VISION ZERO
CENTRAL FLORIDA
Counting down to zero traffic deaths

Safety Action Plan Technical Appendix

UPDATED
AUGUST 2025

metroplan orlando
A REGIONAL TRANSPORTATION PARTNERSHIP

PHOTO OF SR 436 IN THE CITY OF CASSELBERRY

Vision Zero Central Florida

Technical Appendix

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Appendix Part 2A: HIN Development

Memorandum

Date: February 29, 2024

To: Vision Zero Central Florida Partners

From: Mighk Wilson, MetroPlan Orlando
Kathrin Tellez, Fehr & Peers

Subject: Vision Zero Central Florida – Regional High Injury Network

Introduction

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

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

This work will culminate in the preparation of a Safety Action Plan for the region. Additionally, separate HINs were developed for each County and each local jurisdiction reflecting:

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

Based on the analysis, about 47% of KSI crashes occur on 2% of our roads throughout Orange, Osceola, and Seminole counties, representing 13% of the Federal Aid System centerline miles in the region. Of the roads on the regional HIN, 60% are FDOT roads, 30% are county roads and 10% are local roads.

The following describes the data sources that were used and the methodology employed to develop the HIN.

Data Inputs

Road Network

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

Crash Severity Weighting

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

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

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

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

Table 1: Crash Costs[1] and EPDO Weight Factors

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

1. Source: FDOT Design Manual, Table 122.6.2 FDOT KABCO Crash Costs
2. Based on an average weighted KA crash cost in Orange, Osceola and Seminole Counties of $2,438,850 for 2018 – 2022 and an average weighted BC crash cost in Orange, Osceola and Seminole Counties of $129,725.

Crash Mode Weighting

In addition to applying a weight factor based on the severity of a crash, a weight factor was developed and applied based on the travel mode of crash victims. Review of the data indicates that people walking, bicycling, and riding motorcycles are disproportionately represented in crashes that result in a KSI. People outside of vehicles are involved in about 3 percent of all reported crashes but represent 25% of all serious injury crashes and 48% of fatal crashes. For the region, the resulting weight factor, based on the proportion of overall crashes involving someone outside a vehicle to crashes that resulted in an injury, is 3. **All crashes involving a person walking, bicycling, or riding a motorcycle were weighed by a factor of 3** in the development of the Regional HIN for the MetroPlan Orlando region. The factor, while based on local data, is in-line with weight factors used by other jurisdictions in the development of their HINs.

HIN Development

Sliding Window Approach

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

Sliding Window Parameters

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

Safety Score Summary

Crashes were summarized for each window using a 100-ft search radius. This radius was chosen by inspecting crash locations relative to the centerline network at various locations throughout the network. The crash summary for each window consisted of summing all weighted crash values within the search radius. For example, a window with 15 property-damage only, 10 minor injury crashes and 5 KSI crashes within 100 feet would receive a weighted score of 1,770 (15*1+10*17+ 5*317), presuming no pedestrians, bicyclists or motorcyclists were involved. For that same window, if a pedestrian, bicyclist, or motorcyclist was involved in 1 of the 15 property-damage only crashes, 3 of the 10 minor injury crashes and 3 of the 5 KSI crashes, that window would receive a weighted score of 3,776 (14*1+1*3*1+7*17+ 3*3*17+2*317+3*3*317). The weighted score is referred to as a **Safety Score**. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates a lower crash rate. A Safety Score of zero indicates no history of crashes at a location. Windows with the highest values for the segment or facility are identified as candidate HIN locations, with the final Safety Score for segments based on a weighted score per mile.

HIN Development

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

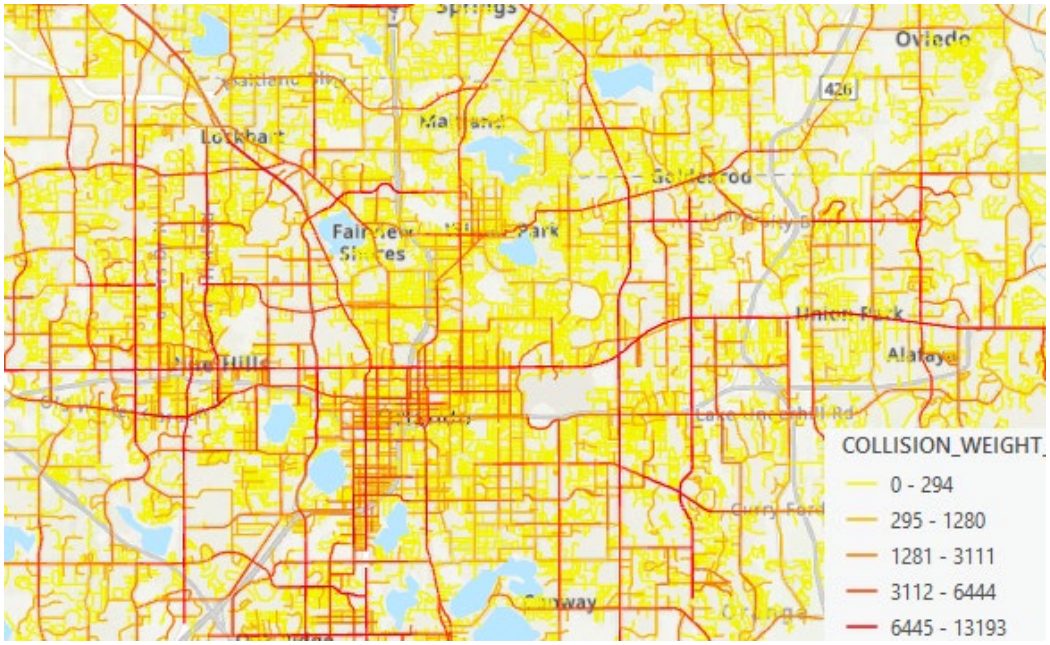


Figure 1: Initial visualization of Crash Weight Summaries (Safety Score) Throughout Network

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

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

HIN and HIN Statistics

The resulting HIN can be viewed through this weblink. The MetroPlan Orlando Regional HIN contains about 260 centerline miles and includes road segments in all three counties, with a disproportionate number of roads in Orange County. Crashes that occur on the HIN segments account for 47% of all KSI crashes in the region. 61% of pedestrian KSI, 50% of bicyclist KSI, and 44% of motorcyclist KSI crashes also occur on these roads, as summarized in **Table 2**. Approximately 53% of the overall HIN is located within a transportation disadvantaged community.

Table 2: MPO Network HIN Statistics

	All Roads*	All Federal Aid Road*	Regional HIN	HIN % All Roads	HIN % of Federal Aid Roads
Centerline miles	10,728	1,966	258	2%	13%
All Crashes	272,523	229,278	98,975	36%	43%
Deaths	1,143	1,071	638	56%	60%
KSI (All modes)	7,146	6,398	3,378	47%	53%
Ped KSI	949	854	576	61%	67%
Bike KSI	327	285	164	50%	58%
Motorcycle KSI	956	864	416	44%	48%

Source: Signal 4 Analytics (2018-2022), Fehr & Peers.
Notes: * Excluding Toll facilities, access-controlled facilities, and parking lots. When accounting for centerline miles of limited access facilities, 47% of KSI crashes occur on 2% of all roads.

The 10 corridors on the HIN that received the highest Safety Score on a per mile basis are summarized in **Table 3,** with the full list provided as an attachment. The percent of each HIN segment that runs through a transportation disadvantaged community is also presented. Of ten segments that received the highest Safety Score, approximately 70% of the combined length is within a transportation disadvantaged community.

LYNX provided bus stop level boarding and alighting data reflective of 2022 ridership from their Automated Passenger County (APC) system installed on all buses. In 2022, there were approximately 30,000,000 instances of people getting onto or of a bus at stops throughout the region. Of the total stop level activity, approximately **50% of people in the region access a bus from a High Injury Network corridor**. Approximately 6% of regional ridership gets onto or off a bus along the top 10 corridors.

As part of a separate process, a HIN in for each County in the region as well as incorporated city was developed. The overlap between County and Local roadway HINs is also noted in the attached HIN summary sheet.

Table 3: Top 10 HIN Corridors[1]

Road Name	From	To	Location	Safety Score [2]	Average Posted Speed	Average 85th Percentile Speed	% of HIN Segment Through TDC[3]
1. John Young Parkway	SR 50	Orange Center Blvd.	Orlando	17,478	42	50	89%
2. Sand Lake Road/ McCoy Road	Turkey Lake Rd.	Universal Blvd.	Orlando/ Orange County	17,104	40	42	100%
3. Chickasaw Trail	Frontage Rd.	Lake Underhill Rd.	Orange County	14,589	40	49	9%
4. Hiawassee Road	Silver Star Rd. (SR 438)	SR 50	Orange County	14,547	45	56	100%
5. Oak Ridge Road	Millenia Blvd.	S. Orange Blossom Trail	Orlando/ Orange County	14,296	40	51	100%
6. Kirkman Road (SR 435)	SR 50	Raleigh St.	Orlando/ Orange County	14,130	46	53	100%
7. S Goldenrod Road (SR 551)	SR 50	Lake Underhill Rd.	Orange County	14,129	37	56	0%
8. S Semoran Boulevard (SR 436)	Lee Vista Rd.	TG Lee Blvd.	Orlando	14,088	48	54	100%
9. Pine Hills Road	SR 50	Old Winter Garden Rd.	Orange County	13,941	38	47	100%
10. Alafaya Trail	SR 50	Lake Underhill Rd.	Orange County	13,564	45	53	0%

Source: Signal 4 Analytics (2018-2022), Fehr & Peers.
Notes: 1. Excluding Toll facilities and access-controlled facilities.
2. The **Safety Score** is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates a lower crash rate. A Safety Score of zero indicates no history of crashes at the location.
3. TDC = **Transportation Disadvantaged Community.** Transportation disadvantage occurs when people are unable to access the needs of their daily life regularly, reliably, and safely. Approximately 25% of the regional population lives in a community designated as transportation disadvantaged. Additional information can be found on the US DOT website: https://www.transportation.gov/priorities/equity/justice40/etc-explorer.

Top Intersections

In addition to developing a HIN, the intersections with the highest Safety Score were also identified based on a similar process as the HIN development. For this analysis, any crash that was within 250 feet of an intersection was considered as attributed to that intersection. The top 30 intersections are also shown on the HIN network, with a summary in **Table 4**. Of the top 30 intersections, none are off the HIN. Intersections where a disproportionate share of the KSI crashes involved a person outside a vehicle are noted in ***bold italics***. All but 1 (Goldenrod Road at Curry Ford Road) of the top 30 HIN intersections is within or adjacent to a transportation disadvantaged community.

Additional information and a map of the HIN are shown on the attached HIN Fact Sheet. If you have questions, please contact Mighk Wilson at mighk.wilson@metroplanorlando.gov.

Attachments:
Summary Statistics for Roads in HIN
HIN Fact Sheet

Table 4: Top 30 HIN Intersections[1]

Intersection	Safety Score	Intersection	Safety Score
1. John Young Parkway at Sand Lake Road[2]	10,140	16. Colonial Drive at Econlockhatchee Trail	6,480
2. Alafaya Trail at Colonial Drive	***10,103***	17. Powers Drive at Silver Star Road	6,415
3. Orange Blossom Trail at Holden Avenue	***10,055***	18. Orange Blossom Trail at Conroy Road/Americana Boulevard	6,401
4. Hiawassee Road at Silver Star Road	***9,630***	***19. Old Cheney Highway/Tucker Avenue at Colonial Drive***	***6,386***
5. N Poinciana Boulevard at Irlo Bronson Memorial Highway	***9,399***	20. Goldenrod Road at University Boulevard	6,224
6. Pine Hills Road at Silver Star Road	8,673	21. Alafaya Trail at Lokanotosa Trail	5,905
7. Semoran Boulevard at Old Cheney Hwy	***8,509***	22. Semoran Boulevard at Curry Ford Road	5,504
8. W Colonial Drive at N Kirkman Road	7,097	23. S French Street at W 25th Street	5,459
9. Goldenrod Road at Colonial Drive	7,040	24. Hastings Street at Silver Star Road	5,368
10. Simpson Road at Irlo Bronson Memorial Highway	6,946	25. Orange Blossom Trail at Orlando Central Parkway	5,160
11. Orange Blossom Trail at Gore Street	***6,769***	26. Orange Blossom Trail at Michigan Street	4,924
12. N Kirkman Road at Old Winter Garden Road	6,724	***27. Irlo Bronson Memorial Highway at Club Sevilla***	***4,812***
13. Goldenrod Road at Curry Ford Road	6,715	28. Forsyth Road at University Boulevard	4,722
14. John Young Parkway at Conroy Road	6,699	29. N French Avenue at W 1st Street (US 17/92)	4,294
15. Pine Hills Road at North Lane	6,651	30. Orange Blossom Trail at Premier Row	3,919

Source: Signal 4 Analytics (2018-2022), Fehr & Peers.
Note: 1. Intersections where a disproportionate share of the KSI crashes involved a person outside a vehicle are noted in ***bold italics***. Underline indicates intersection is not within or adjacent to a transportation disadvantaged community.
2. At the intersection of John Young Parkway at Sand Lake Road, improvements were completed in late 2019/early 2020 to convert an at-grade intersection to a single-point urban interchange (SPUI). The number of KSI crashes per year has reduced from approximately 9 per year (2018/2019) to an average of 3 per year (2020-2022). This intersection could be a candidate for more detailed analysis as part of the County plan to document the safety benefit associated with the SPUI and potentially identify additional countermeasures that could be implemented at the intersection.

Central Florida Vision Zero
Regional HIN Segments
February 2024

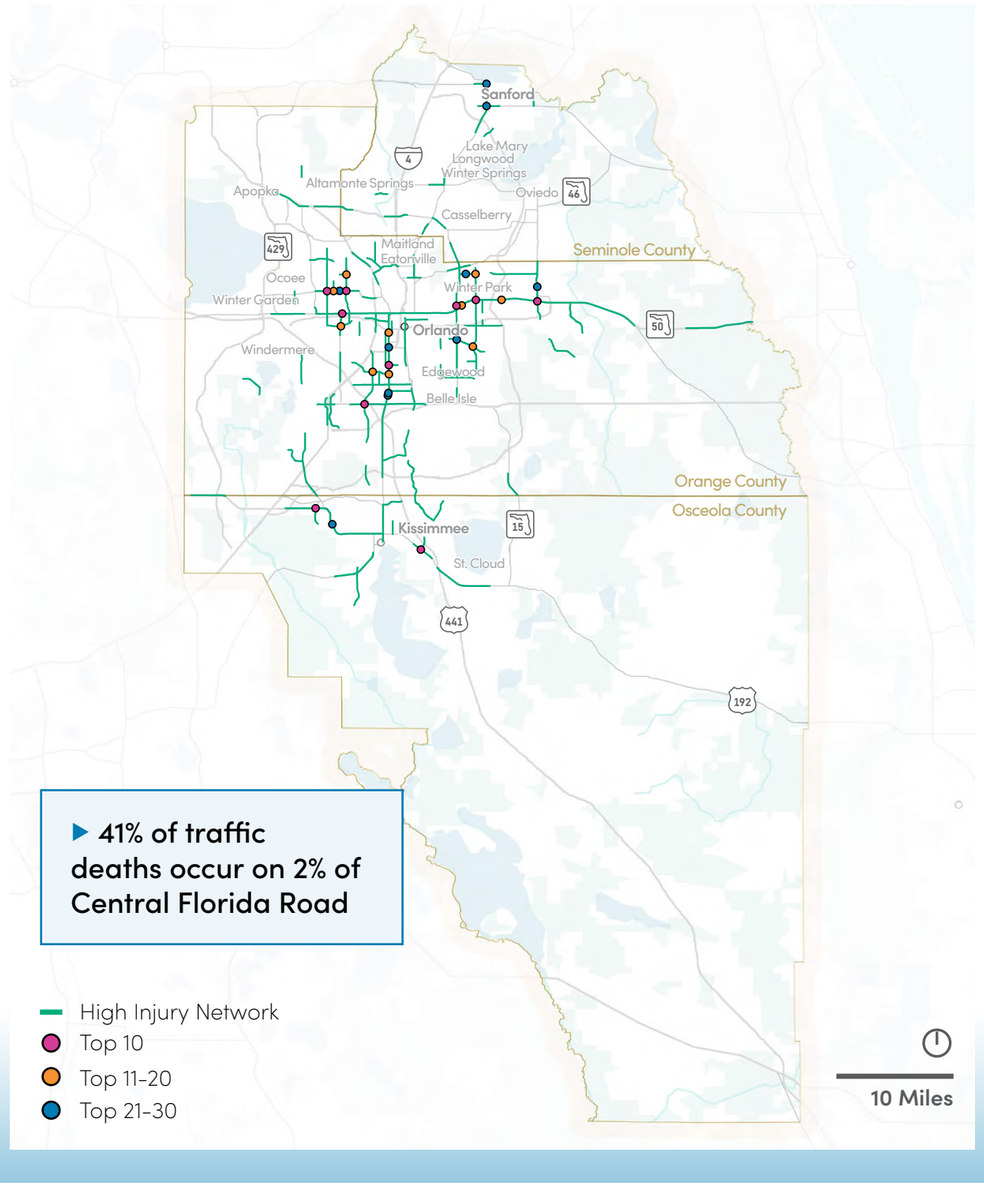
Corridor Number	Road Name	Location	Total Weighted Score per Mile	From	To	Length (miles)	Mean Posted Speed	Mean 85 Percentile Speed	% of corridor in TDC*	Primary HIN Overlap	Secondary HIN Overlap
1	John Young Parkway	Orlando	17,478	SR 50	Orange Center Boulevard	1.45	42	50	89%	All Roads Orange County	
2	Sand Lake Road/McCoy Road	Orlando/Orange	17,104	Turkey Lake Road	Universal Boulevard	0.74	40	42	100%	All Roads Orange County	
3	Chickasaw Trail	Orange County	14,589	Frontage Road	Lake Underhill Road	0.46	40	49	9%	All Roads Orange County	County Roads Orange County
4	Hiawassee Road	Orange County	14,547	Silver Star Road (SR 438)	SR 50	1.76	45	56	100%	All Roads Orange County	County Roads Orange County
5	Oak Ridge Road	Orlando/Orange	14,296	Millenia Boulevard	S. Orange Blossom Trail	2.78	40	51	100%	All Roads Orange County	County Roads Orange County
6	Kirkman Road (SR 435)	Orlando/Orange	14,130	SR 50	Raleigh Street	1.7	46	53	100%	All Roads Orange County	
7	S Goldenrod Road (SR 551)	Orange County	14,129	SR 50	Lake Underhill Road	2	37	56	0%	All Roads Orange County	
8	S Semoran Boulevard (SR 436)	Orlando	14,088	Lee Vista Road	TG Lee Boulevard	0.69	48	54	100%	All Roads Orange County	All Roads Orlando
9	Pine Hills Road	Orange County	13,941	SR 50	Old Winter Garden Road	0.73	38	47	100%	All Roads Orange County	
10	Alafaya Trail	Orange County	13,564	SR 50	Lake Underhill Road	1.43	45	53	0%	All Roads Orange County	
11	S Kirkman Road (SR 435)	Orlando	13,466	LB Mcleod Road	Major Boulevard	2.24	50	57	78%	All Roads Orange County	All Roads Orlando
12	Colonial Drive (SR 50)	Orlando	13,415	Orange Blossom Trail N.	N Bumby Avenue	2.65	40	44	73%	All Roads Orange County	All Roads Orlando
13	North Lane	Orange County	12,946	Westgate Road	N Pine Hills Road	0.53	35	48	100%	All Roads Orange County	County Roads Orange County
14	Hiawassee Road	Orange County	12,344	SR 50	Old Winter Garden Road	0.9	45	53	100%	All Roads Orange County	County Roads Orange County
15	Alafaya Trail (SR 434)	Orange County	12,284	McCulloch Road	SR 50	3.13	45	53	24%	All Roads Orange County	
16	Oak Ridge Road (CR 506)	Orange County	12,054	S. Orange Blossom Trail	Orange Ave S.	1.67	45	47	98%	All Roads Orange County	County Roads Orange County
17	Lee Road	Orange County	11,972	N. Orange Blossom Trail	N. Wymore Road	2.23	45	55	97%	All Roads Orange County	
18	University Boulevard	Orange County	11,938	S Semoran Boulevard (SR 436)	Lake Mirage Boulevard	1.49	45	53	86%	All Roads Orange County	County Roads Orange County
19	Rosalind Avenue	Orlando	11,526	E. Livingston Street	S. Lucerne Circle	1	30	37	81%	All Roads Orange County	County Roads Orange County
20	S Semoran Boulevard (SR 436)	Orlando	11,419	Lake Underhill Road	Lake Margaret Drive	2.34	46	54	2%	All Roads Orange County	County Roads Orange County
21	W Irlo Bronson Memorial Highway	Osceola County	11,347	Celebration Avenue	Four Winds Boulevard	4.98	45	56	94%	All Roads Osceola County	
22	S Goldenrod Road (SR 551)	Orange County	11,182	Lake Underhill Road	Beatty Drive	3.94	45	57	27%	All Roads Orange County	
23	N Ronald Regan Boulevard	Seminole County	10,951	Eldersprings Circle	Jones Avenue	0.93	45	57	100%	All Roads Seminole County	County Roads Seminole County
24	W First Street (US 17/92)	Sanford	10,856	N. Persimmon Avenue	N. Frence Avenue	0.98	43	50	100%	All Roads Seminole County	County Roads Seminole County
25	Edgewater Drive/Highland Avenue	Orange County	10,652	Clarcona Ocoee Road	Lee Road	1.38	43	51	100%	All Roads Orange County	
26	Conway Road	Orlando	10,570	Curry Ford Road	E. Michigan Street	0.75	40	50	0%	All Roads Orange County	All Roads Orlando
27	Pershing Avenue	Orlando	10,554	Woodgate Boulevard	Goldenrod Road S.	0.68	45	53	100%	All Roads Orange County	County Roads Orange County
28	John Young Parkway	Orange County	10,510	SR 528 Ramps	Lazio Lane	0.85	55	58	100%	All Roads Orange County	
29	East Lake Mary Boulevard	Seminole County	10,477	North of Celery Avenue	SR 46	0.91	45	62	0%	All Roads Seminole County	
30	Poinciana Boulevard	Osceola County	10,431	US 192	Siesta Lago Drive	1.29	42	64	100%	All Roads Osceola County	County Roads Osceola County
31	Holden Avenue	Orange County	10,402	Rio Grande Avenue S.	Lake Holden Hills Drive	0.93	35	45	100%	All Roads Orange County	County Roads Orange County
32	S Orange Blossom Trail	Kissimmee	10,376	E. Osceola Parkway	Ridgewood Avenue	1.53	45	55	100%	All Roads Osceola County	
33	US-192/Vine Street	Kissimmee	10,356	South of Four Winds	N. John Young Parkway	3.9	43	52	100%	All Roads Osceola County	All Roads Kissimmee
34	CR 435/Apopka Vineland Road	Orange County	10,310	Balboa Drive	SR 50	0.53	45	53	100%	All Roads Orange County	
35	Texas Avenue	Orange County	10,255	Americana Boulevard	W. Oak Ridge Road	1	35	43	100%	All Roads Orange County	County Roads Orange County
36	Vineland Road	Orange County	10,156	I-4	South of LBV Factory Shores Drive	2.35	47	58	2%	All Roads Orange County	
37	Orange Avenue	Orlando	10,131	S. Lucerne Circle	Gatlin Avenue	2.75	36	46	47%	All Roads Orange County	All Roads Orlando
38	Orange Blossom Trail	Orange County	9,988	Overland Road	Rosamond Drive	1.77	47	57	100%	All Roads Orange County	
39	Ivey Lane	Orlando	9,944	Edgemoor Street	Raleigh Street	1.02	35	53	100%	All Roads Orange County	County Roads Orange County
40	Orange Blossom Trail	Apopka	9,928	Drage Drive	S. McGee Avenue	2.81	38	54	100%	All Roads Orange County	All Roads Apopka
41	Orange Blossom Trail	Orlando	9,902	Lee Road	Shader Road	0.95	48	63	100%	All Roads Orange County	All Roads Orlando
42	Lancaster Road	Orange County	9,900	S. Orange Blossom Trail	Orange Avenue S.	1.78	40	45	99%	All Roads Orange County	County Roads Orange County
43	Goldenroad Road	Orange County	9,875	North of Dwell Well Way	SR 50	2.5	45	54	100%	All Roads Orange County	
44	John Young Parkway	Orlando	9,873	LB McLeod Road	W. Sand Lake Road	4.37	45	61	67%	All Roads Orange County	
45	US-17/92/Orlando Avenue	Seminole County	9,853	South Street	Spartan Drive	0.89	45	55	0%	All Roads Seminole County	
46	S Orange Blossom Trail	Kissimmee	9,546	Ridgewood Avenue	Neptune Road	1.34	41	49	100%	All Roads Osceola County	All Roads Kissimmee
47	Conroy Road/Americana Boulevard	Orlando	9,495	West of President Barack Obama Parkway	S. Orange Blossom Trail	3.22	35	49	64%	All Roads Orange County	County Roads Orange County
48	John Young Parkway	Orange County	9,488	Deerfield Boulevard	South of Town Loop Boulevard	1.56	45	55	0%	All Roads Orange County	

* TDC = Transportation Disadvantaged Community

FACT SHEET

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



WHAT IS A HIGH INJURY NETWORK (HIN)?

A HIN is a collection of streets where a disproportionate number of crashes that result in someone being killed or severely injured (KSI) occur. This allows us to focus our efforts on the places where crashes are more likely to result in a KSI.

HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **43**mph
- Average Prevailing Speed **53**mph
- **53%** of HIN in **Disavantaged Community** [1] (**25%** of the region is classified as disadvantaged)
- HIN includes:

  60% State Roads
  30% County Roads
  10% Local roads

1 **Disadvantaged Communities** experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations. More information can be found on the website: https://www.transportation.gov/priorities/equity/justice40/etc-explorer

HIN NETWORK OVERALL STATISTICS

	ALL ROADS*	HIN	% HIN	FEDERAL AID (FA) NETWORK	% HIN OF FA
CENTERLINE MILES	10,728	258	2%	1,965	13%
All Crashes	272,523	98,975	36%	229,278	43%
DEATHS	1,143	638	56%	1,071	60%
KSI	7,146	3,378	47%	6,398	53%
PEDESTRIAN KSI	949	576	61%	854	67%
BICYCLIST KSI	327	164	50%	285	58%
MOTORCYCLIST KSI	956	416	44%	864	48%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)
* All roads in HIN are on FA network

HOW CAN YOU GET INVOLVED

This planning initiative encourages participation from people of all ages across our region, including community leaders, residents, and visitors. Join us in this quest to eliminate deaths and serious injuries on Central Florida's roads. We can save lives when each of us does our part and we all work together.

Visit our website to review crash data, learn more about safety, provide feedback and get details for upcoming events:
VisionZeroCFL.gov

TOP 30 HIGH INJURY NETWORK INTERSECTION LOCATIONS

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

1. The **Safety Score** is calculated based on the total number of crashes, the **highest level of injury** sustained in each crash, and the **travel mode** of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

TOP 30 HIGH INJURY NETWORK CORRIDORS

#	Road Name	From	To	Location	Safety Score [1]
1.	John Young Parkway	SR 50	Orange Center Blvd.	Orlando	17,478
2.	Sand Lake Road/McCoy Road	Turkey Lake Rd.	Universal Blvd.	Orlando	17,104
3.	Chickasaw Trail	Frontage Rd.	Lake Underhill Rd.	Orange County	14,589
4.	Hiawassee Road	SR 438/Silver Star Rd.	SR 50	Orange County	14,547
5.	Oakridge Road	Millenia Blvd.	S. Orange Blossom Trail	Orlando	14,296
6.	Kirkman Road (SR 435)	SR 50	Raleigh St.	Orange County	14,130
7.	Goldenrod Road (SR 551)	SR 50	Lake Underhill Rd.	Orange County	14,129
8.	Semoran Boulevard (SR 436)	Lee Vista Rd.	TG Lee Blvd.	Orlando	14,088
9.	Pine Hills Road	SR 50	Old Winter Garden Rd.	Orange County	13,941
10.	Alafaya Trail	SR 50	Lake Underhill Rd.	Orange County	13,564
11.	Kirkman Road (SR 435)	LB Mcleod Rd.	Major Blvd.	Orlando	13,466
12.	Colonial Drive	Orange Blossom Trail N.	N Bumby Ave.	Orlando	13,415
13.	North Lane	Westgate Rd.	N Pine Hills Rd.	Orange County	12,946
14.	Hiawassee Rd.	SR 50	Old Winter Garden Rd.	Orange County	12,344
15.	SR 434	McCulloch Rd.	SR 50	Orange County	12,284
16.	Oak Ridge Road (CR 506)	S. Orange Blossom Trail	Orange Ave S.	Orange County	12,054
17.	Lee Road	N. Orange Blossom Trail	N. Wymore Rd.	Orange County	11,972
18.	University Blvd.	Semoran Blvd. (SR 436)	Lake Mirage Blvd.	Orange County	11,938
19.	Rosalind Ave.	E. Livingston St.	S. Lucerne Cir.	Orlando	11,526
20.	Semoran Boulevard	Lake Underhill Rd.	Lake Margaret Dr.	Orlando	11,419
21.	US 192/Vine St.	Celebration Ave.	Four Winds Blvd.	Osceola County	11,347
22.	Goldenrod Road	Lake Underhill Rd.	Beatty Dr.	Orange County	11,182
23.	N Ronald Reagan Blvd.	Elder Springs Cir.	Jones Ave.	Seminole County	10,951
24.	W First Street (US 17/92)	N. Persimmon Ave.	N French Ave.	Sanford	10,856
25.	Edgewater Dr./Highland Ave.	Clarcona Ocoee Rd.	Lee Rd.	Orange County	10,652
26.	Conway Road	Curry Ford Rd.	E. Michigan St.	Orlando	10,570
27.	Pershing Ave.	Woodgate Blvd.	Goldenrod Rd.	Orlando	10,554
28.	John Young Pkwy.	SR 528 Ramps	Lazio Ln.	Orange County	10,510
29.	East Lake Mary Blvd.	North of Celery Ave.	SR 46	Seminole County	10,477
30.	Poinciana Blvd.	US 192	Siesta Lago Dr.	Osceola County	10,431

1. The **Safety Score** is calculated based on the total number of crashes, the **highest level of injury** sustained in each crash, and the **travel mode** of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. The roadway segment score was normalized on a per mile basis. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

Central Florida Vision Zero
Regional HIN Segments
February 2024

Corridor Number	Road Name	Location	Total Weighted Score per Mile	From	To	Length (miles)	Mean Posted Speed	Mean 85 Percentile Speed	% of corridor in TDC*	Primary HIN Overlap	Secondary HIN Overlap
49	University Boulevard	Orange County	9,410	Bibb Lane	Rouse Road	3.66	45	56	11%	All Roads Orange County	County Roads Orange County
50	W Colonial Drive/Martin Luther King	Orange County	9,406	Economic Court	Good Homes Road	2.57	45	57	100%	All Roads Orange County	
51	Westmoreland Drive	Orlando	9,377	SR 526/Washington Street	W. Gore Street	0.87	25	36	100%	All Roads Orange County	All Roads Orlando
52	West 25th Street	Sanford	9,328	Club Road	S. Mellonville Avenue	1.68	40	52	87%	All Roads Seminole County	All Roads Sanford
53	Osceola Parkway	Kissimmee	9,281	N. Orange Blossom Trail	Florida's Turnpike	1.51	45	54	100%	All Roads Osceola County	County Roads Osceola County
54	US-17/92/Orlando Avenue/French Av	Seminole County	9,122	North of Longdale Avenue	SR 434	0.91	45	58	100%	All Roads Seminole County	
55	E Irlo Bronson Highway/Vine Street	Osceola County	9,118	Neocity Way	Pecan Street	1.83	50	61	58%	All Roads Osceola County	
56	Altamonte Drive	Altamonte Springs	9,083	Montgomery Road	Palm Springs Drive	1.76	42	50	0%	All Roads Seminole County	All Roads Altamonte Springs
57	Silver Star Road	Orange County	9,070	Mercy Drive	East of N. John Young Parkway	1.06	45	57	100%	All Roads Orange County	
58	Orange Avenue	Orange County	9,055	Prince Street	Spruce Avenue	1.72	45	53	9%	All Roads Orange County	
59	Orange Blossom Trail	Orange County	9,038	Consulate Drive	Town Center Boulevard	4.34	49	54	93%	All Roads Orange County	
60	Old Winter Garden Road	Orange County	8,868	N. Hiawassee Road	Takoma Street	2.03	42	55	100%	All Roads Orange County	County Roads Orange County
61	SR 434	Seminole County	8,843	West of E. Lake Brantley	Oak Street	0.95	45	52	0%	All Roads Seminole County	
62	Fairbanks Avenue	Winter Park	8,816	Clay Street	Pennsylvania Avenue S.	1.03	35	44	0%	All Roads Orange County	All Roads Winter Park
63	Old Winter Garden Road	Orlando	8,698	SR 408 Exit Ramp	Orange Blossom Trail N.	1.85	42	52	100%	All Roads Orange County	County Roads Orange County
64	Aloma Avenue	Orange County	8,691	West of Street Andrews	West of Tangerine Avenue	1.8	40	47	100%	All Roads Orange County	
65	SR 434	Orange County	8,672	Pembrook Drive	Edgewater Drive	1.56	45	53	100%	All Roads Orange County	
66	Michigan Avenue	Kissimmee	8,545	E. Donegan Drive	E. Vine Street	1.01	40	53	100%	All Roads Osceola County	County Roads Osceola County
67	Powers Drive	Orange County	8,540	Indian Hill Road	SR 438	0.72	35	44	100%	All Roads Orange County	County Roads Orange County
68	SR 436	Casselberry	8,485	US 17-92	Kewannee Trail	1.3	45	54	2%	All Roads Seminole County	All Roads Casselberry
69	John Young Parkway	Orange County	8,451	Sand Lake Road	South of SR 528 Ramps	2.17	54	65	100%	All Roads Orange County	County Roads Orange County
70	Rio Grande Avenue	Orange County	8,446	W. Gore Street	Holden Avenue	2.52	35	53	100%	All Roads Orange County	County Roads Orange County
71	US-17/92/French Avenue	Sanford	8,421	W. 20th Street	W. 27th Street	1.1	45	47	100%	All Roads Seminole County	All Roads Sanford
72	Chickasaw Trail	Orange County	8,374	SR 50	Valencia College Lane	1	40	45	100%	All Roads Orange County	
73	Curry Ford Road	Orange County	8,218	West of Frederica Drive	East of Excalibur Drive	2.95	43	52	0%	All Roads Orange County	
74	Orlando Avenue	Winter Park	8,217	Lake Avenue	W. Fairbanks Avenue	1.75	38	46	0%	All Roads Orange County	All Roads Winter Park
75	Buenaventura Boulevard	Osceola County	8,171	County Boundary	Simpson Road	2.58	37	50	0%	All Roads Osceola County	County Roads Osceola County
76	Simpson Road	Osceola County	8,139	Harbor Town Drive	US 192	1.03	40	48	46%	All Roads Osceola County	County Roads Osceola County
78	Clark Road	Ocoee	8,093	Sparrow Song Lane	White Road	1	45	53	100%	All Roads Orange County	
77	Wetherbee Road	Orange County	8,093	Orange Blossom Trail S.	Orange Avenue S.	1.88	45	54	100%	All Roads Orange County	
79	Hoffner Avenue (SR 15)	Orange County	8,083	Conway Road	Goldenrod Road S.	2.64	45	56	100%	All Roads Orange County	
80	SR 434	Longwood	8,076	S. Ronald Reagan	US 17-92	1.17	45	50	100%	All Roads Seminole County	All Roads Longwood
81	Semoran Boulevard	Orlando	8,053	Lake Margaret Drive	Hoffner Avenue	1.73	50	57	1%	All Roads Orange County	All Roads Orlando
82	Lake Underhill Road	Orange County	7,611	S. Oxalis Avenue	Econlockhatchee Trail N.	2.9	42	49	0%	All Roads Orange County	County Roads Orange County
83	Conway Road	Orange County	7,501	Caitlin Avenue	Hoffner Avenue	1	40	51	2%	All Roads Orange County	
84	Hiawassee Road	Orange County	7,437	Beggs Road	SR 438/Silver Star Road	3.31	45	59	100%	All Roads Orange County	
85	SR 436	Casselberry	7,388	Lake Howell Lane	County Boundary	1.62	50	57	1%	All Roads Seminole County	All Roads Casselberry
86	Colonial Drive	Orange County	7,358	N. Avalon Park Boulevard	SR 520	5.44	51	69	13%	All Roads Orange County	
87	Robinson Street	Orlando	7,204	N. Rosalind Avenue	N. Primrose Road	1.71	35	41	61%	All Roads Orange County	All Roads Orlando
88	John Young Parkway	Kissimmee	7,052	West of Ham Brown Road	Palmetto Avenue	3.84	52	64	77%	All Roads Osceola County	
89	Turkey Lake Road	Orange County	6,854	Toscana Boulevard	South of Hillenmeyer Way	2.22	44	63	20%	All Roads Orange County	County Roads Orange County
90	Clarcona-Ocoee Road	Orange County	6,815	Apopka Vineland Road N.	Powers Drive N.	1.92	45	57	100%	All Roads Orange County	County Roads Orange County
91	Landstar Boulevard/Fairway Woods	Orange County	6,702	Fairway Woods Boulevard	County Boundary	3.08	43	50	0%	All Roads Orange County	
92	Sand Lake Road	Orange County	6,682	Drive Phillips Boulevard	Turkey Lane Road	0.62	45	48	3%	All Roads Orange County	County Roads Orange County
93	Irlo Bronson Memorial Highway	Orange County	6,653	Westside Boulevard	East of Inspiration Drive	2.68	53	59	0%	All Roads Osceola County	
94	Colonial Drive	Orange County	6,645	Econlockhatchee Trail N.	N. Avalon Park Boulevard	5.35	45	56	30%	All Roads Orange County	
95	International Drive	Orange County	6,622	West of Universal	Destination Parkway	3.22	34	39	100%	All Roads Orange County	County Roads Orange County
96	Rock Springs Road N	Orange County	6,606	Faye Street	Welch Road E.	0.88	45	57	0%	All Roads Orange County	
97	Semoran Boulevard	Orange County	6,531	Sheeler Avenue S.	Bear Lake Road	3.03	45	55	67%	All Roads Orange County	
98	Boggy Creek Road	Orlando	5,949	Tradeport Drive	E. Wetherbee Road	2.06	45	58	100%	All Roads Orange County	County Roads Orange County

* TDC = Transportation Disadvantaged Community

Central Florida Vision Zero
Regional HIN Segments
February 2024

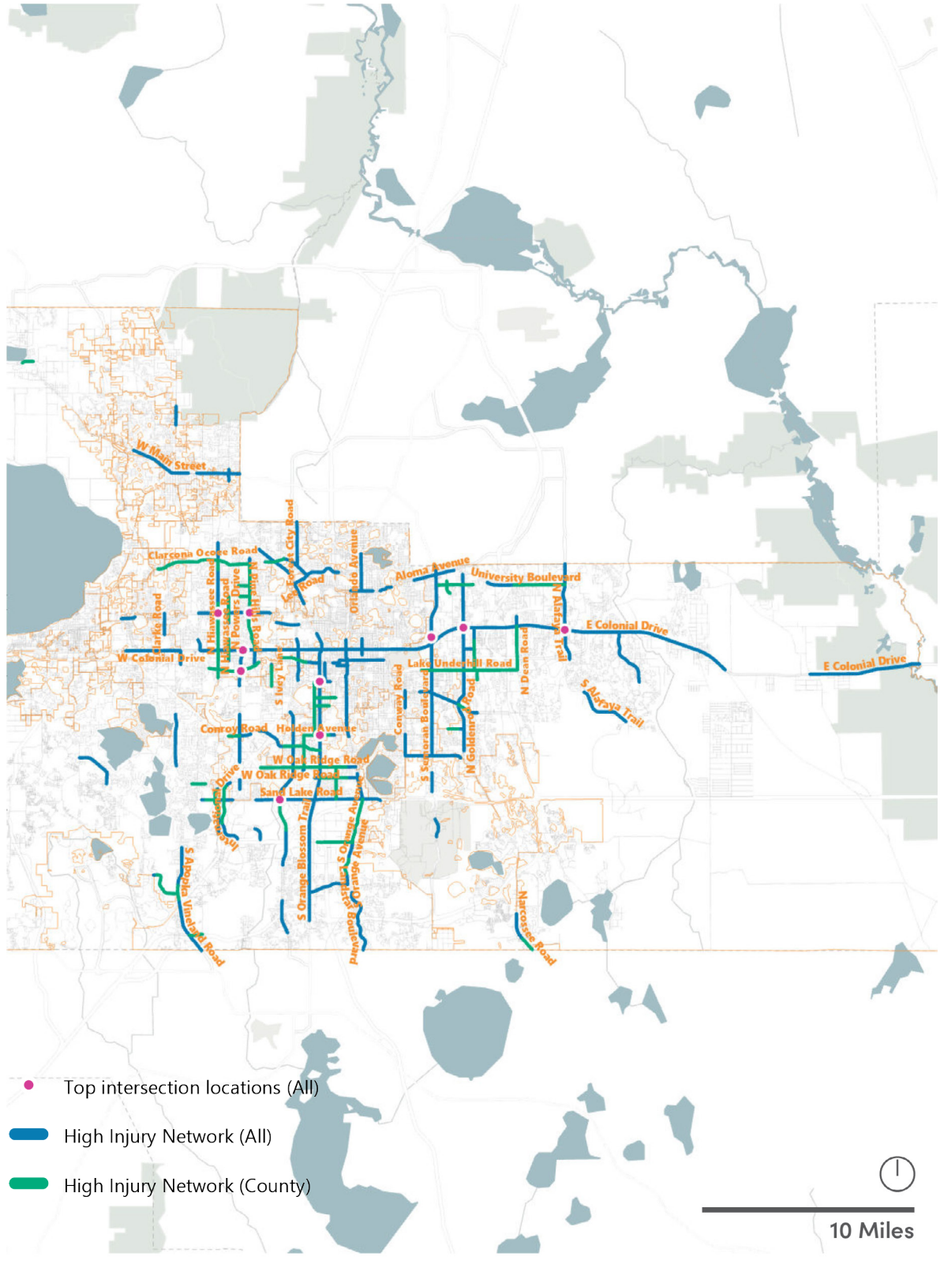
Corridor Number	Road Name	Location	Total Weighted Score per Mile	From	To	Length (miles)	Mean Posted Speed	Mean 85 Percentile Speed	% of corridor in TDC*	Primary HIN Overlap	Secondary HIN Overlap
99	Narcoossee Road	Orange County	5,777	Tavistock Lake Boulevard	County Boundary	1.94	45	59	0%	All Roads Orange County	
100	Colonial Drive	Orange County	5,662	N. Bumby Avenue	Econlockhatchee Trail N.	6.28	47	58	92%	All Roads Orange County	
101	Avalon Park Boulevard	Orange County	5,630	SR 50	South of Timber Springs	2.76	45	54	0%	All Roads Orange County	
102	US-17/92/Orlando Avenue/French Av	Sanford	5,568	W. 27th Street	W. Lake Mary Boulevard	1.66	45	50	100%	All Roads Seminole County	All Roads Sanford
103	Pleasant Hill Road (SR 531)	Osceola County	5,405	Marsh Road	South of Granada Boulevard	3.05	45	61	47%	All Roads Osceola County	County Roads Osceola County
104	E Irlo Bronson Hwy/Vine Street	Street Cloud	5,168	West of Florida's Turnpike	Eastern Avenue	4.57	45	57	0%	All Roads Osceola County	All Roads St. Cloud
105	Winter Garden Vineland Road	Orange County	5,147	Fiquette Road	Overstreet Road	2.09	40	54	0%	All Roads Orange County	
106	Winter Garden Vineland Road	Orange County	4,590	E. Buena Vista Drive	S. Apopka Vineland Road	1.81	45	56	0%	All Roads Orange County	County Roads Orange County
107	Boggy Creek Road	Osceola County	4,451	E. Osceola Parkway	Buenaventura Boulevard	1.72	48	54	0%	All Roads Orange County	County Roads Orange County
108	W Colonial Drive	Orange County	4,233	Apopka Vineland Road N.	Orange Blossom Trail N.	5.72	44	55	100%	All Roads Orange County	
109	Apopka Vineland Road	Orange County	4,003	North of Buena Vista Woods Boulevard	North of Vineland Avenue	2.86	42	55	0%	All Roads Orange County	
110	Apopka Vineland Road	Orange County	3,983	Windy Ridge Road	Sandberry Boulevard	2.41	45	59	0%	All Roads Orange County	
111	Alafaya Trail	Orange County	3,161	Golfway Boulevard	Innovation Way	2.66	45	61	0%	All Roads Orange County	
112	Silver Star Road (SR 438)	Orange County	3,031	Apopka Vineland Road N.	Chantelle Avenue	3.37	41	54	100%	All Roads Orange County	
113	Sand Lake Road	Orange County	2,646	Mandarin Drive	Jetport Drive	5.88	47	58	84%	All Roads Orange County	
114	Orange Blossom Trail	Orlando	2,530	SR 50	Holden Avenue	4.06	36	48	100%	All Roads Orange County	
115	Semoran Boulevard	Orange County	2,417	County Boundary	SR 408	4.96	48	57	100%	All Roads Orange County	
116	Orange Blossom Trail	Orange County	2,315	Holden Avenue	Florida's Turnpike	4.43	42	52	100%	All Roads Orange County	
117	Colonial Drive (SR 50)	Orange County	1,667	Fort Christmas Rd S.	County Boundary	5.19	63	77	0%	All Roads Orange County	
118	Pine Hills Road	Orange County	1,410	Pinto Way	SR 50	4.37	41	55	100%	All Roads Orange County	County Roads Orange County

* TDC = Transportation Disadvantaged Community

Appendix Part 2B: Jurisdictional HIN Fact Sheets

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



WHAT IS A HIGH INJURY NETWORK (HIN)?

A HIN is a collection of streets where a disproportionate number of crashes that result in someone being killed or severely injured (KSI) occur. This allows us to focus our efforts on the places where crashes are more likely to result in a KSI.

HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **42.9**mph
- % of HIN in Transportation Underserved[1] Area 67%
- Other Facts: 56% of fatal and severe injury crashes occur on 4% percent of roadways in Orange County

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	5,744	225	4%
All Crashes	173,043	80,754	47%
DEATHS	786	485	47%
KSI	5,267	2,974	56%
PEDESTRIAN KSI	703	491	70%
BICYCLIST KSI	247	141	57%
MOTORCYCLIST KSI	631	343	54%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	381	66	17%
All Crashes	52,420	22,059	42%
DEATHS	264	125	47%
KSI	1,900	936	49%
PEDESTRIAN KSI	214	142	66%
BICYCLIST KSI	77	48	62%
MOTORCYCLIST KSI	201	96	48%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT). The local roadways HIN is reflective of only roadways maintained by the City of Orange County.

HOW CAN YOU GET INVOLVED

This planning initiative encourages participation from people of all ages across our region, including community leaders, residents, and visitors. Join us in this quest to eliminate deaths and serious injuries on Central Florida's roads. We can save lives when each of us does our part and we all work together.

