » Evaluate opportunities to consolidate driveways (\$)
- » Extend median nose into crosswalk at non-signalized and signalized locations (\$)



PEDESTRIAN/BICYCLE FACILITIES

- » Install median islands with dedicated crosswalks at strategic locations (\$\$\$)



SPEED MANAGEMENT

- » Implement speed sensitive rest on red at nighttime (\$)



OTHER ENGINEERING STRATEGIES

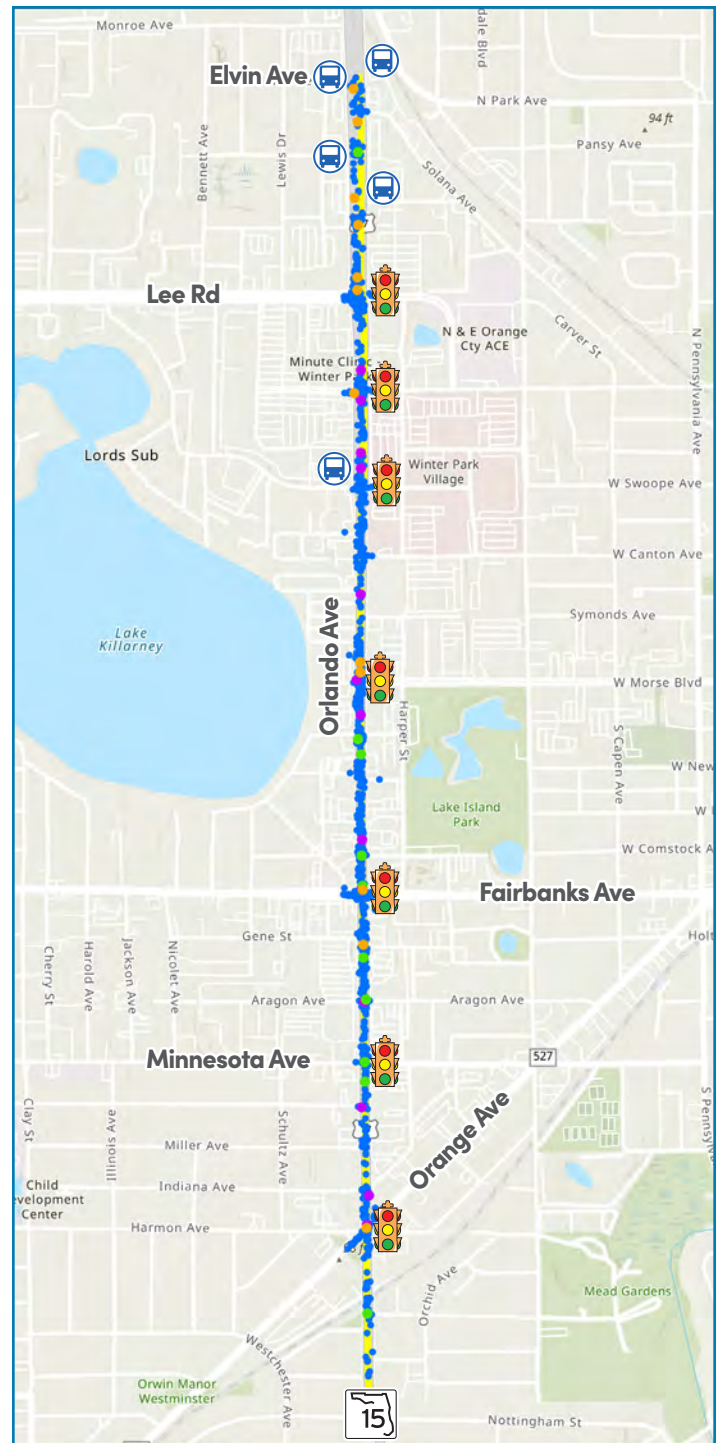
- » Coordinate with FDOT and Winter Park CRA on streetscape improvements (\$)



SIGNING AND STRIPING

- » Update worn pavement markings throughout corridor (\$)

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement.



LEGEND

HIN Corridor

Bus Stop

Traffic Signal

KSII Crashes by Mode

● Pedestrian

● Bicycle

● Motorcycle

● Motor Vehicle

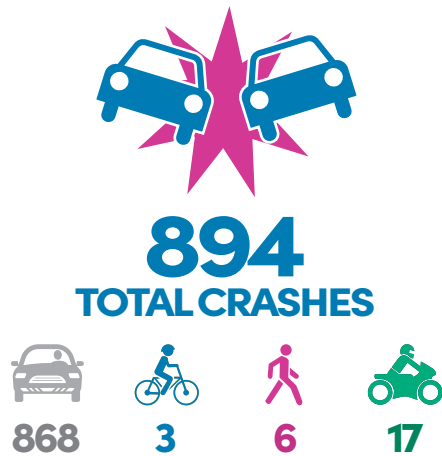


W. FAIRBANKS AVENUE

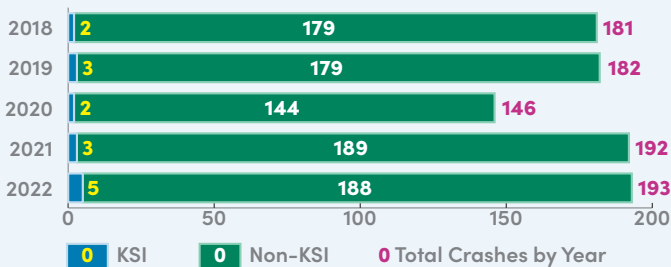
from Driver Avenue to Pennsylvania Avenue
CORRIDOR RANK 3



CRASH STATISTICS (2018-2022)



CRASHES BY YEAR



KSI = Killed and Seriously Injured

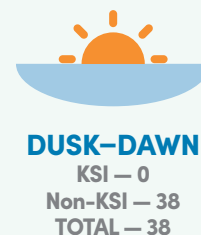
Source: Signal 4 Analytics

TOP 7 CRASH TYPES

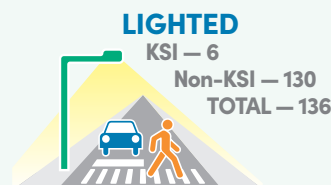
	KSI	NON-KSI	TOTAL
1. REAR END	2	338	340
2. SIDESWIPE	0	156	156
3. RIGHT ANGLE	2	96	98
4. LEFT ENTERING	5	70	75
5. LEFT REAR	2	41	43
6. LEFT LEAVING	0	36	36
7. BACKED INTO	0	19	19

CRASH CONTRIBUTION FACTORS

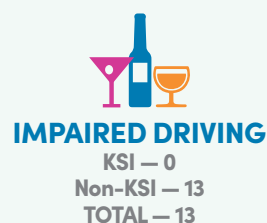
TIME OF DAY

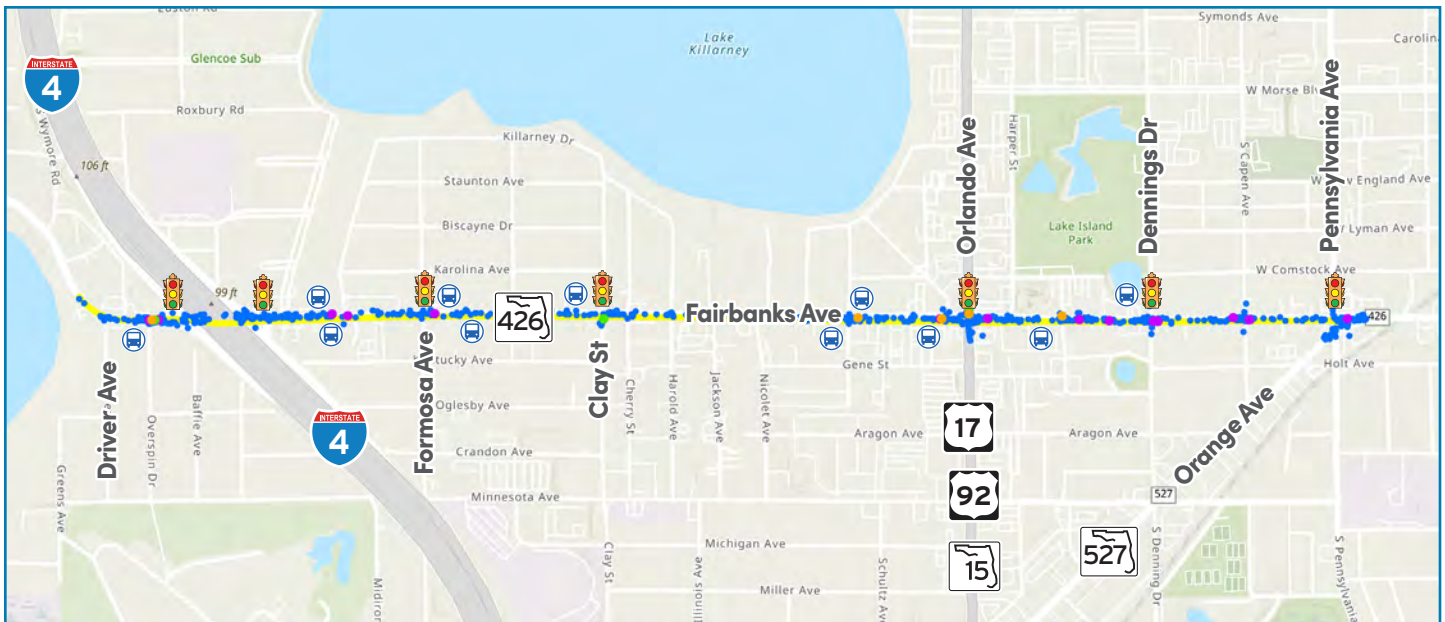


LIGHTING CONDITION



BEHAVIORAL FACTORS





LEGEND



 HIN Corridor

 Bus Stop

 Traffic Signal

KSI Crashes by Mode

 Pedestrian

 Bicycle

 Motorcycle

 Motor Vehicle

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

WINTER PARK

FUNCTIONAL CLASSIFICATION

PRINCIPAL ARTERIAL

CONTEXT CLASSIFICATION

URBAN GENERAL (C4)