Visit our website to review crash data and learn more about our plans to improve transportation safety in your community:

VisionZeroCFL.gov

CRASHES BY LOCATION (LIST)

ORANGE COUNTY ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	S Orange Blossom Trail	Americana Boulevard	W Oak Ridge Road	28,739
2.	S Orange Blossom Trail	I-4	Americana Boulevard	26,322
3.	Silver Star Road	N Hiawassee Road	N Pine Hills Road	24,917
4.	Silver Star Road	N Pine Hills Road	North of Chantelle Road	23,478
5.	N Pine Hills Road	North Lane	Silver Star Road	20,487
6.	Silver Star Road	Apopka Vineland Road	N Hiawassee Road	20,039
7.	N Alafaya Trail	Lokanotosa Trail	E Colonial Drive	19,552
8.	N Kirkman Road	Old Winter Garden Road	Raleigh Street	19,124
9.	S Orange Blossom Trail	W Oak Ridge Road	Sand Lake Road	18,944
10.	W Colonial Drive	N Orange Blossom Trail	I-4	18,128

ORANGE COUNTY COUNTY ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	N Pine Hills Road	North Lane	Silver Star Road	19,482
2.	W Oak Ridge Road	S John Young Parkway	S Orange Blossom Trail	17,830
3.	Lake Underhill Road	S Goldenrod Road	East of S Chickasaw Trail	15,810
4.	N Pine Hills Road	Clarcona Ocoee Road	North Lane	15,570
5.	N Pine Hills Road	Silver Star Road	W Colonial Drive	15,397
6.	W Oak Ridge Road	S Orange Blossom Trail	Queen Street	15,157
7.	S Chickasaw Trail	North of Pine Crossing Circle	Neighborhood Market Road	13,767
8.	University Boulevard	Rouse Road	N Alafaya Trail	13,408
9.	Americana Boulevard	S Texas Avenue	S Orange Blossom Trail	13,322
10.	N Hiawassee Road	Clarcona Ocoee Road	South of Crooked Lane Trail	13,255

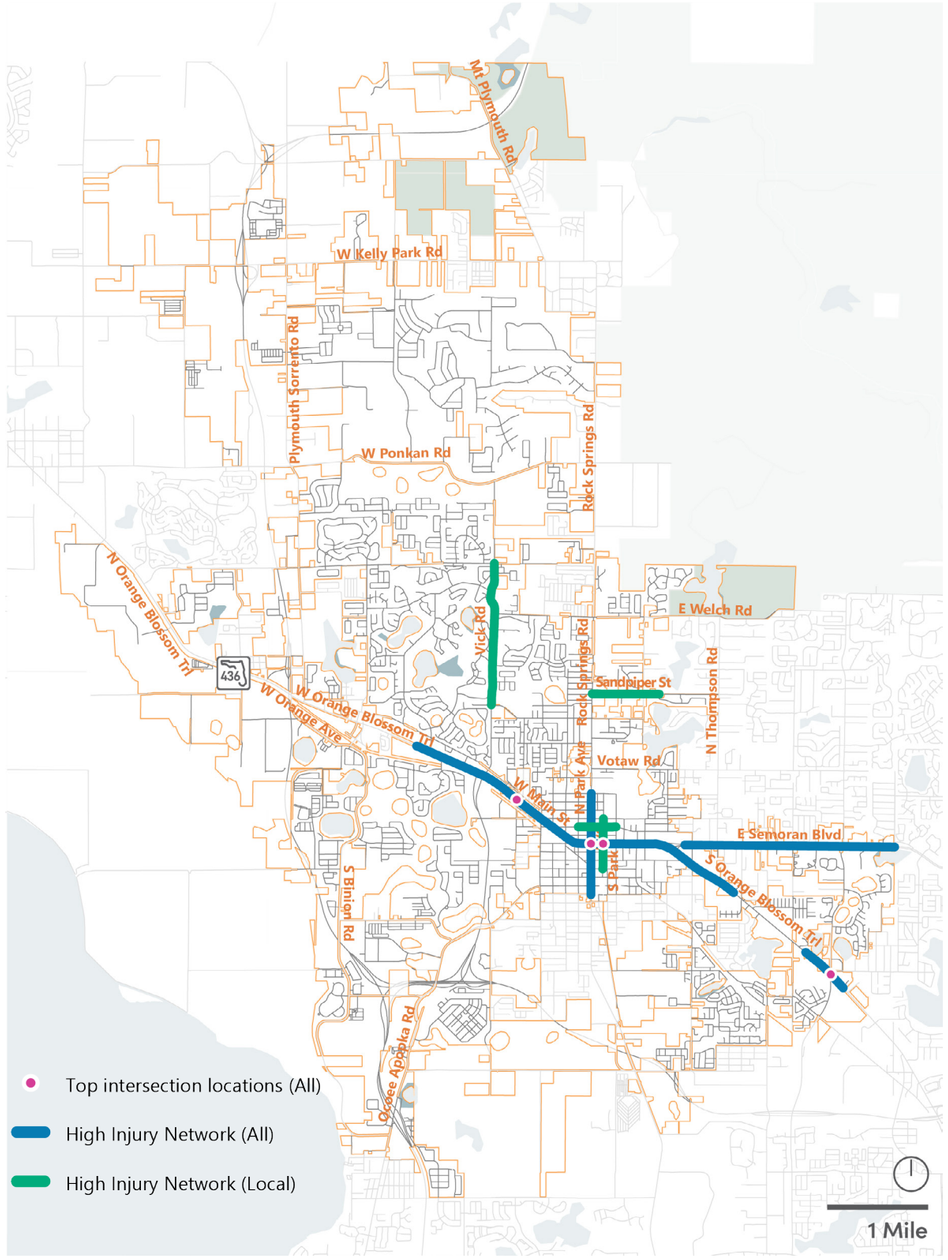
TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	S John Young Parkway & W Sand Lake Road	10,140
2.	E Colonial Drive & N Alafaya Trail	10,103
3.	S Orange Blossom Trail & Holden Avenue	10,055
4.	Silver Star Road & Lake Stanley Road	9,630
5.	Silver Star Road & N Pine Hills Road	8,673
6.	N Semoran Road & Old Cheney Highway	8,509
7.	W Colonial Drive & N Kirkman Road	7,097
8.	E Colonial Drive & N Goldenrod Road	7,040
9.	S Orange Blossom Trail & W Gore Street	6,769
10.	S Kirkman Road & Old Winter Garden Road	6,724

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



WHAT IS A HIGH INJURY NETWORK (HIN)?

A HIN is a collection of streets where a disproportionate number of crashes that result in someone being killed or severely injured (KSI) occur. This allows us to focus our efforts on the places where crashes are more likely to result in a KSI.

HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **39.1**mph
- % of HIN in Transportation Underserved[1] Area **100%**
- Other Facts: 61% of fatal and severe injury crashes occur on 1% percent of roadways in Apopka

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	254	7.3	1%
All Crashes	4,999	2,737	55%
DEATHS	27	15	56%
KSI	109	67	61%
PEDESTRIAN KSI	27	22	81%
BICYCLIST KSI	3	3	100%
MOTORCYCLIST KSI	11	5	45%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	233	3	1%
All Crashes	1,120	166	15%
DEATHS	3	1	33%
KSI	14	7	50%
PEDESTRIAN KSI	1	0	0%
BICYCLIST KSI	1	1	100%
MOTORCYCLIST KSI	3	2	67%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT). The local roadways HIN is reflective of only roadways maintained by the City of Apopka.

HOW CAN YOU GET INVOLVED

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CRASHES BY LOCATION (LIST)

CITY OF APOPKA ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	E Main Street/S Orange Blossom Trail	S Park Avenue	Century Lane	10,746
2.	W Main Street	West of Errol Parkway	S Park Avenue	8,763
3.	S Orange Blossom Trail	East of Tropicana Circle	East of Colour Place	7,873
4.	SR 436	West of Sheeler Avenue	Eastern City Limit	6,187
5.	S Park Avenue	W Oak Street	W 10th Street	5,234

CITY OF APOPKA LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	E 2nd Street	S Central Avenue	S Highland Avenue	2,839
2.	S Forest Ave	E 1st Street	E 7th Street	2,161
3.	Vick Road	W Lester Road	W Martin Street	2,125
4.	E Sandpiper Street	N Park Avenue	East of Ustler Road	1,067

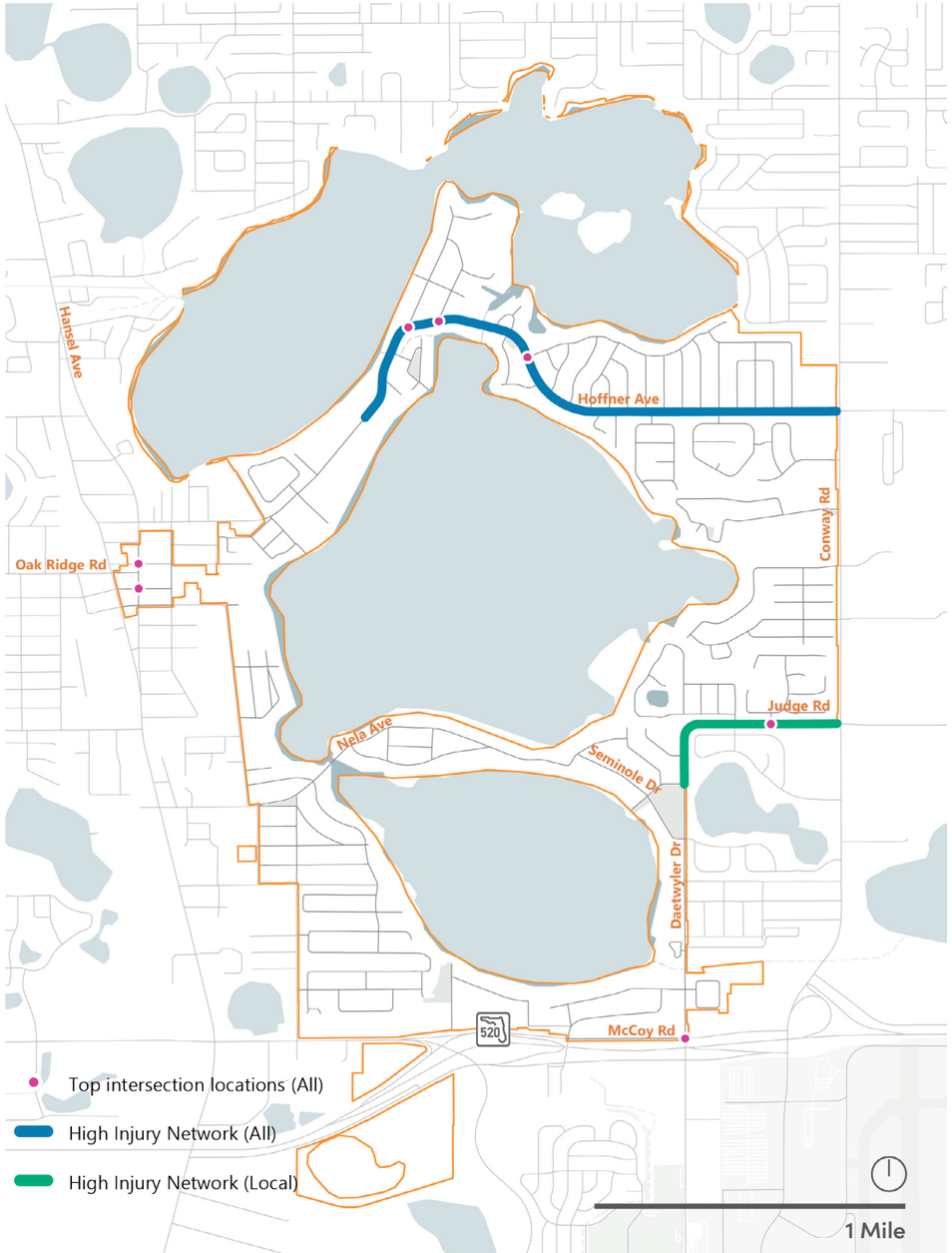
TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	W Main Street at N Bradshaw Road	2,944
2.	S Orange Blossom Trail at N Hiawassee Road	2,927
3.	Main Street at S Park Avenue	2,320
4.	Main Street at S Forest Avenue	2,257

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



WHAT IS A HIGH INJURY NETWORK (HIN)?

A HIN is a collection of streets where a disproportionate number of crashes that result in someone being killed or severely injured (KSI) occur. This allows us to focus our efforts on the places where crashes are more likely to result in a KSI.

HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **33.2**mph
- % of HIN in Transportation Underserved[1] Area **35%**
- Other Facts: 64% of fatal and severe injury crashes occur on 6% percent of roadways in Belle Isle

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	32.5	1.9	6%
All Crashes	479	91	19%
DEATHS	0	0	0%
KSI	11	7	64%
PEDESTRIAN KSI	1	0	0%
BICYCLIST KSI	0	0	0%
MOTORCYCLIST KSI	2	2	100%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	29.5	0.7	2%
All Crashes	115	36	31%
DEATHS	0	0	0%
KSI	3	2	67%
PEDESTRIAN KSI	1	0	0%
BICYCLIST KSI	0	0	0%
MOTORCYCLIST KSI	1	1	100%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT). The local roadways HIN is reflective of only roadways maintained by the City of Belle Isle.

HOW CAN YOU GET INVOLVED

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CRASHES BY LOCATION (LIST)

CITY OF BELLE ISLE ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Hoffner Avenue	West of Venetian Drive	Conway Road	2,260

CITY OF BELLE ISLE LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Judge Road	Warren Park Road	Conway Road	2,260

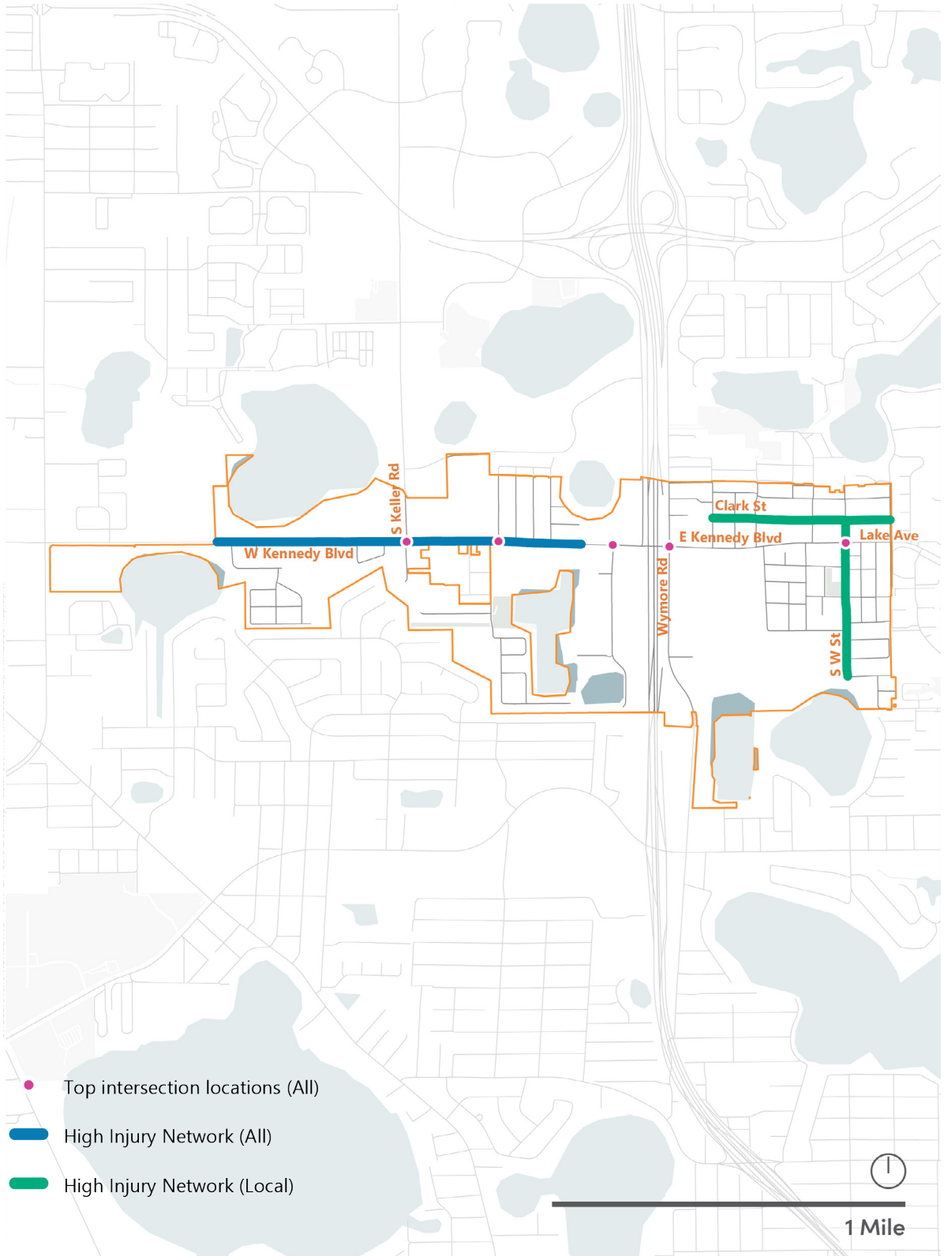
TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	Judge Road at Franconia Drive	1,020
2.	Hoffner Avenue at Pleasure Island Road	956
3.	McCoy Road at Daetwler Drive	742
4.	Hansel Avenue at Waltham Avenue	452
5.	Hansel Avenue at Fairlane Avenue	410
6.	Hoffner Avenue at Oak Island Road	341
7.	Hoffner Avenue at Cullen Lake Shore Drive	340

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



WHAT IS A HIGH INJURY NETWORK (HIN)?

A HIN is a collection of streets where a disproportionate number of crashes that result in someone being killed or severely injured (KSI) occur. This allows us to focus our efforts on the places where crashes are more likely to result in a KSI.

HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **40.4**mph
- % of HIN in Transportation Underserved[1] Area 100%
- Other Facts: 100% of fatal and severe injury crashes occur on 8% percent of roadways in Eatonville

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	12.8	1	8%
All Crashes	350	132	38%
DEATHS	1	1	100%
KSI	2	2	100%
PEDESTRIAN KSI	0	0	0%
BICYCLIST KSI	0	0	0%
MOTORCYCLIST KSI	0	0	0%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	10.1	1	9%
All Crashes	52	16	31%
DEATHS	0	0	0%
KSI	0	0	0%
PEDESTRIAN KSI	0	0	0%
BICYCLIST KSI	0	0	0%
MOTORCYCLIST KSI	0	0	0%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT). The local roadways HIN is reflective of only roadways maintained by the Town of Eatonville.

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CRASHES BY LOCATION (LIST)

TOWN OF EATONVILLE ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	W Kennedy Boulevard	West of Zora Place	West of Lake Destiny Drive	1,286

TOWN OF EATONVILLE LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	West Street	Clark Street	Fitzgerald Drive	281
2.	Clark Street	Gabriel Street	N East Street	118

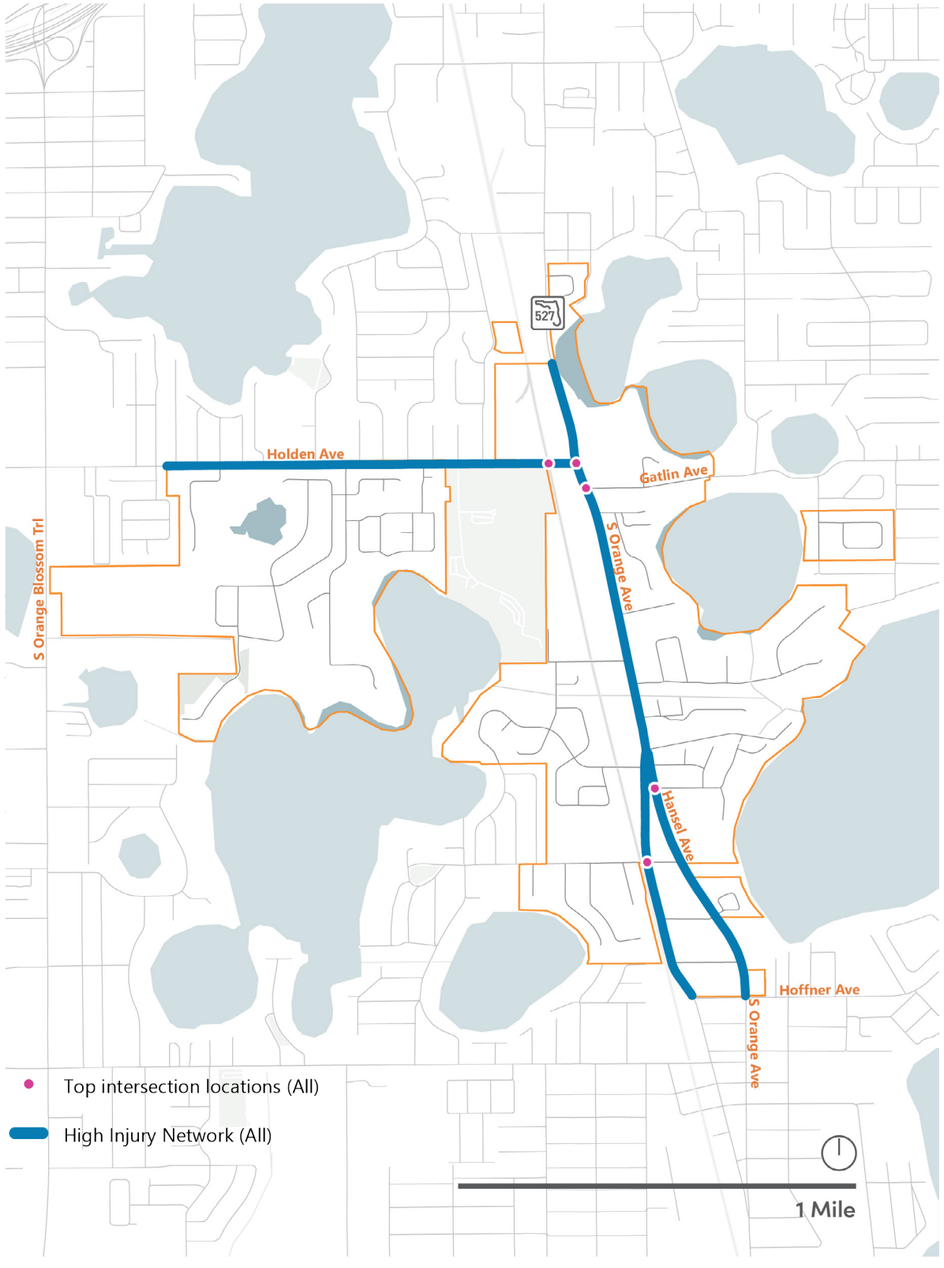
TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	W Kennedy Boulevard at S Keller Road/Mustard Seed Lane	536
2.	E Kennedy Boulevard at Wymore Road	217
3.	W Kennedy Boulevard at Deacon Jones Boulevard	131
4.	W Kennedy Boulevard at Lake Destiny Drive	110
5.	E Kennedy Boulevard at West Street	98

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



WHAT IS A HIGH INJURY NETWORK (HIN)?

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HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **38.1**mph
- % of HIN in Transportation Underserved[1] Area **29%**
- Other Facts: 100% of fatal and severe injury crashes occur on 22% percent of roadways in Edgewood

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	15	3	22%
All Crashes	702	653	93%
DEATHS	4	4	100%
KSI	18	18	100%
PEDESTRIAN KSI	0	0	0%
BICYCLIST KSI	0	0	0%
MOTORCYCLIST KSI	7	7	100%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the ALL ROADS* HI?

The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT).

HOW CAN YOU GET INVOLVED

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CRASHES BY LOCATION (LIST)

CITY OF EDGEWOOD ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Orange Avenue	Kelsey Road	Mandalay Road	7,489
2.	Hansel Avenue	Mandalay Road	Hoffner Avenue	6,136
3.	Holden Avenue	West of S Shore Road	Orange Avenue	3,156
4.	Orange Avenue	Mandalay Road	Hoffner Avenue	2,079

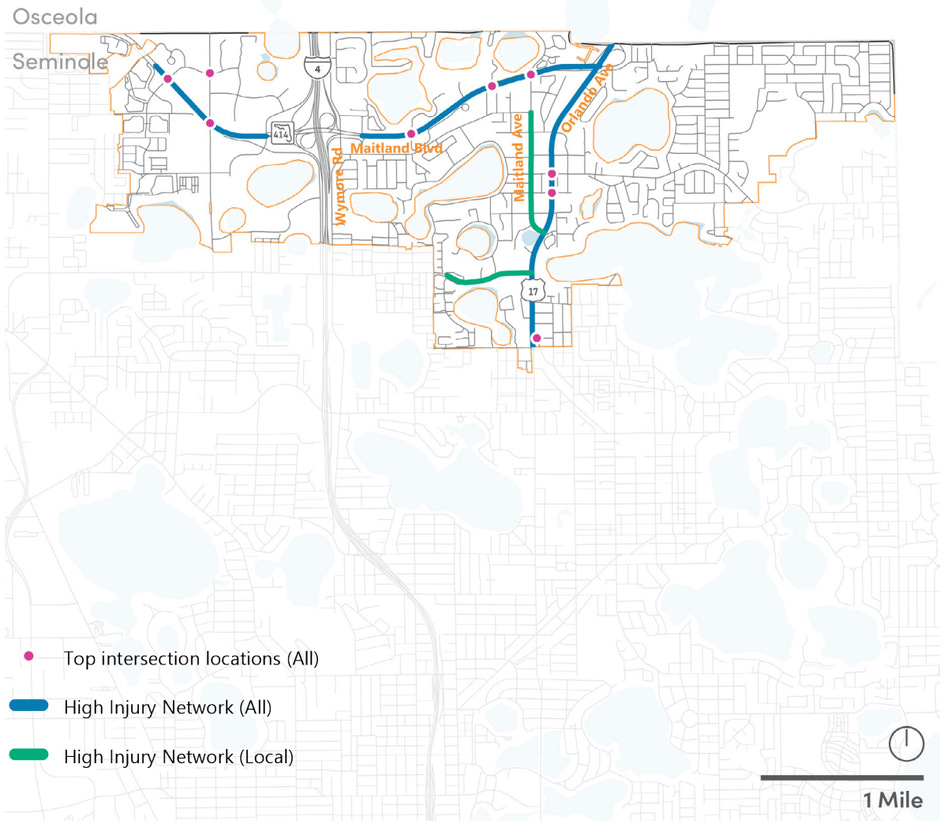
TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	Orange Avenue at Holden Avenue	3,773
2.	Hansel Drive at Oak Lynn Drive	322
3.	Orange Avenue at Gatlin Avenue	301
4.	Orange Avenue at W Mary Jess Rd	159
5.	Holden Avenue at Train Tracks	113

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



WHAT IS A HIGH INJURY NETWORK (HIN)?

A HIN is a collection of streets where a disproportionate number of crashes that result in someone being killed or severely injured (KSI) occur. This allows us to focus our efforts on the places where crashes are more likely to result in a KSI.

HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **43.7**mph
- % of HIN in Transportation Underserved[1] Area **0%**
- Other Facts: 77% of fatal and severe injury crashes occur on 6% percent of roadways in Maitland

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	79.8	4.9	6%
All Crashes	2,798	1,749	63%
DEATHS	9	6	67%
KSI	35	27	77%
PEDESTRIAN KSI	3	3	100%
BICYCLIST KSI	2	2	100%
MOTORCYCLIST KSI	4	2	50%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	66	1.9	3%
All Crashes	586	214	37%
DEATHS	2	2	100%
KSI	4	3	75%
PEDESTRIAN KSI	0	0	0%
BICYCLIST KSI	0	0	0%
MOTORCYCLIST KSI	2	2	100%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

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CRASHES BY LOCATION (LIST)

CITY OF MAITLAND ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	N Orlando Avenue	Northern City Limit	Monroe Avenue	4,718
2.	Maitland Boulevard	Northern City Limit	N Lake Destiny Road	3,627
3.	Maitland Boulevard	N Wymore Road	N Orlando Avenue	3,626

CITY OF MAITLAND LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	N Keller Road	Maitland Summit Boulevard	Maitland Boulevard	3,732
2.	Maitland Summit Boulevard	Maitland Boulevard	N Keller Road	3,621
3.	Lake Avenue	Grove Street	S Orlando Avenue	1,830
4.	N Maitland Avenue	Sandspur Road	S Orlando Avenue	996

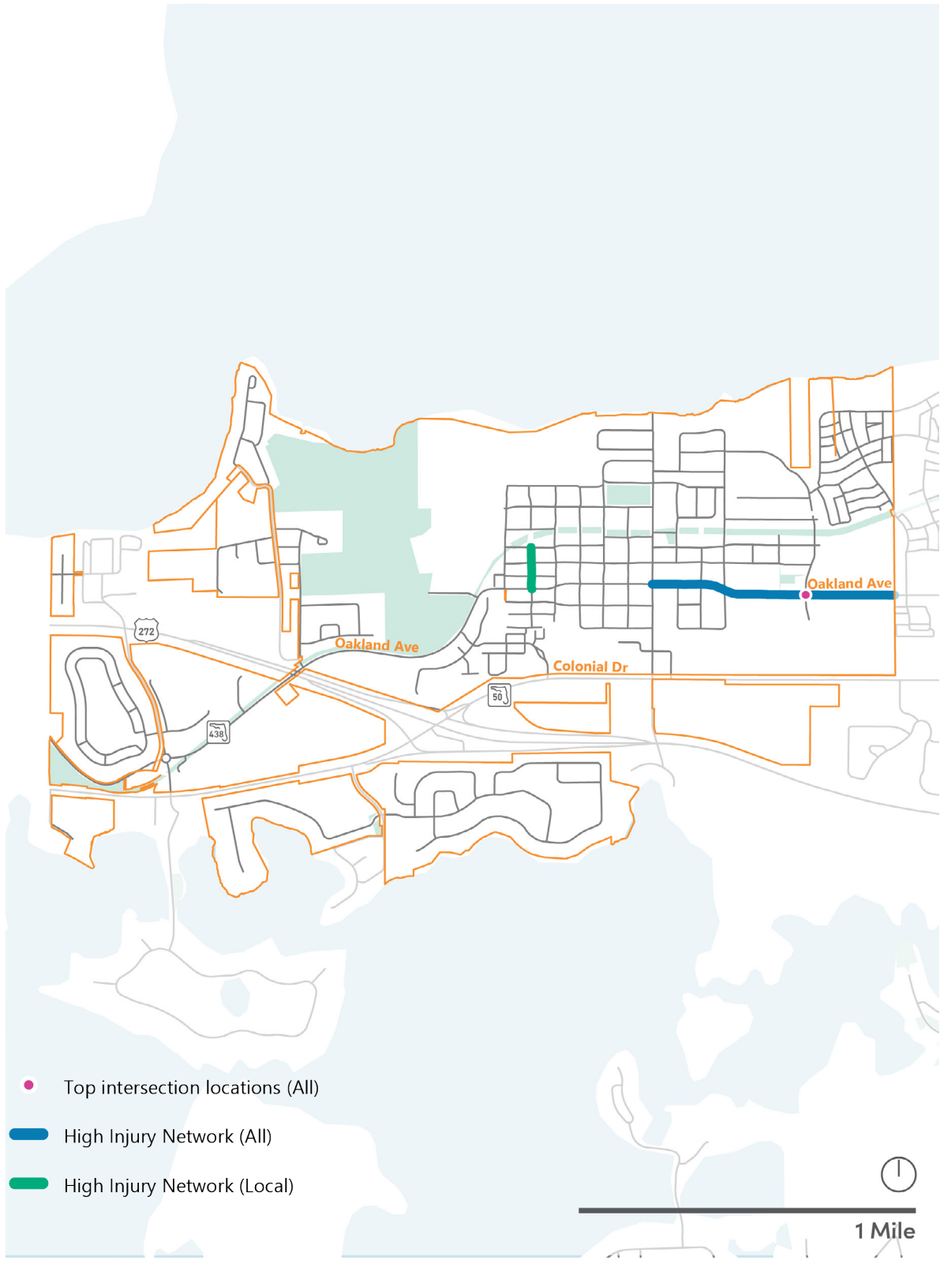
TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	S Orlando Avenue at E Horatio Avenue	1,697
2.	Maitland Boulevard at Vista Trelago	1,547
3.	Maitland Boulevard at N Maitland Avenue	1,395
4.	N Park Avenue at Alpine Drive	1,338
5.	Maitland Boulevard at N Keller Road	1,146
6.	Maitland Boulevard at W Lake Faith Dr	1,100
7.	Maitland Summit Boulevard at N Keller Avenue	1,098
8.	Maitland Boulevard at Maitland Summit Boulevard	1,016
9.	S Orlando Avenue at E Packwood Avenue	959

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



WHAT IS A HIGH INJURY NETWORK (HIN)?

A HIN is a collection of streets where a disproportionate number of crashes that result in someone being killed or severely injured (KSI) occur. This allows us to focus our efforts on the places where crashes are more likely to result in a KSI.

HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **35**mph
- % of HIN in Transportation Underserved[1] Area **0%**
- Other Facts: 50% of fatal and severe injury crashes occur on 3% percent of roadways in Oakland

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	26	0.7	3%
All Crashes	108	19	18%
DEATHS	0	0	0%
KSI	2	1	50%
PEDESTRIAN KSI	1	1	100%
BICYCLIST KSI	0	0	0%
MOTORCYCLIST KSI	1	0	0%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	26	0.1	0.50%
All Crashes	82	2	2.40%
DEATHS	0	0	0%
KSI	2	1	50%
PEDESTRIAN KSI	1	0	0%
BICYCLIST KSI	0	0	0%
MOTORCYCLIST KSI	1	1	100%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT). The local roadways HIN is reflective of only roadways maintained by the Town of Oakland.

HOW CAN YOU GET INVOLVED

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CRASHES BY LOCATION (LIST)

TOWN OF OAKLAND ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	W Oakland Avenue	S Tubb Street	West of Tilden Oaks Trail	1,455

TOWN OF OAKLAND LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	N Pollard Street	W Gulley Avenue	W Oakland Avenue	8,508

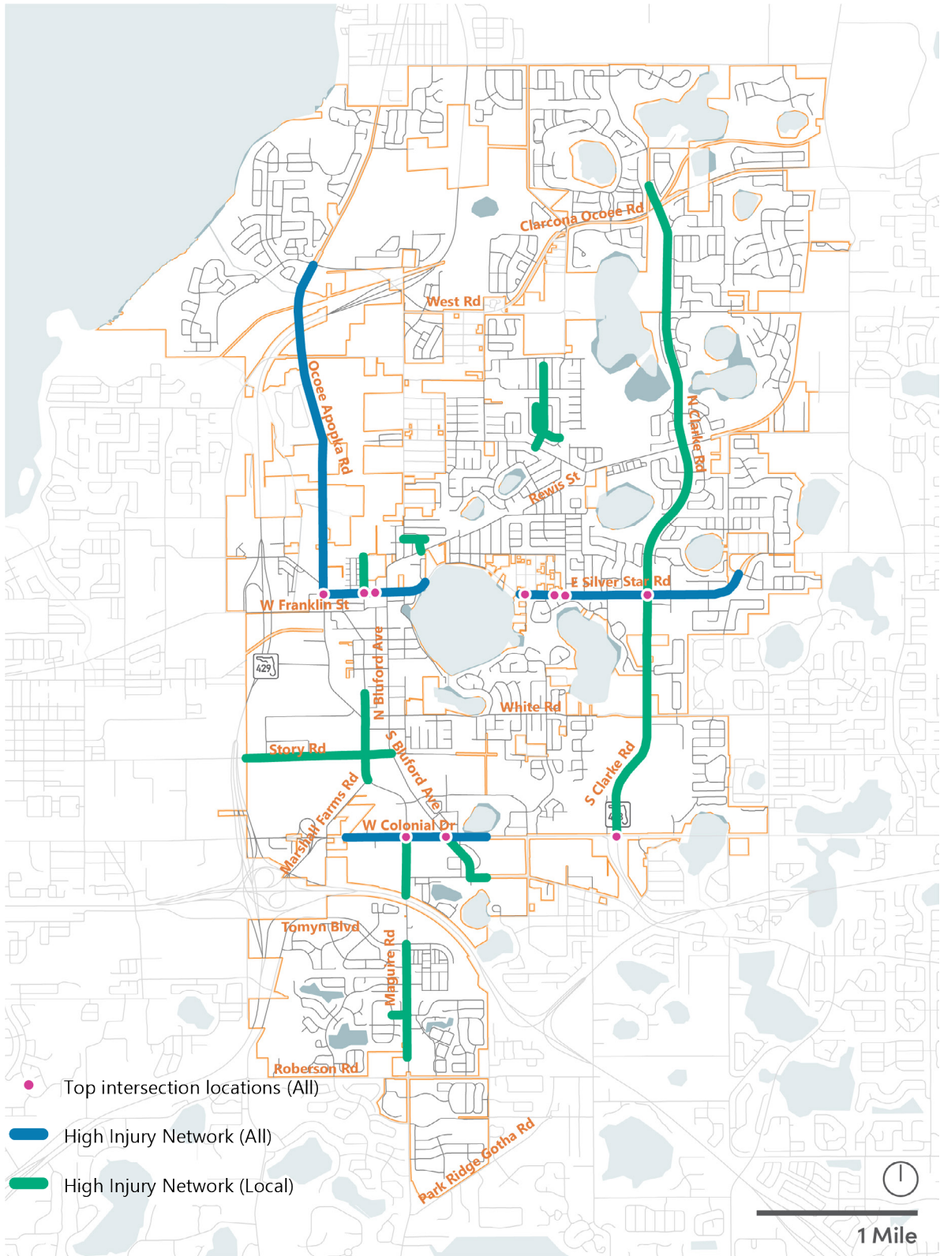
TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	W Oakland Avenue & Motamassek Road	975

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



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HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **42.7**mph
- % of HIN in Transportation Underserved[1] Area **87%**
- Other Facts: 46% of fatal and severe injury crashes occur on 2% percent of roadways in Ocoee

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	178	3	2%
All Crashes	3,260	1,272	39%
DEATHS	0%	0	0%
KSI	103	47	46%
PEDESTRIAN KSI	15	7	47%
BICYCLIST KSI	3	2	67%
MOTORCYCLIST KSI	12	6	50%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	156	9	5%
All Crashes	1,419	831	59%
DEATHS	5	5	100%
KSI	40	33	83%
PEDESTRIAN KSI	4	4	100%
BICYCLIST KSI	2	2	100%
MOTORCYCLIST KSI	6	6	100%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT). The local roadways HIN is reflective of only roadways maintained by the City of Ocoee.

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CRASHES BY LOCATION (LIST)

CITY OF OCOEE ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	W Silver Star Road	Ocoee Apopka Road	Roberts Rise Drive	9,336
2.	W Colonial Drive	West of Economic Court	East of Central Commerce Parkway	9,065
3.	E Silver Star Road	West of 1st Street	Roddy Red Road	5,832
4.	Ocoee Apopka Rd	West Road	W Silver Star Road	3,416

CITY OF OCOEE LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Christine Avenue	Mack Street	Rewis Street	12,639
2.	Mack Street	Lakewook Avenue	East of Christine Avenue	7,064
3.	Winshire Boulevard	Grovesmere Loop	Maguire Road	6,934
4.	Clarke Road	Hobson Road	Hackney Prarie Road	3,935
5.	N Clarke Road	Hackney Prarie Road	Citrus Elementary School	3,801
6.	S Clarke Road	Citrus Elementary School	W Colonial Drive	3,311
7.	Maureen Avenue	Perce Street	Mona Avenue	3,198
8.	Bluford Avenue/Old Winter Garden Road	W Colonial Drive	SR 439	2,369
9.	Lady Avenue	South of Nicole Boulevard	Wurst Road	1,885
10.	S Kissimmee Avenue/ Maguire Road	N of South Cumberland Avenue	Marshall Farms Road	1,129
11.	Maguire Road	W Colonial Drive	South of Old Winter Garden Road	1,108
12.	Maguire Road	Tomyn Boulevard	Publix Entrance	1,105
13.	Story Road	East of SR 429	SR 439	970
14.	N Kissimmee Avenue	Lee Street	Silver Star Road	0

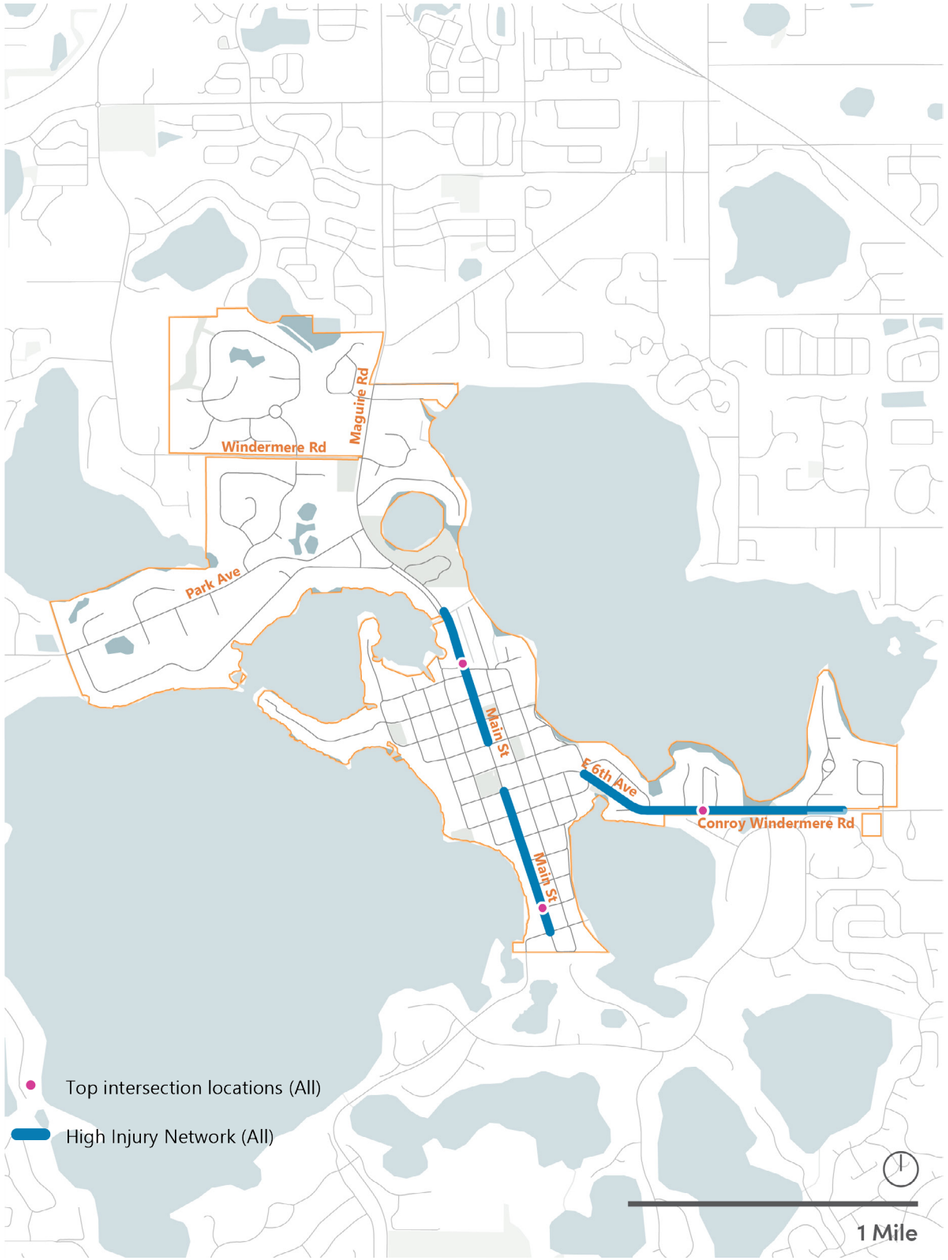
TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	E Silver Star Road & N Clarke Road	4,000
2.	W Colonial Drive & Maguire Road	3,195
3.	W Silver Star Road & N Kissimmee Avenue	2,239
4.	E Silver Star Road & 1st Street	1,311
5.	W Silver Star Road & Ocoee Apopka Road	1,295
6.	W Colonial Drive & S Bluford Avenue	1,189
7.	E Silver Star Road & 3rd Street	1,006
8.	W Silver Star Road & N Cumberland Avenue	990
9.	E Silver Star Road & Ocoee Hills Road	733
10.	W Colonial Drive & S Clarke Road	149

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



WHAT IS A HIGH INJURY NETWORK (HIN)?

A HIN is a collection of streets where a disproportionate number of crashes that result in someone being killed or severely injured (KSI) occur. This allows us to focus our efforts on the places where crashes are more likely to result in a KSI.

HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **25.8**mph
- % of HIN in Transportation Underserved[1] Area **0%**
- Other Facts: 100% of fatal and severe injury crashes occur on 8% percent of roadways in Windermere

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	24	2	8%
All Crashes	294	141	48%
DEATHS	0	0	0%
KSI	3	3	100%
PEDESTRIAN KSI	0	0	0%
BICYCLIST KSI	0	0	0%
MOTORCYCLIST KSI	0	0	0%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the ALL ROADS* HIN?

The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT).

HOW CAN YOU GET INVOLVED

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CRASHES BY LOCATION (LIST)

TOWN OF WINDERMERE ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Main Street	W 6th Ave	Chase Road/E 12th Avenue	845
2.	Main Street	South of Lake Down Circle	E 4th Avenue	810
3.	Conroy Windermere Road	Lake Street/E 7th Avenue	E of Down Point Lane	638

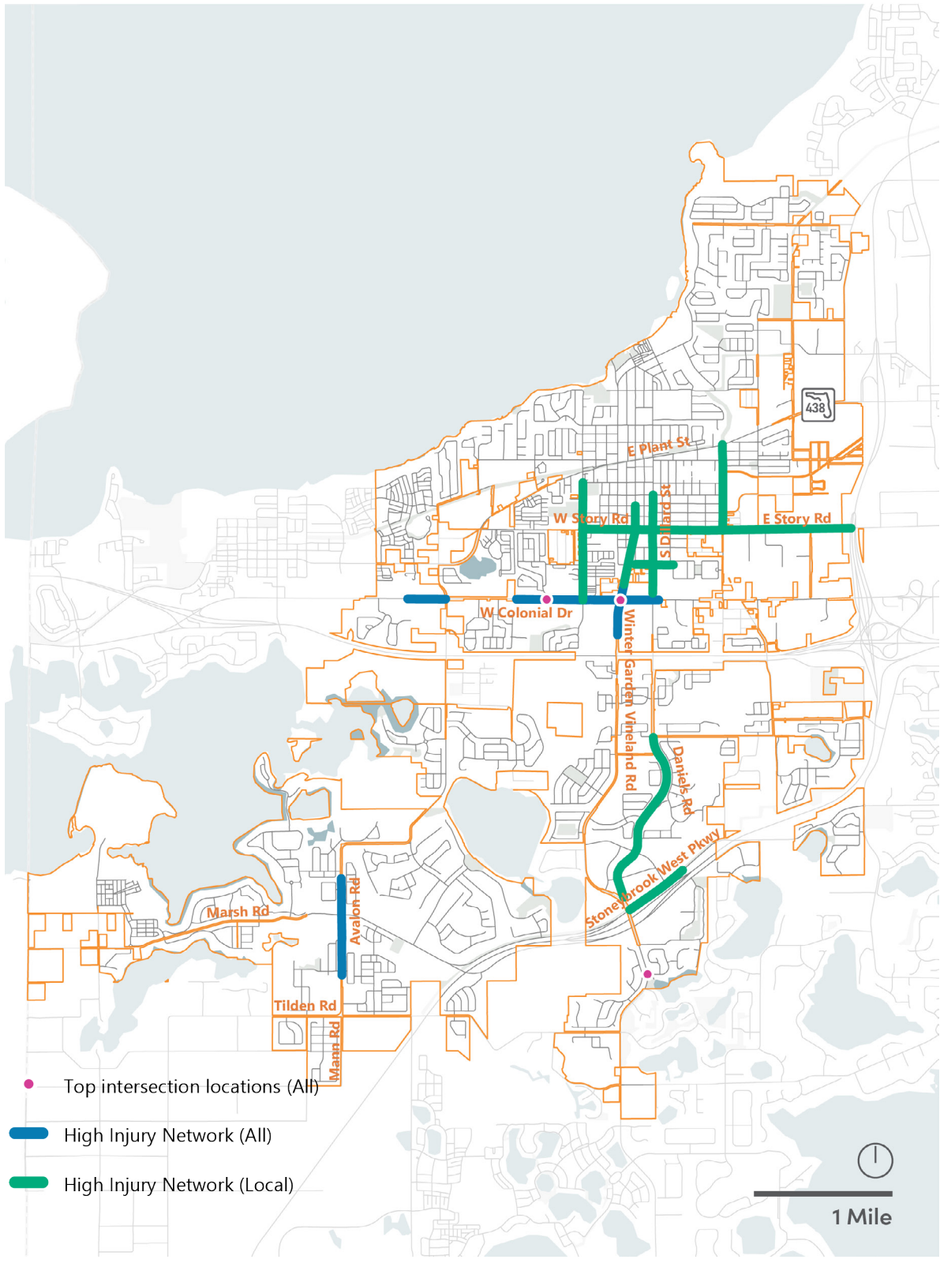
TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	Conroy Windermere Road & Rosser Road	340
2.	Main Street & E 11th Avenue	317
3.	Main Street & North Drive	317

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



WHAT IS A HIGH INJURY NETWORK (HIN)?

A HIN is a collection of streets where a disproportionate number of crashes that result in someone being killed or severely injured (KSI) occur. This allows us to focus our efforts on the places where crashes are more likely to result in a KSI.

HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **42.8**mph
- % of HIN in Transportation Underserved[1] Area 44%
- Other Facts: 29% of fatal and severe injury crashes occur on 1% percent of roadways in Winter Garden

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	183	2	1%
All Crashes	3,312	828	25%
DEATHS	7	2	29%
KSI	24	7	29%
PEDESTRIAN KSI	5	2	40%
BICYCLIST KSI	3	1	33%
MOTORCYCLIST KSI	4	1	25%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	169	3	2%
All Crashes	1,876	836	45%
DEATHS	4	4	100%
KSI	13	10	77%
PEDESTRIAN KSI	4	2	50%
BICYCLIST KSI	2	2	100%
MOTORCYCLIST KSI	2	2	100%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT). The local roadways HIN is reflective of only roadways maintained by the City of Winter Garden.