CORRIDOR LENGTH

1.75 MILES

AVERAGE POSTED SPEED

35 MPH

AVERAGE PREVAILING SPEED

45 MPH

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

30%

TRANSIT ROUTES /ANNUAL BOARDINGS & ALIGHTINGS (2022)

LINK 1, 9 AND 23 / 11,724

TRAVEL LANES / MEDIAN TYPE

4 LANES / TWO-WAY LEFT TURN LANE

PROPOSED SAFETY COUNTERMEASURES



SIGNALS

- » Install Install Leading Pedestrian Intervals (\$)
- » Install retroreflective back plates (\$)
- » Prohibit turns when ped signal is activated (\$)



INTERSECTION AND ROADWAYS

- » Extend median nose into crosswalk (\$)
- » Evaluate opportunities to consolidate driveways (\$)
- » Conduct sight line reviews at driveways and side streets (\$)
- » Install median islands with dedicated crosswalks at strategic locations (\$\$\$)



PEDESTRIAN/BICYCLE FACILITIES

- » West of Orlando Avenue, install high visibility mid-block crosswalks with PHBs at attractors/generators near transit stops (\$\$\$)
- » Buffer bicycle lanes or add separator such as zebra zippers (\$\$)
- » East of Orlando Avenue, install crosswalks at midblocks, advanced warning signs and yield markings (\$)



OTHER ENGINEERING STRATEGIES

- » Conduct Road Safety Audit to identify safety countermeasures (\$)
- » Lighting upgrades at segments and intersections (\$)

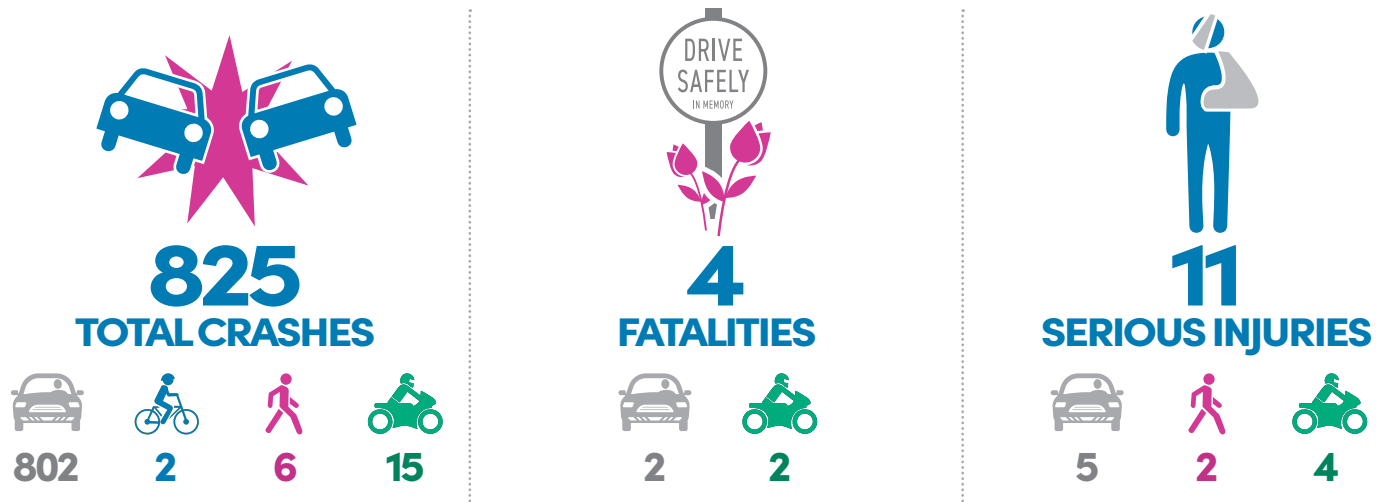
Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement.

S.R. 426

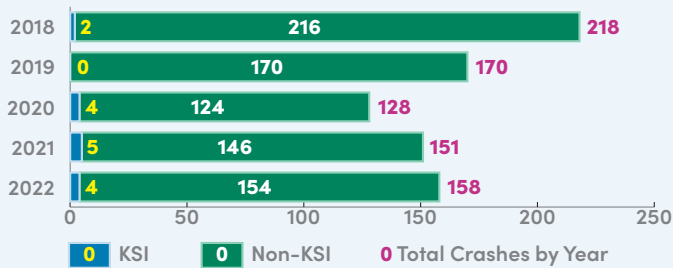
from S. Park Avenue to Balfour Drive
CORRIDOR RANK 4



CRASH STATISTICS (2018-2022)



CRASHES BY YEAR



KSI = Killed and Seriously Injured

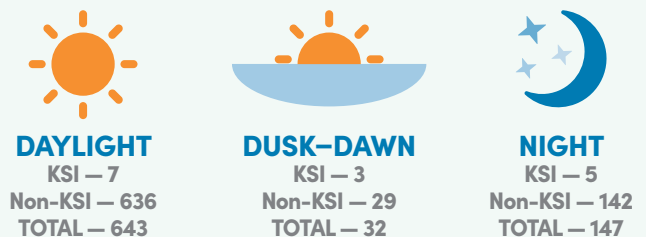
Source: Signal 4 Analytics

TOP 7 CRASH TYPES

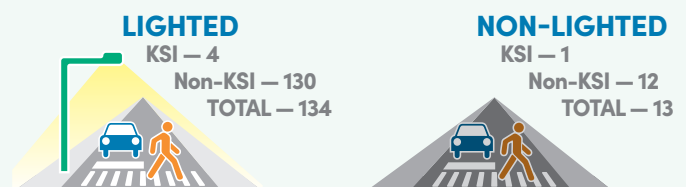
	KSI	NON-KSI	TOTAL
1. REAR END	2	378	380
2. SIDESWIPE	1	157	158
3. LEFT TURN	1	98	99
4. ANGLE	1	49	50
5. OTHER	2	43	45
6. OFF ROAD	1	40	41
7. UNKNOWN	1	19	20