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CRASHES BY LOCATION (LIST)

CITY OF WINTER GARDEN ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Vineland Road	W Morgan Street	Palm Crossing Boulevard	5,000
2.	Avalon Road	N of Ardmore Drive	S of Longbeam Way	3,425
3.	W Colonial Drive	Stage Stop Campground	S Dillard Street	3,406
4.	W Colonial Drive	Winter Woods Apartments	Tildenville School Road	3,388

CITY OF WINTER GARDEN LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	E Palmetto Street	S Main Street	Grand Royal Circle	4,870
2.	Dillard Street	E/W Maple Street	S of E Morgan Street	2,956
3.	Stoneybrook W Parkway	Daniels Road	Winter Garden Village Entrance (Bealls)	2,561
4.	S Main Street/Vineland Road	E Miller Street	W Morgan Street	2,199
5.	9th Street	Plant Street	E Streetory Road	1,921
6.	Daniels Road	Roper Road	Winter Garden Vinelad Road	1,825
7.	S Park Avenue	W Smith Street	W Colonial Boulevard	1,523
8.	E Streetory Road	S Park Avenue	FL 429	733

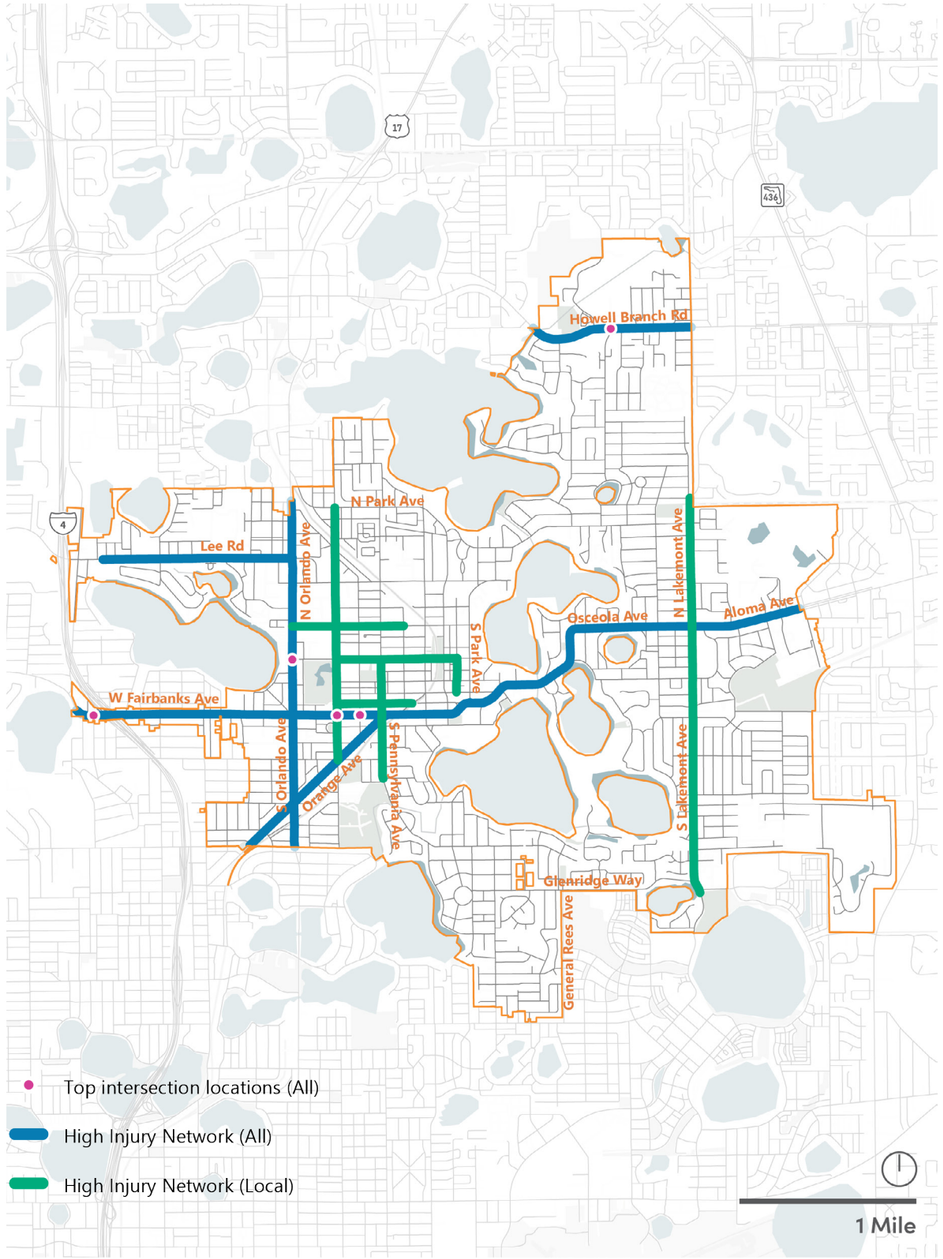
TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	W Colonial Drive at Winter Garden Vineland Road	1,776
2.	W Colonial Drive at Hyde Park Circle	1,064
3.	Winter Garden Vineland Road at Lakeshore Grove Drive	349

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



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HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **35**mph
- % of HIN in Transportation Underserved[1] Area **7%**
- Other Facts: 81% of fatal and severe injury crashes occur on 7% percent of roadways in Winter Park

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	139	9	7%
All Crashes	5,996	3,918	65%
DEATHS	7	7	100%
KSI	62	50	81%
PEDESTRIAN KSI	10	9	90%
BICYCLIST KSI	7	4	57%
MOTORCYCLIST KSI	16	14	88%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	129	6	5%
All Crashes	1,643	590	36%
DEATHS	0	0	0%
KSI	10	6	60%
PEDESTRIAN KSI	1	1	100%
BICYCLIST KSI	3	1	33%
MOTORCYCLIST KSI	2	2	100%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT). The local roadways HIN is reflective of only roadways maintained by the City of Winter Park.

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CRASHES BY LOCATION (LIST)

CITY OF WINTER PARK ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	N Orlando Avenue	Elvin Avenue	W Fairbanks Avenue	9,572
2.	E Fairbanks Avenue	S Orlando Avenue	West of Henkel Circle	8,560
3.	W Fairbanks Avenue	West of Driver Avenue	S Orlando Avenue	7,270
4.	Aloma Avenue	West of Henkel Circle	West of Balfour Drive	6,200
5.	N Orlando Avenue	W Fairbanks Avenue	South of Norfolk Avenue	4,680
6.	Lee Road	West of Gloriosa Avenue	N Orlando Avenue	3,943
7.	N Orange Avenue	W Fairbanks Avenue	Berkshire Avenue	3,805
8.	Howell Branch Road	West of Venetian Way	Eastern City Limit	2,203

CITY OF WINTER PARK LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	S Knowles Avenue	W Morse Boulevard	E Lyman Avenue	5,435
2.	W Comstock Avenue	S Dennings Drive	End of Road	2,348
3.	N Dennings Drive	W Canton Avenue	Minnesota Avenue	2,107
4.	N Lakemont Avenue	Aloma Avenue	South of Glenridge Way	1,893
5.	S Pennsylvania Avenue	W Morse Boulevard	Melrose Avenue	1,763
6.	W Canton Avenue	N Orlando Avenue	N Virginia Avenue	1,679
7.	N Dennings Drive	N Park Avenue	W Canton Avenue	1,598
8.	W Morse Boulevard	N Dennings Drive	N Knowles Avenue	1,114
9.	N Lakemont Avenue	Pine Avenue	Aloma Avenue	536

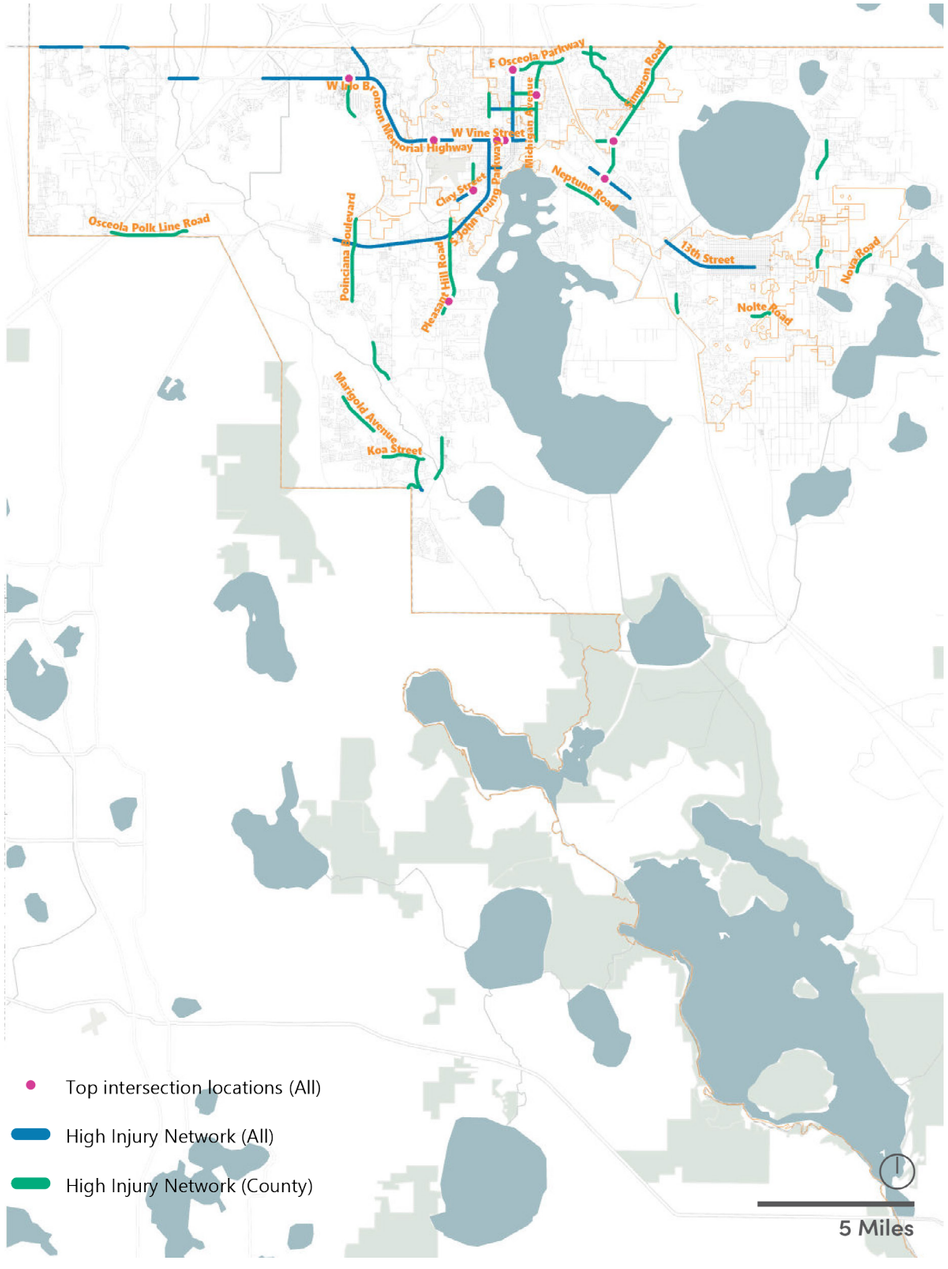
TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	W Fairbanks Avenue at Overspin Drive	2,380
2.	W Fairbanks Avenue at S Capen Drive	2,014
3.	N Orlando Avenue at W Morse Boulevard	1,628
4.	Howell Branch Road at Temple Drive	1,481
5.	W Fairbanks Avenue at S Denning Drive	1,416

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



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HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **44.7**mph
- % of HIN in Transportation Underserved[1] Area 57%
- Other Facts: 45% of fatal and severe injury crashes occur on 2% percent of roadways in Osceola County

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	2,686	51	2%
All Crashes	44,173	18,911	43%
DEATHS	271	111	41%
KSI	1,120	509	45%
PEDESTRIAN KSI	121	75	62%
BICYCLIST KSI	47	26	55%
MOTORCYCLIST KSI	187	90	48%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	1,044	38	4%
All Crashes	24,887	9,596	39%
DEATHS	148	59	40%
KSI	689	305	44%
PEDESTRIAN KSI	64	31	48%
BICYCLIST KSI	34	13	38%
MOTORCYCLIST KSI	112	50	45%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

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HOW CAN YOU GET INVOLVED

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CRASHES BY LOCATION (LIST)

OSCEOLA COUNTY ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	W Irlo Bronson Memorial Highway	Seraigo Boulevard	Poinciana Boulevard	16,299
2.	Simpson Road	Winners Circle	Fortune Road	15,389
3.	S Orange Blossom Trail	W Donegan Avenue	E Vine Street	14,292
4.	W Vine Street	N Thacker Avenue	Kelley Avenue	13,589
5.	W Irlo Bronson Memorial Highway	Siesta Lago Drive	Old Vineland Road	12,578
6.	W Irlo Bronson Memorial Highway	Old Vineland Road	East of Dyer Boulevard	12,071
7.	W Irlo Bronson Memorial Highway	Poinciana Boulevard	Siesta Lago Drive	11,928
8.	S John Young Parkway	East of Harris Boulevard	Pleasant Hill Road	11,592
9.	Clay Street	Dawes Avenue	S Thacker Avenue	11,090
10.	E Osceola Parkway	S Orange Blossom Trail	Bill Beck Boulevard	10,515

OSCEOLA COUNTY COUNTY ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Poinciana Boulevard	W Irlo Bronson Memorial Highway	Palmetto Road	15,973
2.	Boggy Creek Road	East of Grande Boulevard	Simpson Road	9,966
3.	Simpson Road	Fortune Road	E Irlo Bronson Memorial Highway	9,819
4.	E Carroll Street	N Orange Blossom Trail	Michigan Avenue	9,691
5.	Buenaventura Boulevard	County Boundary	South of Wagon Circle	9,639
6.	E Osceola Parkway	N Orange Blossom Trail	Coralwood Circle	9,109
7.	Michigan Avenue	E Carroll Street	E Vine Street	8,713
8.	E Osceola Parkway	Advance Auto Parts/ Chevron Driveway	Sandalwood Drive	8,550
9.	Poinciana Boulevard	Woodmont Boulevard	S Orange Blossom Trail	8,485
10.	Pleasant Hill Road	S John Young Parkway	Suzette Drive	8,396

TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	N Poinciana Boulevard & Irlo Bronson Memorial Highway	9,399
2.	Irlo Bronson Memorial Highway at Simpson Road	6,946
3.	W Vine Street at N Hoagland Boulevard	5,196
4.	Simpson Road & Fortune Road	4,510
5.	E Carroll Street & Michigan Avenue	4,250
6.	W Vine Street & N Rose Avenue	3,772
7.	S Orange Blossom Trail & Osceola Parkway	3,734
8.	Clay Street & Thacker Avenue	3,641
9.	Pleasant Hill Road & Pineridge Circle	3,636
10.	W Vine Street & N Central Avenue	3,635

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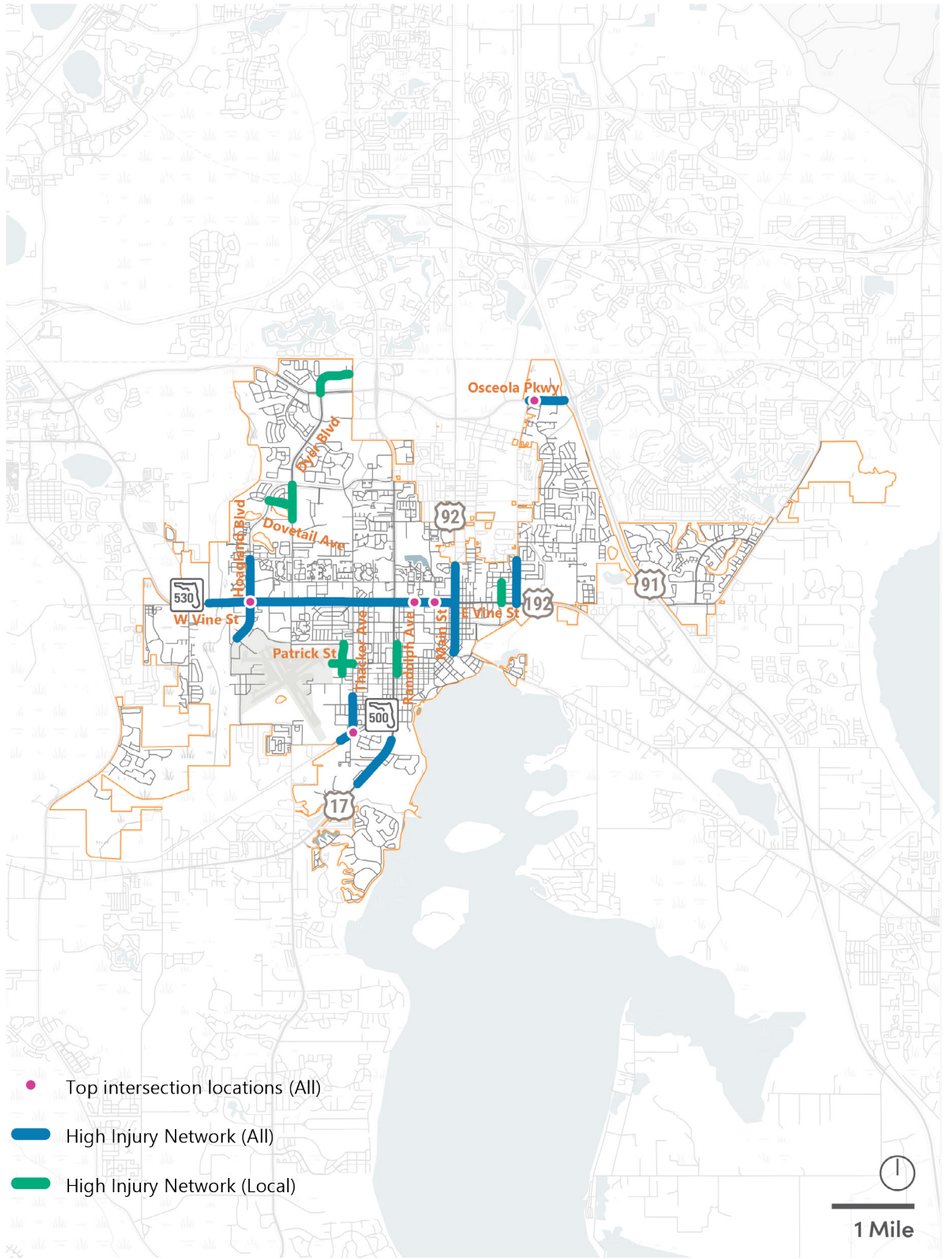

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HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **40.6**mph
- % of HIN in Transportation Underserved[1] Area 100%
- Other Facts: 49% of fatal and severe injury crashes occur on 3% percent of roadways in Kissimmee

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	255	7	3%
All Crashes	10,459	4,622	44%
DEATHS	26	14	44%
KSI	158	78	49%
PEDESTRIAN KSI	21	9	43%
BICYCLIST KSI	9	4	44%
MOTORCYCLIST KSI	34	22	65%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	200	2	1%
All Crashes	609	72	12%
DEATHS	1	0	0%
KSI	11	5	45%
PEDESTRIAN KSI	2	2	100%
BICYCLIST KSI	0	0	0%
MOTORCYCLIST KSI	3	1	33%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

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CRASHES BY LOCATION (LIST)

CITY OF KISSIMMEE ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	US 192	N John Young Parkway	N Main Street	18,358
2.	Osceola Parkway	West of Michigan Avenue	East of Bill Beck Boulevard	16,088
3.	Michigan Avenue	South of Cherokee Drive	US 192	10,766
4.	US 192	Yates Road	West of N Phillip Street	9,587
5.	S Thacker Avenue/Clay Street	Brown Street	North of Schmidt Street	9,468
6.	US 192	West of N Phillip Street	N John Young Parkway	8,583
7.	S John Young Parkway	North of Osceola Park Drive	John Henry Jones Boulevard	7,889
8.	N Main Street	Poinciana Circle	Neptune Road	7,734
9.	Hoagland Boulevard	Hideaway Bay Boulevard	Airpark Way	6,557

CITY OF KISSIMMEE LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Dovetail Avenue	W Carroll Street	Needlepoint Street	3,711
2.	N Randolphe Avenue	North Extent	Emmett Street	2,712
3.	Mabbette Street	West Extent	N Thacker Avenue	1,400
4.	Nebraska Avenue	E Columbia Avenue	US 192	1,274
5.	N Alaska Avenue	Martin Luther King Boulevard	Emmett Street	932
6.	Dyer Boulevard	W Carroll Street	W Donegan Avenue	889
7.	Dyer Boulevard	W Osceola Parkway	West of N Thacker Avenue	429

TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	Hoagland/Carroll Street & US 192	5,196
2.	N Rose Avenue & US 192	3,772
3.	S Thacker Avenue & Clay Street	3,641
4.	Central Avenue & US 192	3,635
5.	Osceola Pkwy & Michigan Avenue	3,401

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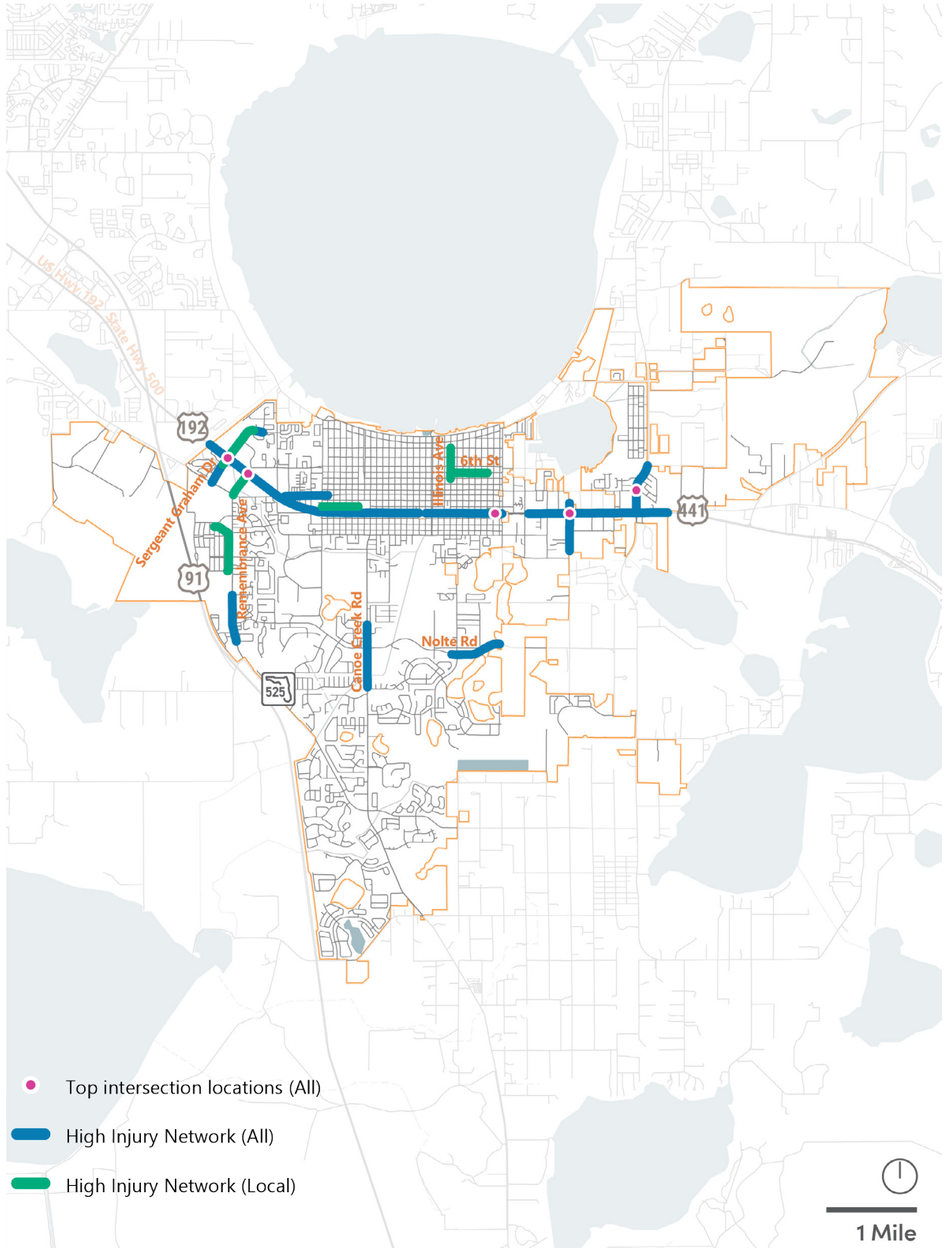

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HIN FACTS

- Average Posted Speed **42.8**mph
- % of HIN in Transportation Underserved[1] Area **0%**
- Other Facts: 58% of fatal and severe injury crashes occur on 3% percent of roadways in St. Cloud

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	272	9	3%
All Crashes	4,107	2,157	53%
DEATHS	12	8	67%
KSI	83	48	58%
PEDESTRIAN KSI	8	3	38%
BICYCLIST KSI	4	3	75%
MOTORCYCLIST KSI	12	9	75%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	231	3	1%
All Crashes	673	103	15%
DEATHS	0	0	0%
KSI	8	4	50%
PEDESTRIAN KSI	2	1	50%
BICYCLIST KSI	0	0	0%
MOTORCYCLIST KSI	1	1	100%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT). The local roadways HIN is reflective of only roadways maintained by the City of St. Cloud.

HOW CAN YOU GET INVOLVED

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CRASHES BY LOCATION (LIST)

CITY OF ST. CLOUD ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	US 192	Western City Limits	Neptune Road	5,965
2.	US 192	Pennsylvania Avenue	Eastern Avenue	5,122
3.	US 192	Neptune Road	New York Avenue	4,711
4.	Narcossee Road N	Lillian Lee Road	US 192	3,992
5.	Commerce Center Drive	Neptune Road	Blackberry Creek Drive	3,803
6.	Old Hickory Tree Road	North of US 192	South of Wilford Street	3,483
7.	Old Canoe Creek Road	King Oak Circle	South of Teka Lane	3,406
8.	US 192	East of Orange Avenue	East of Tay West Drive	3,155
9.	Tenth Street	US 192	Montana Avenue	3,105
10.	Canoe Creek Road	Pirie Pl	Indian Lakes Boulevard W	2,800
11.	Nolte Road	West of Michigan Avenue	Southern Vista Loop	2,799

CITY OF ST. CLOUD LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Illinois Avenue	3rd Street	7th Street	2,794
2.	6th Street	Illinois Avenue	Wyoming Avenue	2,327
3.	Commerce Center Drive	Henry C Yates Lane	Pemberly Pines Circle	1,894
4.	12th Street	Columbia Avenue	California Avenue	800
5.	Rememberance Avenue	Patriot Way	East of Justice Lane	536
6.	Old Canoe Creek Road	US 192	Neptune Road	309

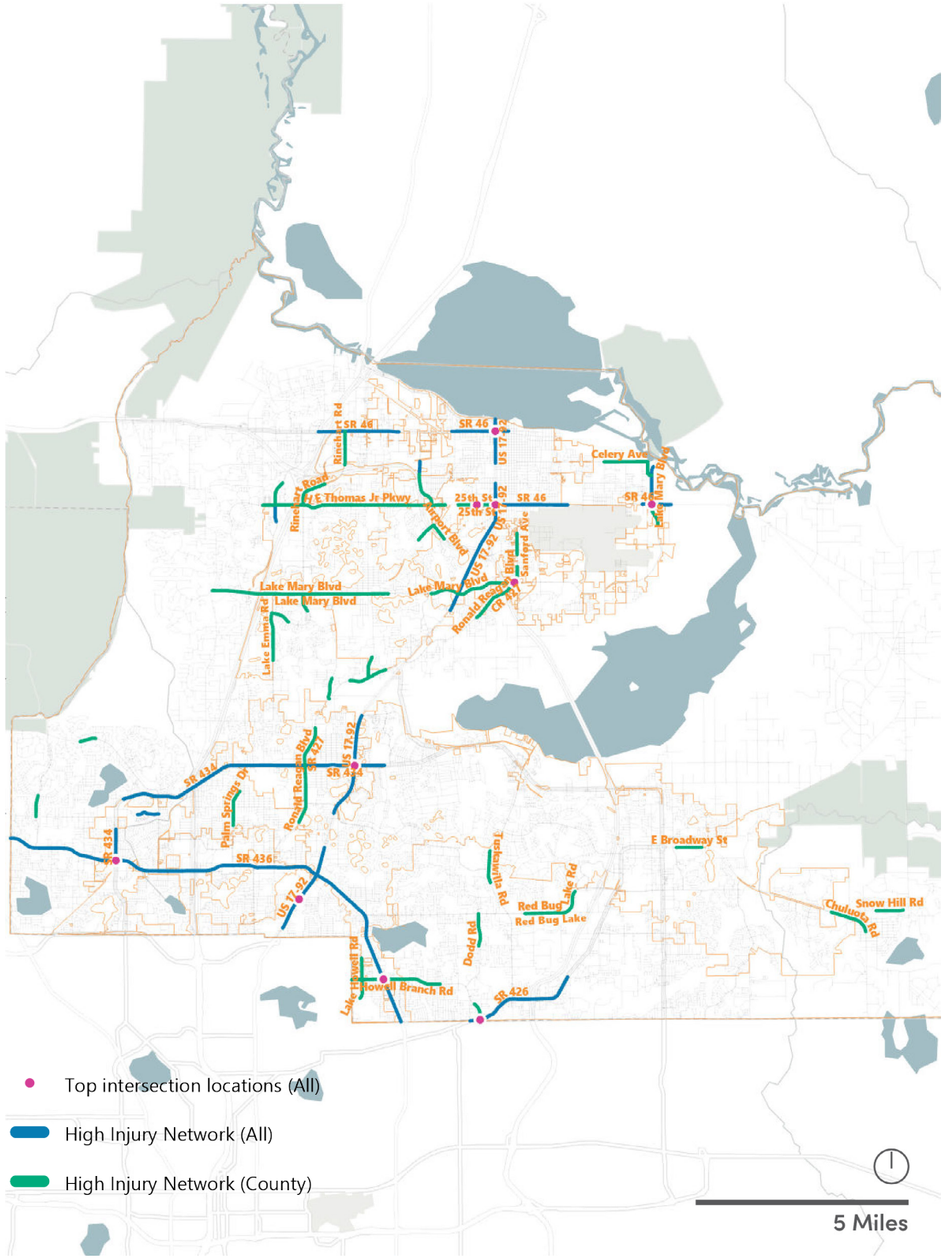
TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	Commerce Center Drive & US 192	2,307
2.	Hickory Tree Road & US 192	1,865
3.	Old Canoe Creek Road & US 192	1,813
4.	Narcoossee Road N & Ashton Park Boulevard	1,317
5.	US 192 & Elm Street	1,270

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



WHAT IS A HIGH INJURY NETWORK (HIN)?

A HIN is a collection of streets where a disproportionate number of crashes that result in someone being killed or severely injured (KSI) occur. This allows us to focus our efforts on the places where crashes are more likely to result in a KSI.

HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **43.4**mph
- % of HIN in Transportation Underserved[1] Area 38%
- Other Facts: 48% of fatal and severe injury crashes occur on 2% percent of roadways in Seminole County

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	2,309	53	2%
All Crashes	49,641	20,717	42%
DEATHS	153	93	61%
KSI	728	353	48%
PEDESTRIAN KSI	123	77	63%
BICYCLIST KSI	33	13	39%
MOTORCYCLIST KSI	137	75	55%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	196	36	18%
All Crashes	18,581	7,751	42%
DEATHS	61	32	52%
KSI	321	187	58%
PEDESTRIAN KSI	43	28	65%
BICYCLIST KSI	13	9	69%
MOTORCYCLIST KSI	59	42	71%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

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The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT). The local roadways HIN is reflective of only roadways maintained by the City of Seminole County.

HOW CAN YOU GET INVOLVED

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CRASHES BY LOCATION (LIST)

SEMINOLE COUNTY ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	SR 434	Wilma St	Ronald Reagan	14,771
2.	SR 426	Tuskawilla Rd	SR 417	10,300
3.	25th St	Club Rd	US17	10,160
4.	US 17-92	South St	Spartan Dr	9,859
5.	SR 436	Montgomery Rd	Palm Springs Dr	8,912
6.	SR 436	US 17-92	Red Bug Lake Rd	8,853
7.	US 17-92	20th St	27th St	8,602
8.	CR 427	Carriage Cove Way	Jones Ave	8,456
9.	Lake Mary Blvd	SR 46	Cayon Pt	8,288
10.	SR 46	Terwilliger Ln	Avocado Ave	8,220

SEMINOLE COUNTY COUNTY ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	25th St	Hardy Ave	US 17	9,039
2.	Ronald Reagan Blvd	Palmetto Ave	SR 434	8,923
3.	Lake Mary Blvd	SR 46	Canyon Pt 320 ft S	8,488
4.	Howell Branch Rd	Bear Gully Rd 670 ft S	SR 426	7,107
5.	Ronald Reagan Blvd	Rose Dr	Meeting Pl 230 ft S	5,731
6.	Howell Branch Rd	County Line	Dike Rd/Tangerine Ave 400 ft E	5,413
7.	International Pkwy	Allure Ln	H E Thomas Jr Pkwy/ CR 46A	5,153
8.	Lake Mary Blvd	I-4 WB Ramps	N Country Club Rd	5,116
9.	Old Lake Mary Road	Airport Blvd	Brightview Dr/ Egrets Landing Dr	4,415
10.	Longwood Lake Mary Rd	Acorn Dr 230 ft N	Ronald Reagan Blvd	4,308

TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	US 17/92 & W 25th Street	5,245
2.	SR 436 & SR 434	4,204
3.	US 17/92 & Lake of the Woods Boulevard	4,049
4.	Aloma Avenue & Howell Branch Road	3,642
5.	US 17/92 & SR 434	3,533
6.	W 25th Street & Hartwell Avenue	3,391
7.	E 25th Street & Lake Mary Boulevard	3,217
8.	US 17/92 & W 1st Street	3,180
9.	SR 436 & Howell Branch Road	3,057
10.	E Lake Mary Boulevard & N Ronald Regan Boulevard	2,941

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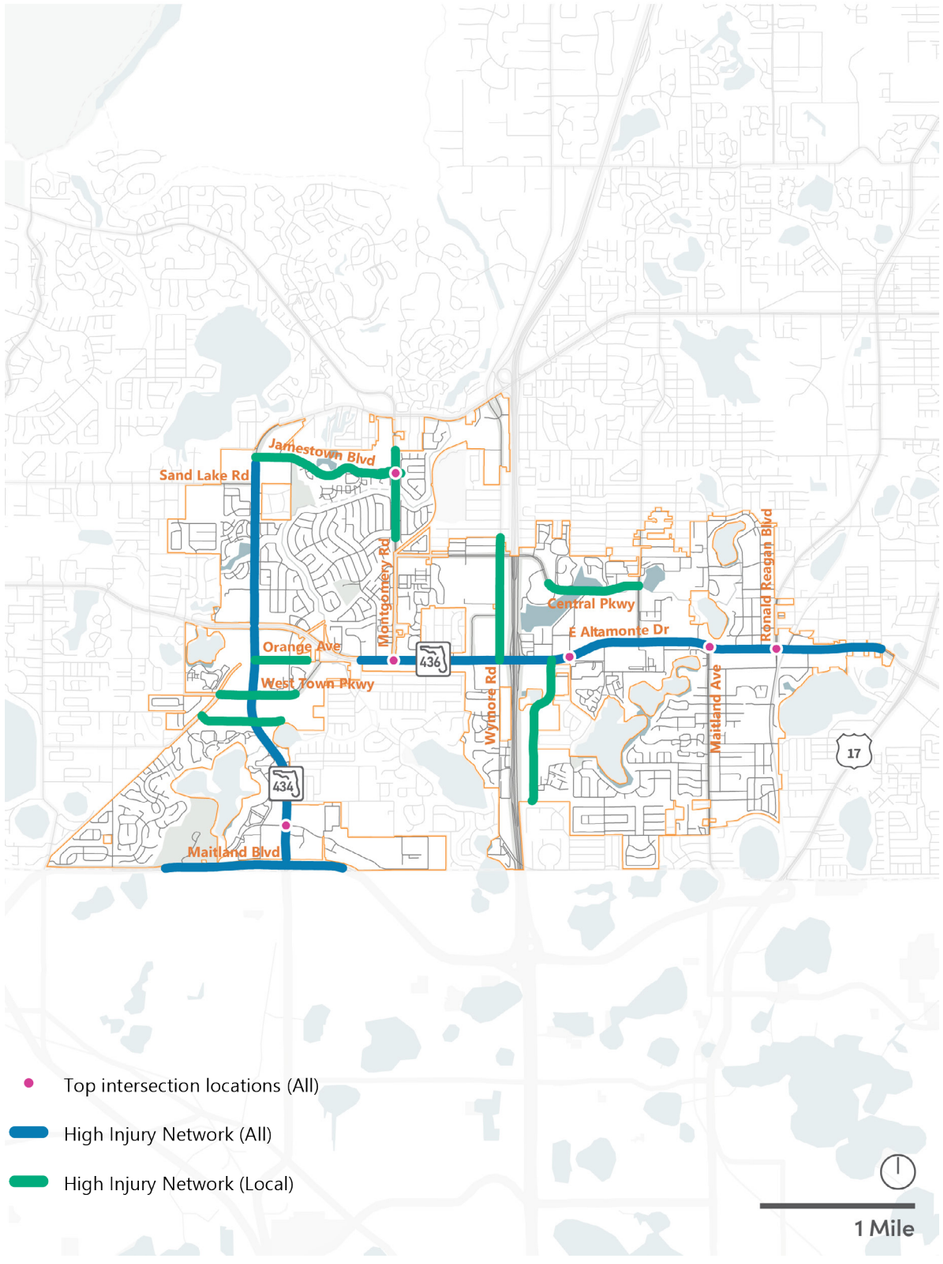
High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



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HOW IS IT CALCULATED?

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HIN FACTS

- Average Posted Speed **40.9**mph
- % of HIN in Transportation Underserved[1] Area 7%
- Other Facts: 85% of fatal and severe injury crashes occur on 8% percent of roadways in Altamonte Springs

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	130	10.4	8%
All Crashes	6,194	4,717	76%
DEATHS	11	9	82%
KSI	48	41	85%
PEDESTRIAN KSI	11	10	91%
BICYCLIST KSI	2	2	100%
MOTORCYCLIST KSI	9	7	78%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	117	5.9	5%
All Crashes	1,402	591	42%
DEATHS	5	4	42%
KSI	15	13	87%
PEDESTRIAN KSI	5	5	100%
BICYCLIST KSI	0	0	0%
MOTORCYCLIST KSI	3	3	100%

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CRASHES BY LOCATION (LIST)

CITY OF ALTAMONTE SPRINGS ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	E Altamonte Drive	I-4	Maitland Avenue	8,762
2.	SR 436	Weatherfield Avenue	I-4	7,819
3.	Jamestown Boulevard	E of Sant Michael Lane	Little Bend Road	5,916
4.	W Town Parkway	Bunnell Road	Laurel Street	4,391
5.	SR 434	S of Jamestown Boulevard	SR 436	4,362
6.	E Altamonte Drive	Maitland Avenue	Anchor Road	4,287
7.	Douglas Avenue	N of Loraine Drive	SR 436	3,936
8.	SR 434	SR 436	W Maitland Boulevard	3,365
9.	E Central Parkway	E of Cranes Roost Drive	Palm Springs Drive	3,351
10.	Montgomery Road	North Street	Greenbriar Boulevard	3,318
11.	Maitland Boulevard	W of Lake Lotus Park Road	City Boundary	2,706

CITY OF ALTAMONTE SPRINGS LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Sun Ridge Place	Sun Ridge Entrance	End of Road	13,020
2.	Jamestown Boulevard	SR 434	Little Bend Road	3,968
3.	Montgomery Road	North Street	Greenbriar Boulevard	3,318
4.	Bunnell Road / West Town Parkway	W Town Parkway	East of Laurel Street	3,297
5.	E Central Parkway	West of Cranes Roost Drive	Palm Springs Drive	2,711
6.	Douglas Avenue	W Citrus Street	SR 436	1,820
7.	Sunshine Lane	Bunnell Road	End of Road	1,673
8.	Northlake Boulevard	E Altamonte Drive	End of Road	1,139
9.	Orange Avenue	SR 434	East of Storage Facility	557

TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	E Altamonte Drive & Cranes Roost Boulevard	2,758
2.	SR436 & Montgomery Road	2,004
3.	Montgomery Road & Clear Channel Drive	1,885
4.	SR 434 & Gateway Drive	1,704
5.	E Altamonte Drive & S Ronald Regan Boulevard	1,626
6.	E Altamonte Drive & Maitland Avenue	1,620

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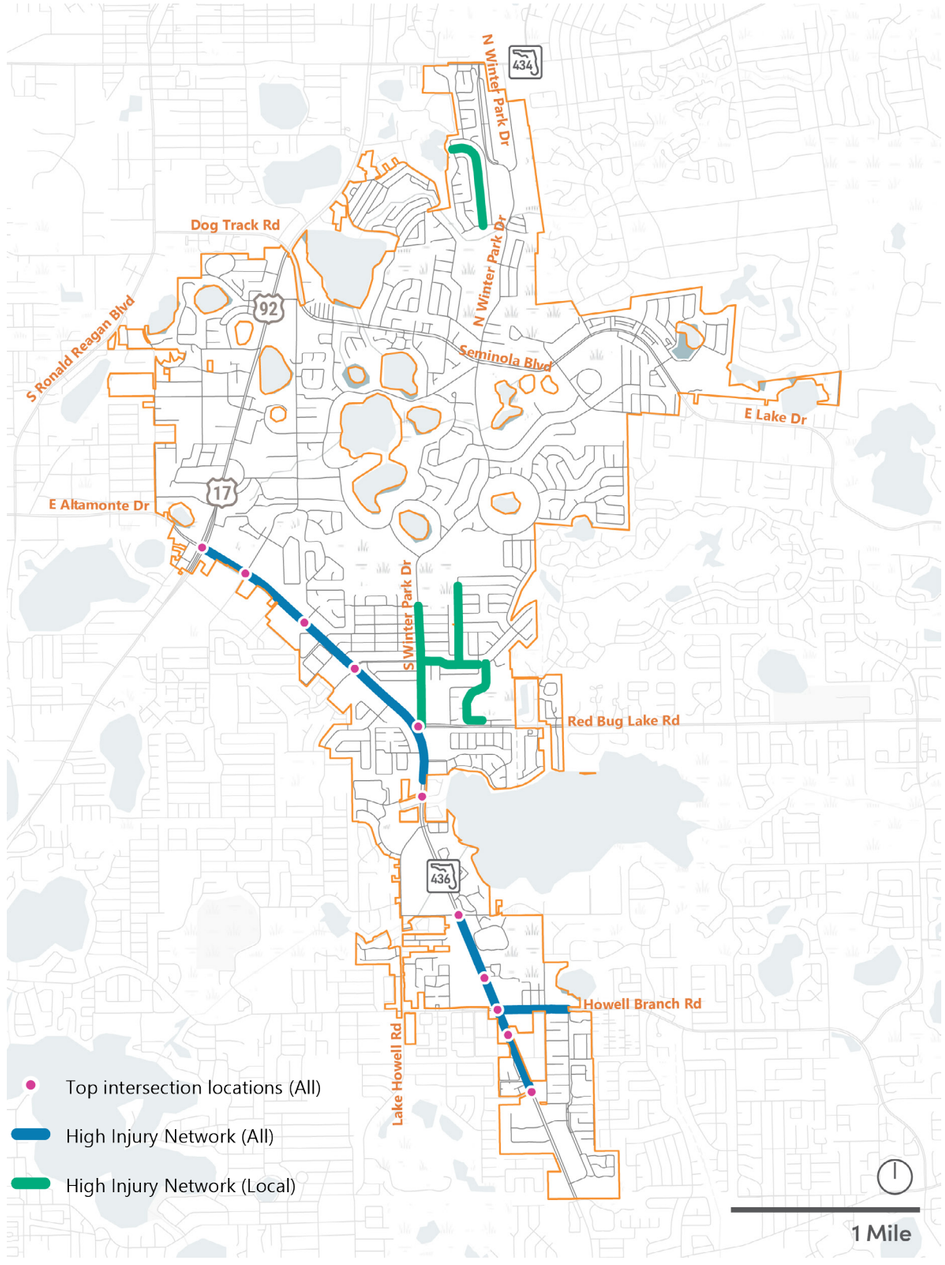
High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



WHAT IS A HIGH INJURY NETWORK (HIN)?

A HIN is a collection of streets where a disproportionate number of crashes that result in someone being killed or severely injured (KSI) occur. This allows us to focus our efforts on the places where crashes are more likely to result in a KSI.

HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **45.1**mph
- % of HIN in Transportation Underserved[1] Area **0%**
- Other Facts: 53% of fatal and severe injury crashes occur on 3% percent of roadways in Casselberry

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	109	3	3%
All Crashes	4,923	2,295	47%
DEATHS	15	12	80%
KSI	47	25	53%
PEDESTRIAN KSI	9	6	67%
BICYCLIST KSI	1	1	100%
MOTORCYCLIST KSI	10	7	70%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	69	2	3%
All Crashes	709	103	15%
DEATHS	0	0	0%
KSI	5	4	80%
PEDESTRIAN KSI	1	1	100%
BICYCLIST KSI	0	0	0%
MOTORCYCLIST KSI	10	1	100%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

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CRASHES BY LOCATION (LIST)

CITY OF CASSELBERRY ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Semoran Boulevard	Lake Howell Lane	Winter Woods Boulevard	8,580
2.	Howell Branch Road	Semoran Boulevard	Antilles Drive	7,601
3.	Semoran Boulevard	US 17/92	Georgetown Drive	6,671

CITY OF CASSELBERRY LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Wilshire Drive	S Winter Park Drive	Gregory Drive	3,096
2.	Elm Drive	Ivanhoe Way	Wilshire Drive	2,081
3.	Mark David Boulevard	Wilshire Drive	Red Bug Lake Road	2,027
4.	S Winter Park Drive	Marigold Road	Red Bug Lake Road	1,789
5.	Wolf Trail	Gee Creek Lane	Osceola Trail	1,649

TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	Semoran Boulevard & Howell Branch Road	3,066
2.	Semoran Boulevard & Winter Woods Boulevard	2,368
3.	US 17-92 at Semoran Bouelvard	2,230
4.	Semoran Boulevard at Sunset Drive	1,693
5.	Semoran Boulevard at Wilshire Drive	1,550
6.	Semoran Boulevard at Lake Howell Lane	1,418
7.	Semoran Boulevard at Red Bug Lake Road	1,365
8.	Semoran Boulevard at Cassel Creek Boulevard	1,197
9.	Semoran Boulevard at Lamplight Way	1,131
10.	Semoran Boulevard at Cedar Bay Point	1,125
11.	Semoran Boulevard at Semoran North Circle	1,015

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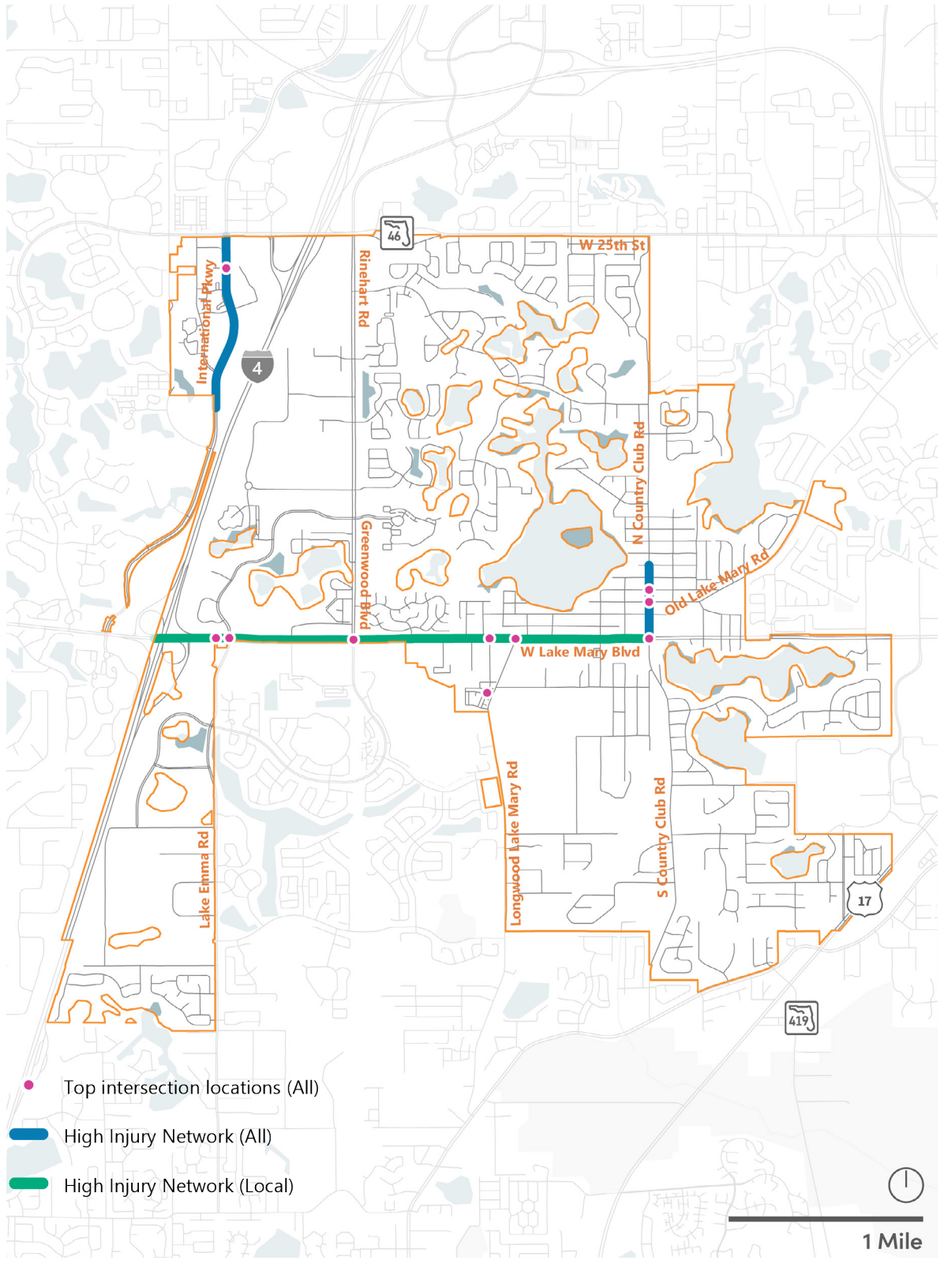
High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



WHAT IS A HIGH INJURY NETWORK (HIN)?