CRASH CONTRIBUTION FACTORS

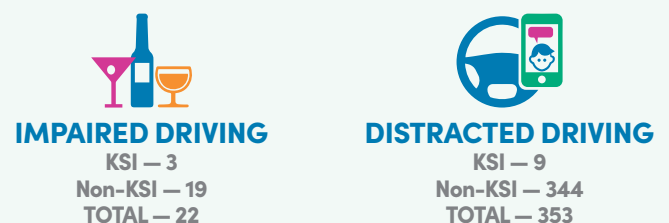
TIME OF DAY

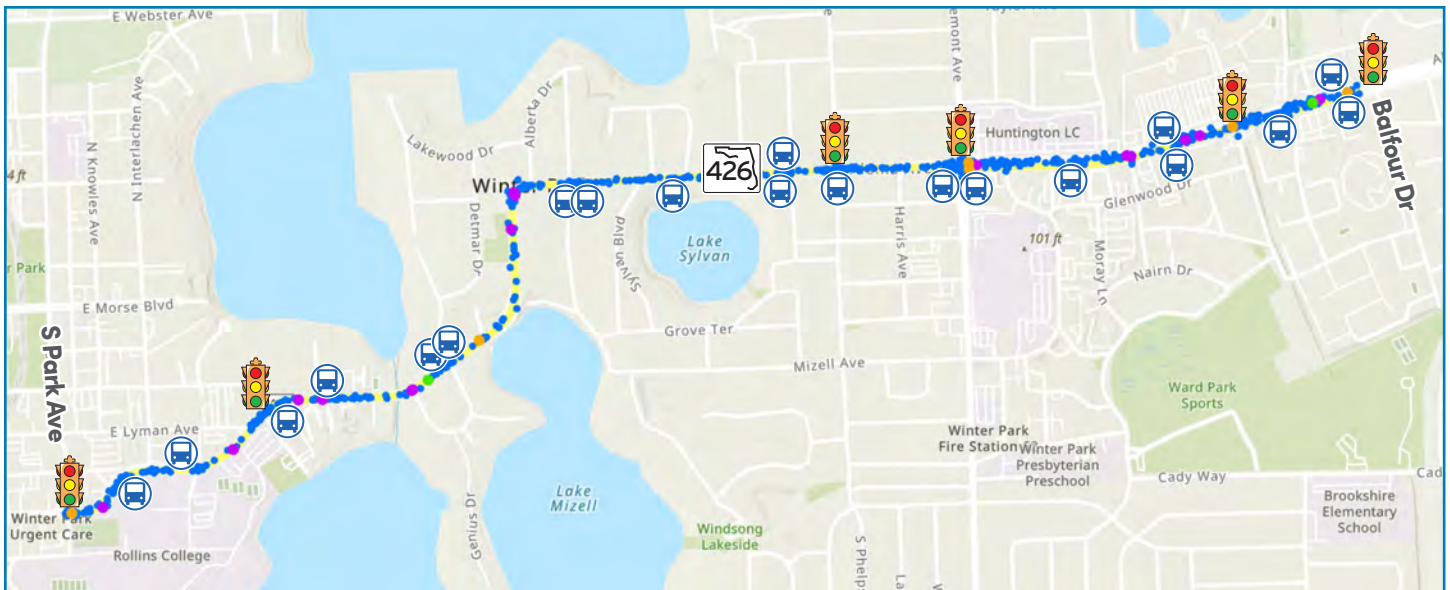


LIGHTING CONDITION



BEHAVIORAL FACTORS





LEGEND

 HIN Corridor

 Bus Stop

 Traffic Signal

KSI Crashes by Mode

 Pedestrian

 Bicycle

 Motorcycle

 Motor Vehicle

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

WINTER PARK

FUNCTIONAL CLASSIFICATION

URBAN PRINCIPAL ARTERIAL

CONTEXT CLASSIFICATION

SUBURBAN COMMERCIAL (C3C)

CORRIDOR LENGTH

2.27 MILES

AVERAGE POSTED SPEED

33.6 MPH

AVERAGE PREVAILING SPEED

44.8 MPH

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

67%

TRANSIT ROUTES / ANNUAL BOARDINGS & ALIGHTINGS (2022)

LINK 13, 443 / 14,649

TRAVEL LANES / MEDIAN TYPE

4 LANES / PAVED

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement.

PROPOSED SAFETY COUNTERMEASURES



SIGNALS

- » Install leading pedestrian intervals (\$)
- » Install retroreflective back plates (\$)
- » Prohibit turns when ped signal is activated (\$)



INTERSECTION AND ROADWAYS

- » Extend median nose into crosswalk (\$)
- » Install raised midblock crosswalks with pedestrian hybrid beacons at Henkel Circle, Trismen Park, and west of Fletcher Place, and raised crosswalk at Interlachen Avenue (FDOT project) (\$\$\$)
- » Install raised intersections with high visibility crosswalks at Chase Avenue, Cortland Avenue, Shepherd Avenue, and North Phelps Avenue (FDOT project) (\$\$\$)
- » Install median islands where possible (\$\$\$)
- » Evaluate opportunities to consolidate driveways (\$\$\$)



PEDESTRIAN/BICYCLE FACILITIES

- » Provide high visibility midblock crosswalks with pedestrian hybrid beacons, in-ground lighting, advanced warning signs and yield markings east of Lakemont Avenue (\$\$\$)
- » Co-locate bus stops with crosswalks at midblocks and intersections (\$)



OTHER ENGINEERING STRATEGIES

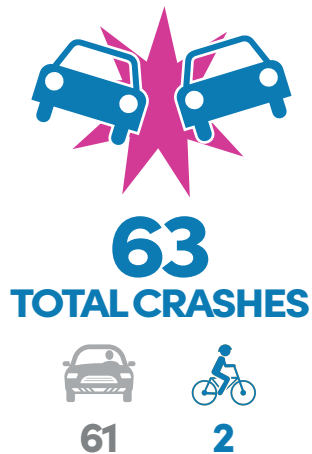
- » Lighting upgrades at segments and intersections (\$\$)
- » Employ distracted driving campaign (\$)
- » Create awareness of night time visibility limitations (\$)

PENNSYLVANIA AVENUE

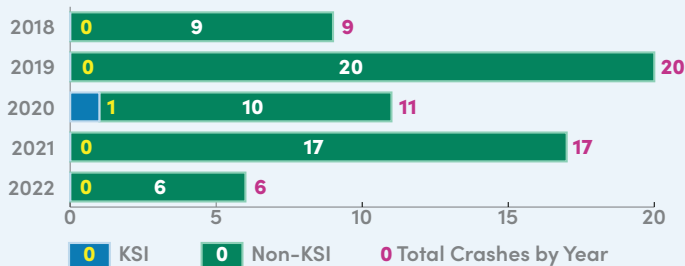
Melrose Avenue to S.R. 527
CORRIDOR RANK 5



CRASH STATISTICS (2018-2022)



CRASHES BY YEAR



KSI = Killed and Seriously Injured

Source: Signal 4 Analytics

TOP 5 CRASH TYPES

	KSI	NON-KSI	TOTAL
1. REAR END	1	23	24
2. ANGLE	0	17	17
3. OTHER	0	7	7
4. OFF ROAD	0	5	5
5. SIDESWIPE	0	3	3

CRASH CONTRIBUTION FACTORS

TIME OF DAY



DAYLIGHT
KSI — 1
Non-KSI — 49
TOTAL — 50



DUSK-DAWN
KSI — 0
Non-KSI — 4
TOTAL — 4



NIGHT
KSI — 0
Non-KSI — 9
TOTAL — 9

LIGHTING CONDITION



BEHAVIORAL FACTORS



IMPAIRED DRIVING
KSI — 0
Non-KSI — 2
TOTAL — 2



DISTRACTED DRIVING
KSI — 1
Non-KSI — 26
TOTAL — 27

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

WINTER PARK

FUNCTIONAL CLASSIFICATION

URBAN MINOR COLLECTOR

CONTEXT CLASSIFICATION

SUBURBAN COMMERCIAL (C3C)

CORRIDOR LENGTH

0.34 MILES

AVERAGE POSTED SPEED

25 MPH

AVERAGE PREVAILING SPEED

31.7 MPH

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

62.4%

TRANSIT ROUTES /ANNUAL BOARDINGS & ALIGHTINGS (2022)

NONE

TRAVEL LANES / MEDIAN TYPE

4 LANES / PAVED

PROPOSED SAFETY COUNTERMEASURES



SIGNALS

- » Install Leading Pedestrian Intervals (\$)
- » Install retroreflective back plates (\$)
- » Prohibit turns when ped signal is activated (\$)



PEDESTRIAN/BICYCLE FACILITIES

- » In combination with proposed tennis trail on the south side of Melrose Avenue, install high visibility and raised midblock crosswalk with rectangular rapid flashing beacons, in-ground lighting, advanced warning signs and yield markings at the Melrose Avenue intersection (\$\$\$)
- » Upgrade existing midblock crossings with high visibility and raised midblock crosswalk with rectangular rapid flashing beacons, in-ground lighting, advanced warning signs and yield markings (\$\$)