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HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **42.4**mph
- % of HIN in Transportation Underserved[1] Area **0%**
- Other Facts: 57% of fatal and severe injury crashes occur on 3% percent of roadways in Lake Mary

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	93	3	3%
All Crashes	2,786	1,533	55%
DEATHS	2	1	50%
KSI	23	13	57%
PEDESTRIAN KSI	6	5	83%
BICYCLIST KSI	1	1	100%
MOTORCYCLIST KSI	4	2	50%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	86	1	1%
All Crashes	971	133	14%
DEATHS	0	0	0%
KSI	8	5	63%
PEDESTRIAN KSI	3	3	100%
BICYCLIST KSI	0	0	0%
MOTORCYCLIST KSI	0	0	0%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT). The local roadways HIN is reflective of only roadways maintained by the City of Lake Mary.

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CRASHES BY LOCATION (LIST)

CITY OF LAKE MARY ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	N Country Club Road	E Grandben Avenue	W Lake Mary Boulevard	9,007
2.	W Lake Mary Boulevard	I-4	Rinehart Road	5,405
3.	W Lake Mary Boulevard	Rinehart Road	N Country Club Road	5,200

CITY OF LAKE MARY LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	N Country Club Road	E Grandben Avenue	W Lake Mary Boulevard	5,634
2.	International Parkway	CR 46A	South of Business Center Drive	2,043

TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	W Lake Mary Boulevard & Flagg Lane	2,154
2.	W Lake Mary Boulevard & N Country Club Road	1,526
3.	W Lake Mary Boulevard & Wheelhouse Lane	1,116
4.	N Country Club Road & E Crystal Lake Avenue	1,040
5.	N Country Club Road & W Lake Mary Boulevard	1,014
6.	Heathrow Center Lane & International Parkway	993
7.	Wheelhouse Lane & Mahonia Court	951
8.	W Lake Mary Boulevard & Lake Emma Road	860
9.	W Lake Mary Boulevard & Longwood Lake Mary Road	744
10.	W Lake Mary Boulevard & Rinehart Road	549

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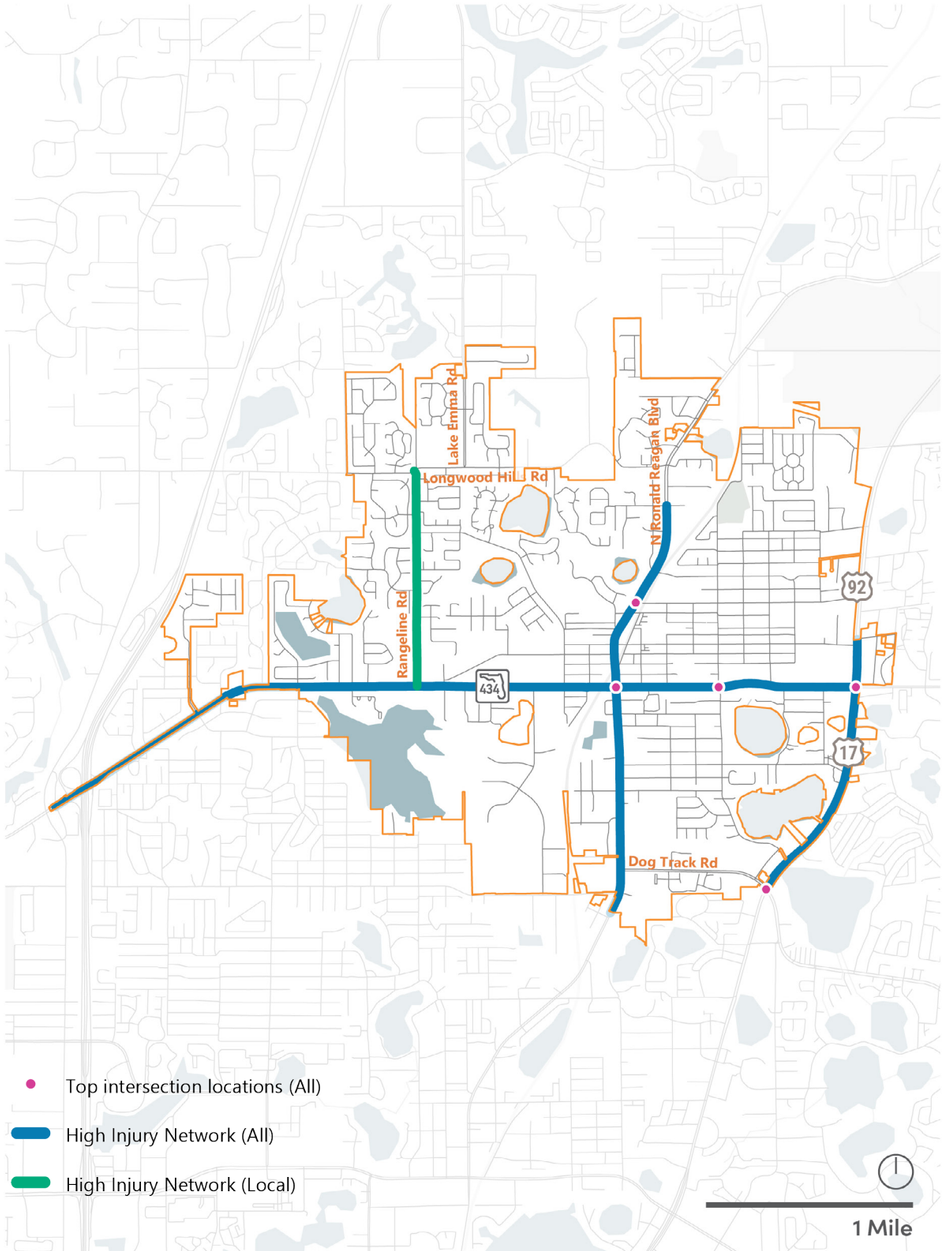
WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



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HOW IS IT CALCULATED?

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HIN FACTS

- Average Posted Speed **41.7**mph
- % of HIN in Transportation Underserved[1] Area 64%
- Other Facts: 90% of fatal and severe injury crashes occur on 9% percent of roadways in Longwood

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	82	7	9%
All Crashes	3,585	2,789	78%
DEATHS	8	8	100%
KSI	51	46	90%
PEDESTRIAN KSI	13	12	92%
BICYCLIST KSI	2	1	50%
MOTORCYCLIST KSI	9	9	100%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	73	2	2%
All Crashes	728	48	7%
DEATHS	1	0	0%
KSI	9	2	22%
PEDESTRIAN KSI	2	0	0%
BICYCLIST KSI	1	1	100%
MOTORCYCLIST KSI	2	0	0%

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CRASHES BY LOCATION (LIST)

CITY OF LONGWOOD ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Ronald Reagan Boulevard	Palmetto Avenue	SR 434	11,235
2.	SR 434	Commerce Park Dr	Springwood Circle	8,283
3.	SR 434	Ronald Reagan Boulevard	US 17/92	7,789
4.	US 17/92	Oak Lane	Dog Track Rd/ Seminola Boulevard	6,365
5.	SR 434	Rangeline Road	Ronald Reagan Boulevard	5,439
6.	Ronald Reagan Boulevard	SR 434	Warren Street	4,958
7.	Ronald Reagan Boulevard	Georgia Avenue	14th Avenue	4,670
8.	SR 434	Springwood Court	Rangeline Road	3,142

CITY OF LONGWOOD LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Rangeline Road	EE Williamson Road/ Longwood Hills Road	SR 434	1,300

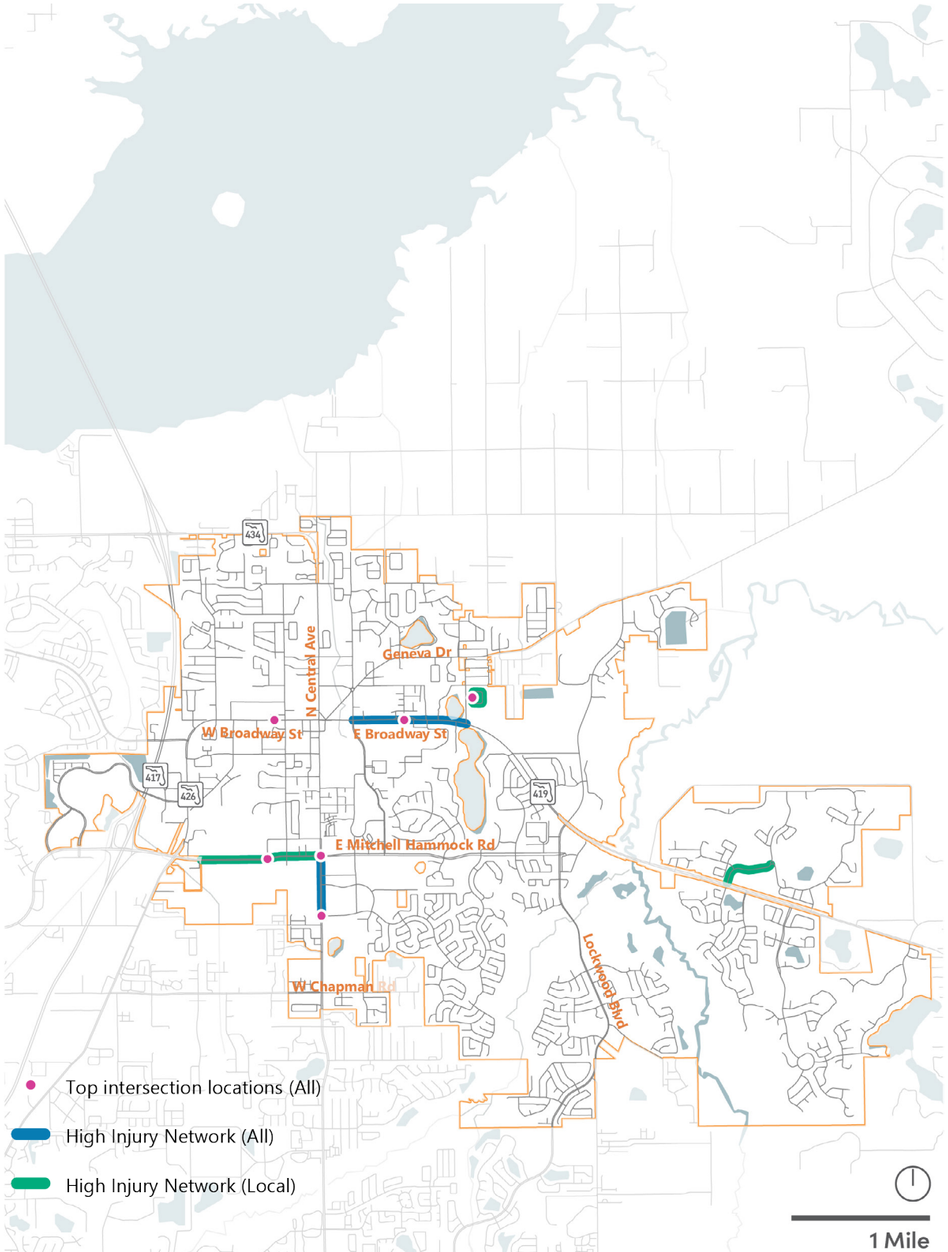
TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	US-17/92 & SR 434	3,137
2.	S Grant Street & SR 434	2,797
3.	Orange Avenue & Ronald Reagan Boulevard	1,964
4.	Ronald Reagan Boulevard & SR 434	1,728
5.	US-17/92 & Dog Track Roadd/Seminola Boulevard	1,610

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



WHAT IS A HIGH INJURY NETWORK (HIN)?

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HOW IS IT CALCULATED?

The HIN calculations weight crashes differently depending on the mode of travel involved and the severity of the crash. Crash summaries for each half mile roadway segment were calculated with the segments that receive the highest score comprising the HIN. High injury intersections are identified using a similar process as the HIN, considering all crashes within 250 feet of each intersection.

HIN FACTS

- Average Posted Speed **40.3**mph
- % of HIN in Transportation Underserved[1] Area 0%
- Other Facts: 42% of fatal and severe injury crashes occur on 1% percent of roadways in Oviedo

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	155	2	1%
All Crashes	2,687	580	22%
DEATHS	2	0	0%
KSI	19	8	42%
PEDESTRIAN KSI	3	2	67%
BICYCLIST KSI	1	0	0%
MOTORCYCLIST KSI	2	1	50%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	86	1	2%
All Crashes	1,552	215	14%
DEATHS	1	0	0%
KSI	6	3	50%
PEDESTRIAN KSI	0	0	0%
BICYCLIST KSI	1	1	100%
MOTORCYCLIST KSI	2	2	100%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT). The local roadways HIN is reflective of only roadways maintained by the City of Oviedo.

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VisionZeroCFL.gov

CRASHES BY LOCATION (LIST)

CITY OF OVIEDO ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Alafaya Trail/S Central Avenue	E Mitchell Hammock Road	Alafaya Woods Boulevard	5,529
2.	W Mitchell Hammock Road	East of Westwood Square	Alafaya Trail	3,017
3.	Broadway Street	Oviedo Boulevard	Reed Avenue	2,990

CITY OF OVIEDO LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Roosevelt Square	North of Round Lake Court	South of Round Lake Court	4,347
2.	Sanctuary Drive	CR 419	Heirloom Rose Place	2,421
3.	W Mitchell Hammock Road	East of Westwood Square	Alafaya Trail	1,990

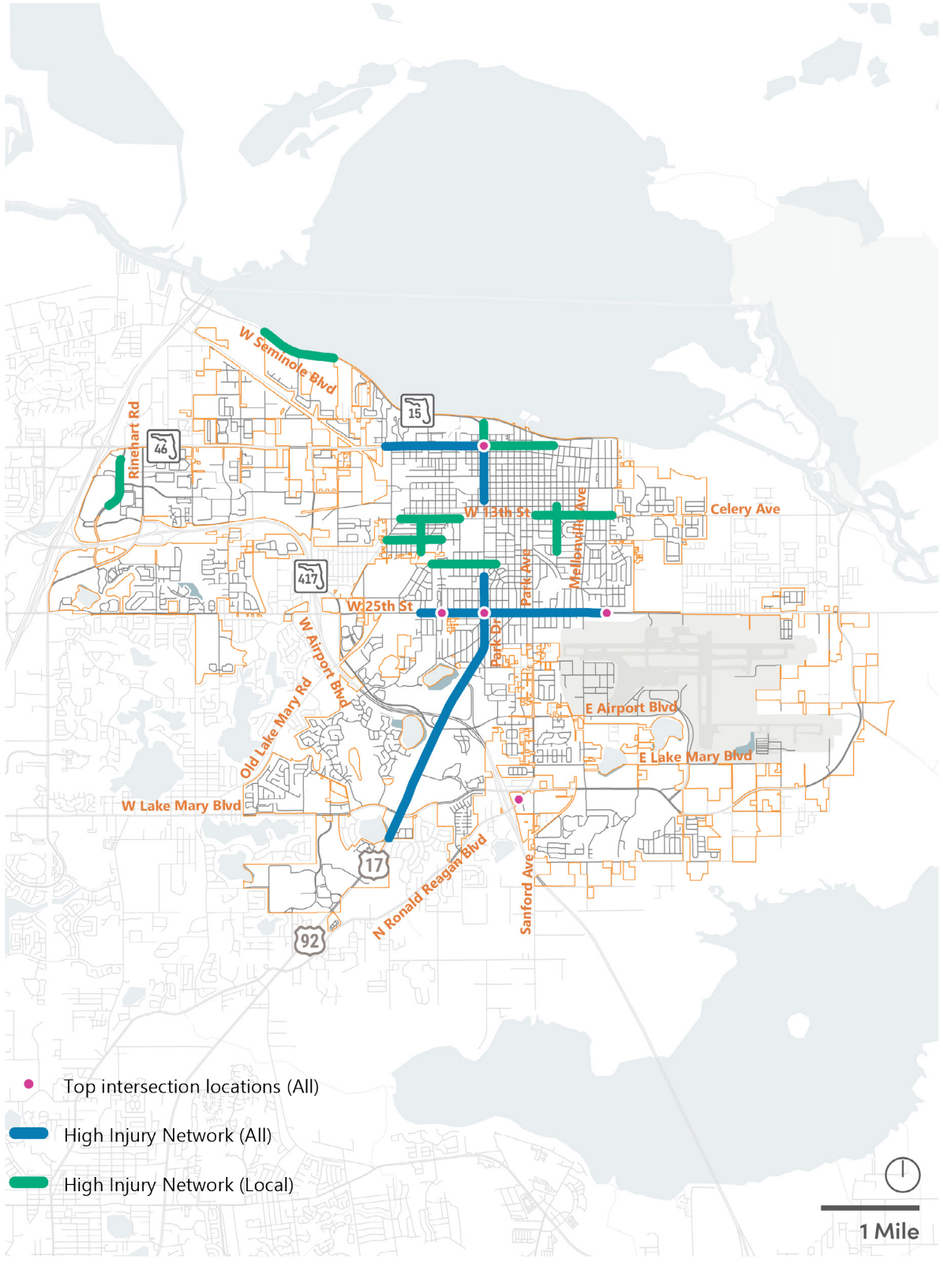
TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	Mitchell Hammock Road & SR 434/Alafaya Trail	1,126
2.	Mitchell Hammock Road & S Norma Ave	1,126
3.	Alafaya Woods Boulevard & SR 434/Alafaya Trail	1,096
4.	Avenue Boulevard & CR 419/Broadway Street	959
5.	SR 426 / CR 426 & Tomoka Drive	955
6.	Round Lake Court & Roosevelt Square	951

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



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HOW IS IT CALCULATED?

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HIN FACTS

- Average Posted Speed **41.9**mph
- % of HIN in Transportation Underserved[1] Area **89%**
- Other Facts: 51% of fatal and severe injury crashes occur on 3% percent of roadways in Sanford

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	262	7	3%
All Crashes	7,088	2,467	35%
DEATHS	28	20	71%
KSI	105	54	51%
PEDESTRIAN KSI	28	18	64%
BICYCLIST KSI	3	2	67%
MOTORCYCLIST KSI	21	14	67%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	238	6	2%
All Crashes	3,134	450	14%
DEATHS	5	3	60%
KSI	30	15	50%
PEDESTRIAN KSI	8	7	88%
BICYCLIST KSI	1	1	100%
MOTORCYCLIST KSI	4	3	75%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

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CRASHES BY LOCATION (LIST)

CITY OF SANFORD ALL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	25th Street	Club Rd/Ridgewood Avenue	Chase Avenue	17,655
2.	25th Street	Mellonville Avenue	Summerlin Avenue	12,171
3.	French Avenue	22nd Street/ Colonial Way	Florida Street/27th Street	9,710
4.	French Avenue	Seminole Boulevard	10th Street	8,771
5.	25th Street	French Avenue	Mellonville Avenue	8,272
6.	1Street Street	Terwilliger Lane	French Avenue	7,920
7.	US 17/92 / French Avenue / Orlando Drive	Florida Street/27th Street	Fairmont Drive	6,189
8.	1Street Street	French Avenue	Park Avenue	3,586
9.	25th Street	Chase Avenue	French Avenue	2,139

CITY OF SANFORD LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	N French Avenue	Seminole Boulevard	1st Street	9,768
2.	1st Street	French Avenue	Sanford Avenue	6,550
3.	Historic Goldsboro Boulevard	Southwest Road	Lake Avenue/William Clark Avenue	4,403
4.	Celery Avenue	Sanford Village Way	Scott Avenue	3,814
5.	Oleander Avenue	HiStreetoric Goldsboro Boulevard	18th Street	3,024
6.	Towne Center Boulevard	Towne Road	South of Onyx Way	2,433
7.	Locust Avenue	South of 11th Street	Escambia Drive	2,121
8.	20th Street	Hays Drive	Elm Avenue	2,049
9.	16th Street	Roosevelt Avenue	Bell Avenue	1,791
10.	US 17-92	West of Walnut Crest Run	East of Walnut Crest Run	1,501
11.	1st Street	Sanford Avenue	Chapman Avenue	107

TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	25th Street & S French Avenue	5,245
2.	25th Street & Hartwell Avenue	3,391
3.	W 1st Street at N French Avenue	3,180
4.	25th Street & S Summerlin Avenue	2,248
5.	N Ronald Regan Boulevard & Keyes Court	2,082

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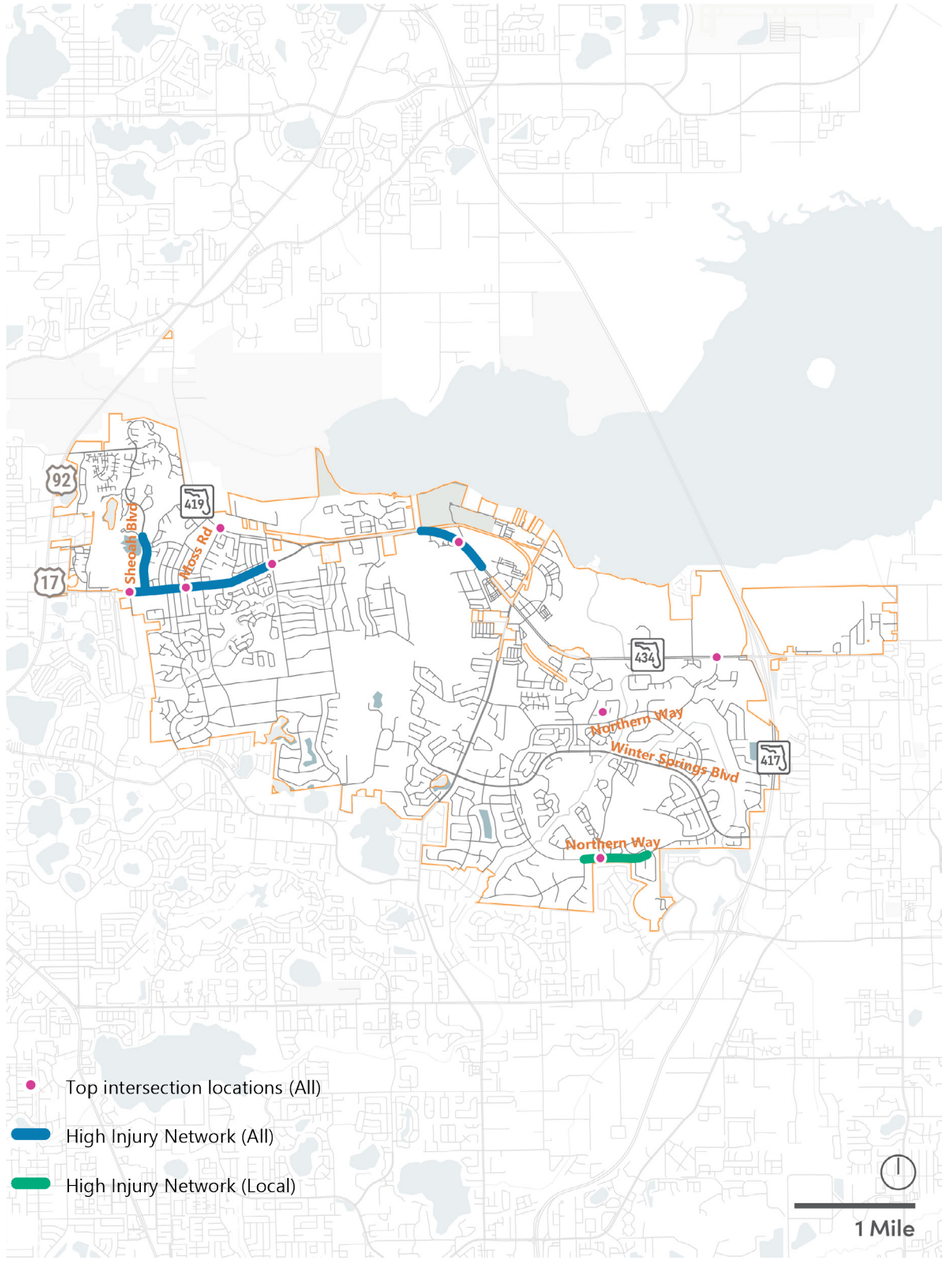
High Injury Network (HIN)

WORST ROADS & INTERSECTIONS FOR CRASH DEATHS AND SERIOUS INJURIES



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HIN FACTS

- Average Posted Speed **41.1**mph
- % of HIN in Transportation Underserved[1] Area 16%
- Other Facts: 56% of fatal and severe injury crashes occur on 1% percent of roadways in Winter Springs

1 Transportation Underseved communities experience greater transportation inequities to access jobs, housing, food, health care, education and other destinations.

HIN NETWORK OVERALL STATS

	ALL ROADS*	HIN	% HIN
CL MILES	157	2	1%
All Crashes	1,523	380	25%
DEATHS	2	1	50%
KSI	16	9	56%
PEDESTRIAN KSI	2	2	100%
BICYCLIST KSI	3	1	33%
MOTORCYCLIST KSI	3	1	33%

	LOCAL ROADS ONLY**	HIN	% HIN
CL MILES	151	1	1%
All Crashes	665	20	3%
DEATHS	0	0	0%
KSI	6	3	50%
PEDESTRIAN KSI	0	0	0%
BICYCLIST KSI	2	1	50%
MOTORCYCLIST KSI	0	0	0%

* All roads excluding limited access (interstate, toll roads, parking lots, etc.)

What is the difference between the ALL ROADS* HIN and the LOCAL ROADS HIN?**

The All roads HIN considers all roadways through the jurisdiction, regardless of the agency that maintains and operates the roadway, like the Florida Department of Transportation (FDOT). The local roadways HIN is reflective of only roadways maintained by the City of Winter Springs.

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CRASHES BY LOCATION (LIST)

CITY OF WINTER SPRINGS ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	SR 434	Belle Avenue	Hayes Road	3,588
2.	SR 434	Wagner Point	Apache Trail	3,072
3.	Sheoah Boulevard	Silver Sea Road	SR 434	2,286

CITY OF WINTER SPRINGS LOCAL ROADWAYS HIGH INJURY NETWORK CORRIDORS

#	Roadway Name	From	To	Safety Score*
1.	Northern Way	Shetland Avenue	Royal Oak Drive	1,804
2.	Sheoah Boulevard	Silver Sea Road	SR 434	1,362

TOP ALL ROADWAY NETWORK HIGH INJURY NETWORK INTERSECTION LOCATIONS

#	Roadway Name	Safety Score*
1.	SR 434 & Central Winds Drive	1,461
2.	SR 434 & Belle Avenue	1,129
3.	SR 434 & Vistawilla Drive	1,023
4.	SR 434 & Hayes Road	1,004
5.	SR 434 & N Fairfax Avenue	994
6.	SR 434 & N Moss Road	964
7.	Greenbriar Lane & Northern Way	954
8.	Canopy Court & Mt Laurel Drive	952

* The Safety Score is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. Crashes that result in death or severe injury, or include a person outside a vehicle have different factors applied. With the Safety Score, a higher score indicates the location experiences a high crash rate and a lower score indicates as lower crash rate. A Safety Score of zero indicates no history of crashes at the location.

APPENDICES PART 2

Appendix Part 2C: Crash Analysis

Memorandum

Date: January 17, 2024

To: Vision Zero Central Florida Partners

From: Mighk Wilson, MetroPlan Orlando
Kathrin Tellez, Fehr & Peers

Subject: Vision Zero Central Florida – Crash Analysis and Profiles

Introduction

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

This memo summarizes the methodology used to analyze the crash data, identify trends in the data and complete a contextual analysis to understand the characteristics of roads throughout the MetroPlan Orlando region where fatal and severe injury crashes are more likely to occur. This analysis is presented in a series of high-level descriptive summary tables to capture relationships between crash data, infrastructure data, and contextual variables. These tables explore overall crash trends and patterns that can be used to guide the selection of other variables warranting deeper analysis, new driver behavior programs, policy changes, or the selection of safety countermeasures for project development. Detailed crash matrices for the region and each county are provided as attachments at the end of this memorandum. The memorandum is organized as follows:

1. Key Findings
2. Methodology and Data Sources
3. Crash Trends
4. Contextual Analysis
    a. Behavioral Factors
    b. Road Factors
    c. Environmental Factors
5. Systemic Matrices

Key Findings

Key findings from the crash analysis are summarized below. The crash analysis considered all reported vehicular crashes in the MetroPlan Orlando Region between January 1, 2018 and December 31, 2022, as well as supplemental information from the Florida Injury Surveillance System (FISS), and the Florida Department of Transportation (FDOT) Modal Office. Crash data was downloaded from Signal 4 Analytics in July 2023; data downloaded before or after this date may reflect different information, especially for the latter years of analysis as the datasets are continually being reviewed and updated. Throughout the report, crashes that result in someone being **killed or severely injured (KSI)** are referred to as **KSI crashes**.

Overall

- During a typical week in the MetroPlan Orlando Region, which includes Orange, Osceola, and Seminole Counties, **5 people are killed and 35 people are seriously injured** in traffic crashes on our roads.
- Although only 25% of the regional population lives in a designated transportation disadvantaged community almost **50% of all crashes and 52% of fatal crashes** occur within or adjacent to **transportation disadvantaged** communities. The designation of transportation disadvantage considers many factors, including poverty rates, motor vehicle ownership, and access to destinations. Additional information is provided in the next section.
- Crashes involving people **outside a vehicle** – pedestrians, bicyclists and motorcyclists – accounted for about 3% of overall crashes, 25% of serious injury crashes and 48% of fatal crashes in the region.
- **Distraction** was a factor in 25% of overall crashes, 31% of serious injury crashes and 18% of fatal crashes.

Car and Truck Involved Crashes

- 61% of **left-turn** KSI crashes are due to a failure to yield the right of way, with 15% related to disobeying the traffic control device (running red light or stop sign). Left-turn related crashes are more likely to result in a KSI as the total number of travel lanes and the posted speed limit increases.
- **Off-road** crashes are more prevalent on 2-lane, 40+ mile per hour speed limit roads without a raised median or shoulders,
- **Rollover** crashes are most prevalent on high-speed principal arterial roads, with operating the motor vehicle in a careless or negligent manner a contributing factor in over 40% of KSI crashes, driving too fast for conditions a contributing factor in 7% of KSI crashes, and swerving to avoid a hazard a contributing factor in 3% of KSI crashes.
- **Alcohol and/or drugs** are a factor in about 10% of KSI crashes, with alcohol/drug related crashes more likely to occur on a Friday or Saturday night/early morning.

- **Teens** comprise about 6% of licensed drivers in the region and are involved in 11% of KSI crashes. **Aging drivers** comprise about 15% of licensed drivers in the region and are involved in about 14% of KSI crashes.
- **Rear-end** crashes are more likely to occur on high-speed, multilane roads, comprising 19% of all KSI crashes.
- 38% of people who died in a car or truck crash in the region were **not wearing their seatbelt**.

Pedestrian and Bicyclist

- 65% of pedestrian and 65% of bicyclist fatalities occur in **transportation disadvantaged communities**.
- Almost 20% of pedestrian KSI and 19% of bicyclist KSI crashes were **hit and run**, as compared to 9% of all crashes.
- Fatal and serious injury crashes involving a person walking or bicycling are more likely to occur at night, under **dark and dark-lighted conditions**.
- The percent of **KSI pedestrian and bicyclist** crashes increases as the number of lanes, the **volume of motor vehicles**, and the **posted speed limit increase**, with 71% of pedestrian KSIs occurring on roads with a posted speed limit higher than 40 miles per hour, 74% occurring on roads with 4 or more lanes, and 82% occurring on roads with more than 15,000 motor vehicle trips per day.
- Approximately 71% of KSI pedestrian crashes are **not at an intersection**.
- About 64% of **bicyclist hospital admissions** (over 100 per year) do not involve a motor vehicle.
- There are about 3 bicyclist fatalities per year that do **not involve a motor vehicle**.
- Non-motor-vehicle pedestrian **hospital admissions** have nearly doubled over the past decade from about 15 to 30 per year, with the increase corresponding to an increase in e-scooter use (and similar devices).

Motorcyclist Crashes

- 43% of motorcyclists who died in a crash were **not wearing a helmet**.
- Crashes involving a motorcyclist are more likely to lead to a severe or fatal injury as posted **speed limit increases**.
- 30% of motorcyclist KSI crashes involve **left-turn** movements and 16% involve **rear-end** crashes.
- Motorcyclist crashes are more likely to result in a **fatality under dark-not lighted conditions**.
- About 10% of motorcyclist KSI are **single-motor vehicle** crashes.

Railroad Crossings

- Of the 19 pedestrian fatalities along railroad **tracks or at railroad crossings**, 58% were determined to be suicides.

Methodology and Data Sources

Several datasets were used to aid in the understanding of crash trends within the region, including data from Signal 4 Analytics (Signal 4)[1], the Florida Injury Surveillance System (FISS), and the Florida Department of Transportation (FDOT) Modal Office. Data from Signal 4 reflects all crashes in the region that were reported to law enforcement and that involve a motor vehicle. From the FISS dataset, deaths, emergency room visits and hospitalizations for people who were injured while walking and biking are provided, including information for people who were injured or killed while walking or bicycling when a motor vehicle was not involved. The FDOT Modal Office provided information related to trespassing incidents near train tracks in the region as incidents between people walking or bicycling and trains do not typically show up in crash reports that would be included in the Signal 4 dataset unless a motor vehicle was involved. Data reflective of 2018 to 2022 from Signal 4 downloaded in June 2023, data from October 2018 to March 2023 from the modal office, and data from 2011 to 2021 from FISS was considered in this analysis.

Spatial Data

The road network that served as the basis for this analysis was obtained from the xGeographic Wave database, which is a land use, transportation, environmental and demographic mapping database, usable across Geographic Information System (GIS) mapping platforms, that has been built for the MetroPlan Orlando region. Information within the database that was considered in the analysis includes:

- Number of through lanes
- Number of turn lanes
- Average Annual Daily Traffic (AADT)
- Posted Speed
- Median Presence
- Presence of walking and biking facilities
- Functional Classification
- Context Classification
- Proximity to key destinations, such as public schools and transit stops

[1] The Signal 4 dashboard and analytics system receives data from Florida's statutory custodian of records, the Florida Department of Highway Safety and Motor Vehicles (FLHSMV); all data is considered preliminary until the year is reconciled and closed out by the FLHSMV, and thus certain adjustments may be made to verify the data where clerical errors are noted. As such, data downloaded before or after the data download for this project (July 2023) may slightly differ from the data used in this analysis.

Signal 4 Crash Dataset

All data from Signal 4 was mapped based on the geolocation associated with each crash record, which revealed some crashes with incomplete or incorrect information, such as crashes that did not actually occur in any of the three counties. After removing incorrectly geolocated crashes (i.e., those not actually located within the region), a total of 327,306 crashes, including 1,366 that resulted in a fatality, 7,484 that resulted in a serious injury, 89,957 that resulted in some injury, and 228,499 that resulted in no injury are considered in the analysis. Of the total reported crashes, approximately 3,950 occurred in parking lots, including 9 fatal crashes and 119 serious injury crashes. Of the total crashes, 50,850 reported crashes occurred on limited access facilities, including 214 fatal crashes and 1,363 serious injury crashes.

For some analyses presented in the subsequent sections, crashes that occurred on limited access facilities, like Interstate 4, and in parking lots, were not considered. Some high-level analyses incorporate all crashes, while most only consider crashes where someone was severely injured or killed. Additionally, total crashes are used as the unit of measurement (as opposed to total number of people involved), unless otherwise stated.

US DOT Transportation Disadvantage

The US Department of Transportation's (DOT) has developed a metric to identify communities that experience transportation insecurity through transportation disadvantage. Transportation disadvantage occurs when people are unable to access the needs of their daily life regularly, reliably, and safely. There are five main components of transportation disadvantage with the indicators used to identity transportation disadvantaged communities summarized below:

1. **Transportation Insecurity** occurs when people are unable to get to where they need to go to meet the needs of their daily life regularly, reliably, and safely. Nationally, there are well-established policies and programs that aim to address food insecurity and housing insecurity, but not transportation insecurity. A growing body of research indicates that transportation insecurity is a significant factor in persistent poverty.
2. The **Environmental Burden** component of the index includes variables measuring factors such as pollution, hazardous facility exposure, and the built environment. These environmental burdens can have far-reaching consequences such as health disparities, negative educational outcomes, and economic hardship.
3. **Social Vulnerability** is a measure of socioeconomic indicators that have a direct impact on quality of life. This set of indicators measure lack of employment, educational attainment, poverty, housing tenure, access to broadband, and housing cost burden as well as identifying household characteristics such as age, disability status and English proficiency.
4. The **Health Vulnerability** category assesses the increased frequency of health conditions that may result from exposure to air, noise, and water pollution, as well as lifestyle factors such as poor walkability, car dependency, and long commute times.
5. **Climate and Disaster Risk Burden** reflects sea level rise, changes in precipitation, extreme weather, and heat which pose risks to the transportation system. These hazards may affect system performance, safety, and reliability. As a result, people may have trouble getting to their homes, schools, stores, and medical appointments.

Each indicator is comprised of multiple factors. Additional information can be found on the US DOT website for Equitable Transportation Community (ETC): https://www.transportation.gov/priorities/equity/justice40/etc-explorer.

For each indicator, a score was developed by normalizing and then summing indicators within each component. Census Tracts/projects areas at "0%" are considered the least disadvantaged and "100%" are the most. US DOT considers a census tract to be experiencing disadvantage if the overall index score places it in the 65 percentile (or higher) of all census tracts in the United States. The ranked Component Scores are then summed across all components to generate an Overall Score. The Transportation Insecurity component was double weighted in generating the final score. Census tracts that have an overall weighted score of 65% or higher are considered Transportation Disadvantaged.

As part of the preparation of a Regional Equity Profile, MetroPlan Orlando reviewed the US DOT data and made minor adjustments based on local data to remove a large census tract in southeast Osceola County that was skewing the results. A summary of the total transportation disadvantaged population in the MetroPlan Orlando region is provided in **Table 1**, which shows that about 25% of the regional population lives in a community considered to be transportation disadvantaged. For some crash statistics throughout the region presented in this memorandum, crash frequency and outcomes for crashes that occurred within transportation disadvantaged communities were compared to the overall regional data.

Table 1: Transportation Disadvantaged Summary Statistics – MetroPlan Orlando Region

Criteria	Total Disadvantaged Population	Total Disadvantaged Census Tracts	Total Disadvantaged area (in Acres)
MetroPlan Orlando Equitable Transportation Community (ETC) Final Rank Score	0.57M (25.2%)	103 (24.9%)	0.16M (9.6%)
Transportation Insecurity	0.78M (34.7%)	131 (31.6%)	1.27M (78%)

Source: Transportation for All; Overcoming Obstacles, Regional Equity Profile, MetroPlan Orlando; November 2023 and EquityIndex_V2 | Tableau Public

Statistical Test Methodology

To test if a certain category of crashes had a significantly higher crash rate, the crashes were normalized based on available data, such as traffic volume or centerline miles in that specific category. For example, crashes that result in someone being killed or severely injured, referred to as KSI crashes, are over-represented for roads with 6+ lanes based on the number of crashes that occurred on roads with 6+ lanes and the proportion of centerline miles for roads with 6+ lanes in the data set. Throughout the report, results that were found to be higher or lower than regional averages or disproportionately represented are highlighted in **blue**. Where applicable, a comparative analysis was made between modes (i.e., all modes versus pedestrians and bicyclists), by severity (i.e., all crashes versus KSI crashes only), or transportation disadvantaged status.

Limitations of the Data and Analysis

There are known limitations of the various datasets that are used for this analysis and the extent to which these limitations affect the overall dataset and subsequent analysis is not quantified. Some limitations include:

- **Only reported crashes** are included in the Signal 4 dataset. Some crash types may be underreported due to a variety of reasons, such as no apparent injuries, law enforcement response time, fear of law enforcement, lack of knowledge about the reporting process, lack of insurance or desire to not involve insurance, or legal status of people involved in crash.
- Potential for **incomplete or inaccurate data** within crash reports. While there are many layers of review that occur for crash reports, some information may not be correct. For example, in some instances, the reporting officer may use the GPS coordinates of where they completed the crash report, which could be a parking lot near the crash site, instead of the location of the first harmful event. Additionally, crashes involving a person in a wheelchair, or micromobility device, like an e-scooter, may be classified as pedestrian or bicyclist related, and a golf cart crash may be characterized as a motor vehicle crash as there are not fields within the crash report to denote the wide range of road users. While the details are often in the crash report, they are not available at this scale of analysis.
- **Only crashes involving a motor vehicle** are reported in the Signal 4 dataset. A crash between a bicyclist and a pedestrian or a bicyclist and a train would not be reflected in the Signal 4 dataset. As noted previously, other data sources were considered to better incorporate those crash types, but it may be difficult to compare trends with a variety of data resources that need to be compiled.
- Results are based on crash data and current attribute data from **2018-2022** and do not account for road improvements made during the study period. Locations where major safety improvements were made during that time frame may be candidates for before-and-after analysis to determine if the road improvements had any effect on crash severity, crash frequency, crash causes, and/or crash types. This type of analysis would also inform the effectiveness of road safety improvements within the study area.
- Some of the crash analyses are based on exposure by using the average annual daily traffic (AADT) volumes for motor vehicles, where available. However, pedestrian and bicyclist volumes are not readily available to adjust for exposure. Therefore, analyses reported here do not adjust for exposure rates based on volumes by modes, and results show crash density but not frequency of crashes based on how many people are walking, i.e., exposure. For example, in many communities, pedestrian crashes are more common during daylight conditions than dark conditions. This does not mean that daylight conditions are more dangerous than dark conditions. Rather, it reflects the fact that people are more likely to travel, and especially more likely to travel by walking, in light conditions than in dark conditions. Having volume by mode would provide some insight into exposure and frequency for non-motorized modes.

Crash Trends

The following sections summarize crash data from 2018 through 2022 to provide statistical trends by year, by mode and by severity. While the data presented in this memorandum is at the regional scale, there are similarities between roads in the region, such that the takeaways from the regional crash analysis can be used by local jurisdictions to help identify common crash trends.

Crashes by Year

The number of crashes by year by severity are is summarized in **Table 2** for reported crashes from 2018 through 2022 in the MetroPlan Orlando region. The severity level reflects the maximum injury severity of any crash participant and is reflected as:

- No Injury – crashes where no persons were reported to be injured. Also known as property damage only crashes.
- Injury – crashes where there is a possible injury or a non-incapacitated injury which may or may not require hospitalization.
- Serious Injury – crashes where there is an incapacitating injury, such as burns, lacerations, or broken bones that require hospitalization.
- Fatality – crash results in one or more fatalities within 30 days.

In 2018 and 2019, the total number of reported crashes was around 75,000 per year. In 2020, the number of reported crashes decreased by about 33%. This reduction in total crashes, with an increase in the percent of crashes that resulted in a fatality or sever injury was likely influenced by the COVID-19 pandemic, which led to a significant reduction in overall travel for a portion of 2020, an increase in severity for crashes that did occur as people tended to be driving faster, and an overall decrease in reporting for non-injury crashes related to social distancing.

Table 2: Crash Summary by Year – MetroPlan Orlando Region

Year	No Injury	Injury	Serious Injury	Fatality	Total
2018	53,529 (71.7%)	19,252 (25.8%)	1,651 (2.2%)	262 (0.4%)	74,694
2019	53,141 (71%)	20,008 (26.7%)	1,465 (2%)	267 (0.4%)	74,881
2020	35,972 (68.1%)	15,217 (28.8%)	1,399 (2.6%)	249 (0.5%)	52,837
2021	42,539 (67.8%)	18,314 (29.2%)	1,648 (2.6%)	280 (0.4%)	62,781
2022	43,318 (69.7%)	17,166 (27.6%)	1,321 (2.1%)	308 (0.5%)	62,113
Total	228,499 (69.8%)	89,957 (27.5%)	7,484 (2.3%)	1,366 (0.4%)	327,306

Source: Signal 4 Analytics; Notes: Includes limited access facilities

Crash summaries by facility type were also developed, as presented in **Table 3** for non-limited access facilities and in **Table 4** for limited access facilities. Limited access facilities include freeways and toll roads while non-limited access roads include surface streets that typically accommodate non-auto travel as well as transit. National data shows that the overall crash rate per million miles of vehicle travel is lower on limited access roads than on non-limited access roads because there are fewer conflicts on limited access roads, including driveways, and bicyclists and pedestrians are not allowed on limited access roads. Therefore, some data is presented for only non-limited access roads.

Table 3: Crash Summary by Year Non-Limited Access Facilities – MetroPlan Orlando Region

Year	No Injury	Injury	Serious Injury	Fatality	Total
2018	44,585 (71.4%)	16,225 (26%)	1,382 (2.2%)	215 (0.3%)	62,407
2019	44,509 (70.7%)	16,937 (26.9%)	1,244 (2%)	226 (0.4%)	62,916
2020	30,986 (68.3%)	13,001 (28.7%)	1,141 (2.5%)	211 (0.5%)	45,339
2021	36,259 (67.7%)	15,766 (29.4%)	1,318 (2.5%)	245 (0.5%)	53,588
2022	36,192 (69.3%)	14,725 (28.2%)	1,036 (2%)	255 (0.5%)	52,208
Total	192,531 (69.6%)	76,654 (27.7%)	6,121 (2.2%)	1,152 (0.4%)	276,458

Source: Signal 4 Analytics
Notes: Does not include limited access facilities

Table 4: Crash Summary by Year Limited Access Facilities Only – MetroPlan Orlando Region

Year	No Injury	Injury	Serious Injury	Fatality	Total
2018	8,944 (72.8%)	3,027 (24.6%)	269 (2.2%)	47 (0.4%)	12,287
2019	8,632 (72.1%)	3,071 (25.7%)	221 (1.8%)	41 (0.3%)	11,965
2020	4,986 (66.5%)	2,216 (29.6%)	258 (3.4%)	38 (0.5%)	7,498
2021	6,280 (68.3%)	2,548 (27.7%)	330 (3.6%)	35 (0.4%)	9,193
2022	7,126 (71.9%)	2,441 (24.6%)	285 (2.9%)	53 (0.5%)	9,905
Total	35,968 (70.7%)	13,303 (26.2%)	1,363 (2.7%)	214 (0.4%)	50,848

Source: Signal 4 Analytics
Notes: Only limited access facilities

For crashes that occurred on non-limited access roads, the number of reported crashes within or 250 feet from of the boundary of a census tract that is identified as transportation disadvantaged was summarized, as presented in **Table 5**, which shows that while only 25% of people live in transportation disadvantaged Census Tracts, almost **50% of all crashes and 54% of fatal crashes occur within or adjacent to transportation disadvantaged communities.**

Table 5: Crash Summary by Year on Non-Limited Access Roads in MetroPlan Orlando Transportation Disadvantaged Areas

Year	No Injury	Injury	Serious Injury	Fatality	Total
2018	21,904 (70.9%)	8,194 (26.5%)	677 (2.2%)	123 (0.4%)	30,898
2019	21,405 (69.2%)	8,773 (28.4%)	629 (2%)	124 (0.4%)	30,931
2020	15,432 (66.7%)	6,997 (30.2%)	603 (2.6%)	113 (0.5%)	23,145
2021	17,306 (65.7%)	8,148 (30.9%)	740 (2.8%)	146 (0.6%)	26,340
2022	16,728 (67.1%)	7,507 (30.1%)	585 (2.3%)	120 (0.5%)	24,940
Total	92,775 (68.1%)	39,619 (29.1%)	3,234 (2.4%)	626 (0.5%)	136,254
Percent of Regional Tootal	48%	52%	53%	54%	49%

Source: Signal 4 Analytics
Notes: Does not include limited access facilities

Crashes by Mode

Table 6 through **Table 9** summarize crashes by injury severity and mode for all roads, limited access roads, non-limited access roads, and roads within and adjacent to transportation disadvantaged communities. Overall, motor vehicle crashes accounted for most of the crashes with almost 97% of total crashes. This is expected as most trips in the region are typically made by motor vehicles. Motorcyclists, pedestrians, and bicyclists together account for about 3.3% of total crashes. On limited access facilities, like freeways and toll roads, people in cars and trucks were involved in 98.8% of all crashes, with pedestrians involved in 0.1% of crashes and motorcyclists involved in 1.1% of all crashes. There were no bicyclist involved crashes on limited access facilities reported during the analysis time frame.