OTHER ENGINEERING STRATEGIES

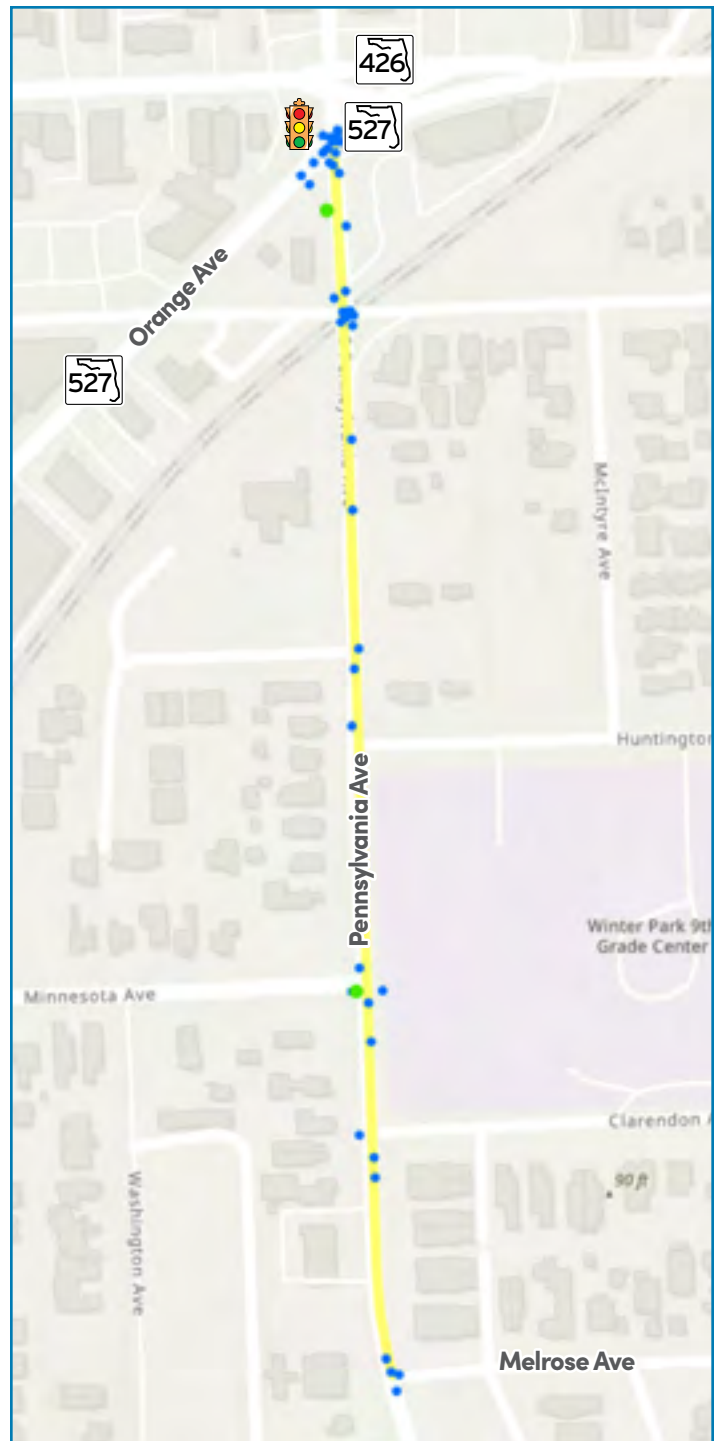
- » Lighting upgrades at segments and intersections (\$\$)



SIGNING AND STRIPING

- » Clear stop sign obstructions/foliage (\$)

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement.



LEGEND

HIN Corridor



Bus Stop



Traffic Signal

KS! Crashes by Mode



Pedestrian



Bicycle

● Motorcycle

● Motor Vehicle



LAKE MONT AVENUE

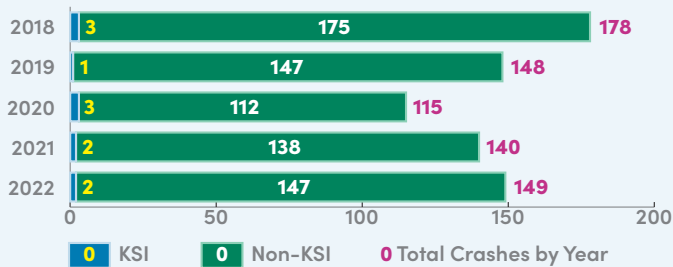
from Glenridge Way to Pine Avenue
CORRIDOR RANK 6



CRASH STATISTICS (2018-2022)



CRASHES BY YEAR



KSI = Killed and Seriously Injured

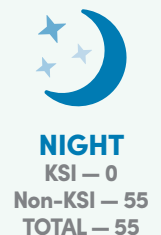
Source: Signal 4 Analytics

TOP 7 CRASH TYPES

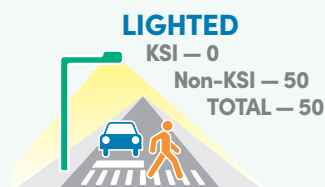
	KSI	NON-KSI	TOTAL
1. REAR END	2	347	349
2. SIDESWIPE	3	87	90
3. OTHER	1	137	138
4. OFF ROAD	1	40	41
5. LEFT TURN	0	30	30
6. BICYCLE	0	31	31
7. HEAD ON	0	20	20

CRASH CONTRIBUTION FACTORS

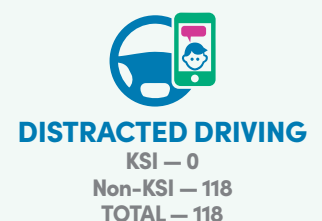
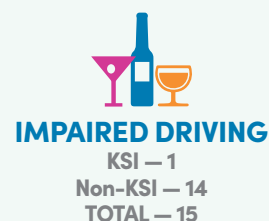
TIME OF DAY



LIGHTING CONDITION



BEHAVIORAL FACTORS



HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

WINTER PARK

FUNCTIONAL CLASSIFICATION

URBAN MAJOR COLLECTOR

CONTEXT CLASSIFICATION

SUBURBAN COMMERCIAL (C3C)

CORRIDOR LENGTH

2.24 MILES

AVERAGE POSTED SPEED

30 MPH

AVERAGE PREVAILING SPEED

38.8 MPH

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

67.4%

TRANSIT ROUTES /ANNUAL BOARDINGS & ALIGHTINGS (2022)

LINK 6, 13 / 32,956

TRAVEL LANES / MEDIAN TYPE

4 LANES / PAVED TURN LANE

PROPOSED SAFETY COUNTERMEASURES



SIGNALS

- » Install Leading Pedestrian Intervals (\$)
- » Install retroreflective back plates (\$)
- » Prohibit turns when ped signal is activated (\$)



INTERSECTION AND ROADWAYS

- » North of Aloma, consider lane repurposing (4 to 3 lanes), with buffered/separated bike lanes and pedestrian paths (\$\$)



PEDESTRIAN/BICYCLE FACILITIES

- » South of Whitehall Drive, install median islands with dedicated crosswalks at strategic locations (\$\$\$)
- » Install raised crosswalks at midblocks, advanced warning signs and yield markings (\$)
- » Widen sidewalks where available right-of-way (\$\$\$)
- » Upgrade existing crosswalk with high visibility markings, advanced warning signs and yield markings (\$\$)



OTHER ENGINEERING STRATEGIES

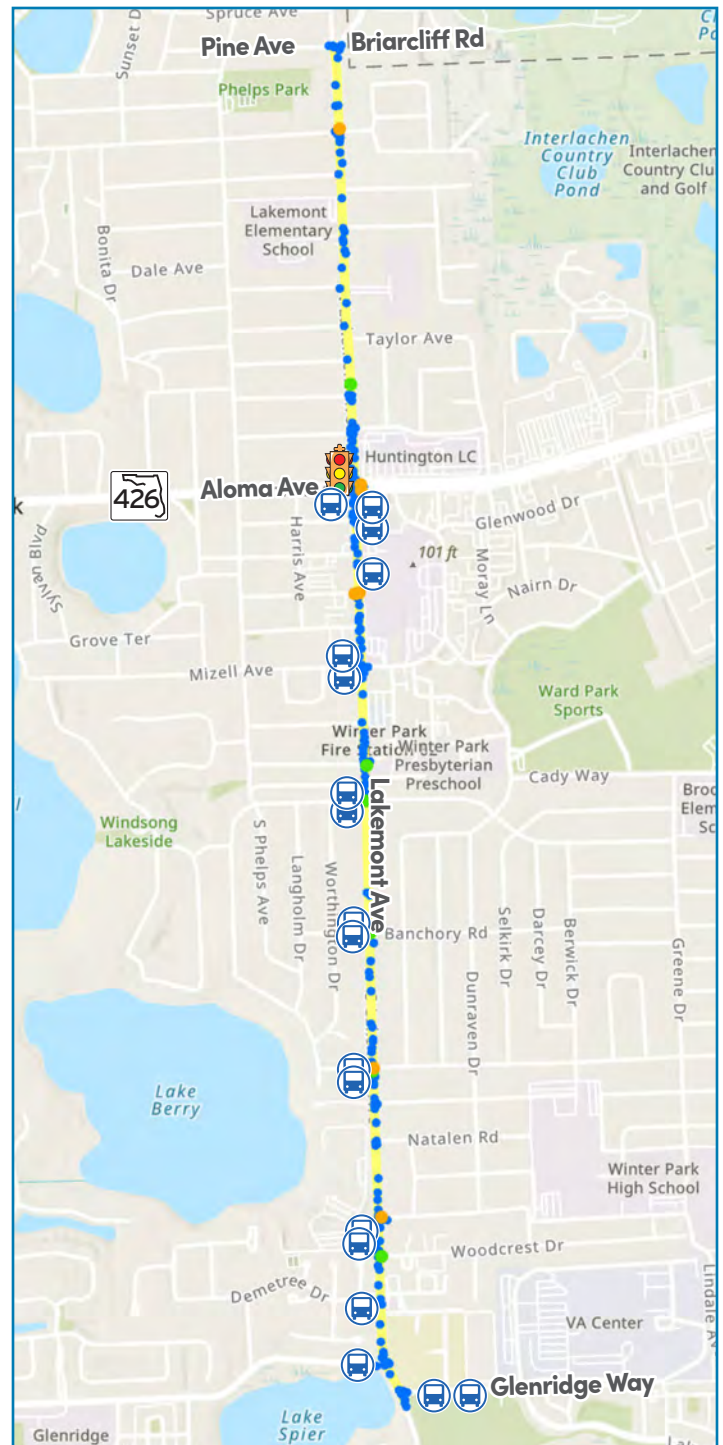
- » Consider transit infrastructure (benches, shelters, etc.) (\$)
- » Consider far side bus top placement (\$)



SIGNING AND STRIPING

- » Update worn pavement markings throughout corridor (\$)

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement.



LEGEND

■ HIN Corridor

Bus Stop

Traffic Signal

KSII Crashes by Mode

● Pedestrian

● Bicycle

● Motorcycle

● Motor Vehicle



N. DENNING DRIVE

from Minnesota Avenue to N. Park Avenue

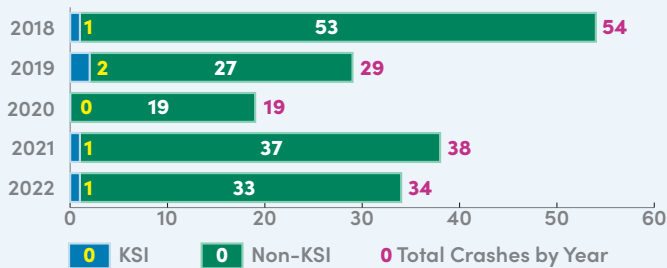
CORRIDOR RANK 8



CRASH STATISTICS (2018-2022)



CRASHES BY YEAR



KSI = Killed and Seriously Injured

Source: Signal 4 Analytics

TOP 7 CRASH TYPES

	KSI	NON-KSI	TOTAL
1. LEFT TURN	3	47	50
2. REAR END	0	44	44
3. OTHER	2	23	25
4. SIDESWIPE	0	21	21
5. OTHER	0	14	14
6. OFF ROAD	0	7	7
7. UNKNOWN	0	5	5

CRASH CONTRIBUTION FACTORS

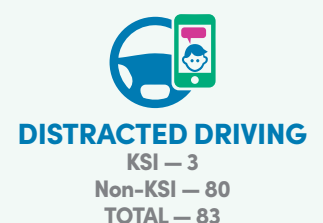
TIME OF DAY



LIGHTING CONDITION



BEHAVIORAL FACTORS



HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

WINTER PARK

FUNCTIONAL CLASSIFICATION

URBAN MAJOR COLLECTOR

CONTEXT CLASSIFICATION

SUBURBAN COMMERCIAL (C3C)

CORRIDOR LENGTH

1.43 MILES

AVERAGE POSTED SPEED

25 MPH

AVERAGE PREVAILING SPEED

36.5 MPH

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

62.4%

TRANSIT ROUTES /ANNUAL BOARDINGS & ALIGHTINGS (2022)

LINK 1, 9, 23, 102, 443 / 40,084

TRAVEL LANES / MEDIAN TYPE

2 LANES / PAVED AND GRASS

PROPOSED SAFETY COUNTERMEASURES



SIGNALS

- » Install Leading Pedestrian Intervals (\$)
- » Install retroreflective back plates (\$)
- » Prohibit turns when ped signal is activated (\$)



INTERSECTION AND ROADWAYS

- » Extend median nose into crosswalk (\$)
- » North of Webster Avenue, consider adding medians at strategic locations (\$\$\$)



PEDESTRIAN/BICYCLE FACILITIES

- » Install high visibility mid-block crosswalks with PHBs at attractors/generators near transit stops (\$\$\$)
- » Install raised crosswalks at midblocks, advanced warning signs and yield markings (\$\$)
- » Provide separated bicycle lanes (\$)
- » North of Webster Avenue, install high visibility mid-block crosswalks with RFBs (as warranted), raised crosswalks, advanced warning signs and yield markings (\$\$\$)



OTHER ENGINEERING STRATEGIES

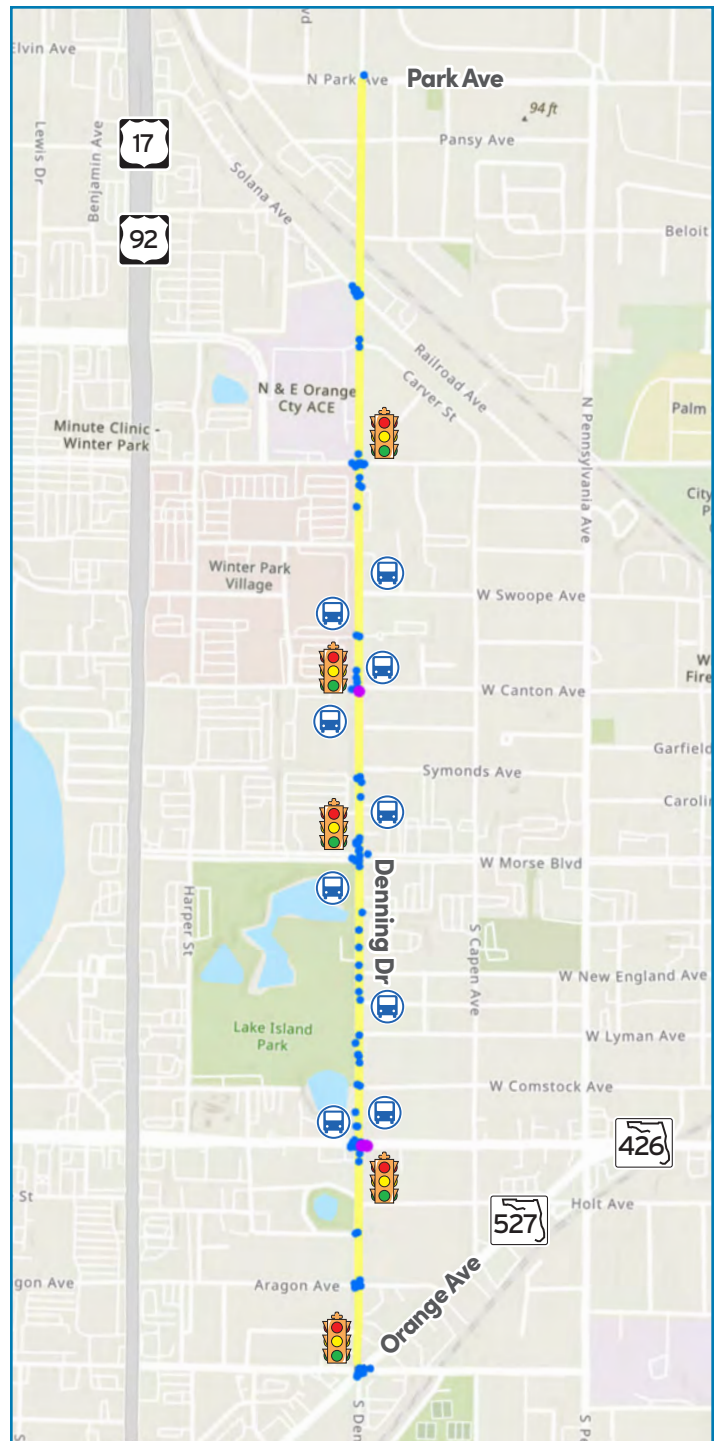
- » Lighting upgrades at segments and intersections (\$\$)



SIGNING AND STRIPING

- » Clear stop sign obstructions/foliage (\$)

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement.



LEGEND

HIN Corridor



Bus Stop



Traffic Signal

KSI Crashes by Mode



Pedestrian



Bicycle

Motorcycle



Motor Vehicle



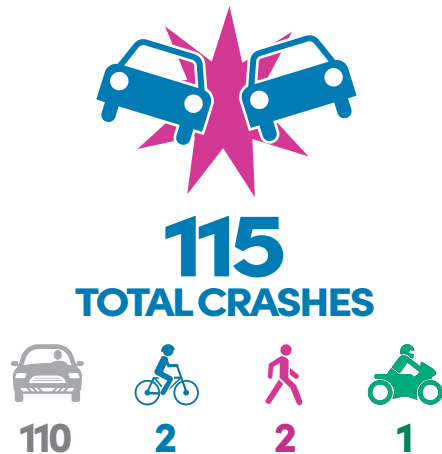
HOWELL BRANCH ROAD

from Horatio Avenue to N. Lakemont Avenue

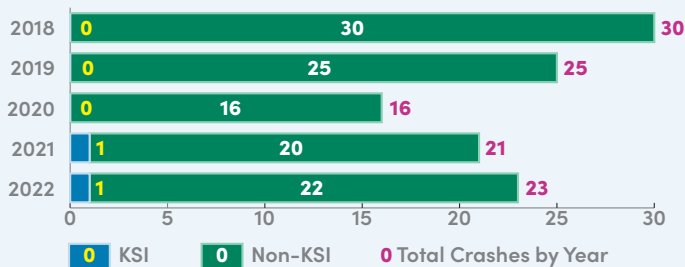
CORRIDOR RANK 11



CRASH STATISTICS (2018-2022)