While motor vehicle crashes accounted for the largest share of both overall crashes and KSI crashes, when vulnerable road users were involved in a crash (defined for the purposes of this memorandum as someone outside a motor vehicle, including a pedestrian, bicyclist, or motorcyclist) the risk of death or serious injury increased disproportionately. **Crashes involving vulnerable road users accounted for about 3% of overall crashes, 25% of serious injury crashes and 48% of fatal crashes** (see **Table 6**). In transportation disadvantaged communities, crashes involving pedestrians and bicyclists were even higher (**Table 9**) than for roads that are not in disadvantaged communities.

- **Pedestrians:** Pedestrians were involved in 1% of all crashes, 9% of crashes that resulted in a serious injury and 26% of crashes that resulted in a fatality (crashes involving a pedestrian where the pedestrian was unharmed or experienced minor injuries are underreported). **In transportation disadvantaged communities, pedestrians were involved in 35% of fatal crashes.** Pedestrians were also involved in 18 fatal crashes on limited access facilities. Most of these people were hit while on the side of the road with a disabled vehicle. Pedestrian coded crashes typically include skateboard, scooter and other micro-mobility devices, and the hospital injury data has shown a significant increase in "pedestrian" injuries that did not involve a motor vehicle (see **Table 14**). These are most likely injuries involving solo micro-mobility users.
- **Bicyclists:** People bicycling were involved in about 0.7% of all crashes, 4% of crashes that resulted in a serious injury and 4% of crashes that resulted in a fatality (crashes involving a bicyclist where the person bicycling was unharmed or experienced minor injuries are underreported). In transportation disadvantaged communities, bicyclists were involved in 5% of fatal crashes. Hospital injury data shows that an average of 64% of bicyclist hospitalizations do not invoive a motor vehicle (Table 13).
- **Motorcyclist:** Motorcycle crashes comprised 1.4% of all crashes, 12% of crashes that resulted in a serious injury and 18% of crashes that resulted in a fatality. Approximately 12% of motorcyclist KSI crashes are single vehicle crashes.
- **Cars and Trucks:** Crashes involving cars and trucks comprised 97% of all crashes, 75% of crashes that resulted in a serious injury and 53% of crashes that resulted in a fatality.

Table 6: Crash Summary by Mode – MetroPlan Orlando Region (2018-2022)

Mode	No Injury	Injury	Serious Injury	Fatality	Total
Bicycle	380 (0.2%)	1,706 (1.9%)	**289 (3.9%)**	**52 (3.8%)**	2,427 (0.7%)
Pedestrian	409 (0.2%)	2,600 (2.9%)	**702 (9.4%)**	**352 (25.8%)**	4,063 (1.2%)
Motorcycle	992 (0.4%)	2,437 (2.7%)	**871 (11.6%)**	**245 (17.9%)**	4,545 (1.4%)
Motor vehicles (including trucks)	226,718 (99.2%)	83,214 (92.5%)	5,622 (75.1%)	717 (52.5%)	316,271 (96.6%)
Total	228,499	89,957	7,484	1,366	327,306

Source: Signal 4 Analytics
Notes: Includes limited access facilities; **Blue/Bold** indicates that crash type disproportionately results in a KSI.

Table 7: Crash Summary by Mode on Limited Access Roads in MetroPlan Orlando Region (2018-2022)

Mode	No Injury	Injury	Serious Injury	Fatality	Total
Bicycle	1 (0%)	13 (0.1%)	2 (0.1%)	0 (0%)	16 (0%)
Pedestrian	10 (0%)	27 (0.2%)	18 (1.3%)	18 (8.4%)	73 (0.1%)
Motorcycle	93 (0.3%)	290 (2.2%)	137 (10.1%)	21 (9.8%)	541 (1.1%)
Motor vehicles (including trucks)	35,864 (99.7%)	12,973 (97.5%)	1,206 (88.5%)	175 (81.8%)	50,218 (98.8%)
Total	35,968	13,303	1,363	214	50,848

Source: Signal 4 Analytics

Table 8: Crash Summary by Mode on Non-Limited Access Roads in MetroPlan Orlando Region (2018-2022)

Mode	No Injury	Injury	Serious Injury	Fatality	Total
Bicycle	379 (0.2%)	1,693 (2.2%)	287 (4.7%)	52 (4.5%)	2,411 (0.9%)
Pedestrian	399 (0.2%)	2,573 (3.4%)	684 (11.2%)	334 (29%)	3,990 (1.4%)
Motorcycle	899 (0.5%)	2,147 (2.8%)	734 (12%)	224 (19.4%)	4,004 (1.4%)
Motor vehicles (including trucks)	190,854 (99.1%)	70,241 (91.6%)	4,416 (72.1%)	542 (47%)	266,053 (96.2%)
Total	192,531	76,654	6,121	1,152	276,458

Source: Signal 4 Analytics
Notes: Does not include limited access facilities

Table 9: Crash Summary by Mode on Non-Limited Access Roads in Transportation Disadvantaged Areas in MetroPlan Orlando Region (2018-2022)

Mode	No Injury	Injury	Serious Injury	Fatality	Total
Bicycle	197 (0.2%)	853 (2.2%)	**161 (5%)**	**34 (5.4%)**	1,245 (0.9%)
Pedestrian	216 (0.2%)	1,359 (3.4%)	**433 (13.4%)**	**219 (35%)**	2,227 (1.6%)
Motorcycle	461 (0.5%)	1,094 (2.8%)	365 (11.3%)	120 (19.2%)	2,040 (1.5%)
Motor vehicles (including trucks)	91,901 (99.1%)	36,313 (91.7%)	2,275 (70.3%)	253 (40.4%)	130,742 (96%)
Total	92,775	39,619	3,234	626	136,254

Source: Signal 4 Analytics
Notes: Does not include limited access facilities; **Blue/Bold** indicates that crash type disproportionately results in a KSI as compared to non-limited access roads not in transportation disadvantaged communities.

Crashes by People Involved

The data in the prior section reflects crashes, which may involve multiple motor vehicles, people traveling by other modes, and result in numerous people in each crash being hurt, severely injured or killed. **Table 10** summaries the number of people involved crashes by injury severity by year, with **Table 11** summarizing total injuries by mode of travel. The trend shows that the number of people killed in the MetroPlan Orlando region is trending higher, with 1,465 people killed in crashes between 2018 and 2022, 9,500 people seriously injured and almost 150,000 people sustaining a moderate or minor injury. Of people who were hurt or killed on non-limited access facilities, crashes that resulted in in 52% of injuries or fatalities occurred within or adjacent to a transportation disadvantaged community. Although only 25% of the regional population lives in a transportation disadvantaged community, **65% of bicyclist fatalities and 65% of pedestrian fatalities occur in transportation disadvantaged communities (Table 12).**

Table 10: Injury Summary by Year – MetroPlan Orlando Region

Year	Injury	Serious Injury	Fatality	Total
2018	31,407 (93%)	2,084 (6.2%)	278 (0.8%)	33,769
2019	32,878 (93.8%)	1,877 (5.4%)	288 (0.8%)	35,043
2020	25,068 (92.5%)	1,769 (6.5%)	271 (1%)	27,108
2021	31,099 (92.8%)	2,106 (6.3%)	309 (0.9%)	33,514
2022	28,469 (93.5%)	1,662 (5.5%)	319 (1%)	30,450
Total	148,921 (93.1%)	9,498 (5.9%)	1,465 (0.9%)	159,884

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Table 11: Total Injuries by Mode of Travel – MetroPlan Orlando Region (2018-2022)

Mode	Injury	Serious Injury	Fatality	Total
Bicycle	1,788 (1.2%)	**293 (3.1%)**	**52 (3.5%)**	2,133 (1.3%)
Pedestrian	2,874 (1.9%)	**723 (7.6%)**	**359 (24.5%)**	3,956 (2.5%)
Motorcycle	3,119 (2.1%)	**945 (9.9%)**	**252 (17.2%)**	4,316 (2.7%)
Motor vehicles (including trucks)	141,140 (94.8%)	7,537 (79.4%)	802 (54.7%)	149,479 (93.5%)
Total	148,921	9,498	1,465	159,884

Source: Signal 4 Analytics
Notes: Includes limited access facilities; **Blue/Bold** indicates that crash type disproportionately results in a KSI.

Table 12: Percent of Total Injuries by Mode of Travel in Transportation Disadvantaged Communities – MetroPlan Orlando Region

Mode	Injury	Serious Injury	Fatality	Total
Bicycle	51%	56%	65%	52%
Pedestrian	54%	63%	65%	57%
Motorcycle	51%	51%	53%	51%
Motor vehicles (including trucks)	52%	51%	47%	52%
Total	52%	52%	54%	52%

Source: Signal 4 Analytics
Notes: Does not include limited access facilities; when limited access facilities are included, the percent of vehicle occupants who are injured or killed decreases from 52% to 51%, and the percent of pedestrians who are injured or killed decreases from 57% to 56% largely due to the amount of through travel on limited access facilities. Approximately 25% of the region's population lives in a transportation disadvantaged community.

Railroad Incidents (not involving a motor vehicle)

Data related to trespasser incidents between trains and bicyclists or pedestrians was obtained from the FDOT modal office for the period between October 2018 and March 2023. The data includes incidents that resulted in a fatality or severe injury, as well as near-misses. As mentioned previously, crash data at railroad crossings involving motor vehicles is included in the Signal 4 crash database, but incidents that do not involve motor vehicles are not reported to Signal 4. A full summary of the incidents by location is provided as **Attachment A,** with a summary of key findings presented below reflective of incidents between people walking or biking and trains operated by SunRail, CSX or Amtrak.

- 27 incidents that resulted in a serious injury or death and 55 near-misses that did not result in an injury were reported between October 2018 and March 2023, including:
    - 8 Injuries, with 2 suicide attempts
    - 19 fatalities, with 11 confirmed or apparent suicides
    - 55 near-misses that did not result in an injury

- Of the 27 KSI incidents, 9 (33%) occurred at a grade crossing and 18 (67%) occurred outside of a crossing area; of the near-miss incidents, 21 (38%) occurred at a crossing and 34 (62%) occurred outside of a crossing.
- Of the KSI incidents, 18 (67%) people were standing, sitting, kneeling, or lying on the railroad tracks, 4 (15%) were walking along the railroad tracks, 2 (7%) were walking across the railroad tracks, and the action was unknown in 3 (11%) of the incidents. Of the near-miss incidents, 22 (40%) people were standing, sitting, kneeling, or lying on the railroad tracks, 14 (25%) were walking along the railroad tracks, 14 (25%) were walking across the railroad tracks, and the action was unknown in 3 (9%) of the incidents.
- Frequency and type of railroad incidents by community:
    - 11 KSI and 22 near-misses in Orlando
    - 3 KSI and 8 near-misses in Winter Park
    - 3 KSI and 5 near-misses in unincorporated Osceola County
    - 3 KSI and 8 near-misses in Kissimmee
    - 2 KSI in Edgewood
    - 2 KSI and 2 near-misses in Longwood
    - 1 KSI and 4 near-misses in unincorporated Orange County
    - 1 KSI in Altamonte Springs
    - 1 KSI and 1 near-miss in Maitland
    - 5 near-misses in Sanford
    - 2 near-misses in Lake Mary

Bicycle and Pedestrian Emergency Room Admission

Data from the Florida Injury Surveillance System (FISS) includes deaths, emergency room visits and hospitalizations for people who were injured while walking and biking, as well as information for people who were injured or killed while walking or bicycling when a motor vehicle was not involved, as summarized in **Table 13** for bicyclist and **Table 14** for pedestrians. These tables show hospital data for Emergency Room (ER) visits, hospitalizations, and fatalities. Data from Law Enforcement (LE) is also shown for comparison purposes. Pedestrian hospitalization data may also include people using electric-scooters (e-scooter) and other mobility devices.

Table 13: Bicyclists Hospitalizations 2011 – 2021 – MetroPlan Orlando Region

Year	LE Fatal Bike Crash	Hospital Reported Fatalities Motor Vehicle Involved	Hospital Reported Fatalities Non Motor Vehicle Involved	LE Incapacitating Bike Crashes	Hospitalizations: Motor Vehicle	Hospitalizations: Non Motor Vehicle	ER: Motor Vehicle	ER: Non Motor Vehicle
2011	12	11	3	53	57	140	376	1,736
2012	11	20	0	70	63	156	393	1,692
2013	15	13	3	91	54	151	458	1,636
2014	13	12	2	127	48	141	379	1729
2015	18	14	4	160	56	137	535	1,533
2016	11	5	0	118	70	102	777	1,042
2017	13	10	5	83	72	82	791	1,323
2018	14	13	3	91	96	100	652	1,354
2019	12	13	3	66	78	125	430	1,040
2020	10	14	1	78	85	144	332	934
2021	17	12	5	75	98	125	-	-
% Change 2011-13 to…								
To 2014-16	11%	-30%	0%	89%	0%	-15%	38%	-15%
To 2017-20	-3%	-15%	50%	11%	43%	-24%	35%	-31%

Source: FISS and MetroPlan Orlando

Table 14: Pedestrian Hospitalizations 2011 – 2021 – MetroPlan Orlando Region

Year	LE Fatal Ped Crash	Hospital Reported Fatalities Motor Vehicle Involved	Hospital Reported Fatalities Non Motor Vehicle Involved	LE Incapacitating Bike Ped Crashes	Hospitalizations: Motor Vehicle	Hospitalizations: Non Motor Vehicle	ER: Motor Vehicle	ER: Non Motor Vehicle
2011	62	46	4	125	141	15	606	84
2012	45	39	2	126	178	19	641	89
2013	55	37	7	160	146	18	684	73
2014	65	48	6	226	153	18	697	123
2015	64	41	4	234	121	22	640	202
2016	77	61	7	207	89	27	542	380
2017	88	70	6	156	108	30	523	434
2018	73	59	4	165	114	32	550	316
2019	89	68	8	171	136	30	429	218
2020	63	57	2	145	127	21	257	133
2021	81	85	6	176	178	29	-	-
% Change 2011-13 to…								
To 2014-16	27%	23%	31%	62%	-22%	29%	-3%	187%
to 2017-20	45%	56%	15%	16%	-22%	63%	-32%	236%

Source: FISS and MetroPlan Orlando

Some key findings include:

- About 64%of bicyclist hospital admissions (over 100 per year) do not involve a motor vehicle.
- There are about 3 bicyclist fatalities per year that do not involve a motor vehicle.
- Non-motor-vehicle pedestrian admissions have nearly doubled over the past decade from about 15 to 30 per year, with the increase corresponding to the increase in e-scooter use (and similar devices). The biggest increases in both admissions and ER visits for pedestrians without motor vehicles are in Orange County, which has the most e-scooter use, especially in Downtown Orlando and near UCF. ER visits in Orange County increased by 370% from 2011-13 to 2017-19.
- A drop in the percent of non-motor vehicle bicyclist admissions and ER visits during the same time periods could indicate a shift from bicycling to scootering.

Additional details related to bicycling and pedestrian hospital visits have been requested from local hospitals, but at the time this report was prepared, the data was not provided.

Crashes by Type

Table 15 summarizes the crashes based on the recorded crash type for all crashes where a crash type is known and **Table 16** summarizes the contributing action of the first driver for the crash categories that disproportionately result in KSIs. Following the table, a definition of each crash type is provided with a summary of key takeaways. This information can be used to identify appropriate strategies to implement at high crash locations that reduce the frequency and severity of crashes.

Table 15: Crash Summary by Type – MetroPlan Orlando Region (2018-2022)

Crash Type	No Injury	Injury	Serious Injury	Fatality	Total	Percent of Total Crashes	Percent of KSI
Angle	10,754	7,173	549	67	18,543	5.7%	**7.0%**
Animal	610	118	9	0	737	0.2%	0.1%
Backed Into	9,267	699	21	2	9,989	3.1%	0.3%
Bicycle	380	1706	289	52	2427	0.7%	**3.9%**
Head On	1,746	1,244	211	93	3,294	1.0%	**3.4%**
Left Entering	9,715	8,632	853	129	19,329	5.9%	**11.1%**
Left Leaving	4,460	3,138	292	48	7,938	2.4%	3.8%
Left Rear	4,517	2,460	171	23	7,171	2.2%	2.2%
Off Road	17,268	6,934	1,010	227	25,439	7.8%	**14.0%**
Opposing Sideswipe	1,737	462	33	2	2,234	0.7%	0.4%
Other	8,266	2,874	260	47	11,447	3.5%	3.5%
Parked vehicle	16,288	1,382	130	26	17,826	5.4%	1.8%
Pedestrian	409	2,600	702	352	4,063	1.2%	**11.9%**
Rear End	89,393	38,494	1,802	121	129,810	39.7%	**21.7%**
Right/Left	694	99	3	0	796	0.2%	0.0%
Right/ Through	3,556	1,190	85	4	4,835	1.5%	1.0%
Right/U-Turn	139	28	0	0	167	0.1%	0.0%
Rollover	942	973	171	40	2,126	0.6%	**2.4%**
Same Direction Sideswipe	37,221	5,281	324	19	42,845	13.1%	3.9%
Solo vehicle–Cars/Trucks	5,355	2420	347	73	8,195	2.5%	**4.7%**
Solo vehicle–Motorcycle	38	372	121	14	545	0.2%	**1.5%**
Unknown	5,744	1,678	101	27	7,550	2.3%	1.4%
Grand Total	228,499	89,957	7,484	1,366	327,306	100%	100%

Source: Signal 4 Analytics; Notes: Includes limited access facilities; **Blue/Bold** indicates that crash type disproportionately results in a KSI or has a high share of KSI.

Table 16: KSI Crash Summary by Contributing Action of First Driver – MetroPlan Orlando Region[1&2]

Crash Type	Angle	Bicycle	Head On	Left Turn	Off Road	Pedestrian	Rear End	Right Turn
Disregarded Other Road Markings	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Disregarded Other Traffic Sign	0.5%	0.3%	0.0%	0.1%	0.2%	0.0%	0.1%	0.0%
Drove Too Fast for Conditions	0.7%	0.0%	2.0%	0.0%	5.5%	0.2%	0.9%	0.0%
Exceeded Posted Speed	0.5%	0.0%	1.0%	1.0%	2.1%	1.0%	0.5%	0.0%
Failed to Keep in Proper Lane	1.0%	1.7%	**23.8%**	0.5%	**13.8%**	1.5%	1.5%	0.0%
Failed to Yield Right-of-Way	**28.4%**	**24.4%**	3.0%	**61.0%**	0.3%	11.8%	1.4%	**62.2%**
Followed Too Closely	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	5.3%	0.0%
Improper Backing	0.0%	0.3%	0.0%	0.0%	0.2%	1.7%	0.0%	0.0%
Improper Passing	0.2%	1.4%	6.4%	0.5%	0.2%	0.4%	0.6%	1.1%
Improper Turn	1.9%	0.7%	0.7%	3.0%	0.6%	0.2%	0.3%	8.9%
No Contributing Action[2]	7.6%	**52.6%**	4.4%	6.0%	8.6%	**65.6%**	3.3%	4.4%
Operated MV in Careless or Negligent Manner	9.5%	8.6%	**21.8%**	5.9%	**42.2%**	9.4%	**77.7%**	1.1%
Operated MV in Erratic, Reckless or Aggressive Manner	1.7%	0.0%	1.0%	0.3%	1.9%	0.8%	1.0%	1.1%
Other Contributing Action	6.1%	6.9%	5.0%	7.1%	**13.7%**	6.0%	6.6%	5.6%
Over-Correcting/ Over-Steering	0.0%	0.3%	0.0%	0.0%	0.8%	0.1%	0.0%	0.0%
Ran Off Road	0.0%	0.0%	1.3%	0.0%	**7.7%**	0.4%	0.1%	0.0%
Ran Red Light	**23.5%**	0.0%	1.3%	9.7%	0.1%	0.0%	0.3%	5.6%
Ran Stop Sign	**17.6%**	2.1%	0.7%	4.6%	0.5%	0.3%	0.2%	10.0%
Swerved or Avoided	0.0%	0.0%	0.3%	0.0%	1.2%	0.6%	0.3%	0.0%
Wrong Side or Wrong Way	0.7%	0.7%	**27.2%**	0.3%	0.2%	0.0%	0.0%	0.0%

Source: Signal 4 Analytics

Notes: 1. Includes limited access facilities; **Blue/Bold** indicates that contributing action is involved in a disproportionate number of KSI crashes.

2. The data in this table reflects the contributing action of Driver 1. Typically, Driver #1 is the at-fault party, but not always. In some instances where a person driving hits a pedestrian or cyclist, and the reporting officer determined the pedestrian or bicyclist was at-fault, the crash report will note "No Contributing Action" for Driver 1.

Angle crashes are when two motor vehicles traveling perpendicularly collide, such as a person driving across an intersection colliding with a motor vehicle traveling on the intersecting street. Some angle crashes may be referred to as a T-bone crash. This crash type reflects 5.7% of all crashes and 7% of KSI crashes – crashes where someone is seriously injured or killed. The top contributing factors in KSI angle on crashes are failure to yield the right-of-way (28%), running a red light (24%), running a stop sign (18%) and operating the motor vehicle in a careless or negligent manner (10%). 7% of motorcyclist KSIs and 11% of motorist KSIs are angle-crash related.

Animal involves an animal, which could range from a small animal such as a cat or dog, that would be unlikely to cause significant injury to heavier animals, such as deer or bears. Overall, animals are involved in 0.2% of all crashes and 0.1% of KSI crashes.

Backed into involves a driver backing into another road user. This crash type reflects 3.1% of all crashes and 0.3% of KSI crashes. The low proportion of these crashes resulting in KSI is likely due to the slow speed at which most people back-up.

Bicycle crashes involve someone bicycling and another motorized road user, typically someone in a motor vehicle, but sometimes a motorcycle. Crashes between two people bicycling are not included in the dataset. This crash type reflects 0.7% of all crashes and **3.9% of KSI crashes**. When people bicycling are involved in a crash, they are more likely to be seriously injured or killed. The top motorist contributing factors in KSI bicycle involved crashes are failure to yield right-of-way (24%) and operating the motor vehicle in a careless or negligent manner (9%). For 53% of bicyclist involved KSI crashes, no contributing action is noted for the motor vehicle driver, indicating that the person bicycling likely failed to yield the right-of-way in those crashes.

Head-on crashes occur when two motor vehicles traveling in the opposite direction collide head-on. This crash type reflects 1.0% of all crashes and **3.4% of KSI crashes**. The top contributing factors in KSI head on crashes are wrong-way driving (27%), failure to keep in proper lane (24%) and operating the motor vehicle in a careless or negligent manner (21%). Head-on crashes account for about 5% of motor vehicle KSI crashes.

Left-turn crashes are categorized as **left entering (Figure 1),** which are crashes that occur when a motor vehicle turning left collides with a through motor vehicle in the opposite direction of travel with both motor vehicles traveling on the same road in opposite directions prior to the crash, **left leaving (Figure 2),** which are crashes that occur when a motor vehicle turning left collides with a through motor vehicle on the other road, and **left rear (Figure 3)**, which are crashes that occur when one motor vehicle is making a left turn onto the same street as an approaching through motor vehicle. Overall, left-turn related crashes comprise about 11% of all crashes and **17% of KSI crashes**, with the left-entering crash type being the most prevalent. The top contributing factors in KSI left turn related crashes are failure to yield the right-of-way (61%) and running the red light or stop sign (15%). **30% of motorcyclist KSIs and 25% of motorist KSIs are left-turn related.**

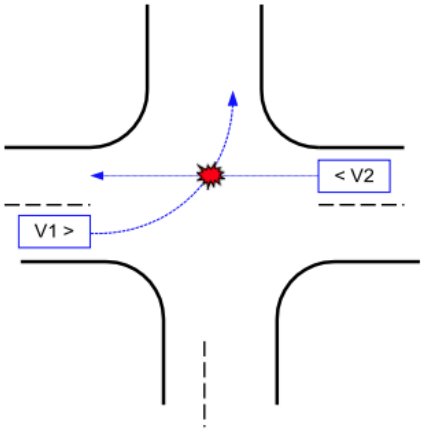


Figure 1: Left Entering Crash Type

Off-road crashes, also known as road departures, occur when the motor vehicle leaves the roadway. This crash type reflects 7.8% of all crashes and **14% of KSI crashes**. The top contributing factors in KSI off-road crashes are operating the motor vehicle in a careless or negligent manner (42%) and failure to keep in proper lane (14%).

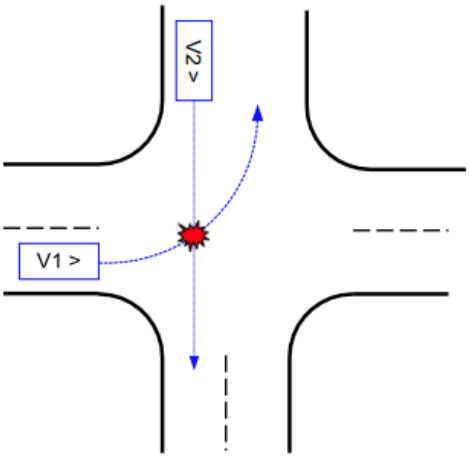
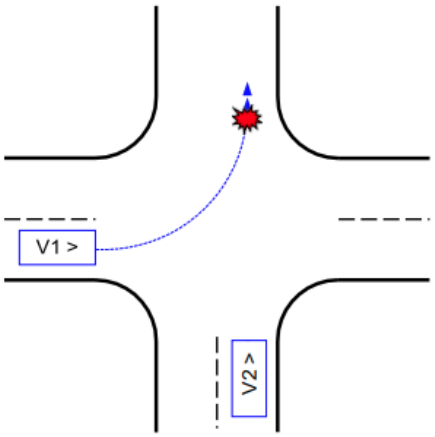


Figure 2: Left Leaving Crash Type

Sideswipe crashes can occur between motor vehicles traveling in the same or opposite direction and involve an impact between the sides of the motor vehicles with no significant involvement of the front or rear of the motor vehicle. The impact then swipes along the surface of the motor vehicle parallel to the direction of travel. Opposite direction sideswipe crashes represent about 0.7% of total crashes, and 0.4% of KSI crashes. Same direction sideswipe crashes represent about 13.1% of total crashes, and 3.9% of KSI crashes. About 4% of motor vehicle KSI and 5% of motorcyclist KSIs are related to sideswipes. The top contributing factors in KSI sideswipe crashes are failure to keep in proper lane (25%) and operating the motor vehicle in a careless or negligent manner (22%).



Parked motor vehicle crashes occur when a motor vehicle collides with a parked motor vehicle. These accounted for 5.4% of total crashes and 1.8% of KSI crashes.

Pedestrian related crashes occur between a person walking and a motor vehicle driver, including motorcyclists. This crash type reflects 1.2% of all crashes and **11.9% of KSI crashes**. No contributing action by a driver is noted in 66% of KSI pedestrian crashes (likely meaning that the pedestrian failed to yield the right-of-way to the person driving), with a person driving failing to yield the right-of-way a contributing factor in 11.8% of KSI crashes. Operating a motor vehicle in a careless or negligent manner is a contributing factor in 9.4% of pedestrian KSI crashes. **71% of pedestrian KSI crashes are not at an intersection (Table 52).**

Rear-end crashes occur when a motor vehicle crashes into the motor vehicle in front of it. This crash type reflects 39.6% of all crashes and **21.7% of KSI crashes**. Rear-end crashes are the most common crash type in the region. 78% of rear-end KSI crashes are caused by people operating the motor vehicle in a careless or negligent manner, including driver inattention or distraction. Following too closely was a contributing action in 5.3% of rear-end KSI crashes. **16% of motorcyclist KSIs and 24% of motorist KSIs are rear-end related** which could involve a motorcyclist running into the back of a motor vehicle or a motor vehicle running into the back of a motorcyclist.

Right-turn crashes include **right/left** crashes where a right-turning and left-turning motor vehicle were entering the same road in the same direction; **right/through** when a right-turning motor vehicle turns in front of a motor vehicle traveling through, with both motor vehicles traveling in the same direction after then respective maneuvers; **right/U-turn**, when a motor vehicle is turning right at the same time a motor vehicle is making a U-turn into the same lane. Overall, right-turn related crashes comprise about 1.8% of all crashes and 1% of KSI crashes, with the right-through crash type being the most prevalent. The top contributing factors in KSI right-turn related crashes are failure to yield the right-of-way (62%), running a red light or stop sign (15%), or improper turning (6%).

Rollover crashes occur when a motor vehicle tips on its side or roof during a crash. Depending on the force of the crash, a motor vehicle may roll just once, or it may roll multiple times before coming to a stop. Rollover crashes represent about 0.6% of total crashes, and **2.4%** of KSI crashes. The top contributing factor in KSI rollover crashes is operating the motor vehicle in a careless or negligent manner (41%).

Single-motor vehicle crashes involve only one motor vehicle. Single-car and truck vehicle crashes account for about 2.5% of total crashes and **4.7% of KSI crashes.** Single-motorcyclist crashes account for about 0.2% of total crashes and **1.5% of KSI crashes,** 10% of motorcyclist KSI are single-vehicle crashes.

Time of Day

Crashes by time of day are summarized as percentages by the travel mode in **Table 17** for all crashes and **Table 18** for KSI crashes. Overall, crashes are most likely to occur between 3 and 6 PM, as that period typically reflects the busiest time on our roads. While crashes involving vulnerable road users are also high during this time, crashes involving people walking and motorcycling are also prevalent from 6 to 9 PM. Crashes involving bicyclists tend to occur throughout much of the day.

Table 17: All Crash Summary by Time of Day by Mode – MetroPlan Orlando Region

Time of Day	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
12-3 AM	4%	4%	6%	6%	1%
3-6 AM	3%	3%	3%	4%	3%
6-9 AM	12%	12%	9%	14%	16%
9-Noon	14%	14%	10%	10%	16%
Noon-3 PM	19%	19%	16%	12%	19%
3-6 PM	24%	24%	21%	18%	23%
6-9 PM	16%	16%	**20%**	**23%**	14%
9-Midnight	8%	8%	**14%**	**13%**	6%

Source: Signal 4 Analytics
Notes: Does not include limited access facilities; **Bold/Blue** indicates a disproportionate number of crashes occurs for this mode during the timeframe indicated.

KSI crashes are more likely to occur between 3 PM and midnight, with the percentage/number of KSI crashes involving vulnerable road users higher than for people in cars or trucks. Approximately 25% of pedestrian KSI crashes occur between 6 and 9 PM with another 22% occurring between 9 PM and midnight. Overall KSI crashes occur more frequently between 6 PM and 6 AM, indicating that darkness can be a contributing factor, in addition to other contributing factors, including less overall travel during that time period leading to faster speeds for people driving, and less light, which can make it difficult to see hazards in and along the roadway, including disabled vehicles or pedestrians.

Table 18: KSI Crash Summary by Time of Day by Mode – MetroPlan Orlando Region

Time of Day	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
12-3 AM	9%	9%	8%	10%	4%
3-6 AM	6%	7%	3%	7%	5%
6-9 AM	12%	14%	9%	10%	15%
9-Noon	11%	13%	9%	6%	14%
Noon-3 PM	13%	14%	14%	7%	14%
3-6 PM	16%	16%	19%	10%	15%
6-9 PM	17%	15%	19%	**26%**	19%
9-Midnight	15%	13%	19%	**22%**	12%

Source: Signal 4 Analytics
Notes: Does not include limited access facilities; **Bold/Blue** indicates a disproportionate number of KSI crashes occurs for this mode during the timeframe indicated.

Day of Week

Crashes by day of week are summarized as percentages by travel mode in **Table 19** for all crashes and **Table 20** for KSI crashes. During a typical week, there are a similar number of crashes observed to occur Monday through Thursday, with Friday being slightly higher than other days. The overall number of crashes is lower on Saturday and Sunday. While crashes involving vulnerable road users are also the highest on Friday, crashes involving bicyclists tend to be higher on weekdays and lower on weekends.

Table 19: All Crash Summary by Day of Week by Mode – MetroPlan Orlando Region

Day of Week	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Monday	15%	15%	12%	15%	16%
Tuesday	15%	15%	12%	15%	16%
Wednesday	15%	15%	14%	15%	16%
Thursday	15%	15%	15%	15%	17%
Friday	17%	17%	17%	17%	16%
Saturday	12%	12%	16%	12%	11%
Sunday	10%	10%	14%	11%	8%

Source: Signal 4 Analytics
Notes: Does not include limited access facilities

Crashes that result in a severe injury or fatality are slightly more likely to occur on Friday and Saturday, except for bicyclists, which see the highest KSI crash rates on Thursdays and Saturdays. For bicyclist-involved crashes, the overall number of reported crashes involving a bicyclist is low compared to other modes so caution should be used when using this data. Alcohol may be a contributing factor in the slightly higher KSI crashes on Friday and Saturday as alcohol involved crashes are more likely to occur on a Friday or Saturday (see **Table 25**).

Table 20: KSI Crash Summary by Day of Week by Mode – MetroPlan Orlando Region

Day of Week	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Monday	14%	14%	12%	12%	16%
Tuesday	14%	14%	12%	15%	14%
Wednesday	14%	14%	13%	15%	13%
Thursday	14%	14%	15%	15%	17%
Friday	15%	15%	16%	16%	13%
Saturday	16%	15%	17%	15%	17%
Sunday	13%	13%	15%	12%	10%

Source: Signal 4 Analytics
Notes: Does not include limited access facilities

Contextual Analysis

This section provides additional information related to road user behavior, the environmental conditions and the roadway conditions to provide additional context about why crashes are occuring.

Behavioral Factors

This section provides an overview of behavioral factors that contribute to crashes, including alcohol and drug impairment, aggressive aggressively, speeding, and occupant protection.

Alcohol Impairment

Table 21 summarizes crashes caused by alcohol impairment. These crashes include both when the alcohol level was reported as over the legal limit as well as when alcohol use was listed as a contributing crash factor in the crash report. Most crashes (98.5%) did not include an alcohol impaired driver. **Although only 1.5% of crashes involved alcohol impairment, alcohol involved crashes account for 3% of crashes where someone was seriously injured and 21% of fatal crashes in the region.**

Table 21: Crash Summary by Alcohol Impairment – MetroPlan Orlando Region

Alcohol Involved	No Injury	Injury	Serious Injury	Fatality	Total
Yes	2,569 (1.1%)	1,741 (1.9%)	**229 (3.1%)**	**282 (20.6%)**	4,821 (1.5%)
No	225,930 (98.9%)	88,216 (98.1%)	7,255 (96.9%)	1,084 (79.4%)	322,485 (98.5%)
Total	228,499	89,957	7,484	1,366	327,306

Source: Signal 4 Analytics
Notes: Includes limited access facilities, **Blue/Bold** indicates that behavioral factor disproportionately results in a KSI.

While the percent of crashes involving alcohol is slightly more likely to occur on non-limited access roads than on the road network overall, the percent of those crashes resulting in a fatality is slightly less than on the overall network, likely due to a slightly lower speed (**Table 22**). Alcohol is a factor in about 1.4% of all crashes and 15.7% of fatal crashes in transportation disadvantaged communities, a slightly lower rate than the regional average (**Table 23**). Of crashes on non-limited access roads, **51% of serious injury (95 of 187) and 44% of fatal crashes (98 of 224) involving alcohol** occur in transportation disadvantaged communities.

Table 22: Crash Summary by Alcohol Impairment on Non-Limited Access Facilities – MetroPlan Orlando Region

Alcohol Involved	No Injury	Injury	Serious Injury	Fatality	Total
Yes	2,338 (1.2%)	1,541 (2%)	**187 (3.1%)**	**224 (19.4%)**	4,290 (1.6%)
No	190,193 (98.8%)	75,113 (98%)	5,934 (96.9%)	928 (80.6%)	272,168 (98.4%)
Total	192,531	76,654	6,121	1,152	276,458

Source: Signal 4 Analytics
Notes: Does not include limited access facilities.

Table 23: Crash Summary by Alcohol Impairment on Non-Limited Access Facilities in Transportation Disadvantaged Communities – MetroPlan Orlando Region

Alcohol Involved	No Injury	Injury	Serious Injury	Fatality	Total
Yes	1,064 (1.1%)	703 (1.8%)	95 (2.9%)	98 (15.7%)	1,960 (1.4%)
No	91,711 (98.9%)	38,916 (98.2%)	3,139 (97.1%)	528 (84.3%)	134,294 (98.6%)
Total	92,775	39,619	3,234	626	136,254

Source: Signal 4 Analytics
Notes: Does not include limited access facilities.

Crashes that involve alcohol are significantly more likely to result in a serious injury or fatality, as shown in **Table 24,** which shows that about 6% of alcohol involved crashes resulted in a fatality, as compared to 0.4% of all crashes (see Table 2).

Table 24: Alcohol Involved Crashes by Severity by Year – MetroPlan Orlando Region

Year	No Injury	Injury	Serious Injury	Fatality	Total
2018	606 (55.6%)	365 (33.5%)	60 (5.5%)	58 (5.3%)	1,089
2019	582 (53.3%)	407 (37.3%)	46 (4.2%)	57 (5.2%)	1,092
2020	401 (49.6%)	324 (40.1%)	30 (3.7%)	53 (6.6%)	808
2021	507 (54.3%)	320 (34.3%)	49 (5.3%)	57 (6.1%)	933
2022	473 (52.6%)	325 (36.2%)	44 (4.9%)	57 (6.3%)	899
Total	2,569 (53.3%)	1,741 (36.1%)	229 (4.8%)	282 (5.8%)	4,821

Source: Signal 4 Analytics
Notes: Includes limited access facilities

As shown in **Table 25**, alcohol involved crashes are more likely to occur on a Friday or Saturday, and as shown in **Table 26**, are more likely to occur late in the evening or early morning hours.

Table 25: Alcohol Involved Crashes by Day of Week– MetroPlan Orlando Region

Day of Week	All Crashes	All KSI Crashes	All Crashes Involving Alcohol	KSI Crashes Involving Alcohol
Monday	15%	14%	11%	13%
Tuesday	15%	14%	8%	6%
Wednesday	15%	14%	10%	10%
Thursday	15%	14%	11%	10%
Friday	17%	15%	16%	17%
Saturday	12%	16%	21%	**23%**
Sunday	10%	13%	22%	**21%**

Source: Signal 4 Analytics
Notes: Does not include limited access facilities or parking lots, **Blue/Bold** indicates that behavioral factor disproportionately results in crashes and KSI crashes during these days of week.

Table 26: Alcohol Involved Crashes by Time of Day – MetroPlan Orlando Region

Day of Week	All Crashes	All Crashes KSI Crashes	All Crashes Involving Alcohol	All KSI Crashes Involving Alcohol
12-3 AM	9%	4%	**26%**	**29%**
3-6 AM	6%	3%	11%	**16%**
6-9 AM	12%	12%	4%	4%
9-Noon	11%	14%	2%	5%
Noon-3 PM	13%	19%	6%	8%
3-6 PM	16%	24%	10%	16%
6-9 PM	17%	16%	19%	16%
9-Midnight	15%	8%	**23%**	**19%**

Source: Signal 4 Analytics
Notes: Does not include limited access facilities or parking lots, **Blue/Bold** indicates that behavioral factor disproportionately results in crashes and KSI crashes during these time periods.

Drug Impairment

Table 21 summarizes crashes caused by drug impairment. Drugs can include illegal drugs, as well as prescription drugs. This finding is made when a drug test of a driver is positive, or a driver refused a test after being suspected of a drug impairment. Most crashes (99.5%) did not include a drug impaired driver. **Despite about 0.5% of crashes involving drug impairment, drug impaired crashes account for 16% of crashes where someone was killed in the region.**

Table 27: Crash Summary by Drug Impairment – MetroPlan Orlando Region

Drug Impaired Driver?	No Injury	Injury	Serious Injury	Fatality	Total
Yes	690 (0.3%)	506 (0.6%)	86 (1.1%)	**212 (15.5%)**	1,494 (0.5%)
No	227,809 (99.7%)	89,451 (99.4%)	7,398 (98.9%)	**1,154 (84.5%)**	325,812 (99.5%)
Total	228,499	89,957	7,484	1,366	327,306

Source: Signal 4 Analytics
Notes: Includes limited access facilities

The percent of crashes involving drugs on non-limited access roads is similar to the regional average, the percent of those crashes resulting in a fatality is slightly less than on the overall network, likely due to a slightly lower speed (**Table 28**). Drugs are a factor in about 0.4% of all crashes and 14.4% of fatal crashes in transportation disadvantaged communities, a slightly lower rate than the regional average (**Table 23**). Of crashes on non-limited access roads, **43% of serious injury (30 of 70) and 53% of fatal crashes (90 of 169) involving drugs** occur in transportation disadvantaged communities.

Table 28: Crash Summary by Drug Impairment on Non-Limited Access Facilities – MetroPlan Orlando Region

Drug Impaired Driver?	No Injury	Injury	Serious Injury	Fatality	Total
Yes	610 (0.3%)	435 (0.6%)	70 (1.1%)	169 (14.7%)	1,284 (0.5%)
No	191,921 (99.7%)	76,219 (99.4%)	6051 (98.9%)	983 (85.3%)	275,174 (99.5%)
Total	192,531	76,654	6,121	1,152	276,458

Source: Signal 4 Analytics
Notes: Does not include limited access facilities.

Table 29: Crash Summary by Drug Impairment on Non-Limited Access Facilities in Transportation Disadvantaged Communities – MetroPlan Orlando Region

Drug Impaired Driver?	No Injury	Injury	Serious Injury	Fatality	Total
Yes	281 (0.3%)	179 (0.5%)	30 (0.9%)	90 (14.4%)	580 (0.4%)
No	92,494 (99.7%)	39,440 (99.5%)	3,204 (99.1%)	536 (85.6%)	135,674 (99.6%)
Total	92,775	39,619	3,234	626	136,254

Source: Signal 4 Analytics
Notes: Does not include limited access facilities.

Crashes that involve drug impairment are significantly more likely to result in a serious injury or fatality, as shown in **Table 30,** which shows that about **14% of drug involved crashes results in a fatality, as compared to 0.4% of all crashes** (see Table 2).

Table 30: Drug Impaired Driver Involved Crashes by Severity by Year – MetroPlan Orlando Region

Year	No Injury	Injury	Serious Injury	Fatality	Total
2018	179 (50.6%)	114 (32.2%)	17 (4.8%)	44 (12.4%)	354
2019	172 (49%)	104 (29.6%)	17 (4.8%)	58 (16.5%)	351
2020	109 (41.8%)	103 (39.5%)	16 (6.1%)	33 (12.6%)	261
2021	138 (45.7%)	108 (35.8%)	14 (4.6%)	42 (13.9%)	302
2022	92 (40.7%)	77 (34.1%)	22 (9.7%)	35 (15.5%)	226
Total	690 (46.2%)	506 (33.9%)	86 (5.8%)	212 (14.2%)	1,494

Source: Signal 4 Analytics
Notes: Includes limited access facilities

When both drugs and alcohol are factors in a crash, a serious injury or fatality is more likely to occur, as shown in **Table 31.**

Table 31: Alcohol and Drug Involved Crashes by Severity by Year – MetroPlan Orlando Region

Year	No Injury	Injury	Serious Injury	Fatality	Total
2018	75 (41.7%)	64 (35.6%)	12 (6.7%)	29 (16.1%)	180
2019	70 (41.9%)	56 (33.5%)	7 (4.2%)	34 (20.4%)	167
2020	41 (35%)	51 (43.6%)	8 (6.8%)	17 (14.5%)	117
2021	54 (40.3%)	51 (38.1%)	9 (6.7%)	20 (14.9%)	134
2022	38 (36.2%)	38 (36.2%)	12 (11.4%)	17 (16.2%)	105
Total	278 (39.5%)	260 (37%)	48 (6.8%)	117 (16.6%)	703

Source: Signal 4 Analytics
Notes: Includes limited access facilities

A comparison of crash outcomes when alcohol or drugs, or when both alcohol and drugs are involved is presented in **Figure 4**, which shows when alcohol or drugs are involved, a crash is more likely to result in an injury or fatality. When someone is under the influence of drugs or alcohol, their reaction time is slower than when not under the influence, contributing to worsening crash outcomes with drug and alcohol use.

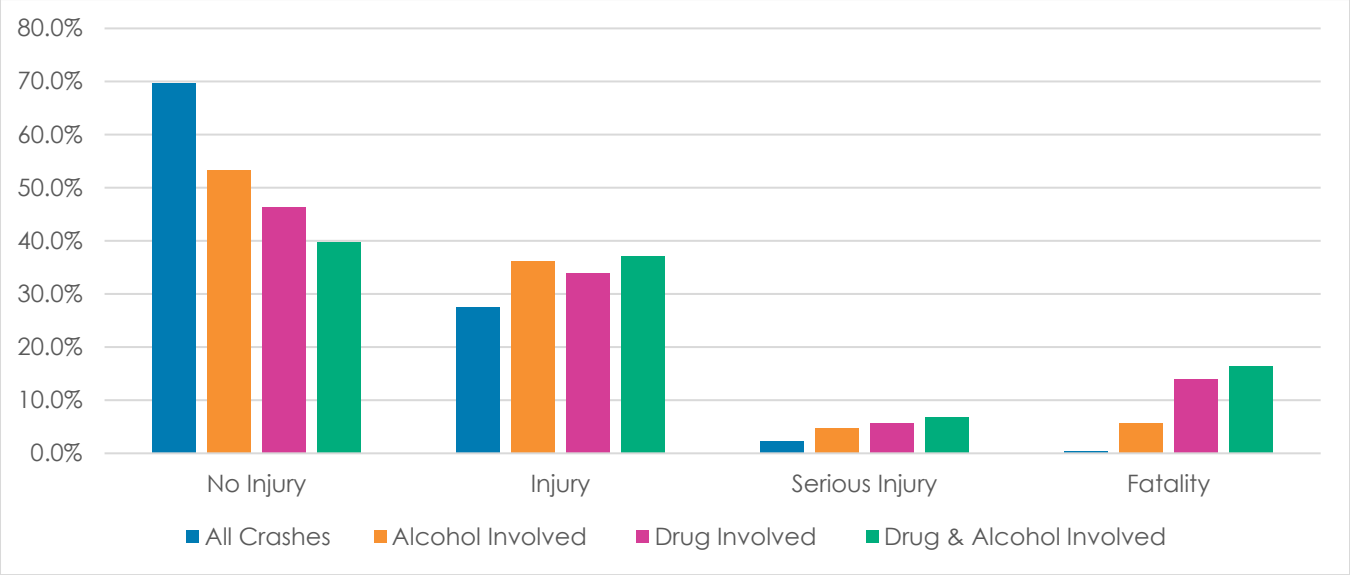


Figure 4: Drug and Alcohol Crash Severity Comparison

Speeding

Table 32 summarizes crashes where either exceeding the speed limit or driving too fast for the conditions was noted in the crash report. The approximately 6,000 crashes where speeding was noted as a factor made up about 1.8% of all crashes; however, **3.1% of the crashes listed as**

speeding-related resulted in a serious injury and 8% resulted in a fatality. As it can be difficult to prove speeding, the number of KSI crashes attributed to speeding is likely an undercount.

Table 32: Crash Summary by Reported Speeding – MetroPlan Orlando Region

Speeding?	No Injury	Injury	Serious Injury	Fatality	Total
Yes	3,616 (1.6%)	2,100 (2.3%)	230 (3.1%)	**109 (8%)**	6,055 (1.8%)
No	224,883 (98.4%)	87,857 (97.7%)	7,254 (96.9%)	1,257 (92%)	321,251 (98.2%)
Total	228,499	89,957	7,484	1,366	327,306

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Of crashes that involve speeding, they tend to be more fatal for people outside of vehicles. Of speeding crashes, 15% result in the fatality of a pedestrian and 25% result in the fatality of a motorcyclist, as presented in **Table 33**.