CRASHES BY YEAR



KSI = Killed and Seriously Injured

Source: Signal 4 Analytics

TOP 5 CRASH TYPES

	KSI	NON-KSI	TOTAL
1. REAR END	0	68	68
2. SIDESWIPE	0	15	15
3. LEFT TURN	0	9	9
4. OFF ROAD	1	8	9
5. OTHER	0	6	6

CRASH CONTRIBUTION FACTORS

TIME OF DAY



DAYLIGHT
KSI — 2
Non-KSI — 98
TOTAL — 100



DUSK-DAWN
KSI — 0
Non-KSI — 6
TOTAL — 6



NIGHT
KSI — 0
Non-KSI — 9
TOTAL — 9

LIGHTING CONDITION



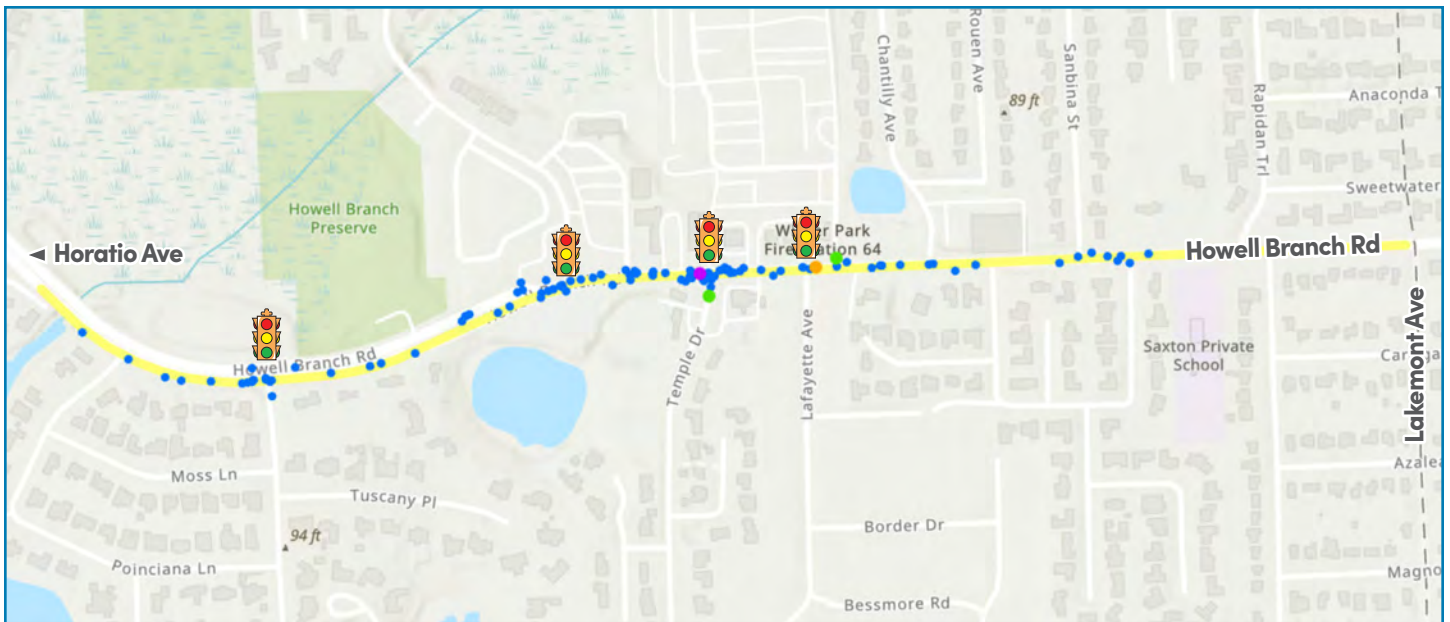
BEHAVIORAL FACTORS



IMPAIRED DRIVING
KSI — 0
Non-KSI — 2
TOTAL — 2



DISTRACTED DRIVING
KSI — 1
Non-KSI — 58
TOTAL — 59



LEGEND



HIN Corridor

Bus Stop

Traffic Signal

KSI Crashes by Mode

Pedestrian

Bicycle

Motorcycle

Motor Vehicle

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

WINTER PARK

FUNCTIONAL CLASSIFICATION

URBAN MINOR ARTERIAL

CONTEXT CLASSIFICATION

SUBURBAN COMMERCIAL (C3C)

CORRIDOR LENGTH

0.93 MILES

AVERAGE POSTED SPEED

40 MPH

AVERAGE PREVAILING SPEED

48 MPH

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

0%

TRANSIT ROUTES /ANNUAL BOARDINGS & ALIGHTINGS (2022)

NONE

TRAVEL LANES / MEDIAN TYPE

4 LANES / PAVED

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement.

PROPOSED SAFETY COUNTERMEASURES



SIGNALS

- » Install Install Leading Pedestrian Intervals (\$)
- » Install retroreflective back plates (\$)
- » Prohibit turns when ped signal is activated (\$)



INTERSECTION AND ROADWAYS

- » Reduce lane widths from 12' to 11' (\$)
- » Tighten curb radii at side streets (\$\$\$)
- » Extend median nose into crosswalk (\$)
- » Consider roundabouts at offset intersections (\$\$\$)



PEDESTRIAN/BICYCLE FACILITIES

- » Install high visibility midblock crosswalks with PHBs at attractors/generators near transit stops (\$\$\$)
- » Buffer bicycle lanes or add separator such zicla zippers (\$\$)
- » Install crosswalks at midblocks, advanced warning signs and yield markings (\$)
- » Install median islands with dedicated crosswalks at strategic locations (\$\$\$)
- » West of Temple Trail, install high visibility, raised, midblock crosswalks with PHBs at attractors/generators (\$\$\$)
- » Widen sidewalks where ROW is available (\$\$\$)



SPEED MANAGEMENT

- » Consider speed reduction to 35 mph (\$)



OTHER ENGINEERING STRATEGIES

- » Conduct Road Safety Audit to identify safety countermeasures (\$)
- » Lighting upgrades at segments and intersections (\$)



SIGNING AND STRIPING

- » Upgrade crosswalk striping (\$)

S.R. 423 / LEE ROAD

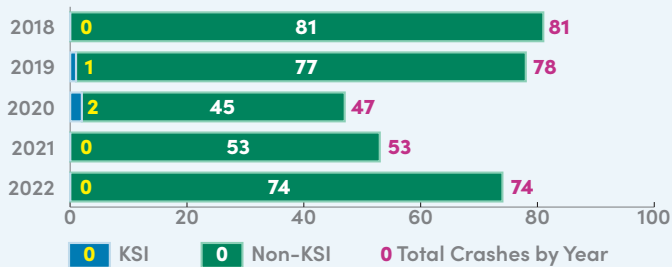
from Gloriosa Avenue to S.R. 17
CORRIDOR RANK 9



CRASH STATISTICS (2018-2022)



CRASHES BY YEAR



KSI = Killed and Seriously Injured

Source: Signal 4 Analytics

TOP 7 CRASH TYPES

	KSI	NON-KSI	TOTAL
1. REAR END	1	155	156
2. SIDESWIPE	0	72	72
3. OTHER	0	28	28
4. LEFT TURN	0	22	22
5. ANGLE	0	16	16
6. UNKNOWN	0	14	14
7. RIGHT TURN	0	8	8

CRASH CONTRIBUTION FACTORS

TIME OF DAY

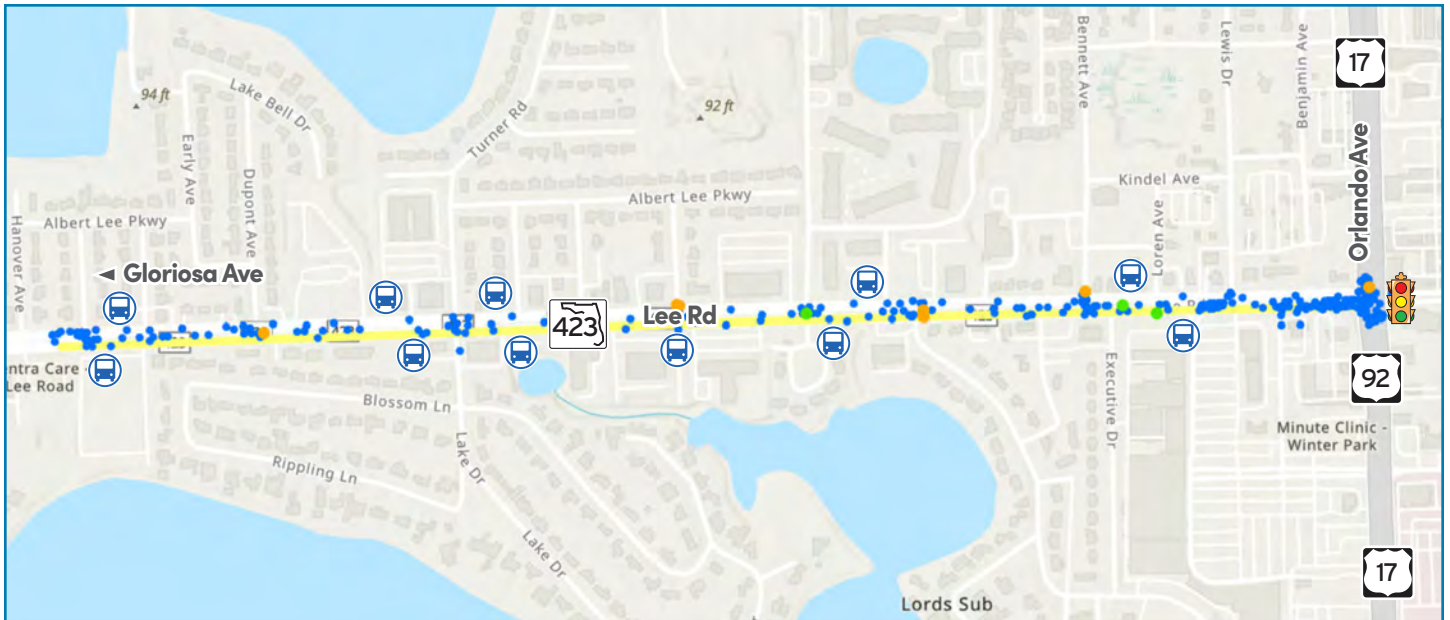


LIGHTING CONDITION



BEHAVIORAL FACTORS





LEGEND



 HIN Corridor

 Bus Stop

 Traffic Signal

KSI Crashes by Mode

 Pedestrian

 Bicycle

 Motorcycle

 Motor Vehicle

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

WINTER PARK

FUNCTIONAL CLASSIFICATION

URBAN PRINCIPAL ARTERIAL

CONTEXT CLASSIFICATION

SUBURBAN COMMERCIAL (C3C)

CORRIDOR LENGTH

1.1 MILES

AVERAGE POSTED SPEED

44.4 MPH

AVERAGE PREVAILING SPEED

51.4 MPH

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

58%

TRANSIT ROUTES / ANNUAL BOARDINGS & ALIGHTINGS (2022)

LINK 443 / 13,136

TRAVEL LANES / MEDIAN TYPE

4 LANES / CURB & VEGETATION

PROPOSED SAFETY COUNTERMEASURES



SIGNALS

- » Install leading pedestrian intervals (\$)
- » Prohibit right turn on red at Orlando Ave intersection (\$)
- » Upgrade to audible push button pedestrian crossing signals (\$)



INTERSECTION AND ROADWAYS

- » Tighten curb radii at intersections (\$\$\$)
- » Prohibit left turns from select side streets (\$)
- » Extend median nose into crosswalk (\$)
- » Consider roundabouts at major, non-signalized intersections (\$\$\$)



PEDESTRIAN/BICYCLE FACILITIES

- » Install high visibility midblock crosswalks with pedestrian hybrid beacons at attractors/generators near transit stops (\$\$\$)
- » Co-locate bus stops with crosswalks (\$)



SPEED MANAGEMENT

- » Reduced speed limit to 40 mph



SIGNING AND STRIPING

- » Update worn pavement markings throughout corridor (\$)

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement.

MORSE BOULEVARD

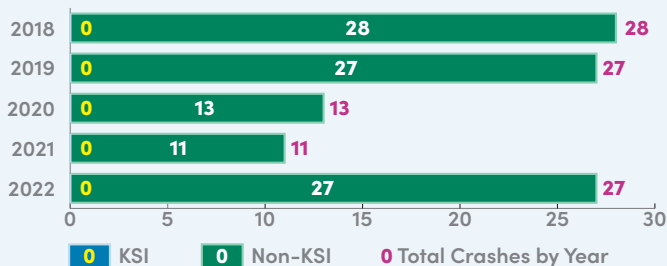
from Denning Drive to S. Park Avenue
CORRIDOR RANK 10



CRASH STATISTICS (2018-2022)



CRASHES BY YEAR



KSI = Killed and Seriously Injured

Source: Signal 4 Analytics

TOP 7 CRASH TYPES

	KSI	NON-KSI	TOTAL
1. ANGLE	0	48	48
2. LEFT TURN	0	15	15
3. REAR END	0	14	14
4. OTHER	0	14	14
5. SIDESWIPE	0	7	7
6. OFF ROAD	0	5	5
7. PEDESTRIAN	0	3	3

CRASH CONTRIBUTION FACTORS

TIME OF DAY



DAYLIGHT
KSI — 0
Non-KSI — 88
TOTAL — 88



DUSK-DAWN
KSI — 0
Non-KSI — 3
TOTAL — 3



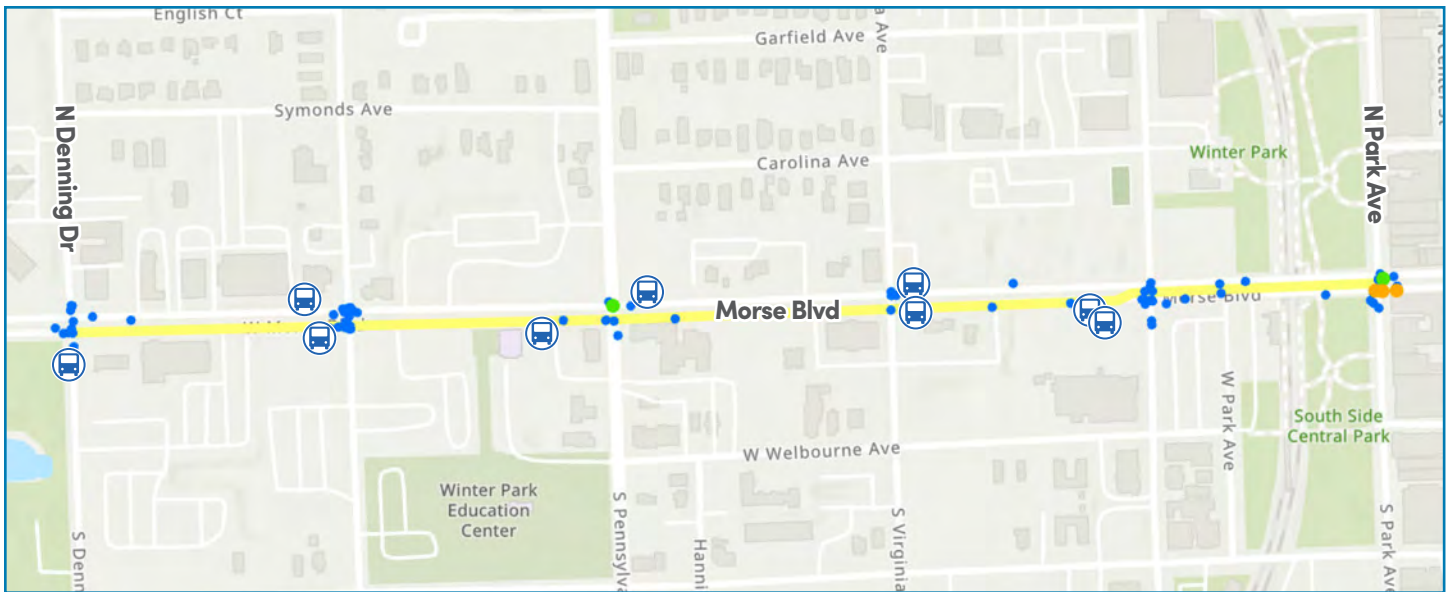
NIGHT
KSI — 0
Non-KSI — 18
TOTAL — 18

LIGHTING CONDITION



BEHAVIORAL FACTORS





LEGEND

HIN Corridor

Bus Stop

Traffic Signal

KSI Crashes by Mode

Pedestrian

Bicycle

Motorcycle

Motor Vehicle

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

WINTER PARK

FUNCTIONAL CLASSIFICATION

URBAN MINOR COLLECTOR

CONTEXT CLASSIFICATION

SUBURBAN COMMERCIAL (C3C)

CORRIDOR LENGTH

0.86 MILES

AVERAGE POSTED SPEED

25 MPH

AVERAGE PREVAILING SPEED

35 MPH

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

62.4%

TRANSIT ROUTES /ANNUAL BOARDINGS & ALIGHTINGS (2022)

LINK 1, 9, 102, 443 / 17,985

TRAVEL LANES / MEDIAN TYPE

4 LANES / CURB & VEGETATION

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement.