Table 33: Crash by Mode with Reported Speeding Non-Limited Access Roads – MetroPlan Orlando Region

Mode	No Injury	Injury	Serious Injury	Fatality	Total
Bicycle	0 (0%)	4 (0.3%)	0 (0%)	2 (2.1%)	6 (0.1%)
Pedestrian	17 (0.7%)	12 (0.8%)	7 (4.5%)	14 (14.9%)	50 (1.2%)
Motorcycle	14 (0.6%)	75 (5.3%)	43 (27.7%)	23 (24.5%)	155 (3.9%)
Motor Vehicles (including trucks)	2,321 (98.7%)	1,333 (93.6%)	105 (67.7%)	55 (58.5%)	3,814 (94.8%)
Total	2,352	1,424	155	94	4,025

Source: Signal 4 Analytics
Notes: Does not include limited access facilities

Crashes by Age

A crash analysis of speeding and impaired drivers by age was conducted, with the results presented in **Figure 5** and **Figure 6**. Consistent with statewide and national data, younger drivers are more likely to be involved in speeding related and impaired crashes.

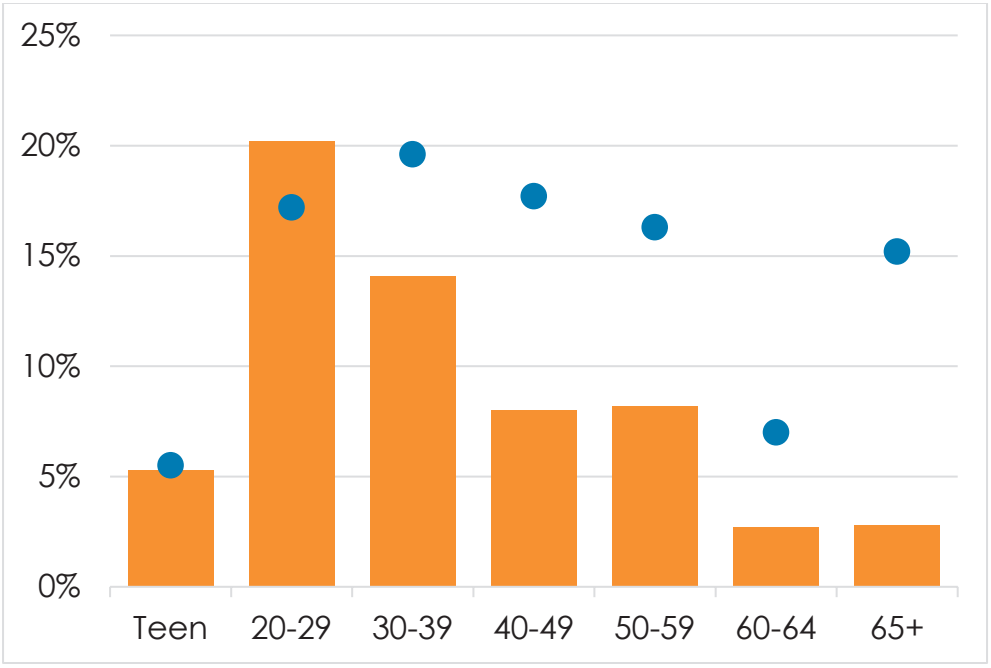


Figure 5: Speeding Related KSI Crashes by Age

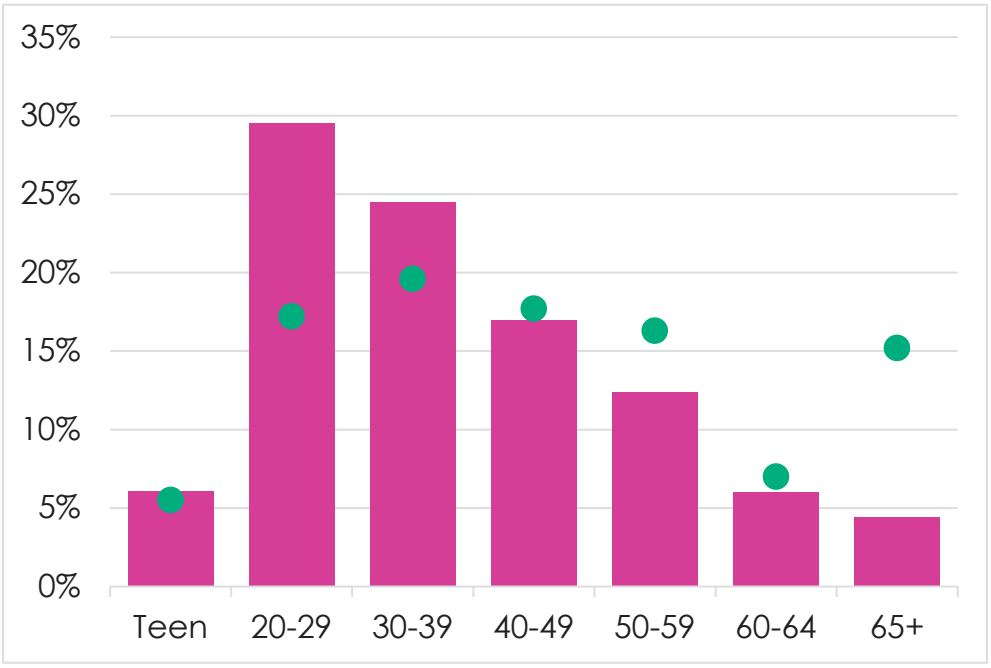


Figure 6: Impaired KSI Crashes by Age

Crashes that involve an aging driver (defined as a driver 65 or older) or teen driver are summarized in **Table 34** through **Table 37.** Aging drivers comprise about 15.2% of licensed drivers (from Florida Department of Highway Safety and Motor Vehicles Licensed Drivers by County, January 1, 2022).

in the region and are involved in about 14.4% of all crashes and 13.9% of KSI crashes. Aging drivers are less likely to be involved in a crash involving a vulnerable road user. Although the aging driver crash rates are proportional to the percentage of licensed drivers, it is likely that some people in the aging driver cohort maintain a license but do not drive frequently.

Table 34: All Crash Summary Aging Drivers by Mode – MetroPlan Orlando Region

Aging Driver?	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Yes	47,023 (14.4%)	45,767 (14.5%)	531 (11.7%)	447 (11%)	278 (11.5%)
No	280,283 (85.6%)	270,504 (85.5%)	4014 (88.3%)	3,616 (89%)	2,149 (88.5%)
Total	327,306	316,271	4,545	4,063	2,427

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Table 35: KSI Crash Summary Aging Drivers by Mode – MetroPlan Orlando Region

Aging Driver?	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Yes	1,233 (13.9%)	987 (15.6%)	128 (11.5%)	84 (8%)	34 (10%)
No	7,617 (86.1%)	5352 (84.4%)	988 (88.5%)	970 (92%)	307 (90%)
Total	8,850	6,339	1,116	1,054	341

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Teens comprise about 5.5% of licensed drivers in the region and are involved in 12.5% of all crashes and 10.8% of KSI crashes. Like aging drivers, they are more likely to be involved in a motor vehicle-to-motor vehicle crash than one with vulnerable road users. The inexperience of teen drivers is a large factor in their disproportionate representation in crashes.

Table 36: All Crash Summary Teen Drivers by Mode – MetroPlan Orlando Region

Teen Driver?	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Yes	40,931 (12.5%)	40,219 (12.7%)	411 (9%)	182 (4.5%)	119 (4.9%)
No	286,375 (87.5%)	276,052 (87.3%)	4,134 (91%)	3,881 (95.5%)	2,308 (95.1%)
Total	327,306	316,271	4,545	4,063	2,427

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Table 37: KSI Crash Summary Teen Drivers by Mode – MetroPlan Orlando Region

Teen Driver?	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Yes	953 (10.8%)	799 (12.6%)	85 (7.6%)	46 (4.4%)	23 (6.7%)
No	7,897 (89.2%)	5,540 (87.4%)	1,031 (92.4%)	1,008 (95.6%)	318 (93.3%)
Total	8,850	6,339	1,116	1,054	341

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Teen drivers and aging drivers were also less likely to be involved in crashes and KSI crashes on limited access facilities, potentially indicating a preference for travel on lower speed roadways.

Aggressive Driving

Table 38 summarizes crashes where aggressive driving was noted in the crash report. The approximately 8,700 crashes that involved aggressive driving comprise about 3% of all crashes; however, 5% of the crashes listed as aggressive driving related resulted in a serious injury and 10% resulted in a fatality.

Table 38: Crash Summary by Reported Aggressive Driving – MetroPlan Orlando Region

Aggressive Driving?	No Injury	Injury	Serious Injury	Fatality	Total
Yes	5,243 (2.3%)	3,026 (3.4%)	342 (4.6%)	139 (10.2%)	8,750 (2.7%)
No	223,256 (98.2%)	86,931 (97%)	7,142 (95.5%)	1,227 (89.8%)	318,556 (97.3%)
Total	228,499	89,957	7,484	1,366	327,306

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Distracted Driving

Table 39 summarizes crashes where distracted driving was noted in the crash report. The approximately 83,000 crashes that involved distracted driving comprise about 25 % of all crashes; however, 30% of the crashes listed as distracted-driving related resulted in a serious injury and 18% resulted in a fatality.

Table 39: Crash Summary by Reported Distracted Driving – MetroPlan Orlando Region

Distracted Driving ?	No Injury	Injury	Serious Injury	Fatality	Total
Yes	51,924 (22.7%)	28,514 (31.7%)	2,295 (30.7%)	243 (17.8%)	82,976 (25.4%)
No	176,575 (77.3%)	61,443 (68.3%)	5,189 (69.3%)	1,123 (82.2%)	244,330 (74.6%)
Total	228,499	89,957	7,484	1,366	327,306

Source: Signal 4 Analytics
Notes: Includes limited access facilities

It should also be noted that multiple behavioral factors can collectively contribute to the occurrence of crashes. For example, a person driving under the influence of drugs may also be distracted and/or driving aggressively.

Occupant Protection: Seatbelts & Helmets

A crash summary by use of occupant protection is provided in **Table 40** for people in motor vehicles (seatbelts) and in **Table 41** for motorcyclists (helmet use). In all motor vehicle crashes, 98.3% of occupants were wearing a seatbelt. As seatbelt usage declines, more injuries occur, **with 38% of motor vehicle occupants who died in the MetroPlan Orlando region not wearing a seatbelt**. 49% of motorcyclist who died were wearing a FDOT compliant helmet; **43% of motorcyclists who died where not wearing a helmet.**

Table 40: Motor vehicle Crash Summary by Reported Occupant Seatbelt Use– MetroPlan Orlando Region

Occupant Protection Used	No Injury	Injury	Serious Injury	Fatality	Total
Yes	641,445 (98.7%)	136,840 (97.3%)	6,729 (89.3%)	438 (54.6%)	785,452 (98.3%)
No	4,368 (0.7%)	2,161 (1.5%)	**521 (6.9%)**	**307 (38.3%)**	7,357 (0.9%)
Unknown	4,175 (0.6%)	1,622 (1.2%)	289 (3.8%)	57 (7.1%)	6,143 (0.8%)
Total	649,988 (100%)	140,623 (100%)	7,539 (100%)	802 (100%)	798,952

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Table 41: Motorcycle Crash Summary by Helmet Use – MetroPlan Orlando Region

Occupant Protection Used	No Injury	Injury	Serious Injury	Fatality	Total
FDOT Compliant Helmet	460 (9.8%)	1,500 (48.6%)	455 (48.3%)	124 (49%)	2,539 (28.2%)
Other Helmet	17 (0.4%)	56 (1.8%)	21 (2.2%)	11 (4.3%)	105 (1.2%)
No Helmet	1,140 (24.2%)	826 (26.8%)	**324 (34.4%)**	**109 (43.1%)**	2,399 (26.7%)
Unknown	3,093 (65.7%)	705 (22.8%)	143 (15.2%)	9 (3.6%)	3,950 (43.9%)
Total	4,710 (100%)	3,087 (100%)	943 (100%)	253 (100%)	8,993 (100%)

Source: Signal 4 Analytics
Notes: Includes limited access facilities

For crashes that resulted in a fatality or serious injury, the responding officer likely made the determination of seatbelt and helmet use. For crashes with lower levels of severity, people involved in crashes may have self-reported wearing a seatbelt or helmet when they were not. For motorcyclist involved crashes, reporting of helmet use appears to decline with no injury or minor injury crashes.

Hit and Run

A hit and run crash is defined as the act of causing a traffic crash and failing to remain at the scene of the crash afterwards. Of all the reported crashes in the region, about 14% are classified as a hit and run, with that percentage increasing for crashes involving pedestrians and bicyclists, as shown in **Table 42**. Approximately 20% of pedestrian KSI and 19% of bicyclist KSIs are classified as a hit and run, as shown in **Table 43**. Hit and run crashes that occur in transportation disadvantaged communities are shown in **Table 44. Pedestrian and bicyclists hit and run crashes are more likely to occur in a disadvantaged community than in other places, with approximately 72% of pedestrian hit and run KSIs and 70% of bicyclist hit and run KSIs occurring in transportation disadvantaged communities; only 25% of the population lives in a transportation disadvantaged community.**

Table 42: All Crash Summary Hit and Run by Mode – MetroPlan Orlando Region

Hit & Run?	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Yes	45,394 (13.9%)	43,588 (13.8%)	488 (10.7%)	**896 (22.1%)**	**422 (17.4%)**
No	281,912 (86.1%)	272,683 (86.2%)	4,057 (89.3%)	3,167 (77.9%)	2,005 (82.6%)
Total	327,306	316,271	4,545	4,063	2,427

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Table 43: KSI Crash Summary Hit and Run by Mode – MetroPlan Orlando Region

Hit & Run?	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Yes	783 (8.8%)	454 (7.2%)	59 (5.3%)	**206 (19.5%)**	**64 (18.8%)**
No	8,067 (91.2%)	5,885 (92.8%)	1,057 (94.7%)	848 (80.5%)	277 (81.2%)
Total	8,850	6339	1116	1054	341

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Table 44: KSI Crash Summary Hit and Run by Mode in Transportation Disadvantaged Communities – MetroPlan Orlando Region

Hit & Run?	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Yes	**448 (11.6%)**	228 (9%)	27 (5.6%)	**148 (22.7%)**	**45 (23.1%)**
No	3,412 (88.4%)	2,300 (91%)	458 (94.4%)	504 (77.3%)	150 (76.9%)
Total	3,860	2,528	485	652	195

Source: Signal 4 Analytics
Notes: Does not include limited access facilities

Commercial Motor Vehicle

Commercial motor vehicles include those with a gross motor vehicle weight greater than 26,001 pounds or that have three or more axles regardless of weight. Of all the reported crashes in the region, about 6% involve a commercial motor vehicle **(Table 45)**, with about 6% of KSI crashes involving a commercial motor vehicle. People in motor vehicles were more likely to be involved in fatal and severe injury crashes that involve a commercial motor vehicle, as shown in **Table 46**. KSI crashes involving commercial vehicles are less likely to occur in transportation disadvantaged communities, although motorcycle and bicycle involved KSI crashes with commercial vehicles are slightly overrepresented in transportation disadvantaged communities, as shown in **Table 47**.

Table 45: All Crash Summary Commercial Motor Vehicle by Mode – MetroPlan Orlando Region

Commercial Motor vehicle Involved?	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Yes	20,377 (6.2%)	20,151 (6.4%)	95 (2.1%)	91 (2.2%)	40 (1.6%)
No	306,929 (93.8%)	296,120 (93.6%)	4,450 (97.9%)	3,972 (97.8%)	2,387 (98.4%)
Total	327,306	316,271	4,545	4,063	2,427

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Table 46: KSI Crash Summary Commercial Motor Vehicle by Mode – MetroPlan Orlando Region

Commercial Motor vehicle Involved?	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Yes	530 (6%)	456 (7.2%)	28 (2.5%)	34 (3.2%)	12 (3.5%)
No	8,320 (94%)	5883 (92.8%)	1088 (97.5%)	1020 (96.8%)	329 (96.5%)
Total	8,850	6,339	1,116	1,054	341

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Table 47: KSI Crash Summary Commercial Motor Vehicle by Mode in Transportation Disadvantaged Communities – MetroPlan Orlando Region

Commercial Motor vehicle Involved?	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Yes	184 (4.8%)	145 (5.7%)	16 (3.3%)	13 (2%)	10 (5.1%)
No	3676 (95.2%)	2383 (94.3%)	469 (96.7%)	639 (98%)	185 (94.9%)
Total	3,860	2,528	485	652	195

Source: Signal 4 Analytics
Notes: Does not include limited access facilities

Environmental Factors

Crash outcomes were also evaluated based on environmental factors, such as road conditions and lighting conditions.

Road Surface Condition

Table 48 summarizes crash outcomes by road surface conditions. Overall, all crashes, including KSI crashes, were more likely to occur on dry roads than other road conditions. This finding is similar for disadvantaged communities.

Table 48: Crash Summary by Road Surface Condition – MetroPlan Orlando Region

Road Surface Condition	No Injury	Injury	Serious Injury	Fatality	Total
Dry	198,872 (87%)	78,102 (86.8%)	6,580 (87.9%)	1,212 (88.7%)	284,766 (87%)
Ice/Frost	7 (0%)	3 (0%)	(0%)	(0%)	10 (0%)
Mud, Dirt, Gravel	102 (0%)	19 (0%)	2 (0%)	2 (0.1%)	125 (0%)
Oil	9 (0%)	10 (0%)	(0%)	(0%)	19 (0%)
Other	67 (0%)	19 (0%)	5 (0.1%)	5 (0.4%)	96 (0%)
Sand	15 (0%)	4 (0%)	(0%)	(0%)	19 (0%)
Unknown	589 (0.3%)	48 (0.1%)	11 (0.1%)	1 (0.1%)	649 (0.2%)
Water (standing/ moving)	44 (0%)	19 (0%)	(0%)	1 (0.1%)	64 (0%)
Wet	28,794 (12.6%)	11,733 (13%)	886 (11.8%)	145 (10.6%)	41,558 (12.7%)
Total	228,499	89,957	7,484	1,366	327,306

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Lighting Condition

Table 49 summarizes crashes by reported lighting condition for all modes of travel. While most crashes occur during daylight hours, crashes that occur under dark conditions, either lighted or unlighted, are more likely to result in a serious injury or a fatality. As shown in **Table 50,** crashes involving a person walking, bicycling, or motorcycling are more likely to occur at night than crashes involving only people in motor vehicles. Crashes in transportation disadvantaged communities are also more likely to occur at night than in non-transportation disadvantaged communities, as shown in **Table 51.**

Table 49: Crash Summary by Lighting Conditions – MetroPlan Orlando Region

Lighting Condition	No Injury	Injury	Serious Injury	Fatality	Total
Dark - Lighted	42,745 (18.7%)	19,665 (21.9%)	2,151 (28.7%)	**556 (40.7%)**	65,117 (19.9%)
Dark - Not Lighted	8,173 (3.6%)	4,179 (4.6%)	647 (8.6%)	**267 (19.5%)**	13,266 (4.1%)
Dark - Unknown Lighting	585 (0.3%)	206 (0.2%)	6 (0.1%)	2 (0.1%)	799 (0.2%)
Dawn	3,861 (1.7%)	1602 (1.8%)	148 (2%)	44 (3.2%)	5,655 (1.7%)
Daylight	164,995 (72.2%)	60,996 (67.8%)	4,272 (57.1%)	455 (33.3%)	230,718 (70.5%)
Dusk	7,315 (3.2%)	3,258 (3.6%)	250 (3.3%)	37 (2.7%)	10,860 (3.3%)
Other	115 (0.1%)	17 (0%)	4 (0.1%)	5 (0.4%)	141 (0%)
Unknown	710 (0.3%)	34 (0%)	6 (0.1%)	(0%)	750 (0.2%)
Total	228,499 (69.8%)	89,957 (27.5%)	7,484 (2.3%)	1,366 (0.4%)	327,306

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Table 50: Crash Summary by Lighting Conditions – Pedestrians, Bicyclists and Motorcyclists – MetroPlan Orlando Region

Lighting Condition	No Injury	Injury	Serious Injury	Fatality	Total
Dark – Lighted	381 (21.4%)	1,413 (21%)	598 (32.1%)	**292 (45%)**	2,684 (24.3%)
Dark – Not Lighted	78 (4.4%)	403 (6%)	194 (10.4%)	**146 (22.5%)**	821 (7.4%)
Dark – Unknown Lighting	3 (0.2%)	18 (0.3%)	3 (0.2%)	1 (0.2%)	25 (0.2%)
Dawn	29 (1.6%)	146 (2.2%)	30 (1.6%)	27 (4.2%)	232 (2.1%)
Daylight	1,223 (68.7%)	4,495 (66.7%)	963 (51.7%)	160 (24.7%)	6,841 (62%)
Dusk	62 (3.5%)	260 (3.9%)	70 (3.8%)	20 (3.1%)	412 (3.7%)
Other	1 (0.1%)	3 (0%)	1 (0.1%)	3 (0.5%)	8 (0.1%)
Unknown	4 (0.2%)	5 (0.1%)	3 (0.2%)	0 (0%)	12 (0.1%)
Total	1,781 (16.1%)	6,743 (61.1%)	1,862 (16.9%)	649 (5.9%)	11,035

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Table 51: Crash Summary by Lighting Conditions in Transportation Disadvantaged Communities – MetroPlan Orlando Region

Lighting Condition	No Injury	Injury	Serious Injury	Fatality	Total
Dark – Lighted	18,516 (20%)	8,864 (22.4%)	1,021 (31.6%)	**293 (46.8%)**	28,694 (21.1%)
Dark – Not Lighted	2,683 (2.9%)	1,443 (3.6%)	233 (7.2%)	106 (16.9%)	4,465 (3.3%)
Dark – Unknown Lighting	255 (0.3%)	95 (0.2%)	4 (0.1%)	1 (0.2%)	355 (0.3%)
Dawn	1,493 (1.6%)	644 (1.6%)	49 (1.5%)	16 (2.6%)	2,202 (1.6%)
Daylight	66,622 (71.8%)	27,126 (68.5%)	1,821 (56.3%)	197 (31.5%)	95,766 (70.3%)
Dusk	2,920 (3.1%)	1,424 (3.6%)	103 (3.2%)	11 (1.8%)	4,458 (3.3%)
Other	42 (0%)	7 (0%)	1 (0%)	2 (0.3%)	52 (0%)
Unknown	244 (0.3%)	16 (0%)	2 (0.1%)	(0%)	262 (0.2%)
Total	92,775 (68.1%)	39,619 (29.1%)	3,234 (2.4%)	626 (0.5%)	136,254

Source: Signal 4 Analytics
Notes: Does not include limited access facilities

Road Factors

This section of the report provides crash information by characteristics of the road, such as the crash location (intersection or segment), number of lanes, speed limit, and type of road. This section focuses on crashes that occurred on the surface road system, and as such, limited access and toll facilities are excluded from this analysis.

Crash Location (Intersection vs Segment)

At a high-level, a crash location can either be at an intersection (or within the intersection influence area) or along a road segment. As summarized in **Table 52**, about 25% of all crashes occurred at an intersection, with crashes occurring at intersections disproportionately resulting in a serious injury or fatality, as shown in **Table 53.** About 70% of pedestrian involved crashes occur at non-intersection locations, with 73% of pedestrian crashes that result in serious injury or fatality occurring at a non-intersection location. The percent of pedestrian KSI crashes at non-intersection locations is slightly higher in transportation disadvantaged communities (**Table 55**).

Table 52: All Crash Summary by Location by Mode – MetroPlan Orlando Region

Location	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Intersection	82,062 (25.1%)	78,455 (24.8%)	1,292 (28.4%)	1,211 (29.8%)	1,104 (45.5%)
Segment	245,244 (74.9%)	237,816 (75.2%)	3,253 (71.6%)	2,852 (70.2%)	1,323 (54.5%)
Total	327,306	316,271	4,545	4,063	2,427

Source: Signal 4 Analytics
Notes: Includes limited access facilities

Table 53: KSI Crash Summary by Location by Mode – MetroPlan Orlando Region

Location	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Intersection	2,860 (39.3%)	2,059 (41.5%)	391 (40.8%)	272 (26.7%)	138 (40.7%)
Segment	4,413 (60.7%)	2,899 (58.5%)	567 (59.2%)	746 (73.3%)	201 (59.3%)
Total	7,273	4,958	958	1,018	339

Source: Signal 4 Analytics
Notes: Does not include limited access facilities

Table 54: KSI Crash Summary by Location by Mode in Transportation Disadvantaged Communities – MetroPlan Orlando Region

Location	All Crashes	Motor vehicles	Motorcyclist	Pedestrians	Bicyclists
Intersection	1,537 (39.8%)	1,108 (43.8%)	188 (38.8%)	158 (24.2%)	83 (42.6%)
Segment	2,323 (60.2%)	1,420 (56.2%)	297 (61.2%)	494 (75.8%)	112 (57.4%)
Total	3,860	2,528	485	652	195

Source: Signal 4 Analytics
Notes: Does not include limited access facilities

Posted Speed Limit

The number of reported crashes by the speed limit of the road where the crash occurred is summarized in **Table 55**, and compared to the miles of road in the analysis area with that posted speed limit. Crashes disproportionately occur on roads with higher speeds **– roads with a posted speed limit 40 miles per hour or greater represent about 13% of the total centerline miles in the region, and account for 63% of all crashes and 72.4% of KSI crashes**, as shown in **Table 56**.

Table 55: All Crash Summary by Posted Speed Limit by Mode – MetroPlan Orlando Region

Mode	25 or less	30 35	40 45	50 55	60+	Total
% of Centerline miles with Posted Speed Limit	79.4%	7.2%	8.8%	3.0%	1.5%	100%
Motor vehicles	408 (8.5%)	861 (17.9%)	**2,788 (58%)**	**654 (13.6%)**	99 (2.1%)	250,381
Motorcyclist	93 (9.9%)	185 (19.6%)	**527 (55.8%)**	**127 (13.5%)**	12 (1.3%)	3,893
Pedestrian	97 (10.4%)	174 (18.6%)	**555 (59.3%)**	**109 (11.6%)**	1 (0.1%)	3,385
Bicyclist	43 (13.2%)	71 (21.8%)	**178 (54.8%)**	**31 (9.5%)**	2 (0.6%)	2,302
All modes combined	34,262 (13.2%)	63,078 (24.3%)	**137,537 (52.9%)**	**24,131 (9.3%)**	953 (0.4%)	259,961

Source: Signal 4 Analytics
Notes: Does not include limited access facilities; Total crashes does not sum to total non-limited access crashes as presented in Table 3 as posted speed limit data is not readily available for all roadways.

Table 56: KSI Crash Summary by Posted Speed Limit by Mode – MetroPlan Orlando Region

Mode	25 or less	30 35	40 45	50 55	60+	Total
% of Centerline miles with Posted Speed Limit	79.4%	7.2%	8.8%	3.0%	1.5%	100%
Motor vehicles	32,797 (13.1%)	60,872 (24.3%)	**132,490 (52.9%)**	**23,310 (9.3%)**	912 (0.4%)	4,810
Motorcyclist	479 (12.3%)	847 (21.8%)	**2,116 (54.4%)**	**417 (10.7%)**	34 (0.9%)	944
Pedestrian	610 (18%)	808 (23.9%)	**1713 (50.6%)**	**252 (7.4%)**	2 (0.1%)	936
Bicyclist	376 (16.3%)	551 (23.9%)	**1,218 (52.9%)**	**152 (6.6%)**	5 (0.2%)	325
All modes combined	641 (9.1%)	1,291 (18.4%)	**4,048 (57.7%)**	**921 (13.1%)**	114 (1.6%)	7,015

Source: Signal 4 Analytics
Notes: Does not include limited access facilities; Total KSI crashes does not sum to total non-limited access crashes as presented in Table 3 as posted speed limit data is not readily available for all roadways.

Number of Travel Lanes

The number of reported crashes by the number of travel lanes on the road where the crash occurred is summarized in **Table 57**, and compared to the centerline miles of road in the analysis area with that number of lanes. KSI Crashes disproportionately occur on roads with more lanes, as shown in **Table 58.** For example, 4 lane roadways are about 6.5% of all roadways and where 39% of all crashes and 41% of KSI crashes occur. Crash outcomes by number of lanes are closely correlated with crashes by speed as multilane roads tend to have higher speed limits and higher operating speeds than 2-lane roads.

Table 57: All Crash Summary by Number of Travel Lanes by Mode – MetroPlan Orlando Region

Mode	2	4	6+	Total
% of Centerline miles with number of lanes	91.8%	6.5%	1.7%	100%
Motor vehicles	87213 (34.8%)	**96,320 (38.5%)**	**66,848 (26.7%)**	250,381
Motorcyclist	1401 (36%)	**1,565 (40.2%)**	**927 (23.8%)**	3,893
Pedestrian	1239 (36.6%)	**1,225 (36.2%)**	**921 (27.2%)**	3,385
Bicyclist	842 (36.6%)	**910 (39.5%)**	**550 (23.9%)**	2,302
All modes combined	90695 (34.9%)	**100,020 (38.5%)**	**69,246 (26.6%)**	259,961

Source: Signal 4 Analytics
Notes: Does not include limited access facilities; Total crashes does not sum to total non-limited access crashes as presented in Table 3 as number of travel lane data is not readily available for all roadways.

Table 58: KSI Crash Summary by Number of Travel Lanes by Mode – MetroPlan Orlando Region

Mode	2	4	6+	Total
% of Centerline miles with number of lanes	91.8%	6.5%	1.7%	100%
Motor vehicles	1,528 (31.8%)	**1,985 (41.3%)**	**1,297 (27%)**	4,810
Motorcyclist	330 (35%)	**391 (41.4%)**	**223 (23.6%)**	944
Pedestrian	244 (26.1%)	**347 (37.1%)**	**345 (36.9%)**	936
Bicyclist	115 (35.4%)	**133 (40.9%)**	**77 (23.7%)**	325
All modes combined	2,217 (31.6%)	**2,856 (40.7%)**	**1,942 (27.7%)**	7,015

Source: Signal 4 Analytics
Notes: Does not include limited access facilities; Total KSI crashes does not sum to total non-limited access crashes as presented in Table 3 as number of travel lane data is not readily available for all roadways.

Median Type

The number of reported crashes by the median type of the road where the crash occurred is summarized in **Table 57** for all crashes and **Table 58** for KSI crashes, and compared to the centerline miles of road in the analysis with that type of median. For roadways with no median, they are more

likely to be 2-lane, low speed roadways, where roadways with paved or grass medians are more likely to have multiple lane and posted speed limits.

Table 59: All Crash Summary by Median Type by Mode – MetroPlan Orlando Region[1]

Mode	None	Grass	Multiple[2]	Paved[3]	Other[4]	Total
% of Centerline miles	88.1%	8.3%	0.3%	3.2%	0.1%	100%
Motor vehicles	92,114 (36.8%)	77,706 (31%)	7,547 (3%)	69,936 (27.9%)	3,024 (1.2%)	250,327
Motorcyclist	1497 (38.5%)	1239 (31.8%)	109 (2.8%)	1,009 (25.9%)	39 (1%)	3,893
Pedestrian	1504 (44.4%)	910 (26.9%)	67 (2%)	869 (25.7%)	35 (1%)	3,385
Bicyclist	964 (41.9%)	692 (30.1%)	47 (2%)	563 (24.5%)	36 (1.6%)	2,302
All modes combined	96,079 (37%)	80,547 (31%)	7,770 (3%)	72,377 (27.8%)	3,134 (1.2%)	259,907

Source: Signal 4 Analytics
Notes: 1. Does not include limited access facilities; Total crashes does not sum to total non-limited access crashes as presented in Table 3 as median type data is not readily available for all roadways. 2. One some roadway segments, multiple median types are present along the length of a roadway, such as grass median on segments, transitioning to a paved median at an intersection. 3. A paved median could either concrete or asphalt and includes 1) a raised paved median, or 2) non-raised medians where road markings do not allow for automobile travel. 4. Other medians could include brick, gravel or a bridge structure.

Table 60: KSI Crash Summary by Median Type by Mode – MetroPlan Orlando Region

Mode	None	Grass	Multiple	Paved	Other	Total
% of Centerline miles	88.1%	8.3%	0.3%	3.2%	0.1%	100%
Motor vehicles	1,668 (34.7%)	1,750 (36.4%)	123 (2.6%)	1,246 (25.9%)	23 (0.5%)	4,810
Motorcyclist	356 (37.7%)	309 (32.7%)	25 (2.6%)	247 (26.2%)	7 (0.7%)	944
Pedestrian	345 (36.9%)	288 (30.8%)	28 (3%)	268 (28.6%)	7 (0.7%)	936
Bicyclist	134 (41.2%)	100 (30.8%)	3 (0.9%)	84 (25.8%)	4 (1.2%)	325
All modes combined	2,503 (35.7%)	2,447 (34.9%)	179 (2.6%)	1,845 (26.3%)	41 (0.6%)	7,015

Source: Signal 4 Analytics
Notes: Does not include limited access facilities; Total KSI crashes does not sum to total non-limited access crashes as presented in Table 3 as median type data is not readily available for all roadways.

Functional Classification

The number of reported crashes by the functional classification of the road where the crash occurred is summarized in **Table 61**, and compared to the miles of road in the analysis with that functional classification. Crashes disproportionately occur on arterial and major collector-roads with the proportion of all crashes and KSI crashes increasing as the functional classification becomes a higher level, as shown in **Table 62**. This finding is consistent with the finding that crashes disproportionately occur on roads with a higher posted speed limit and more travel lanes.

Table 61: All Crash Summary by Functional Classification by Mode – MetroPlan Orlando Region

Mode	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local/Other	Total
% of Centerline miles with Functional Classification	4.1%	4.0%	7.2%	1.9%	82.8%	100%
Motor vehicles	91,625 (35.1%)	65,443 (25%)	50,840 (19.4%)	6,135 (2.3%)	47,366 (18.1%)	261,409
Motorcyclist	1,456 (36.7%)	996 (25.1%)	796 (20.1%)	98 (2.5%)	617 (15.6%)	3,963
Pedestrian	1,225 (35.5%)	800 (23.2%)	674 (19.5%)	89 (2.6%)	667 (19.3%)	3,455
Bicyclist	753 (32.5%)	583 (25.2%)	501 (21.6%)	98 (4.2%)	382 (16.5%)	2,317
All modes combined	**95,059 (35.1%)**	**67,822 (25%)**	**52,811 (19.5%)**	6,420 (2.4%)	49,032 (18.1%)	271,144

Source: Signal 4 Analytics
Notes: Does not include limited access facilities; Total crashes does not sum to total non-limited access crashes as presented in Table 3 as functional classification data is not readily available for all roadways.

Table 62: KSI Crash Summary by Functional Classification by Mode – MetroPlan Orlando Region

Mode	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local/Other	Total
% of Centerline miles with Functional Classification	4.1%	4.0%	7.2%	1.9%	82.8%	100%
Motor vehicles	**1,688 (34.5%)**	**1,439 (29.4%)**	1018 (20.8%)	117 (2.4%)	631 (12.9%)	4,893
Motorcyclist	**349 (36.7%)**	**255 (26.8%)**	198 (20.8%)	30 (3.2%)	118 (12.4%)	950
Pedestrian	**428 (45.2%)**	**234 (24.7%)**	152 (16.1%)	22 (2.3%)	111 (11.7%)	947
Bicyclist	**112 (34.3%)**	**74 (22.6%)**	75 (22.9%)	12 (3.7%)	54 (16.5%)	327
All modes combined	**2,577 (36.2%)**	**2,002 (28.1%)**	**1,443 (20.3%)**	181 (2.5%)	914 (12.8%)	7,117

Source: Signal 4 Analytics
Notes: Does not include limited access facilities; Total KSI crashes does not sum to total non-limited access crashes as presented in Table 3 as functional classification data is not readily available for all roadways.

Context Classification

All roads maintained by the Florida Department of Transportation (FDOT) have also been assigned a context classification to reflect the land use and transportation context through which the road traverses. The respective context classification is based on the roadway function as well as the surrounding land uses. A brief description of each context classification is provided below. For more information, please refer to the FDOT Context Classification Guide at

https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/roadway/completestreets/files/fdot-context-classification.pdf.

- **C1 – Natural:** Lands preserved in a natural or wilderness condition, including lands unsuitable for settlement due to natural conditions. Design speed ranges from 55-70 mph.
- **C2 – Rural:** Sparsely settled lands; may include agricultural land, grassland, woodland, and wetlands. Design speed ranges from 55-70 mph.
- **C2T – Rural Town:** Small concentrations of developed areas immediately surrounded by rural and natural areas; includes many historic towns. Design speed ranges from 25-45 mph.
- **C3R – Suburban Residential:** Mostly residential uses within large blocks and a disconnected or sparse roadway network. Design speed ranges from 35-55 mph.
- **C3C – Suburban Commercial:** Mostly non-residential uses with large building footprints and large parking lots within large blocks and a disconnected or sparse roadway network. Design speed ranges from 35-55 mph.
- **C4 – Urban General:** Mix of uses set within small blocks with a well-connected roadway network. May extend long distances. The roadway network usually connects to residential neighborhoods immediately along the corridor or behind the uses fronting the roadway. Design speed ranges from 30-45 mph.
- **C5 – Urban Center:** Mix of uses set within small blocks with a well-connected roadway network. Typically concentrated around a few blocks and identified as part of a civic or economic center of a community, town, or city. Design speed ranges from 25-35 mph.
- **C6 – Urban Core:** Areas with the highest densities and building heights, and within FDOT classified Large Urbanized Areas (population >1,000,000). Many are regional centers and destinations. Buildings have mixed uses, are built up to the roadway, and are within a well-connected roadway network. Design speed ranges from 25-30 mph.

For FDOT roads where a context classification has been assigned, the number of reported crashes by context classification is summarized in **Table 63**. Crashes disproportionately occur on Suburban Commercial Corridors (C3C) as these are roads that typically carry large volumes of motor vehicle traffic, provide direct access to land uses, serve transit, and accommodate people walking and bicycling. The percent of KSI crashes for people walking, bicycling, and motorcycling is also disproportionally higher on C3C roads, as shown in **Table 64**.

Table 63: All Crash Summary by Functional Classification by Mode – MetroPlan Orlando Region

Mode	C1	C2	C2T	C3C	C3R	C4	C5	C6	Total
% of Centerline miles with Context Class	1.0%	20.9%	0.2%	48.3%	16.7%	10.6%	1.0%	0.5%	100%
Motor vehicles	206 (0.2%)	2,659 (2%)	86 (0.1%)	**91804 (68.6%)**	11,416 (8.5%)	23,715 (17.7%)	2372 (1.8%)	1487 (1.1%)	133,745
Motorcyclist	8 (0.4%)	55 (2.7%)	3 (0.1%)	**1363 (65.8%)**	224 (10.8%)	354 (17.1%)	44 (2.1%)	19 (0.9%)	2,070
Pedestrian	0 (0%)	10 (0.6%)	4 (0.2%)	**1224 (68.3%)**	118 (6.6%)	375 (20.9%)	30 (1.7%)	32 (1.8%)	1,793
Bicyclist	0 (0%)	8 (0.7%)	2 (0.2%)	**803 (69.8%)**	112 (9.7%)	195 (16.9%)	12 (1%)	19 (1.7%)	1,151
All modes combined	214 (0.2%)	2,732 (2%)	95 (0.1%)	**95194 (68.6%)**	11,870 (8.6%)	24,639 (17.8%)	2,458 (1.8%)	1,557 (1.1%)	138,759

Source: Signal 4 Analytics
Notes: Only includes FDOT non-limited access roads that have been assigned a context classification.

Table 64: KSI Crash Summary by Functional Classification by Mode – MetroPlan Orlando Region

Mode	C1	C2	C2T	C3C	C3R	C4	C5	C6	Total
% of Centerline miles with Context Class	1.0%	20.9%	0.2%	48.3%	16.7%	10.6%	1.0%	0.5%	100%
Motor vehicles	2 (0.4%)	19 (3.9%)	1 (0.2%)	**315 (63.9%)**	70 (14.2%)	71 (14.4%)	12 (2.4%)	3 (0.6%)	493
Motorcyclist	0 (0%)	5 (0.9%)	0 (0%)	**419 (71.7%)**	37 (6.3%)	107 (18.3%)	9 (1.5%)	7 (1.2%)	584
Pedestrian	0 (0%)	1 (0.6%)	1 (0.6%)	**121 (75.2%)**	18 (11.2%)	20 (12.4%)	0 (0%)	0 (0%)	161
Bicyclist	17 (0.5%)	193 (5.2%)	6 (0.2%)	**2,510 (68.1%)**	445 (12.1%)	457 (12.4%)	39 (1.1%)	19 (0.5%)	3,686
All modes combined	15 (0.6%)	168 (6.9%)	4 (0.2%)	**1,655 (67.6%)**	320 (13.1%)	259 (10.6%)	18 (0.7%)	9 (0.4%)	2,448

Source: Signal 4 Analytics
Notes: Only includes FDOT non-limited access roads that have been assigned a context classification.

Traffic Volumes

The number of reported crashes by the volume of traffic on the road where the crash occurred is summarized in **Table 65** for roads where traffic volume data is available. Crashes disproportionately occur on roads with higher traffic volumes, with the proportion of KSI crashes increasing as the traffic volumes increase, as shown in **Table 66.**

Table 65: All Crash Summary by Traffic Volumes by Mode – MetroPlan Orlando Region

Mode	Less than 15,000	15,000 30,000	More than 30,000	Total
Motor vehicles	50,384 (23.5%)	70,400 (32.8%)	94,045 (43.8%)	214,829
Motorcyclist	855 (25.5%)	1,145 (34.1%)	1,354 (40.4%)	3,354
Pedestrian	683 (24.5%)	857 (30.7%)	1,251 (44.8%)	2,791
Bicyclist	534 (27.5%)	609 (31.4%)	798 (41.1%)	1,941
All modes combined	52,456 (23.5%)	73,011 (32.8%)	97,448 (43.7%)	222,915

Source: Signal 4 Analytics
Notes: Does not include limited access facilities; Total crashes does not sum to total non-limited access crashes as presented in Table 3 as traffic count data is not readily available for all roadways.

Table 66: KSI Crash Summary by Traffic Volume by Mode – MetroPlan Orlando Region

Mode	Less than 15,000	15,000 30,000	More than 30,000	Total
Motor vehicles	1,055 (24.7%)	1,477 (34.5%)	1,746 (40.8%)	4,278
Motorcyclist	229 (27.3%)	298 (35.5%)	312 (37.2%)	839
Pedestrian	149 (17.8%)	260 (31.1%)	427 (51.1%)	836
Bicyclist	72 (26.2%)	85 (30.9%)	118 (42.9%)	275
All modes combined	1,505 (24.2%)	2,120 (34%)	2,603 (41.8%)	6,228

Source: Signal 4 Analytics
Notes: Does not include limited access facilities; Total KSI crashes does not sum to total non-limited access crashes as presented in Table 3 as functional classification data is not readily available for all roadways.

Systemic Matrices

Based on the crash type, behavior, environmental and road factors, the travel modes, and factors involved in a disproportionate number of fatal and severe injury crashes was identified, as presented in **Attachment B** for the MetroPlan Orlando region, **Attachment C** for Orange County, **Attachment D** for Osceola County and **Attachment E** for Seminole County. While similar analyses were prepared for each individual jurisdiction, the small relative sample size in many local communities can skew some of the analysis results.

For this analysis, only crashes on non-limited access facilities and where sufficient roadway information was available were included in the analysis. Parking lot crashes were also excluded, with the resulting regional analysis reflecting 260,000 crashes (94% of the total non-limited access crashes) and 7,015 KSI crashes (98% of all non-limited access KSI crashes). Therefore, some of the information presented in these tables may be slightly different than the information presented in the tables in this report due to this difference in data sets, although the overall conclusions remain the same.

Data is presented in the following tables:

- All Crash Matrix – Raw number of total crashes by each factor
- All KSI Crash Matrix – Raw number of KSI crashes by each factor
- % of All Crashes that Resulted in a KSI – Shows the percentage of overall crashes that resulted in a KSI.

- % of KSI – Shows of only KSI, what percentage of total KSIs each factor represents.
- % of Car and Truck KSI – Of KSI crashes involving only people in cars and trucks, the most prevalent factors.
- % of Motorcycle KSI – Of KSI crashes involving motorcyclists, the most prevalent factors.
- % of Pedestrian KSI – Of KSI crashes involving pedestrians, the most prevalent factors.
- % of Bicyclist KSI – Of KSI crashes involving bicyclists, the most prevalent factors.

The information is cross tabulated by the following factors:

- Crash Type
- Alcohol Related
- Hit and Run
- Aggressive Driving
- Distracted Driving
- Intersection Related
- Drug Related
- Aging Driver
- Teen Driver
- Day of Week
- Time of Day
- Lighting Condition
- Number of Lanes
- Number of Turn Lanes
- Posted Speed Limit
- Roadway Classification
- Average Annual Daily Traffic
- Context Classification
- Presence of Bike Lane or Pave Shoulder
- Presence of Sidewalks
- Median Presence

Some key findings that build on the findings presented previously include:

- Crashes involving a variety of behavioral and contextual factors are more likely to be fatal on non-limited access roadways with a posted speed limit of 40 MPH or greater, including hit and run, alcohol and drug related crashes, aging and teen drivers, and bicycle and pedestrian involved crashes. KSI crashes occur more frequently on high-speed roadways.
- The FDOT Context Classification C3C – Commercial Corridor is associated with a disproportionate number of KSI crashes for all travel modes as these roadways tend to have a high-level of multimodal activity as well as high-speeds. Left-turn, rear-end and pedestrian KSI crashes are most prevalent on this roadway type.
- While overall crash trends are similar across each of the three counties that comprise the MetroPlan Orlando region, there are some subtle differences:
    - **Hit and Run** KSI crashes as a percent of overall KSI crashes are more prevalent in **Orange County** (10.3%), as compared to the regional average (9.2%), Osceola County (6.2%) and Seminole County (5.8%)

- **Alcohol Related** KSI crashes as a percent of overall KSI crashes occur more frequently in Osceola (7.5%) and Seminole Counties (6.6%), than Orange County (5.2%) with a regional average of 5.7%.
- **Teen Driver** KSI crashes as a percent of overall KSI crashes occur at a similar rate in all counties: Orange County is 11.6%, Osceola County is 12.4% and Seminole County is 10.2%. The regional average is 11.6%.
- **Aging Driver** KSI crashes occur more frequently as a percent of overall KSI crashes in Seminole County (18.7%) with Osceola County a close second (16.4%), as compared to the regional average (14.9%) and Orange County (14.0%).
- **Pedestrian** involved KSI crashes occur more frequently as a percent of overall KSI crashes in Seminole County (17.1%), as compared to Orange County (13.4%), the regional average (13.3%), and Osceola County (10.8%).

Attachments:

Attachment A: FDOT Modal Office Crash Data

Attachment A-1: Trespasser Near Misses

Attachment A-2: Trespasser Incidents (Results in a KSI)

Attachment B: MetroPlan Orlando Regional Systemic Crash Matrix

1. All Crash Matrix
2. All KSI Crash Matrix
3. Percent of All Crashes that Resulted in a KSI
4. Percent of KSI for All Crashes
5. Percent of Car and Truck KSI
6. Percent of Motorcycle KSI
7. Percent of Pedestrian KSI
8. Percent of Bicyclist KSI

Attachment C: Orange County Systemic Crash Matrix

- Same List as Regional

Attachment D: Osceola County Systemic Crash Matrix

- Same List as Regional

Attachment E: Seminole County Systemic Crash Matrix

- Same List as Regional

Attachment A-1
Railroad Near Misses
MetroPlan Orlando Region

CFRC Trespasser Near Misses 2018 - 2023 YTD												
Date				Time	Location				Operator	Rev.?	Trespasser Action	Description of Incident / Employee or Subcontractor
Day	M	D	Y	Hr & Min	Milepost	Description	Jurisdiction	At crossing?				
Fri	4	28	2023	06:32	805.09	Near Garden St.	Osceola County	N	SunRail	Y	Standing	Pedestrian trespasser loitering in the area south of Garden St. in Osceola County. Walking around and standing on tracks.
Thu	4	27	2023	17:06	767.80	Between CR 46A and Airport Blvd.	Sanford	N	SunRail	Y	Walking Along	Homeless pedestrian trespasser walking along tracks pulling wagon just north of Airport Blvd. Stepped off tracks at last second as SunRail train approached.
Mon	4	24	2023	18:18	798.50	Between Fourth St. and Taft Vineland Rd.	Orange County	N	SunRail	Y	Walking Along	Pedestrian trespasser walking in the gauge of the tracks. Stepped off tracks at last second as SunRail train approached.
Tue	2	28	2023	20:12	800.83	Between S. Orange Ave. Overpass and E. Wetherbee Rd.	Orange County	N	SunRail	Y	Sitting	Pedestrian trespasser sitting on rail just south of the Orange Ave. overpass. Trespasser got up and walked off the tracks at the last second as SunRail train approached.
Thu	2	23	2023	16:59	788.97	Near Magnolia Ave.	Orlando	N	SunRail	Y	Walking Across	Homeless pedestrian trespasser crossing the tracks to reach a homeless encampment between Magnolia Ave. and Orange Ave. Cleared tracks before SunRail train passed.
Wed	1	11	2023	20:05	789.62	Near Concord St.	Orlando	N	SunRail	Y	Sitting	Pedestrian trespasser sitting on rail just north of Concord St. in Orlando. Trespasser got up and walked off the tracks at the last second as SunRail train approached. Trespasser said to be possibly intoxicated.
Mon	12	26	2022	16:25	809.30	Between S. Clyde Ave. and Jack Calhoun Dr.	Kissimmee	N	SunRail	Y	Walking Across	Homeless pedestrian trespasser crossing the tracks to reach a homeless encampment south of the John Young Pkwy. Overpass. Cleared tracks before SunRail train passed.
Fri	12	2	2022	08:54	791.20	Columbia St.	Orlando	N	SunRail	Y	Walking Across	Pedestrian trespasser crossing the tracks just north of the Columbia St. crossing in Orlando. Cleared tracks before SunRail train passed.
Wed	11	30	2022	07:55	777.68	E. Church Ave.	Longwood	Y	SunRail	Y	Walking Across	Pedestrian trespasser crossing the tracks on the south edge of the Church Ave. crossing in Longwood. Trespasser ignored warning lights, bells, and gates.
Fri	9	23	2022	15:39	798.50	Between Fourth St. and Taft Vineland Rd.	Orange County	N	SunRail	Y	Walking Along	Pedestrian trespasser walking in the gauge of the tracks. Stepped off tracks at last second as SunRail train approached.
Wed	8	31	2022	07:40	786.60	Near S. Denning Dr.	Winter Park	N	SunRail	Y	Standing	Pedestrian trespasser loitering in the area S. Denning Dr., Minnesota Ave., and Holt Ave. in Winter Park. Mental health issues. SunRail train applied emergency braking to avoid hitting trespasser.
Wed	6	15	2022	08:21	790.40	Near Church St.	Orlando	N	SunRail	Y	Walking Along	Pedestrian trespasser walking along tracks between the Church St. station NB platform and the South St. crossing.
Fri	6	3	2022	16:00	804.70	Near Osceola Pkwy.	Osceola County	N	SunRail	Y	Unknown	Pedestrian trespasser on tracks near the Osceola Pkwy. Overpass.
Fri	3	25	2022	12:30	791.77	Near Kaley St.	Orlando	N	SunRail	Y	Sitting	Pedestrian trespasser sitting against rail just south of the Kaley St. crossing. Trespasser scooted out of the foul at the last second.
Fri	3	18	2022	15:45	786.06	Near Fairbanks Ave.	Winter Park	N	SunRail	Y	Walking Along	Pedestrian Trespasser walking in the gauge of the tracks from Lyman Ave. towards Fairbanks Ave. in Winter Park. Trespasser stepped of tracks at the last second.
Fri	3	11	2022	20:13	786.42	Near Minnesota Ave.	Winter Park	N	SunRail	Y	Sitting	Pedestrian trespasser sitting in the gauge of the tracks just south of the Minnesota Ave. crossing. Trespasser got up and cleared the tracks before the train passed and appeared intoxicated.
Tue	12	21	2021	20:39	773.09	Lake Mary Station	Lake Mary	N	SunRail	Y	Walking Along	Pedestrian trespassers walking down the tracks towards the Lake Mary Station.
Mon	11	29	2021	15:58	788.97	Magnolia Ave.	Orlando	Y	SunRail	Y	Walking Across	Pedestrian Trespasser walking across the tracks at the Magnolia Ave. crossing in Orlando. Trespasser walked around warning gate and ignored lights and bells.

Attachment A-1
Railroad Near Misses
MetroPlan Orlando Region

CFRC Trespasser Near Misses 2018 - 2023 YTD												
Date				Time	Location				Operator	Rev.?	Trespasser Action	Description of Incident / Employee or Subcontractor
Day	M	D	Y	Hr & Min	Milepost	Description	Jurisdiction	At crossing?				
Thu	11	4	2021	07:26	789.99	Robinson St.	Orlando	Y	SunRail	Y	Standing	Pedestrian trespasser stood in front of train at the Robinson St. grade crossing in Orlando. Train stopped short of trespasser.
Tue	11	2	2021	17:27	789.81	LYNX Central Station	Orlando	Y	SunRail	Y	Walking Across	Pedestrian trespasser walked out in front of train at the LYNX Central Station north pedestrian crossing as the train was departing the station.
Thu	10	28	2021	16:46	784.70	Near N Denning Dr.	Winter Park	Y	SunRail	Y	Walking Along	Homeless pedestrian trespasser walking in the gauge of the tracks. Trespasser steeped away from tracks before train passed.
Mon	10	11	2021	18:17	789.50	Colonial Dr.	Orlando	Y	SunRail	Y	Standing	Pedestrian trespasser walked out in front of train at the Colonial Dr. crossing and then stopped and stood in front of train. Trespasser moved on at last second.
Fri	10	8	2021	08:41	766.00	Between SR 46 Overpass and McCracken Rd.	Sanford	Y	SunRail	Y	Standing	Pedestrian trespasser standing on the tracks refusing to move. Possible attempted suicide. Same individual and location from 9/21/21.
Tue	9	21	2021	07:11	766.00	Between SR 46 Overpass and McCracken Rd.	Sanford	Y	SunRail	Y	Standing	Pedestrian trespasser standing on the tracks refusing to move. Possible attempted suicide.
Tue	9	7	2021	16:38	773.09	Lake Mary Station	Lake Mary	Y	SunRail	Y	Walking Across	Pedestrian trespasser walked out in front of SunRail train entering the Lake Mary Station at the south station pedestrian crossing. Trespasser was on the phone and distracted. Upon noticing the train, the trespasser jumped backwards out of the way.
Mon	8	30	2021	19:35	807.49	Between Magnolia St. and East Oak St.	Kissimmee	N	SunRail	Y	Standing	Pedestrian trespasser attempted to lay down in front of train. Attempted suicide.
Fri	8	20	2021	18:30	790.49	Near South St.	Orlando	N	SunRail	Y	Standing	Pedestrian trespasser standing on tracks.
Tue	8	17	2021	14:27	804.60	Near Tupperware Station	Osceola County	N	SunRail	Y	Walking Along	Pedestrian trespasser walking down tracks towards the Tupperware Station.
Thu	7	29	2021	14:22	808.17	Near Monument Ave.	Kissimmee	Y	SunRail	Y	Walking Across	Pedestrian trespasser crossing at the Monument Ave. crossing in Kissimmee. Trespasser was elderly and walking at slow rate.
Thu	7	15	2021	19:48	787.99	Princeton St.	Orlando	Y	SunRail	Y	Walking Across	Pedestrian trespasser walked out in front of train at the Princeton St. crossing in Orlando. Trespasser ignored warning gate, lights, and bells.
Tue	7	13	2021	19:48	789.40	Between Marks St. and Colonial Dr.	Orlando	N	SunRail	Y	Walking Along	Homeless pedestrian trespasser walking within the foul of the tracks between Marks St. and Colonial Dr. in Orlando. Train was able to stop before contacting individual.
Tue	7	6	2021	05:45	766.00	Between SR 46 Overpass and McCracken Rd.	Sanford	N	SunRail	Y	Walking Along	Pedestrian trespasser walking down tracks near the SR 46 overpass and Amtrak auto train facility.
Wed	6	30	2021	06:35	784.10	Near Orlando Ave. Overpass	Orlando	N	SunRail	Y	Unknown	Two pedestrian trespassers fouling the tracks near the Orlando Ave. overpass.
Mon	3	22	2021	15:38	786.06	Fairbanks Ave.	Winter Park	Y	SunRail	Y	Standing	Two pedestrian trespassers reported playing chicken with a SunRail train at the Fairbanks Ave. crossing in Winter Park.
Wed	2	3	2021	18:12	786.06	Fairbanks Ave.	Winter Park	Y	SunRail	Y	Walking Along	Pedestrian trespasser jaywalking across Fairbanks Ave. at the grade crossing in front of approaching SunRail train.
Wed	11	18	2020	22:34	789.81	Near Livingston St.	Orlando	N	SunRail	Y	Standing	Pedestrian trespasser standing between the LYNX Central Station platforms on the tracks. Stood by intertrack fence as train passed.
Wed	11	11	2020	08:31	787.79	Rollins St.	Orlando	Y	SunRail	Y	Standing	Pedestrian trespasser stood in front of train at the Rollins St. grade crossing in Orlando. Trespasser moved at last second. Possible attempted suicide.

Attachment A-1
Railroad Near Misses
MetroPlan Orlando Region

CFRC Trespasser Near Misses 2018 - 2023 YTD												
Date				Time	Location				Operator	Rev.?	Trespasser Action	Description of Incident / Employee or Subcontractor
Day	M	D	Y	Hr & Min	Milepost	Description	Jurisdiction	At crossing?				
Thu	10	8	2020	21:36	809.36	Between Clyde Ave. and Pleasant Hill Rd.	Kissimmee	N	SunRail	Y	Unknown	Pedestrian trespasser reported on tracks.
Mon	5	18	2020	18:29	793.20	Between Drennen St. and Holden Ave.	Orlando	N	SunRail	Y	Sitting	Pedestrian trespasser sitting in the gauge of the tracks. SunRail train stopped and the visually intoxicated trespasser attempted to board the train.
Wed	4	22	2020	08:12	767.41	Near Country Club Rd.	Sanford	N	SunRail	Y	Walking Along	Pedestrian trespasser walking down the tracks near the Country Club Rd. grade crossing in Sanford. Train stopped and trespasser ran off.
Tue	3	10	2020	14:57	790.29	Pine St.	Orlando	Y	SunRail	Y	Standing	Pedestrian trespasser running around in circles over the Pine St. crossing in Orlando. The trespasser momentarily stopped and stood in from of the train and then ran off.
Fri	2	14	2020	17:05	787.73	Rollins St.	Orlando	Y	SunRail	Y	Walking Across	Pedestrian trespasser walked in front of train at the Rollins St. crossing in Orlando. Elderly person. Froze when observing train and backed up.
Thu	2	13	2020	17:07	800.75	Wetherbee Rd.	Orange County	Y	SunRail	Y	Riding Across	Pedestrian trespassers (Kids on bikes) rode around the warning gates and in front of a SunRail train at the Wetherbee Rd. crossing.
Wed	1	15	2020	19:35	806.50	Between Donegan Ave. and Vine St.	Osceola County	N	SunRail	Y	Sitting	Pedestrian trespassers (teenagers) sitting on tracks. Moved forward just enough to not get hit by train.
Wed	1	15	2020	16:50	792.03	Grant St.	Orlando	N	SunRail	Y	Walking Along	Pedestrian trespasser walking down tracks towards the Grant St. crossing in Orlando. Upon seeing train, the trespasser ran off the tracks towards the Target store.
Tue	1	14	2020	06:55	790.20	Near Central Blvd.	Orlando	N	SunRail	Y	Standing	Pedestrian trespasser standing in the gauge of the tracks.
Wed	1	8	2020	16:29	789.16	Near Orange Ave.	Orlando	N	SunRail	Y	Walking Along	Pedestrian trespasser walking down the tracks between the Magnolia Ave. and Orange Ave. crossings.
Sun	2	10	2019	14:24	789.48	Colonial Dr.	Orlando	Y	Amtrak	Y	Standing	Pedestrian trespasser standing in the middle of the tracks at Colonial Dr. Amtrak train was able to stop and the trespasser was very hostile towards the train crew.
Tue	1	22	2019	12:53	808.22	Near Ruby Ave.	Kissimmee	N	SunRail	Y	Laying	Pedestrian trespasser laying on tracks just north of Ruby Avenue in Kissimmee. Train was able to stop just short of trespasser.
Thu	1	10	2019	19:08	805.70	Garden St.	Osceola County	Y	SunRail	Y	Walking Across	Pedestrian trespasser walked out in front of train at the Garden St. crossing in Osceola County. Trespasser ignored warning gate, lights, and bells.
Fri	12	21	2018	13:19	782.84	Lake Ave.	Maitland	Y	SunRail	Y	Walking Across	Mobility scooter stalled or got stuck over the tracks at the Lake Ave. grade crossing. Rider got off scooter and pulled it out of the path of the train.
Thu	11	1	2018	14:50	807.80	Near Park St.	Kissimmee	N	SunRail	Y	Standing	Homeless pedestrian trespasser stood in the middle of the tracks in front of train. Camp set up beside tracks.
Wed	10	31	2018	16:20	809.00	Between Clyde Ave. and Pleasant Hill Rd.	Kissimmee	N	SunRail	Y	Walking Across	Pedestrian trespasser crossed the tracks in front of train.
Tue	10	23	2018	12:52	776.12	CR 427	Longwood	Y	SunRail	Y	Unknown	Pedestrian trespasser fouling tracks at the CR-427 grade crossing in Longwood.
Fri	10	5	2018	09:23	809.80	Between Clyde Ave. and Pleasant Hill Rd.	Kissimmee	N	SunRail	Y	Unknown	Pedestrian trespasser fouling tracks.

Attachment A-2
Railroad Incidents
MetroPlan Orlando Region

CFRC Trespasser Incidents 2018 - 2023 YTD														
Date				Time	Location				Operator	Rev.?	Fatality or Injury/Illness		Trespasser Action	Suicide?	Description of Incident / Employee or Subcontractor
Day	M	D	Y	Hr & Min	Milepost	Description	Jurisdiction	At crossing?							
Thu	4	13	2023	05:45	789.10	Near Orange Ave.	Orlando	No	SunRail	Y	Fatality	1	Kneeling	Apparent	SunRail train struck pedestrian trespasser kneeling in the gauge of the track just north of the Orange Ave. grade crossing in Orlando.
Sun	7	24	2022	03:05	805.90	Near Carroll St.	Osceola County	No	CSX	Y	Fatality	1	Lying	Apparent	CSX train struck pedestrian trespasser lying on the tracks just south of Carrol St. in Osceola County.
Mon	6	6	2022	18:52	794.50	Near Mary Jess Rd.	Edgewood	No	SunRail	Y	Injury	1	Sitting	No	SunRail train struck a pedestrian trespasser sitting on the tracks just south of Mary Jess Rd. in Edgewood. Trespasser noticed train at last second and attempted to get up and move out of the way.
Sun	6	5	2022	00:23	807.23	Near Vine St.	Kissimmee	No	CSX	Y	Fatality	1	Sitting	Apparent	CSX train struck pedestrian trespasser sitting on the tracks near the Vine St. grade crossing in Kissimmee.
Sun	1	30	2022	13:08	789.77	LYNX Central Station North Ped Crossing	Orlando	Yes	Amtrak	Y	Injury	1	Walking Across	No	Amtrak train struck pedestrian trespasser walking across the LYNX Central Station north pedestrian crossing. The individual ignored warning lights and bells and walked out Infront of the approaching Amtrak train. The individual appeared distracted and did not appear to be trying to beat the train.
Thu	12	30	2021	16:19	790.05	Jefferson St.	Orlando	Yes	SunRail	Y	Fatality	1	Standing	Yes	SunRail train struck pedestrian trespasser standing at the Jefferson St. grade crossing in Orlando. The trespasser ran out Infront of the train at the last second.
Mon	9	13	2021	02:00	807.40	Near Magnolia St.	Kissimmee	No	CSX	Y	Fatality	1	Unknown	Unknown	CSX train struck pedestrian trespasser near the Magnolia St. grade crossing in Kissimmee.
Wed	7	14	2021	15:55	790.24	Near Central Blvd.	Orlando	No	SunRail	Y	Fatality	1	Standing	Yes	SunRail train struck pedestrian trespasser standing in the gauge of the track near the Central Blvd. grade crossing in Orlando. The trespasser walked out Infront of the train at the last second.
Tue	7	6	2021	08:31	776.30	Between CR 427 and Georgia Ave.	Longwood	No	None	N	Fatality	1	Hanging	Yes	Trespasser found hanging from signal mast.
Tue	3	30	2021	15:48	791.60	Between Columbia St. and Kaley St.	Orlando	No	SunRail	Y	Fatality	1	Sitting	No	SunRail train struck pedestrian trespasser sitting outside the gauge of the rail but fouling the tracks. After investigation, the trespasser was found to be under the influence of drugs.
Wed	2	24	2021	21:45	786.17	Holt Ave.	Winter Park	Yes	CSX	Y	Fatality	1	Walking Across	No	CSX train struck pedestrian trespasser at the S Pennsylvania Ave and Holt Ave. grade crossing in Winter Park. Trespasser was elderly and assumed to be attempting to cross the tracks.

Attachment A-2
Railroad Incidents
MetroPlan Orlando Region

CFRC Trespasser Incidents 2018 - 2023 YTD														
Date				Time	Location				Operator	Rev.?	Fatality or Injury/Illness		Trespasser Action	Suicide?	Description of Incident / Employee or Subcontractor
Day	M	D	Y	Hr & Min	Milepost	Description	Jurisdiction	At crossing?							
Wed	1	6	2021	06:55	810.80	Between Jack Calhoun Dr. and Crestridge Dr.	Osceola County	No	Unknown	Unknown	Fatality	1	Unknown	Unknown	Deceased body found in the gauge of the tracks at milepost 810.8 near the Hoagland Ave. overpass. No report from trains of a trespasser. Cause of death unknown.
Mon	8	10	2020	05:58	781.15	Near Ballard St.	Altamonte Springs	No	SunRail	Y	Fatality	1	Sitting	Apparent	SunRail train struck pedestrian trespasser sitting in the gauge of the tracks just north of the Ballard St. grade crossing in Altamonte Springs.
Fri	12	13	2019	22:52	791.40	Between Columbia St. and Kaley St.	Orlando	No	SunRail	Y	Fatality	1	Walking Along	No	SunRail train struck pedestrian trespasser walking down the gauge of the tracks. Trespasser was walking the same direction as the train.
Fri	11	22	2019	20:57	777.68	Church Ave.	Longwood	Yes	Amtrak	Y	Fatality	1	Unknown	Yes	Amtrak train struck a pedestrian trespasser at the Church Ave. grade crossing in Longwood.
Mon	10	28	2019	06:22	808.15	Monument Ave.	Kissimmee	Yes	SunRail	Y	Fatality	1	Standing	Yes	SunRail train struck a pedestrian trespasser standing on the Monument Ave. grade crossing in Kissimmee. Trespasser ran out in front of train at the last second and stood over the tracks.
Tue	9	17	2019	08:48	791.50	Between Columbia St. and Kaley St.	Orlando	No	SunRail	Y	Injury	1	Standing	No	SunRail train struck a pedestrian trespasser standing next to the tracks, just within the foul.
Tue	6	4	2019	08:17	792.30	Near Michigan St.	Orlando	No	SunRail	Y	Fatality	1	Sitting	Yes	SunRail train struck a pedestrian trespasser just south of the Michigan St. grade crossing in Orlando. The trespasser walked out Infront of the train at the last second and sat in the gauge of the tracks.
Fri	5	10	2019	09:41	783.66	Palmetto Ave.	Maitland	Yes	SunRail	Y	Fatality	1	Standing	Yes	SunRail train struck a pedestrian trespasser at the Palmetto Ave. grade crossing (Lake Lilly Park) in Maitland. The trespasser ran out Infront of the train at the last second and stood over the tracks.
Thu	2	28	2019	17:52	795.57	Lancaster Ave.	Orange County	Yes	SunRail	Y	Fatality	1	Standing	Apparent	SunRail train struck a pedestrian trespasser standing with a bicycle at the Lancaster Rd. grade crossing. Trespasser rode bike into crossing Infront of train and stood up over the tracks.
Mon	2	18	2019	10:04	794.87	Between Mary Jess Rd. and Oakridge Rd.	Edgewood	No	SunRail	Y	Fatality	1	Walking Along	No	SunRail train struck pedestrian trespasser walking down the gauge of the tracks. Trespasser was walking the same direction as the train.
Tue	1	29	2019	15:12	784.50	Between Lake Ave. and N. Denning Dr.	Winter Park	No	SunRail	Y	Injury	1	Walking Along	No	SunRail train struck pedestrian trespasser walking along side the tracks, just within the foul.
Wed	1	2	2019	16:58	792.10	Near Grant St.	Orlando	No	SunRail	Y	Injury	1	Standing	No	SunRail train struck a shopping cart just south of the Grant St. grade crossing in Orlando. Homeless trespasser handling cart was hit by the cart and injured.

Attachment A-2
Railroad Incidents
MetroPlan Orlando Region

CFRC Trespasser Incidents 2018 - 2023 YTD														
Date				Time	Location				Operator	Rev.?	Fatality or Injury/Illness		Trespasser Action	Suicide?	Description of Incident / Employee or Subcontractor
Day	M	D	Y	Hr & Min	Milepost	Description	Jurisdiction	At crossing?							
Fri	12	7	2018	06:20	790.30	Near Pine St.	Orlando	No	SunRail	Y	Fatality	1	Standing	No	SunRail train struck pedestrian trespasser just north of Pine St. Trespasser was standing between the wall/fence for the Orlando Urban Trail and the tracks.
Wed	12	5	2018	19:04	791.02	Gore St.	Orlando	Yes	SunRail	Y	Injury	1	Standing	No	SunRail train struck pedestrian trespasser at the Gore St. grade crossing. Trespasser was standing on a bicycle and appeared to be slumped over and passed out.
Wed	11	14	2018	18:25	810.75	Between Pleasant Hill Rd. and Crestridge Dr.	Osceola County	No	SunRail	Y	Fatality	1	Standing	No	SunRail train struck pedestrian trespasser south of Pleasant Hill Road (now Jack Calhoun Dr). Trespasser was standing just within the foul of the tracks.
Fri	10	12	2018	15:37	786.06	Fairbanks Ave.	Winter Park	Yes	SunRail	Y	Injury	1	Riding Along	Apparent	SunRail train struck pedestrian trespasser riding a bicycle at the Fairbanks Ave. grade crossing in Winter Park. Trespasser rode out in front of train from the west side of the crossing then turned and rode down the tracks in the same direction of travel as the train.

Attachment B-1
MetroPlan Orlando Region
All Crashes 2018 -2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification			
All		3 Lanes or Less	4-5 Lanes	6+ Lanes				25 or less	30-35	40-45	50-55	60+													
		2-3	4-5	6-8	None	1 to 2	3+	0-25	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C
Type	Angle	8995	6029	2486	7111	9387	1547	3909	6302	6517	757	25	3953	3757	4974	689	379	4293	5558	4282	3668	3	122	10	4116
	Animal	334	225	43	371	212	22	60	81	252	128	81	197	120	167	34	3	84	287	161	70	0	84	0	72
	Bicycle	842	910	550	723	1394	200	376	551	1218	152	5	753	583	501	98	17	365	534	609	798	0	8	2	803
	Head On	1482	1009	464	1361	1478	245	540	814	1296	267	38	863	643	779	96	18	685	851	840	702	7	66	1	760
	Left Turn	12807	14946	5871	7712	23368	2900	3544	10072	17915	2066	27	8189	10098	9185	1278	341	4889	8749	10800	9353	15	344	9	9912
	Off Road	8805	5086	2118	9692	6604	755	4748	3539	6318	1212	192	3638	3185	3477	710	202	5839	4046	3759	3263	34	292	10	3319
	Other	18417	9857	5457	23922	14649	2651	12499	7861	11521	1715	135	8284	6260	5979	932	377	19390	6760	7076	7712	12	294	6	7812
	Pedestrian	1239	1225	921	1151	1976	328	610	808	1713	252	2	1225	800	674	89	24	643	683	857	1251	0	10	4	1224
	Rear End	25714	41535	36007	19858	66388	17788	4306	21791	63746	13238	175	47641	29481	18790	1667	519	5936	16921	31039	49829	106	1013	46	47737
	Right Turn	1718	2316	1588	1136	3622	963	529	1323	3319	440	11	1836	1760	1189	157	46	733	1107	1636	2231	1	34	0	2287
	Rollover	618	517	265	655	659	105	162	299	572	233	134	573	283	304	43	17	199	458	371	381	3	136	0	356
	Sideswipe	7937	13939	11675	7312	20827	5883	2340	7840	20073	3188	110	15429	9275	5610	526	185	2997	5300	9865	15757	32	284	7	14659
	Unknown	1787	2426	1801	1633	3623	933	639	1797	3077	483	18	2478	1577	1182	101	50	801	1202	1716	2433	1	45	0	2137
Alcohol Related	Y	1663	1418	1006	1646	2082	497	801	940	1947	371	28	1474	898	821	145	38	849	950	999	1399	6	65	1	1436
	N	89032	98602	68240	80991	152105	33823	33461	62138	135590	23760	925	93585	66924	51990	6275	2140	46005	51506	72012	96049	208	2667	94	93758
Hit and Run	Y	13415	12211	9436	13932	19236	4489	6799	8193	17025	2969	76	12426	8583	6553	757	300	9038	6702	8870	12838	17	225	6	12143
	N	77280	87809	59810	68705	134951	29831	27463	54885	120512	21162	877	82633	59239	46258	5663	1878	37816	45754	64141	84610	197	2507	89	83051
Aggressive Driving	Y	2337	2415	1411	2232	3466	633	958	1705	2959	518	23	2225	1434	1322	186	58	1106	1376	1770	2044	7	89	0	2002
	N	88358	97605	67835	80405	150721	33687	33304	61373	134578	23613	930	92834	66388	51489	6234	2120	45748	51080	71241	95404	207	2643	95	93192
Distracted Driving	Y	22744	27095	18675	20043	41233	9075	7593	14944	38621	7079	277	24925	18922	13914	1615	644	10331	12808	20286	26512	69	875	31	25871
	N	67951	72925	50571	62594	112954	25245	26669	48134	98916	17052	676	70134	48900	38897	4805	1534	36523	39648	52725	70936	145	1857	64	69323
Intersection Related	Y	30778	32147	17298	18896	50727	10988	9683	23147	41324	5976	93	25055	20988	19588	2849	923	11208	19914	23770	25136	47	806	26	28670
	N	59917	67873	51948	63741	103460	23332	24579	39931	96213	18155	860	70004	46834	33223	3571	1255	35646	32542	49241	72312	167	1926	69	66524
Drug Related	Y	465	428	333	447	681	143	195	247	638	134	12	460	277	245	44	14	231	283	289	458	2	20	0	448
	N	90230	99592	68913	82190	153506	34177	34067	62831	136899	23997	941	94599	67545	52566	6376	2164	46623	52173	72722	96990	212	2712	95	94746
Aging Driver	Y	13225	15957	10450	11770	24315	5451	4758	9877	21553	3331	113	15322	10254	7933	1002	354	6671	8142	11084	15428	36	432	12	15321
	N	77470	84063	58796	70867	129872	28869	29504	53201	115984	20800	840	79737	57568	44878	5418	1824	40183	44314	61927	82020	178	2300	83	79873
Teenage Driver	Y	11864	13397	8871	10306	20922	4227	4106	7768	18884	3278	96	11886	8992	7312	1118	303	5844	7092	9686	12679	28	394	18	12332
	N	78831	86623	60375	72331	133265	30093	30156	55310	118653	20853	857	83173	58830	45499	5302	1875	41010	45364	63325	84769	186	2338	77	82862
Day of the Week	Monday	13490	15051	10363	12151	23299	5107	4966	9286	20907	3601	144	14461	10134	7854	965	305	6838	7936	10866	14738	34	410	17	14530
	Tuesday	13742	15484	10590	12355	23788	5319	5038	9547	21382	3709	140	14691	10537	8018	1003	296	6917	8000	11153	15210	34	393	17	14750
	Wednesday	13701	15447	10343	12510	23539	5186	5065	9630	21148	3531	117	14488	10342	8160	989	317	6939	8052	11144	14890	28	408	10	14573
	Thursday	13789	15613	10732	12478	24100	5223	5057	9821	21408	3726	122	14789	10482	8192	1059	355	6924	8252	11169	15222	39	389	15	14683
	Friday	15115	17168	11727	13688	26470	5780	5532	10680	23568	4090	140	16375	11426	8983	1040	366	7748	8809	12452	16713	43	451	21	16334
	Saturday	11187	11780	8724	10436	18366	4303	4581	7763	16275	2923	149	11360	8181	6314	716	295	6239	6111	8966	11609	22	349	5	11317
	Sunday	9671	9477	6767	9019	14625	3402	4023	6351	12849	2551	141	8895	6720	5290	648	244	5249	5296	7261	9066	14	332	10	9007
Time of Day	12-3 AM	4517	3721	2770	4437	5524	1395	2090	2782	4966	1085	85	3662	2700	2299	270	88	2337	2384	2930	3620	10	134	4	3523
	3-6 AM	2930	2560	1808	2774	3766	939	1193	1608	3572	822	103	2575	1794	1395	207	64	1444	1543	1953	2491	8	159	1	2482
	6-9 AM	11784	12666	7982	9735	19431	4054	4070	7243	17600	3349	170	11590	8710	6691	904	260	5065	6923	9258	11808	26	462	13	11856
	9-Noon	12229	13507	9574	11638	20814	4934	4885	8714	18517	3100	94	13177	9119	6801	816	288	7185	6887	9537	13602	32	327	13	13198
	Noon-3 PM	16959	19265	13772	16269	30025	6853	6673	12482	26574	4153	114	19166	12679	9576	1216	445	10065	9714	13503	19593	43	452	16	18541
	3-6 PM	20898	24366	16527	18959	37669	7745	7346	15300	33419	5574	152	23159	16211	12885	1560	525	10033	12734	17649	23628	54	581	26	23000
	6-9 PM	13964	15956	10924	12138	24718	5414	5032	9799	22040	3855	118	14438	10917	8735	957	339	6884	8136	11984	15071	34	391	18	14868
	9-Midnight	7414	7979	5889	6687	12240	2986	2973	5150	10849	2193	117	7292	5692	4429	490	169	3841	4135	6197	7635	7	226	4	7726
Lighting Conditions	Dark - Lighted	16830	19615	14967	15208	30337	7539	6841	13235	26653	4631	52	18631	13624	10483	1110	397	8839	9559	14803	19611	17	247	9	19053
	Dark - Not Lighted	5335	3513	1553	4887	4868	823	1767	1785	4751	1761	337	3232	2353	2388	378	108	2119	2985	2843	2561	30	521	8	3065
	Dark - Unknown Lighting	349	165	99	331	275	40	194	178	214	27	0	147	126	142	21	3	207	156	133	149	0	6	0	142
	Dawn	1595	1704	1024	1341	2523	579	502	966	2321	491	43	1529	1113	964	132	35	670	1008	1299	1445	7	76	1	1609
	Daylight	63241	71516	49295	57751	110912	24190	23569	44871	98690	16427	495	68583	48096	36853	4551	1560	33210	36909	51307	70468	153	1803	72	68140
	Dusk	2859	3376	2246	2561	5066	1128	1009	1917	4762	771	22	2828	2416	1874	214	68	1355	1696	2537	3121	7	75	5	3089
	Other	48	33	25	63	49	8	28	21	48	9	0	38	22	22	1	0	37	25	21	36	0	0	0	38
	Unknown	431	97	36	488	153	13	349	101	96	14	4	70	70	83	13	7	411	115	67	56	0	4	0	56

Attachment B-1
Limited access facilites, parking lots and roadways for which contextual data was not available were not included in this analysis.

Attachment B-1
MetroPlan Orlando Region
All Crashes 2018 -2022

Mode:	All Collisions	Context Classification					Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C3R	C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	481	2070	250	156	10837	13282	1697	2531	16217	1210	83	1687	2995	12828	9709	3961	293	3427	118
	Animal	57	6	1	1	384	309	50	243	578	22	2	271	106	225	304	221	10	64	3
	Bicycle	112	195	12	19	1166	1562	221	519	2119	165	18	132	260	1910	964	692	47	563	36
	Head On	148	298	23	23	1758	2093	284	578	2755	178	22	387	482	2086	1633	590	38	669	23
	Left Turn	1924	2895	228	103	18550	23612	3711	6301	30876	2565	183	2953	4721	25950	14146	10113	864	8239	258
	Off Road	751	749	77	58	11761	11722	1122	3165	15238	696	75	2902	3114	9993	8273	4643	324	2634	130
	Other	983	2979	354	336	28446	25742	2853	5136	31607	1930	194	3914	5000	24817	19150	7226	613	6415	318
	Pedestrian	118	375	30	32	1662	2288	396	701	3057	296	32	248	387	2750	1504	910	67	869	35
	Rear End	5475	9853	861	358	38585	60257	17926	25073	87815	13882	1559	7775	12789	82692	26600	37103	3840	34158	1532
	Right Turn	280	401	32	13	2673	3794	797	1031	4925	644	53	348	672	4602	1772	1628	203	1975	44
	Rollover	77	118	13	8	708	852	160	388	1294	102	4	395	217	788	615	484	32	263	6
	Sideswipe	1284	3767	481	359	13149	21087	5124	7340	29296	3844	411	2656	4034	26861	9212	11227	1269	11275	559
	Unknown	180	933	96	91	2706	3934	891	1189	5291	655	68	413	706	4895	2197	1749	170	1826	72
Alcohol Related	Y	197	359	39	35	2087	2714	534	839	3640	396	51	463	600	3024	1715	1216	114	993	49
	N	11673	24280	2419	1522	130298	167820	34698	53356	227428	25793	2653	23618	34883	197373	94364	79331	7656	71384	3085
Hit and Run	Y	1242	3630	375	308	19711	24278	6224	6224	31248	3459	355	2997	4681	27384	14855	9317	920	9569	394
	N	10628	21009	2083	1249	112674	146256	47971	47971	199820	22730	2349	21084	30802	173013	81224	71230	6850	62808	2740
Aggressive Driving	Y	278	620	65	30	3240	3914	1476	1476	5530	569	64	636	983	4544	2462	1971	140	1494	95
	N	11592	24019	2393	1527	129145	166620	52719	52719	225538	25620	2640	23445	34500	195853	93617	78576	7630	70883	3039
Distracted Driving	Y	3544	5330	481	174	33976	44613	14530	14530	60853	7069	592	6718	9378	52418	24123	22424	2183	19156	615
	N	8326	19309	1977	1383	98409	125921	39665	39665	170215	19120	2112	17363	26105	147979	71956	58123	5587	53221	2519
Intersection Related	Y	4408	7631	782	512	37729	54069	15141	15141	71364	8187	672	6813	11628	61782	30930	23483	2329	22410	1061
	N	7462	17008	1676	1045	94656	116465	39054	39054	159704	18002	2032	17268	23855	138615	65149	57064	5441	49967	2073
Drug Related	Y	71	80	7	5	638	784	278	278	1084	129	13	153	179	894	455	403	41	315	12
	N	11799	24559	2451	1552	131747	169750	53917	53917	229984	26060	2691	23928	35304	199503	95624	80144	7729	72062	3122
Aging Driver	Y	1887	4195	445	164	19044	26012	8274	8274	35183	3986	463	3137	5213	31282	14339	12184	1101	11429	569
	N	9983	20444	2013	1393	113341	144522	45921	45921	195885	22203	2241	20944	30270	169115	81740	68363	6669	60948	2565
Teenage Driver	Y	1941	2464	213	87	17978	21572	7981	7981	30248	3535	349	2828	4880	26424	12012	11213	954	9520	427
	N	9929	22175	2245	1470	114407	148962	46214	46214	200820	22654	2355	21253	30603	173973	84067	69334	6816	62857	2707
Day of the Week	Monday	1779	3696	368	231	19492	25504	8208	8208	34643	3846	415	3575	5336	29993	14360	12033	1164	10874	469
	Tuesday	1803	3888	391	197	19989	26043	8316	8316	35295	4094	427	3658	5421	30737	14513	12230	1193	11369	502
	Wednesday	1863	3833	369	225	19926	25977	8360	8360	35257	3816	418	3424	5394	30673	14713	12141	1130	11021	476
	Thursday	1832	3947	403	229	20264	26270	8420	8420	35702	4047	385	3599	5358	31177	14763	12402	1220	11252	494
	Friday	2020	4149	403	235	22282	28725	9299	9299	39103	4461	446	4032	5932	34046	16176	13699	1247	12306	568
	Saturday	1373	2918	294	236	16591	20879	6411	6411	28050	3299	342	3113	4329	24249	11667	9919	1019	8720	358
	Sunday	1200	2208	230	204	13841	17136	5181	5181	23018	2626	271	2680	3713	19522	9887	8123	797	6835	267
Time of Day	12-3 AM	458	1077	130	205	5815	7473	2025	2025	9880	1032	96	1289	1692	8027	4659	3177	404	2657	108
	3-6 AM	333	606	85	92	3713	4824	1442	1442	6476	761	61	1023	1077	5198	2894	2248	243	1842	68
	6-9 AM	1744	2708	285	155	15971	21267	6918	6918	28996	3092	344	3337	4759	24336	12110	10090	979	8816	430
	9-Noon	1518	3730	357	207	18004	23472	7082	7082	31400	3555	355	3151	4723	27436	12999	10712	1017	10138	439
	Noon-3 PM	2162	5450	515	257	25711	33026	10237	10237	44403	5052	541	4153	6530	39313	18358	15103	1322	14579	623
	3-6 PM	2748	6039	596	281	31048	40214	13420	13420	55092	6083	616	5201	8149	48441	22810	19312	1764	17127	769
	6-9 PM	1927	3327	314	176	21215	26456	8751	8751	36131	4261	452	3613	5552	31679	14654	13029	1255	11428	470
	9-Midnight	980	1702	176	184	10908	13802	4320	4320	18690	2353	239	2314	3001	15967	7595	6876	786	5790	227
Lighting Conditions	Dark - Lighted	2108	4970	553	557	25570	33806	10036	10036	45071	5738	603	3778	6663	40971	17907	16266	1833	14785	608
	Dark - Not Lighted	738	307	25	13	5871	6302	2777	2777	9496	839	66	2794	2104	5503	4942	3328	336	1739	54
	Dark - Unknown Lighting	29	63	4	5	397	434	109	109	557	52	4	72	110	431	354	122	19	110	8
	Dawn	248	313	41	13	2135	2745	971	971	3829	443	51	529	678	3116	1609	1369	134	1152	56
	Daylight	8329	18364	1781	935	93276	121089	38474	38474	163904	18250	1898	16061	24628	143363	67792	56590	5182	52151	2301
	Dusk	393	589	50	29	4518	5594	1745	1745	7556	845	80	742	1178	6561	3000	2754	259	2365	103
	Other	7	5	0	0	70	73	19	19	93	12	1	10	20	76	47	32	3	22	2
	Unknown	18	28	4	5	539	484	62	62	553	10	1	92	101	371	420	85	4	53	2

Attachment B-1
Limited access facilites, parking lots and roadways for which contextual data was not available were not included in this analysis.

Attachment B-2
MetroPlan Orlando Region
All KSI Crashes 2018 -2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				Context Classification			
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R	C4	C5	C6
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+																	
Type	Angle	272	208	114	208	344	54	104	170	267	48	5	159	134	154	24	16	119	171	150	153	0	13	1	180	26	41	2	5
	Animal	4	3	0	4	3	0	2	0	1	3	1	2	1	1	1	0	2	3	2	0	0	2	0	1	0	0	0	0
	Bicycle	115	133	77	102	195	30	43	71	178	31	2	112	74	75	12	3	51	72	85	118	0	1	1	121	18	20	0	0
	Head On	147	82	33	152	103	8	14	43	121	64	20	100	59	69	11	2	22	104	76	60	3	29	0	60	24	17	0	0
	Left Turn	451	696	349	281	1100	120	85	298	940	169	4	428	522	372	34	15	130	348	530	484	4	38	1	508	110	80	8	0
	Off Road	316	355	126	437	354	37	128	156	408	91	14	213	225	179	21	12	178	189	253	199	4	19	0	180	56	22	5	1
	Other	284	271	198	309	405	67	118	149	375	90	21	273	180	150	26	6	146	181	202	250	2	22	1	227	43	68	7	5
	Pedestrian	244	347	345	267	580	100	97	174	555	109	1	428	234	152	22	1	110	149	260	427	0	5	0	419	37	107	9	7
	Rear End	234	540	542	282	832	210	19	137	923	221	16	636	429	193	14	11	41	159	412	705	2	31	2	612	98	77	4	0
	Right Turn	19	40	31	16	63	12	5	17	53	14	1	31	30	21	2	1	6	17	30	38	1	1	0	37	3	4	0	0
	Rollover	57	42	18	74	40	5	12	22	44	21	18	45	18	28	5	1	22	49	23	25	1	17	0	23	11	3	1	0
	Sideswipe	55	93	85	67	143	24	10	37	132	46	8	114	68	30	7	2	13	42	68	109	0	10	0	109	11	12	2	1
	Unknown	19	46	24	23	63	3	4	17	51	14	3	36	28	19	2	0	4	21	29	35	0	5	0	33	8	6	1	0
Alcohol Related	Y	134	171	95	173	204	26	39	79	211	54	17	158	92	89	16	4	44	116	105	136	3	22	0	130	29	26	3	1
	N	2083	2685	1847	2049	4021	644	602	1212	3837	867	97	2419	1910	1354	165	66	800	1389	2015	2467	14	171	6	2380	416	431	36	18
Hit and Run	Y	194	240	213	182	409	62	67	119	381	76	4	260	174	124	12	8	75	113	187	273	0	6	0	248	26	58	3	3
	N	2023	2616	1729	2040	3816	608	574	1172	3667	845	110	2317	1828	1319	169	62	769	1392	1933	2330	17	187	6	2262	419	399	36	16
Aggressive Driving	Y	148	147	69	136	213	19	46	102	177	34	5	125	75	101	12	3	52	104	106	105	2	6	0	96	25	34	4	3
	N	2069	2709	1873	2086	4012	651	595	1189	3871	887	109	2452	1927	1342	169	67	792	1401	2014	2498	15	187	6	2414	420	423	35	16
Distracted Driving	Y	614	832	526	582	1208	210	146	317	1183	287	39	698	620	402	41	23	216	408	636	726	6	73	3	677	150	96	7	1
	N	1603	2024	1416	1640	3017	460	495	974	2865	634	75	1879	1382	1041	140	47	628	1097	1484	1877	11	120	3	1833	295	361	32	18
Intersection Related	Y	945	1152	748	646	1914	291	254	617	1631	326	17	936	836	655	81	30	313	673	862	980	5	65	3	1020	202	179	19	14
	N	1272	1704	1194	1576	2311	379	387	674	2417	595	97	1641	1166	788	100	40	531	832	1258	1623	12	128	3	1490	243	278	20	5
Drug Related	Y	77	98	61	88	129	21	19	33	139	35	10	97	62	45	6	4	24	58	63	91	2	12	0	76	21	16	1	0
	N	2140	2758	1881	2134	4096	649	622	1258	3909	886	104	2480	1940	1398	175	66	820	1447	2057	2512	15	181	6	2434	424	441	38	19
Aging Driver	Y	340	441	263	302	650	114	84	194	597	151	18	396	303	211	28	7	121	246	308	386	4	42	1	383	73	65	5	3
	N	1877	2415	1679	1920	3575	556	557	1097	3451	770	96	2181	1699	1232	153	63	723	1259	1812	2217	13	151	5	2127	372	392	34	16
Teenage Driver	Y	258	345	212	235	515	74	76	142	482	111	4	254	250	172	27	10	111	177	232	298	1	14	3	284	58	28	3	2
	N	1959	2511	1730	1987	3710	596	565	1149	3566	810	110	2323	1752	1271	154	60	733	1328	1888	2305	16	179	3	2226	387	429	36	17
Day of the Week	Monday	350	362	244	319	560	90	91	174	553	119	19	334	267	215	24	9	120	228	277	335	3	27	1	341	68	50	5	3
	Tuesday	290	406	286	306	608	84	89	172	570	132	19	355	290	196	27	7	123	194	312	365	3	24	2	363	53	53	2	2
	Wednesday	305	400	288	304	622	83	90	198	571	120	14	377	260	208	28	12	124	218	276	384	1	31	1	348	64	73	7	1
	Thursday	311	422	275	311	616	97	90	179	602	124	13	367	300	209	19	13	116	209	300	390	2	27	0	365	56	78	7	2
	Friday	353	427	306	348	645	112	108	198	624	141	15	402	318	211	30	13	131	245	333	390	5	29	1	379	70	77	5	2
	Saturday	309	468	305	322	657	115	92	198	631	142	19	411	308	222	26	10	117	213	339	416	0	29	0	391	73	77	7	5
	Sunday	299	371	238	312	517	89	81	172	497	143	15	331	259	182	27	6	113	198	283	323	3	26	1	323	61	49	6	4
Time of Day	12-3 AM	176	247	178	212	322	70	49	111	331	94	16	254	171	113	11	2	53	129	182	237	1	18	0	232	43	58	4	5
	3-6 AM	138	159	132	170	215	48	34	83	231	67	14	178	118	66	14	5	52	87	127	165	2	21	0	148	29	26	8	1
	6-9 AM	287	365	231	247	565	80	71	161	511	117	23	282	270	199	27	7	107	193	264	323	4	37	1	303	52	52	5	0
	9-Noon	247	333	227	253	476	90	88	146	456	104	13	295	234	153	22	6	109	168	224	314	4	29	1	284	48	47	5	3
	Noon-3 PM	300	374	231	283	574	74	94	187	519	100	5	307	268	191	25	12	128	199	284	311	1	18	0	312	52	62	2	3
	3-6 PM	375	440	284	373	670	75	119	198	651	116	15	385	295	250	32	12	144	257	349	362	2	23	1	373	77	75	6	2
	6-9 PM	371	508	344	368	748	124	103	212	735	162	11	454	344	254	31	15	142	243	390	454	3	24	1	430	66	70	3	3
	9-Midnight	323	430	315	316	655	109	83	193	614	161	17	422	302	217	19	11	109	229	300	437	0	23	2	428	78	67	6	2
Lighting Conditions	Dark - Lighted	527	884	748	587	1352	244	164	431	1295	260	9	890	618	406	41	23	205	366	633	967	1	19	2	860	122	189	21	11
	Dark - Not Lighted	345	304	119	345	377	51	52	113	371	183	49	309	176	170	27	5	86	255	235	192	4	69	1	247	73	19	0	0
	Dark - Unknown Lighting	2	2	2	3	3	0	2	0	4	0	0	3	1	1	0	0	1	1	2	2	0	0	0	1	0	2	0	0
	Dawn	51	56	29	42	82	13	12	25	76	18	5	41	36	39	5	1	15	37	41	43	1	9	0	46	7	5	2	0
	Daylight	1213	1519	982	1166	2278	335	388	686	2151	440	49	1259	1101	776	103	39	501	802	1132	1320	10	91	3	1273	235	230	15	8
	Dusk	72	89	58	74	126	26	22	32	145	19	1	69	69	47	5	2	34	39	77	73	1	4	0	77	8	12	1	0
	Other	2	1	4	2	4	1	0	2	4	1	0	4	1	2	0	0	0	2	0	5	0	0	0	5	0	0	0	0
	Unknown	5	1	0	3	3	0	1	2	2	0	1	2	0	2	0	0	2	3	0	1	0	1	0	1	0	0	0	0