PROPOSED SAFETY COUNTERMEASURES



SIGNALS

- » Install leading pedestrian intervals (\$)
- » Prohibit right turn on red at Orlando Ave intersection (\$)
- » Upgrade to audible push button pedestrian crossing signals (\$)
- » Install retroreflective back plates (\$)



INTERSECTION AND ROADWAYS

- » Reduce lane widths to 11' (\$)
- » Extend median nose into crosswalk at non-signalized and signalized locations (\$)



PEDESTRIAN/BICYCLE FACILITIES

- » Install raised crosswalks at midblocks, advanced warning signs and yield markings (\$\$\$)



SIGNING AND STRIPING

- » Update worn pavement markings throughout corridor (\$)
- » Clear stop sign obstructions/foliage (\$)



OTHER ENGINEERING STRATEGIES

- » Employ speed feedback signs for short recurring periods of time

CANTON AVENUE

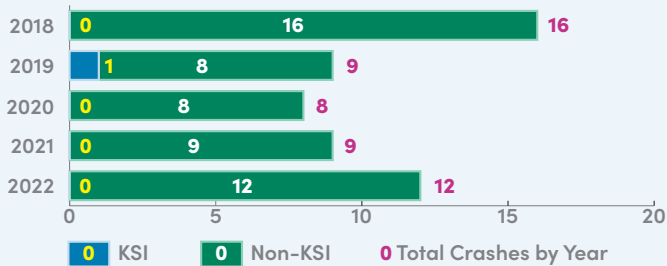
from U.S. 17 to N. Virginia Avenue
CORRIDOR RANK 11



CRASH STATISTICS (2018-2022)



CRASHES BY YEAR



KSI = Killed and Seriously Injured

Source: Signal 4 Analytics

TOP 7 CRASH TYPES

	KSI	NON-KSI	TOTAL
1. REAR END	0	15	15
2. ANGLE	1	13	14
3. LEFT TURN	0	9	9
4. OTHER	0	5	5
5. RIGHT TURN	0	3	3
6. UNKNOWN	0	3	3
7. SIDESWIPE	0	3	3

CRASH CONTRIBUTION FACTORS

TIME OF DAY



DAYLIGHT
KSI — 1
Non-KSI — 45
TOTAL — 46



DUSK-DAWN
KSI — 0
Non-KSI — 1
TOTAL — 1



NIGHT
KSI — 0
Non-KSI — 8
TOTAL — 8

LIGHTING CONDITION



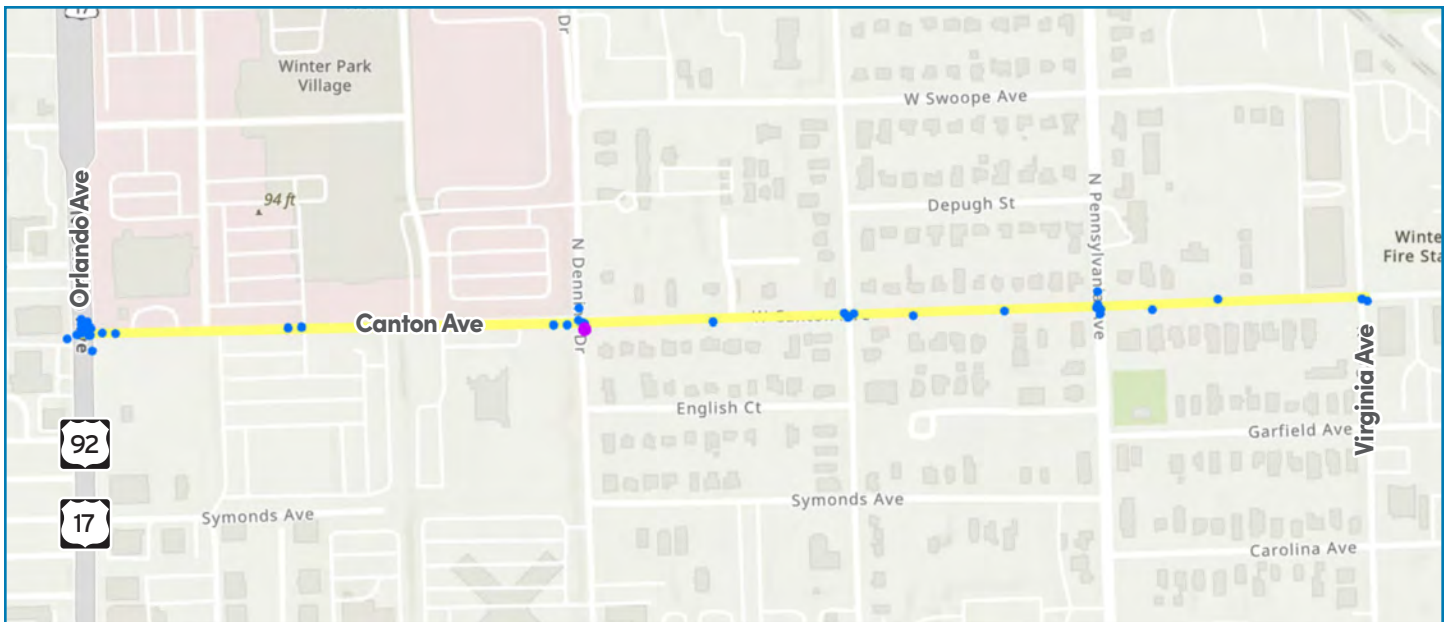
BEHAVIORAL FACTORS



IMPAIRED DRIVING
KSI — 0
Non-KSI — 0
TOTAL — 0



DISTRACTED DRIVING
KSI — 1
Non-KSI — 28
TOTAL — 29



LEGEND



 HIN Corridor

 Bus Stop

 Traffic Signal

KSI Crashes by Mode

 Pedestrian

 Bicycle

 Motorcycle

 Motor Vehicle

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

WINTER PARK

FUNCTIONAL CLASSIFICATION

URBAN LOCAL

CONTEXT CLASSIFICATION

SUBURBAN COMMERCIAL (C3C)

CORRIDOR LENGTH

0.63 MILES

AVERAGE POSTED SPEED

25 MPH

AVERAGE PREVAILING SPEED

NO DATA

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

62%

TRANSIT ROUTES /ANNUAL BOARDINGS & ALIGHTINGS (2022)

NONE

TRAVEL LANES / MEDIAN TYPE

2 LANES / PAVED (NOTTWLTL)

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement.

PROPOSED SAFETY COUNTERMEASURES



SIGNALS

- » Install retroreflective back plates at Denning Drive (\$)
- » Prohibit turns when ped signal is activated (\$)



INTERSECTION AND ROADWAYS

- » Feasibility study to assess impacts of prohibiting left turns from Canton Avenue onto Orlando Avenue (\$)
- » Evaluate converting 4-way stop controlled intersections to roundabouts (\$\$\$)
- » Install raised crosswalks at midblock locations (\$\$)



PEDESTRIAN/BICYCLE FACILITIES AND SPEED MANAGEMENT

- » Install high visibility midblock crosswalks with rectangular rapid flashing beacons (as warranted) advanced warning signs and yield markings (\$\$\$)
- » Add "Bicycle May use Full Road" signage (\$)



OTHER ENGINEERING STRATEGIES

- » Lighting upgrades at segments and intersections (\$\$)



SIGNING AND STRIPING

- » Clear stop sign obstructions/foilage (\$)

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Transportation Advisory Board

agenda item 6.a

item type

Staff Updates

meeting date

June 17, 2024

prepared by

Hongmyung Lim, Engineer II

approved by

Kim Breland, Deputy City Clerk

subject

RRFB Update

motion | recommendation**background****alternatives | other considerations****fiscal impact****attachments**

None



Transportation Advisory Board

agenda item 6.b

item type

Staff Updates

meeting date

June 17, 2024

prepared by

Hongmyung Lim, Engineer II

approved by

Kim Breland, Deputy City Clerk

subject

Brick Repair Update

motion | recommendation**background****alternatives | other considerations****fiscal impact****attachments**

None



Transportation Advisory Board

agenda item 6.c

item type

Staff Updates

meeting date

June 17, 2024

prepared by

Hongmyung Lim, Engineer II

approved by

Kim Breland, Deputy City Clerk

subject

Paving Project Update

motion | recommendation**background****alternatives | other considerations****fiscal impact****attachments**

None



Transportation Advisory Board

agenda item 6.d

item type

Staff Updates

meeting date

June 17, 2024

prepared by

Hongmyung Lim, Engineer II

approved by

Kim Breland, Deputy City Clerk

subject

SR426 & Cortland Ave Signal

motion | recommendation**background****alternatives | other considerations****fiscal impact****attachments**

None



Transportation Advisory Board

agenda item 6.e

item type

Staff Updates

meeting date

June 17, 2024

prepared by

Hongmyung Lim, Engineer II

approved by

Kim Breland, Deputy City Clerk

subject

Quail Hollow Update

motion | recommendation**background****alternatives | other considerations****fiscal impact****attachments**

None



Transportation Advisory Board

agenda item 6.f

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subject

Denning Trail Continuation Update

motion | recommendation**background****alternatives | other considerations****fiscal impact****attachments**

None