Attachment B-2
MetroPlan Orlando Region
All KSI Crashes 2018 -2022

Mode:	All Collisions		Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	338	406	82	106	529	62	3	85	96	413	288	169	10	123	4
	Animal	4	3	1	3	7	0	0	5	1	1	4	3	0	0	0
	Bicycle	166	210	37	78	293	26	6	33	30	262	134	100	3	84	4
	Head On	130	159	13	90	257	4	1	84	50	128	155	58	5	44	0
	Left Turn	752	983	216	297	1323	164	9	162	215	1119	530	522	31	408	5
	Off Road	541	532	54	211	759	35	3	153	123	521	313	321	21	138	4
	Other	406	487	85	181	691	59	3	117	108	528	308	249	21	169	6
	Pedestrian	363	601	121	214	825	98	13	65	99	772	345	288	28	268	7
	Rear End	498	718	258	340	1097	202	17	144	154	1018	270	522	46	471	7
	Right Turn	45	51	9	30	82	8	0	9	10	71	15	37	1	37	0
	Rollover	63	69	5	43	113	3	1	46	15	56	49	46	3	18	1
	Sideswipe	89	125	42	66	196	34	3	26	23	184	68	98	6	58	3
	Unknown	36	50	13	26	79	10	0	14	8	67	24	34	4	27	0
Alcohol Related	Y	189	239	48	113	364	34	2	88	50	262	161	143	15	79	2
	N	3242	4155	888	1572	5887	671	57	855	882	4878	2342	2304	164	1766	39
Hit and Run	Y	309	439	132	132	592	54	1	56	72	519	270	173	13	185	6
	N	3122	3955	1553	1553	5659	651	58	887	860	4621	2233	2274	166	1660	35
Aggressive Driving	Y	198	219	91	91	324	39	1	54	68	242	159	126	5	72	2
	N	3233	4175	1594	1594	5927	666	58	889	864	4898	2344	2321	174	1773	39
Distracted Driving	Y	987	1235	455	455	1744	211	17	306	261	1405	668	726	64	504	10
	N	2444	3159	1230	1230	4507	494	42	637	671	3735	1835	1721	115	1341	31
Intersection Related	Y	1344	1796	606	606	2489	335	21	318	375	2152	1032	953	60	785	15
	N	2087	2598	1079	1079	3762	370	38	625	557	2988	1471	1494	119	1060	26
Drug Related	Y	110	144	63	63	213	21	2	48	36	152	92	90	5	49	0
	N	3321	4250	1622	1622	6038	684	57	895	896	4988	2411	2357	174	1796	41
Aging Driver	Y	490	632	263	263	918	114	12	161	137	746	376	351	25	284	8
	N	2941	3762	1422	1422	5333	591	47	782	795	4394	2127	2096	154	1561	33
Teenage Driver	Y	431	497	207	207	718	92	5	79	129	607	262	292	19	234	8
	N	3000	3897	1478	1478	5533	613	54	864	803	4533	2241	2155	160	1611	33
Day of the Week	Monday	471	593	237	237	861	86	9	130	132	694	358	317	30	243	8
	Tuesday	496	601	263	263	891	86	5	135	125	722	351	340	16	270	5
	Wednesday	483	642	207	207	873	109	11	132	140	721	356	352	20	258	7
	Thursday	487	628	254	254	900	98	10	128	130	750	360	335	25	284	4
	Friday	537	674	254	254	948	129	9	140	141	805	392	373	26	289	6
	Saturday	512	675	260	260	961	112	9	139	145	798	365	388	37	289	3
	Sunday	445	581	210	210	817	85	6	139	119	650	321	342	25	212	8
Time of Day	12-3 AM	243	353	159	159	530	66	5	94	80	427	192	216	19	168	6
	3-6 AM	198	263	105	105	380	46	3	79	61	289	145	174	13	94	3
	6-9 AM	438	548	214	214	778	97	8	125	103	655	305	309	23	241	5
	9-Noon	398	526	178	178	722	80	5	110	102	595	262	283	18	241	3
	Noon-3 PM	481	599	195	195	817	80	8	111	130	664	342	297	18	247	1
	3-6 PM	559	709	260	260	995	95	9	126	140	833	427	380	28	258	6
	6-9 PM	640	758	303	303	1096	118	9	144	162	917	447	408	34	326	8
	9-Midnight	474	638	271	271	933	123	12	154	154	760	383	380	26	270	9
Lighting Conditions	Dark - Lighted	958	1360	476	476	1880	256	23	166	249	1744	685	771	67	612	24
	Dark - Not Lighted	360	382	284	284	698	64	6	249	153	366	330	277	21	138	2
	Dark - Unknown Lighting	3	5	1	1	6	0	0	0	0	6	1	2	0	1	2
	Dawn	67	84	32	32	118	18	0	27	16	93	52	43	1	40	0
	Daylight	1914	2420	833	833	3342	344	28	469	480	2765	1350	1287	80	985	12
	Dusk	123	136	55	55	196	21	2	27	32	160	78	64	8	68	1
	Other	2	4	1	1	5	2	0	1	2	4	1	3	2	1	0
	Unknown	4	3	3	3	6	0	0	4	0	2	6	0	0	0	0

Attachment B-3
MetroPlan Orlando Region
Percent of All Crashes that Result in a KSI 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	3.0%	3.4%	4.6%	2.9%	3.7%	3.5%	2.7%	2.7%	4.1%	6.3%	20.0%	4.0%	3.6%	3.1%	3.5%	4.2%	2.8%	3.1%	3.5%	4.2%	0.0%	10.7%	10.0%	4.4%	5.4%
	Animal	1.2%	1.3%	0.0%	1.1%	1.4%	0.0%	3.3%	0.0%	0.4%	2.3%	1.2%	1.0%	0.8%	0.6%	2.9%	0.0%	2.4%	1.0%	1.2%	0.0%	-	2.4%	-	1.4%	0.0%
	Bicycle	13.7%	14.6%	14.0%	14.1%	14.0%	15.0%	11.4%	12.9%	14.6%	20.4%	40.0%	14.9%	12.7%	15.0%	12.2%	17.6%	14.0%	13.5%	14.0%	14.8%	-	12.5%	50.0%	15.1%	16.1%
	Head On	9.9%	8.1%	7.1%	11.2%	7.0%	3.3%	2.6%	5.3%	9.3%	24.0%	52.6%	11.6%	9.2%	8.9%	11.5%	11.1%	3.2%	12.2%	9.0%	8.5%	42.9%	43.9%	0.0%	7.9%	16.2%
	Left Turn	3.5%	4.7%	5.9%	3.6%	4.7%	4.1%	2.4%	3.0%	5.2%	8.2%	14.8%	5.2%	5.2%	4.1%	2.7%	4.4%	2.7%	4.0%	4.9%	5.2%	26.7%	11.0%	11.1%	5.1%	5.7%
	Off Road	3.6%	7.0%	5.9%	4.5%	5.4%	4.9%	2.7%	4.4%	6.5%	7.5%	7.3%	5.9%	7.1%	5.1%	3.0%	5.9%	3.0%	4.7%	6.7%	6.1%	11.8%	6.5%	0.0%	5.4%	7.5%
	Other	1.5%	2.7%	3.6%	1.3%	2.8%	2.5%	0.9%	1.9%	3.3%	5.2%	15.6%	3.3%	2.9%	2.5%	2.8%	1.6%	0.8%	2.7%	2.9%	3.2%	16.7%	7.5%	16.7%	2.9%	4.4%
	Pedestrian	19.7%	28.3%	37.5%	23.2%	29.4%	30.5%	15.9%	21.5%	32.4%	43.3%	50.0%	34.9%	29.3%	22.6%	24.7%	4.2%	17.1%	21.8%	30.3%	34.1%	-	50.0%	0.0%	34.2%	31.4%
	Rear End	0.9%	1.3%	1.5%	1.4%	1.3%	1.2%	0.4%	0.6%	1.4%	1.7%	9.1%	1.3%	1.5%	1.0%	0.8%	2.1%	0.7%	0.9%	1.3%	1.4%	1.9%	3.1%	4.3%	1.3%	1.8%
	Right Turn	1.1%	1.7%	2.0%	1.4%	1.7%	1.2%	0.9%	1.3%	1.6%	3.2%	9.1%	1.7%	1.7%	1.8%	1.3%	2.2%	0.8%	1.5%	1.8%	1.7%	100.0%	2.9%	-	1.6%	1.1%
	Rollover	9.2%	8.1%	6.8%	11.3%	6.1%	4.8%	7.4%	7.4%	7.7%	9.0%	13.4%	7.9%	6.4%	9.2%	11.6%	5.9%	11.1%	10.7%	6.2%	6.6%	33.3%	12.5%	-	6.5%	14.3%
	Sideswipe	0.7%	0.7%	0.7%	0.9%	0.7%	0.4%	0.4%	0.5%	0.7%	1.4%	7.3%	0.7%	0.7%	0.5%	1.3%	1.1%	0.4%	0.8%	0.7%	0.7%	0.0%	3.5%	0.0%	0.7%	0.9%
	Unknown	1.1%	1.9%	1.3%	1.4%	1.7%	0.3%	0.6%	0.9%	1.7%	2.9%	16.7%	1.5%	1.8%	1.6%	2.0%	0.0%	0.5%	1.7%	1.7%	1.4%	0.0%	11.1%	-	1.5%	4.4%
Alcohol Related	Y	8.1%	12.1%	9.4%	10.5%	9.8%	5.2%	4.9%	8.4%	10.8%	14.6%	60.7%	10.7%	10.2%	10.8%	11.0%	10.5%	5.2%	12.2%	10.5%	9.7%	50.0%	33.8%	0.0%	9.1%	14.7%
	N	2.3%	2.7%	2.7%	2.5%	2.6%	1.9%	1.8%	2.0%	2.8%	3.6%	10.5%	2.6%	2.9%	2.6%	2.6%	3.1%	1.7%	2.7%	2.8%	2.6%	6.7%	6.4%	6.4%	2.5%	3.6%
Hit and Run	Y	1.4%	2.0%	2.3%	1.3%	2.1%	1.4%	1.0%	1.5%	2.2%	2.6%	5.3%	2.1%	2.0%	1.9%	1.6%	2.7%	0.8%	1.7%	2.1%	2.1%	0.0%	2.7%	0.0%	2.0%	2.1%
	N	2.6%	3.0%	2.9%	3.0%	2.8%	2.0%	2.1%	2.1%	3.0%	4.0%	12.5%	2.8%	3.1%	2.9%	3.0%	3.3%	2.0%	3.0%	3.0%	2.8%	8.6%	7.5%	6.7%	2.7%	3.9%
Aggressive Driving	Y	6.3%	6.1%	4.9%	6.1%	6.1%	3.0%	4.8%	6.0%	6.0%	6.6%	21.7%	5.6%	5.2%	7.6%	6.5%	5.2%	4.7%	7.6%	6.0%	5.1%	28.6%	6.7%	-	4.8%	9.0%
	N	2.3%	2.8%	2.8%	2.6%	2.7%	1.9%	1.8%	1.9%	2.9%	3.8%	11.7%	2.6%	2.9%	2.6%	2.7%	3.2%	1.7%	2.7%	2.8%	2.6%	7.2%	7.1%	6.3%	2.6%	3.6%
Distracted Driving	Y	2.7%	3.1%	2.8%	2.9%	2.9%	2.3%	1.9%	2.1%	3.1%	4.1%	14.1%	2.8%	3.3%	2.9%	2.5%	3.6%	2.1%	3.2%	3.1%	2.7%	8.7%	8.3%	9.7%	2.6%	4.2%
	N	2.4%	2.8%	2.8%	2.6%	2.7%	1.8%	1.9%	2.0%	2.9%	3.7%	11.1%	2.7%	2.8%	2.7%	2.9%	3.1%	1.7%	2.8%	2.8%	2.6%	7.6%	6.5%	4.7%	2.6%	3.5%
Intersection Related	Y	3.1%	3.6%	4.3%	3.4%	3.8%	2.6%	2.6%	2.7%	3.9%	5.5%	18.3%	3.7%	4.0%	3.3%	2.8%	3.3%	2.8%	3.4%	3.6%	3.9%	10.6%	8.1%	11.5%	3.6%	4.6%
	N	2.1%	2.5%	2.3%	2.5%	2.2%	1.6%	1.6%	1.7%	2.5%	3.3%	11.3%	2.3%	2.5%	2.4%	2.8%	3.2%	1.5%	2.6%	2.6%	2.2%	7.2%	6.6%	4.3%	2.2%	3.3%
Drug Related	Y	16.6%	22.9%	18.3%	19.7%	18.9%	14.7%	9.7%	13.4%	21.8%	26.1%	83.3%	21.1%	22.4%	18.4%	13.6%	28.6%	10.4%	20.5%	21.8%	19.9%	100.0%	60.0%	-	17.0%	29.6%
	N	2.4%	2.8%	2.7%	2.6%	2.7%	1.9%	1.8%	2.0%	2.9%	3.7%	11.1%	2.6%	2.9%	2.7%	2.7%	3.0%	1.8%	2.8%	2.8%	2.6%	7.1%	6.7%	6.3%	2.6%	3.6%
Aging Driver	Y	2.6%	2.8%	2.5%	2.6%	2.7%	2.1%	1.8%	2.0%	2.8%	4.5%	15.9%	2.6%	3.0%	2.7%	2.8%	2.0%	1.8%	3.0%	2.8%	2.5%	11.1%	9.7%	8.3%	2.5%	3.9%
	N	2.4%	2.9%	2.9%	2.7%	2.8%	1.9%	1.9%	2.1%	3.0%	3.7%	11.4%	2.7%	3.0%	2.7%	2.8%	3.5%	1.8%	2.8%	2.9%	2.7%	7.3%	6.6%	6.0%	2.7%	3.7%
Teenage Driver	Y	2.2%	2.6%	2.4%	2.3%	2.5%	1.8%	1.9%	1.8%	2.6%	3.4%	4.2%	2.1%	2.8%	2.4%	2.4%	3.3%	1.9%	2.5%	2.4%	2.4%	3.6%	3.6%	16.7%	2.3%	3.0%
	N	2.5%	2.9%	2.9%	2.7%	2.8%	2.0%	1.9%	2.1%	3.0%	3.9%	12.8%	2.8%	3.0%	2.8%	2.9%	3.2%	1.8%	2.9%	3.0%	2.7%	8.6%	7.7%	3.9%	2.7%	3.9%
Day of the Week	Monday	2.6%	2.4%	2.4%	2.6%	2.4%	1.8%	1.8%	1.9%	2.6%	3.3%	13.2%	2.3%	2.6%	2.7%	2.5%	3.0%	1.8%	2.9%	2.5%	2.3%	8.8%	6.6%	5.9%	2.3%	3.8%
	Tuesday	2.1%	2.6%	2.7%	2.5%	2.6%	1.6%	1.8%	1.8%	2.7%	3.6%	13.6%	2.4%	2.8%	2.4%	2.7%	2.4%	1.8%	2.4%	2.8%	2.4%	8.8%	6.1%	11.8%	2.5%	2.9%
	Wednesday	2.2%	2.6%	2.8%	2.4%	2.6%	1.6%	1.8%	2.1%	2.7%	3.4%	12.0%	2.6%	2.5%	2.5%	2.8%	3.8%	1.8%	2.7%	2.5%	2.6%	3.6%	7.6%	10.0%	2.4%	3.4%
	Thursday	2.3%	2.7%	2.6%	2.5%	2.6%	1.9%	1.8%	1.8%	2.8%	3.3%	10.7%	2.5%	2.9%	2.6%	1.8%	3.7%	1.7%	2.5%	2.7%	2.6%	5.1%	6.9%	0.0%	2.5%	3.1%
	Friday	2.3%	2.5%	2.6%	2.5%	2.4%	1.9%	2.0%	1.9%	2.6%	3.4%	10.7%	2.5%	2.8%	2.3%	2.9%	3.6%	1.7%	2.8%	2.7%	2.3%	11.6%	6.4%	4.8%	2.3%	3.5%
	Saturday	2.8%	4.0%	3.5%	3.1%	3.6%	2.7%	2.0%	2.6%	3.9%	4.9%	12.8%	3.6%	3.8%	3.5%	3.6%	3.4%	1.9%	3.5%	3.8%	3.6%	0.0%	8.3%	0.0%	3.5%	5.3%
	Sunday	3.1%	3.9%	3.5%	3.5%	3.5%	2.6%	2.0%	2.7%	3.9%	5.6%	10.6%	3.7%	3.9%	3.4%	4.2%	2.5%	2.2%	3.7%	3.9%	3.6%	21.4%	7.8%	10.0%	3.6%	5.1%
Time of Day	12-3 AM	3.9%	6.6%	6.4%	4.8%	5.8%	5.0%	2.3%	4.0%	6.7%	8.7%	18.8%	6.9%	6.3%	4.9%	4.1%	2.3%	2.3%	5.4%	6.2%	6.5%	10.0%	13.4%	0.0%	6.6%	9.4%
	3-6 AM	4.7%	6.2%	7.3%	6.1%	5.7%	5.1%	2.8%	5.2%	6.5%	8.2%	13.6%	6.9%	6.6%	4.7%	6.8%	7.8%	3.6%	5.6%	6.5%	6.6%	25.0%	13.2%	0.0%	6.0%	8.7%
	6-9 AM	2.4%	2.9%	2.9%	2.5%	2.9%	2.0%	1.7%	2.2%	2.9%	3.5%	13.5%	2.4%	3.1%	3.0%	3.0%	2.7%	2.1%	2.8%	2.9%	2.7%	15.4%	8.0%	7.7%	2.6%	3.0%
	9-Noon	2.0%	2.5%	2.4%	2.2%	2.3%	1.8%	1.8%	1.7%	2.5%	3.4%	13.8%	2.2%	2.6%	2.2%	2.7%	2.1%	1.5%	2.4%	2.3%	2.3%	12.5%	8.9%	7.7%	2.2%	3.2%
	Noon-3 PM	1.8%	1.9%	1.7%	1.7%	1.9%	1.1%	1.4%	1.5%	2.0%	2.4%	4.4%	1.6%	2.1%	2.0%	2.1%	2.7%	1.3%	2.0%	2.1%	1.6%	2.3%	4.0%	0.0%	1.7%	2.4%
	3-6 PM	1.8%	1.8%	1.7%	2.0%	1.8%	1.0%	1.6%	1.3%	1.9%	2.1%	9.9%	1.7%	1.8%	1.9%	2.1%	2.3%	1.4%	2.0%	2.0%	1.5%	3.7%	4.0%	3.8%	1.6%	2.8%
	6-9 PM	2.7%	3.2%	3.1%	3.0%	3.0%	2.3%	2.0%	2.2%	3.3%	4.2%	9.3%	3.1%	3.2%	2.9%	3.2%	4.4%	2.1%	3.0%	3.3%	3.0%	8.8%	6.1%	5.6%	2.9%	3.4%
	9-Midnight	4.4%	5.4%	5.3%	4.7%	5.4%	3.7%	2.8%	3.7%	5.7%	7.3%	14.5%	5.8%	5.3%	4.9%	3.9%	6.5%	2.8%	5.5%	4.8%	5.7%	0.0%	10.2%	50.0%	5.5%	8.0%
Lighting Conditions	Dark - Lighted	3.1%	4.5%	5.0%	3.9%	4.5%	3.2%	2.4%	3.3%	4.9%	5.6%	17.3%	4.8%	4.5%	3.9%	3.7%	5.8%	2.3%	3.8%	4.3%	4.9%	5.9%	7.7%	22.2%	4.5%	5.8%
	Dark - Not Lighted	6.5%	8.7%	7.7%	7.1%	7.7%	6.2%	2.9%	6.3%	7.8%	10.4%	14.5%	9.6%	7.5%	7.1%	7.1%	4.6%	4.1%	8.5%	8.3%	7.5%	13.3%	13.2%	12.5%	8.1%	9.9%
	Dark - Unknown Lighting	0.6%	1.2%	2.0%	0.9%	1.1%	0.0%	1.0%	0.0%	1.9%	0.0%	-	2.0%	0.8%	0.7%	0.0%	0.0%	0.5%	0.6%	1.5%	1.3%	-	0.0%	-	0.7%	0.0%
	Dawn	3.2%	3.3%	2.8%	3.1%	3.3%	2.2%	2.4%	2.6%	3.3%	3.7%	11.6%	2.7%	3.2%	4.0%	3.8%	2.9%	2.2%	3.7%	3.2%	3.0%	14.3%	11.8%	0.0%	2.9%	2.8%
	Daylight	1.9%	2.1%	2.0%	2.0%	2.1%	1.4%	1.6%	1.5%	2.2%	2.7%	9.9%	1.8%	2.3%	2.1%	2.3%	2.5%	1.5%	2.2%	2.2%	1.9%	6.5%	5.0%	4.2%	1.9%	2.8%
	Dusk	2.5%	2.6%	2.6%	2.9%	2.5%	2.3%	2.2%	1.7%	3.0%	2.5%	4.5%	2.4%	2.9%	2.5%	2.3%	2.9%	2.5%	2.3%	3.0%	2.3%	14.3%	5.3%	0.0%	2.5%	2.0%
	Other	4.2%	3.0%	16.0%	3.2%	8.2%	12.5%	0.0%	9.5%	8.3%	11.1%	-	10.5%	4.5%	9.1%	0.0%	-	0.0%	8.0%	0.0%	13.9%	-		-	13.2%	0.0%
	Unknown	1.2%	1.0%	0.0%	0.6%	2.0%	0.0%	0.3%	2.0%	2.1%	0.0%	25.0%	2.9%	0.0%	2.4%	0.0%	0.0%	0.5%	2.6%	0.0%	1.8%	-	25.0%	-	1.8%	0.0%

Attachment B-3
MetroPlan Orlando Region
Percent of All Crashes that Result in a KSI 2018-2022

Mode: All	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	2.0%	0.8%	3.2%	3.1%	3.1%	4.8%	4.2%	3.3%	5.1%	3.6%	5.0%	3.2%	3.2%	3.0%	4.3%	3.4%	3.6%	3.4%
	Animal	0.0%	0.0%	0.0%	1.0%	1.0%	2.0%	1.2%	1.2%	0.0%	0.0%	1.8%	0.9%	0.4%	1.3%	1.4%	0.0%	0.0%	0.0%
	Bicycle	10.3%	0.0%	0.0%	14.2%	13.4%	16.7%	15.0%	13.8%	15.8%	33.3%	25.0%	11.5%	13.7%	13.9%	14.5%	6.4%	14.9%	11.1%
	Head On	5.7%	0.0%	0.0%	7.4%	7.6%	4.6%	15.6%	9.3%	2.2%	4.5%	21.7%	10.4%	6.1%	9.5%	9.8%	13.2%	6.6%	0.0%
	Left Turn	2.8%	3.5%	0.0%	4.1%	4.2%	5.8%	4.7%	4.3%	6.4%	4.9%	5.5%	4.6%	4.3%	3.7%	5.2%	3.6%	5.0%	1.9%
	Off Road	2.9%	6.5%	1.7%	4.6%	4.5%	4.8%	6.7%	5.0%	5.0%	4.0%	5.3%	3.9%	5.2%	3.8%	6.9%	6.5%	5.2%	3.1%
	Other	2.3%	2.0%	1.5%	1.4%	1.9%	3.0%	3.5%	2.2%	3.1%	1.5%	3.0%	2.2%	2.1%	1.6%	3.4%	3.4%	2.6%	1.9%
	Pedestrian	28.5%	30.0%	21.9%	21.8%	26.3%	30.6%	30.5%	27.0%	33.1%	40.6%	26.2%	25.6%	28.1%	22.9%	31.6%	41.8%	30.8%	20.0%
	Rear End	0.8%	0.5%	0.0%	1.3%	1.2%	1.4%	1.4%	1.2%	1.5%	1.1%	1.9%	1.2%	1.2%	1.0%	1.4%	1.2%	1.4%	0.5%
	Right Turn	1.0%	0.0%	0.0%	1.7%	1.3%	1.1%	2.9%	1.7%	1.2%	0.0%	2.6%	1.5%	1.5%	0.8%	2.3%	0.5%	1.9%	0.0%
	Rollover	2.5%	7.7%	0.0%	8.9%	8.1%	3.1%	11.1%	8.7%	2.9%	25.0%	11.6%	6.9%	7.1%	8.0%	9.5%	9.4%	6.8%	16.7%
	Sideswipe	0.3%	0.4%	0.3%	0.7%	0.6%	0.8%	0.9%	0.7%	0.9%	0.7%	1.0%	0.6%	0.7%	0.7%	0.9%	0.5%	0.5%	0.5%
	Unknown	0.6%	1.0%	0.0%	1.3%	1.3%	1.5%	2.2%	1.5%	1.5%	0.0%	3.4%	1.1%	1.4%	1.1%	1.9%	2.4%	1.5%	0.0%
Alcohol Related	Y	7.2%	7.7%	2.9%	9.1%	8.8%	9.0%	13.5%	10.0%	8.6%	3.9%	19.0%	8.3%	8.7%	9.4%	11.8%	13.2%	8.0%	4.1%
	N	1.8%	1.5%	1.2%	2.5%	2.5%	2.6%	2.9%	2.6%	2.6%	2.1%	3.6%	2.5%	2.5%	2.5%	2.9%	2.1%	2.5%	1.3%
Hit and Run	Y	1.6%	0.8%	1.0%	1.6%	1.8%	2.1%	2.1%	1.9%	1.6%	0.3%	1.9%	1.5%	1.9%	1.8%	1.9%	1.4%	1.9%	1.5%
	N	1.9%	1.7%	1.3%	2.8%	2.7%	3.2%	3.2%	2.8%	2.9%	2.5%	4.2%	2.8%	2.7%	2.7%	3.2%	2.4%	2.6%	1.3%
Aggressive Driving	Y	5.5%	6.2%	10.0%	6.1%	5.6%	6.2%	6.2%	5.9%	6.9%	1.6%	8.5%	6.9%	5.3%	6.5%	6.4%	3.6%	4.8%	2.1%
	N	1.8%	1.5%	1.0%	2.5%	2.5%	3.0%	3.0%	2.6%	2.6%	2.2%	3.8%	2.5%	2.5%	2.5%	3.0%	2.3%	2.5%	1.3%
Distracted Driving	Y	1.8%	1.5%	0.6%	2.9%	2.8%	3.1%	3.1%	2.9%	3.0%	2.9%	4.6%	2.8%	2.7%	2.8%	3.2%	2.9%	2.6%	1.6%
	N	1.9%	1.6%	1.3%	2.5%	2.5%	3.1%	3.1%	2.6%	2.6%	2.0%	3.7%	2.6%	2.5%	2.6%	3.0%	2.1%	2.5%	1.2%
Intersection Related	Y	2.3%	2.4%	2.7%	3.6%	3.3%	4.0%	4.0%	3.5%	4.1%	3.1%	4.7%	3.2%	3.5%	3.3%	4.1%	2.6%	3.5%	1.4%
	N	1.6%	1.2%	0.5%	2.2%	2.2%	2.8%	2.8%	2.4%	2.1%	1.9%	3.6%	2.3%	2.2%	2.3%	2.6%	2.2%	2.1%	1.3%
Drug Related	Y	20.0%	14.3%	0.0%	17.2%	18.4%	22.7%	22.7%	19.6%	16.3%	15.4%	31.4%	20.1%	17.0%	20.2%	22.3%	12.2%	15.6%	0.0%
	N	1.8%	1.6%	1.2%	2.5%	2.5%	3.0%	3.0%	2.6%	2.6%	2.1%	3.7%	2.5%	2.5%	2.5%	2.9%	2.3%	2.5%	1.3%
Aging Driver	Y	1.5%	1.1%	1.8%	2.6%	2.4%	3.2%	3.2%	2.6%	2.9%	2.6%	5.1%	2.6%	2.4%	2.6%	2.9%	2.3%	2.5%	1.4%
	N	1.9%	1.7%	1.1%	2.6%	2.6%	3.1%	3.1%	2.7%	2.7%	2.1%	3.7%	2.6%	2.6%	2.6%	3.1%	2.3%	2.6%	1.3%
Teenage Driver	Y	1.1%	1.4%	2.3%	2.4%	2.3%	2.6%	2.6%	2.4%	2.6%	1.4%	2.8%	2.6%	2.3%	2.2%	2.6%	2.0%	2.5%	1.9%
	N	1.9%	1.6%	1.2%	2.6%	2.6%	3.2%	3.2%	2.8%	2.7%	2.3%	4.1%	2.6%	2.6%	2.7%	3.1%	2.3%	2.6%	1.2%
Day of the Week	Monday	1.4%	1.4%	1.3%	2.4%	2.3%	2.9%	2.9%	2.5%	2.2%	2.2%	3.6%	2.5%	2.3%	2.5%	2.6%	2.6%	2.2%	1.7%
	Tuesday	1.4%	0.5%	1.0%	2.5%	2.3%	3.2%	3.2%	2.5%	2.1%	1.2%	3.7%	2.3%	2.3%	2.4%	2.8%	1.3%	2.4%	1.0%
	Wednesday	1.9%	1.9%	0.4%	2.4%	2.5%	2.5%	2.5%	2.5%	2.9%	2.6%	3.9%	2.6%	2.4%	2.4%	2.9%	1.8%	2.3%	1.5%
	Thursday	2.0%	1.7%	0.9%	2.4%	2.4%	3.0%	3.0%	2.5%	2.4%	2.6%	3.6%	2.4%	2.4%	2.4%	2.7%	2.0%	2.5%	0.8%
	Friday	1.9%	1.2%	0.9%	2.4%	2.3%	2.7%	2.7%	2.4%	2.9%	2.0%	3.5%	2.4%	2.4%	2.4%	2.7%	2.1%	2.3%	1.1%
	Saturday	2.6%	2.4%	2.1%	3.1%	3.2%	4.1%	4.1%	3.4%	3.4%	2.6%	4.5%	3.3%	3.3%	3.1%	3.9%	3.6%	3.3%	0.8%
	Sunday	2.2%	2.6%	2.0%	3.2%	3.4%	4.1%	4.1%	3.5%	3.2%	2.2%	5.2%	3.2%	3.3%	3.2%	4.2%	3.1%	3.1%	3.0%
Time of Day	12-3 AM	5.4%	3.1%	2.4%	4.2%	4.7%	7.9%	7.9%	5.4%	6.4%	5.2%	7.3%	4.7%	5.3%	4.1%	6.8%	4.7%	6.3%	5.6%
	3-6 AM	4.3%	9.4%	1.1%	5.3%	5.5%	7.3%	7.3%	5.9%	6.0%	4.9%	7.7%	5.7%	5.6%	5.0%	7.7%	5.3%	5.1%	4.4%
	6-9 AM	1.9%	1.8%	0.0%	2.7%	2.6%	3.1%	3.1%	2.7%	3.1%	2.3%	3.7%	2.2%	2.7%	2.5%	3.1%	2.3%	2.7%	1.2%
	9-Noon	1.3%	1.4%	1.4%	2.2%	2.2%	2.5%	2.5%	2.3%	2.3%	1.4%	3.5%	2.2%	2.2%	2.0%	2.6%	1.8%	2.4%	0.7%
	Noon-3 PM	1.1%	0.4%	1.2%	1.9%	1.8%	1.9%	1.9%	1.8%	1.6%	1.5%	2.7%	2.0%	1.7%	1.9%	2.0%	1.4%	1.7%	0.2%
	3-6 PM	1.2%	1.0%	0.7%	1.8%	1.8%	1.9%	1.9%	1.8%	1.6%	1.5%	2.4%	1.7%	1.7%	1.9%	2.0%	1.6%	1.5%	0.8%
	6-9 PM	2.1%	1.0%	1.7%	3.0%	2.9%	3.5%	3.5%	3.0%	2.8%	2.0%	4.0%	2.9%	2.9%	3.1%	3.1%	2.7%	2.9%	1.7%
	9-Midnight	3.9%	3.4%	1.1%	4.3%	4.6%	6.3%	6.3%	5.0%	5.2%	5.0%	6.7%	5.1%	4.8%	5.0%	5.5%	3.3%	4.7%	4.0%
Lighting Conditions	Dark - Lighted	3.8%	3.8%	2.0%	3.7%	4.0%	4.7%	4.7%	4.2%	4.5%	3.8%	4.4%	3.7%	4.3%	3.8%	4.7%	3.7%	4.1%	3.9%
	Dark - Not Lighted	6.2%	0.0%	0.0%	6.1%	6.1%	10.2%	10.2%	7.4%	7.6%	9.1%	8.9%	7.3%	6.7%	6.7%	8.3%	6.3%	7.9%	3.7%
	Dark - Unknown Lighting	3.2%	0.0%	0.0%	0.8%	1.2%	0.9%	0.9%	1.1%	0.0%	0.0%	0.0%	0.0%	1.4%	0.3%	1.6%	0.0%	0.9%	25.0%
	Dawn	1.6%	4.9%	0.0%	3.1%	3.1%	3.3%	3.3%	3.1%	4.1%	0.0%	5.1%	2.4%	3.0%	3.2%	3.1%	0.7%	3.5%	0.0%
	Daylight	1.3%	0.8%	0.9%	2.1%	2.0%	2.2%	2.2%	2.0%	1.9%	1.5%	2.9%	1.9%	1.9%	2.0%	2.3%	1.5%	1.9%	0.5%
	Dusk	2.0%	2.0%	0.0%	2.7%	2.4%	3.2%	3.2%	2.6%	2.5%	2.5%	3.6%	2.7%	2.4%	2.6%	2.3%	3.1%	2.9%	1.0%
	Other	0.0%	-	-	2.9%	5.5%	5.3%	5.3%	5.4%	16.7%	0.0%	10.0%	10.0%	5.3%	2.1%	9.4%	66.7%	4.5%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.7%	0.6%	4.8%	4.8%	1.1%	0.0%	0.0%	4.3%	0.0%	0.5%	1.4%	0.0%	0.0%	0.0%	0.0%

Attachment B-4
MetroPlan Orlando Region
Percent of All KSI Crashes 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	3.9%	3.0%	1.6%	2.9%	4.8%	0.8%	1.5%	2.4%	3.8%	0.7%	0.1%	2.2%	1.9%	2.2%	0.3%	0.2%	1.7%	2.7%	2.4%	2.5%	0.0%	0.2%	0.0%	2.5%	0.4%
	Animal	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	1.6%	1.9%	1.1%	1.4%	2.7%	0.4%	0.6%	1.0%	2.5%	0.4%	0.0%	1.6%	1.0%	1.1%	0.2%	0.0%	0.7%	1.2%	1.4%	1.9%	0.0%	0.0%	0.0%	1.7%	0.3%
	Head On	2.1%	1.2%	0.5%	2.1%	1.4%	0.1%	0.2%	0.6%	1.7%	0.9%	0.3%	1.4%	0.8%	1.0%	0.2%	0.0%	0.3%	1.7%	1.2%	1.0%	0.0%	0.4%	0.0%	0.8%	0.3%
	Left Turn	6.4%	9.9%	5.0%	3.9%	15.5%	1.7%	1.2%	4.2%	13.4%	2.4%	0.1%	6.0%	7.3%	5.2%	0.5%	0.2%	1.8%	5.6%	8.5%	7.8%	0.1%	0.5%	0.0%	7.1%	1.5%
	Off Road	4.5%	5.1%	1.8%	6.1%	5.0%	0.5%	1.8%	2.2%	5.8%	1.3%	0.2%	3.0%	3.2%	2.5%	0.3%	0.2%	2.5%	3.0%	4.1%	3.2%	0.1%	0.3%	0.0%	2.5%	0.8%
	Other	4.0%	3.9%	2.8%	4.3%	5.7%	0.9%	1.7%	2.1%	5.3%	1.3%	0.3%	3.8%	2.5%	2.1%	0.4%	0.1%	2.1%	2.9%	3.2%	4.0%	0.0%	0.3%	0.0%	3.2%	0.6%
	Pedestrian	3.5%	4.9%	4.9%	3.8%	8.1%	1.4%	1.4%	2.5%	7.9%	1.6%	0.0%	6.0%	3.3%	2.1%	0.3%	0.0%	1.5%	2.4%	4.2%	6.9%	0.0%	0.1%	0.0%	5.9%	0.5%
	Rear End	3.3%	7.7%	7.7%	4.0%	11.7%	3.0%	0.3%	2.0%	13.2%	3.2%	0.2%	8.9%	6.0%	2.7%	0.2%	0.2%	0.6%	2.6%	6.6%	11.3%	0.0%	0.4%	0.0%	8.6%	1.4%
	Right Turn	0.3%	0.6%	0.4%	0.2%	0.9%	0.2%	0.1%	0.2%	0.8%	0.2%	0.0%	0.4%	0.4%	0.3%	0.0%	0.0%	0.1%	0.3%	0.5%	0.6%	0.0%	0.0%	0.0%	0.5%	0.0%
	Rollover	0.8%	0.6%	0.3%	1.0%	0.6%	0.1%	0.2%	0.3%	0.6%	0.3%	0.3%	0.6%	0.3%	0.4%	0.1%	0.0%	0.3%	0.8%	0.4%	0.4%	0.0%	0.2%	0.0%	0.3%	0.2%
	Sideswipe	0.8%	1.3%	1.2%	0.9%	2.0%	0.3%	0.1%	0.5%	1.9%	0.7%	0.1%	1.6%	1.0%	0.4%	0.1%	0.0%	0.2%	0.7%	1.1%	1.8%	0.0%	0.1%	0.0%	1.5%	0.2%
	Unknown	0.3%	0.7%	0.3%	0.3%	0.9%	0.0%	0.1%	0.2%	0.7%	0.2%	0.0%	0.5%	0.4%	0.3%	0.0%	0.0%	0.1%	0.3%	0.5%	0.6%	0.0%	0.1%	0.0%	0.5%	0.1%
Alcohol Related	Y	1.9%	2.4%	1.4%	2.4%	2.9%	0.4%	0.6%	1.1%	3.0%	0.8%	0.2%	2.2%	1.3%	1.3%	0.2%	0.1%	0.6%	1.9%	1.7%	2.2%	0.0%	0.3%	0.0%	1.8%	0.4%
	N	29.7%	38.3%	26.3%	28.8%	56.5%	9.0%	8.6%	17.3%	54.7%	12.4%	1.4%	34.0%	26.8%	19.0%	2.3%	0.9%	11.2%	22.3%	32.4%	39.6%	0.2%	2.4%	0.1%	33.4%	5.8%
Hit and Run	Y	2.8%	3.4%	3.0%	2.6%	5.7%	0.9%	1.0%	1.7%	5.4%	1.1%	0.1%	3.7%	2.4%	1.7%	0.2%	0.1%	1.1%	1.8%	3.0%	4.4%	0.0%	0.1%	0.0%	3.5%	0.4%
	N	28.8%	37.3%	24.6%	28.7%	53.6%	8.5%	8.2%	16.7%	52.3%	12.0%	1.6%	32.6%	25.7%	18.5%	2.4%	0.9%	10.8%	22.4%	31.0%	37.4%	0.2%	2.6%	0.1%	31.8%	5.9%
Aggressive Driving	Y	2.1%	2.1%	1.0%	1.9%	3.0%	0.3%	0.7%	1.5%	2.5%	0.5%	0.1%	1.8%	1.1%	1.4%	0.2%	0.0%	0.7%	1.7%	1.7%	1.7%	0.0%	0.1%	0.0%	1.3%	0.4%
	N	29.5%	38.6%	26.7%	29.3%	56.4%	9.1%	8.5%	16.9%	55.2%	12.6%	1.6%	34.5%	27.1%	18.9%	2.4%	0.9%	11.1%	22.5%	32.3%	40.1%	0.2%	2.6%	0.1%	33.9%	5.9%
Distracted Driving	Y	8.8%	11.9%	7.5%	8.2%	17.0%	3.0%	2.1%	4.5%	16.9%	4.1%	0.6%	9.8%	8.7%	5.6%	0.6%	0.3%	3.0%	6.6%	10.2%	11.7%	0.1%	1.0%	0.0%	9.5%	2.1%
	N	22.9%	28.9%	20.2%	23.0%	42.4%	6.5%	7.1%	13.9%	40.8%	9.0%	1.1%	26.4%	19.4%	14.6%	2.0%	0.7%	8.8%	17.6%	23.8%	30.1%	0.2%	1.7%	0.0%	25.8%	4.1%
Intersection Related	Y	13.5%	16.4%	10.7%	9.1%	26.9%	4.1%	3.6%	8.8%	23.3%	4.6%	0.2%	13.2%	11.7%	9.2%	1.1%	0.4%	4.4%	10.8%	13.8%	15.7%	0.1%	0.9%	0.0%	14.3%	2.8%
	N	18.1%	24.3%	17.0%	22.1%	32.5%	5.3%	5.5%	9.6%	34.5%	8.5%	1.4%	23.1%	16.4%	11.1%	1.4%	0.6%	7.5%	13.4%	20.2%	26.1%	0.2%	1.8%	0.0%	20.9%	3.4%
Drug Related	Y	1.1%	1.4%	0.9%	1.2%	1.8%	0.3%	0.3%	0.5%	2.0%	0.5%	0.1%	1.4%	0.9%	0.6%	0.1%	0.1%	0.3%	0.9%	1.0%	1.5%	0.0%	0.2%	0.0%	1.1%	0.3%
	N	30.5%	39.3%	26.8%	30.0%	57.6%	9.1%	8.9%	17.9%	55.7%	12.6%	1.5%	34.8%	27.3%	19.6%	2.5%	0.9%	11.5%	23.2%	33.0%	40.3%	0.2%	2.5%	0.1%	34.2%	6.0%
Aging Driver	Y	4.8%	6.3%	3.7%	4.2%	9.1%	1.6%	1.2%	2.8%	8.5%	2.2%	0.3%	5.6%	4.3%	3.0%	0.4%	0.1%	1.7%	3.9%	4.9%	6.2%	0.1%	0.6%	0.0%	5.4%	1.0%
	N	26.8%	34.4%	23.9%	27.0%	50.2%	7.8%	7.9%	15.6%	49.2%	11.0%	1.4%	30.6%	23.9%	17.3%	2.1%	0.9%	10.2%	20.2%	29.1%	35.6%	0.2%	2.1%	0.1%	29.9%	5.2%
Teenage Driver	Y	3.7%	4.9%	3.0%	3.3%	7.2%	1.0%	1.1%	2.0%	6.9%	1.6%	0.1%	3.6%	3.5%	2.4%	0.4%	0.1%	1.6%	2.8%	3.7%	4.8%	0.0%	0.2%	0.0%	4.0%	0.8%
	N	27.9%	35.8%	24.7%	27.9%	52.1%	8.4%	8.1%	16.4%	50.8%	11.5%	1.6%	32.6%	24.6%	17.9%	2.2%	0.8%	10.3%	21.3%	30.3%	37.0%	0.2%	2.5%	0.0%	31.3%	5.4%
Day of the Week	Monday	5.0%	5.2%	3.5%	4.5%	7.9%	1.3%	1.3%	2.5%	7.9%	1.7%	0.3%	4.7%	3.8%	3.0%	0.3%	0.1%	1.7%	3.7%	4.4%	5.4%	0.0%	0.4%	0.0%	4.8%	1.0%
	Tuesday	4.1%	5.8%	4.1%	4.3%	8.5%	1.2%	1.3%	2.5%	8.1%	1.9%	0.3%	5.0%	4.1%	2.8%	0.4%	0.1%	1.7%	3.1%	5.0%	5.9%	0.0%	0.3%	0.0%	5.1%	0.7%
	Wednesday	4.3%	5.7%	4.1%	4.3%	8.7%	1.2%	1.3%	2.8%	8.1%	1.7%	0.2%	5.3%	3.7%	2.9%	0.4%	0.2%	1.7%	3.5%	4.4%	6.2%	0.0%	0.4%	0.0%	4.9%	0.9%
	Thursday	4.4%	6.0%	3.9%	4.4%	8.7%	1.4%	1.3%	2.6%	8.6%	1.8%	0.2%	5.2%	4.2%	2.9%	0.3%	0.2%	1.6%	3.4%	4.8%	6.3%	0.0%	0.4%	0.0%	5.1%	0.8%
	Friday	5.0%	6.1%	4.4%	4.9%	9.1%	1.6%	1.5%	2.8%	8.9%	2.0%	0.2%	5.6%	4.5%	3.0%	0.4%	0.2%	1.8%	3.9%	5.3%	6.3%	0.1%	0.4%	0.0%	5.3%	1.0%
	Saturday	4.4%	6.7%	4.3%	4.5%	9.2%	1.6%	1.3%	2.8%	9.0%	2.0%	0.3%	5.8%	4.3%	3.1%	0.4%	0.1%	1.6%	3.4%	5.4%	6.7%	0.0%	0.4%	0.0%	5.5%	1.0%
	Sunday	4.3%	5.3%	3.4%	4.4%	7.3%	1.3%	1.2%	2.5%	7.1%	2.0%	0.2%	4.7%	3.6%	2.6%	0.4%	0.1%	1.6%	3.2%	4.5%	5.2%	0.0%	0.4%	0.0%	4.5%	0.9%
Time of Day	12-3 AM	2.5%	3.5%	2.5%	3.0%	4.5%	1.0%	0.7%	1.6%	4.7%	1.3%	0.2%	3.6%	2.4%	1.6%	0.2%	0.0%	0.7%	2.1%	2.9%	3.8%	0.0%	0.3%	0.0%	3.3%	0.6%
	3-6 AM	2.0%	2.3%	1.9%	2.4%	3.0%	0.7%	0.5%	1.2%	3.3%	1.0%	0.2%	2.5%	1.7%	0.9%	0.2%	0.1%	0.7%	1.4%	2.0%	2.6%	0.0%	0.3%	0.0%	2.1%	0.4%
	6-9 AM	4.1%	5.2%	3.3%	3.5%	7.9%	1.1%	1.0%	2.3%	7.3%	1.7%	0.3%	4.0%	3.8%	2.8%	0.4%	0.1%	1.5%	3.1%	4.2%	5.2%	0.1%	0.5%	0.0%	4.3%	0.7%
	9-Noon	3.5%	4.7%	3.2%	3.6%	6.7%	1.3%	1.3%	2.1%	6.5%	1.5%	0.2%	4.1%	3.3%	2.1%	0.3%	0.1%	1.5%	2.7%	3.6%	5.0%	0.1%	0.4%	0.0%	4.0%	0.7%
	Noon-3 PM	4.3%	5.3%	3.3%	4.0%	8.1%	1.0%	1.3%	2.7%	7.4%	1.4%	0.1%	4.3%	3.8%	2.7%	0.4%	0.2%	1.8%	3.2%	4.6%	5.0%	0.0%	0.3%	0.0%	4.4%	0.7%
	3-6 PM	5.3%	6.3%	4.0%	5.2%	9.4%	1.1%	1.7%	2.8%	9.3%	1.7%	0.2%	5.4%	4.1%	3.5%	0.4%	0.2%	2.0%	4.1%	5.6%	5.8%	0.0%	0.3%	0.0%	5.2%	1.1%
	6-9 PM	5.3%	7.2%	4.9%	5.2%	10.5%	1.7%	1.5%	3.0%	10.5%	2.3%	0.2%	6.4%	4.8%	3.6%	0.4%	0.2%	2.0%	3.9%	6.3%	7.3%	0.0%	0.3%	0.0%	6.0%	0.9%
	9-Midnight	4.6%	6.1%	4.5%	4.4%	9.2%	1.5%	1.2%	2.8%	8.8%	2.3%	0.2%	5.9%	4.2%	3.0%	0.3%	0.2%	1.5%	3.7%	4.8%	7.0%	0.0%	0.3%	0.0%	6.0%	1.1%
Lighting Conditions	Dark - Lighted	7.5%	12.6%	10.7%	8.2%	19.0%	3.4%	2.3%	6.1%	18.5%	3.7%	0.1%	12.5%	8.7%	5.7%	0.6%	0.3%	2.9%	5.9%	10.2%	15.5%	0.0%	0.3%	0.0%	12.1%	1.7%
	Dark - Not Lighted	4.9%	4.3%	1.7%	4.8%	5.3%	0.7%	0.7%	1.6%	5.3%	2.6%	0.7%	4.3%	2.5%	2.4%	0.4%	0.1%	1.2%	4.1%	3.8%	3.1%	0.1%	1.0%	0.0%	3.5%	1.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.7%	0.8%	0.4%	0.6%	1.2%	0.2%	0.2%	0.4%	1.1%	0.3%	0.1%	0.6%	0.5%	0.5%	0.1%	0.0%	0.2%	0.6%	0.7%	0.7%	0.0%	0.1%	0.0%	0.6%	0.1%
	Daylight	17.3%	21.7%	14.0%	16.4%	32.0%	4.7%	5.5%	9.8%	30.7%	6.3%	0.7%	17.7%	15.5%	10.9%	1.4%	0.5%	7.0%	12.9%	18.2%	21.2%	0.1%	1.3%	0.0%	17.9%	3.3%
	Dusk	1.0%	1.3%	0.8%	1.0%	1.8%	0.4%	0.3%	0.5%	2.1%	0.3%	0.0%	1.0%	1.0%	0.7%	0.1%	0.0%	0.5%	0.6%	1.2%	1.2%	0.0%	0.1%	0.0%	1.1%	0.1%
	Other	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%
	Unknown	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment B-4
MetroPlan Orlando Region
Percent of All KSI Crashes 2018-2022

Mode:	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.6%	0.0%	0.1%	4.7%	5.8%	1.2%	1.5%	7.5%	0.9%	0.0%	1.2%	1.4%	5.9%	4.1%	2.4%	0.1%	1.8%	0.1%
	Animal	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.3%	0.0%	0.0%	2.3%	3.0%	0.5%	1.1%	4.2%	0.4%	0.1%	0.5%	0.4%	3.7%	1.9%	1.4%	0.0%	1.2%	0.1%
	Head On	0.2%	0.0%	0.0%	1.8%	2.3%	0.2%	1.3%	3.7%	0.1%	0.0%	1.2%	0.7%	1.8%	2.2%	0.8%	0.1%	0.6%	0.0%
	Left Turn	1.1%	0.1%	0.0%	10.6%	14.0%	3.1%	4.2%	18.9%	2.3%	0.1%	2.3%	3.1%	16.0%	7.6%	7.4%	0.4%	5.8%	0.1%
	Off Road	0.3%	0.1%	0.0%	7.6%	7.6%	0.8%	3.0%	10.8%	0.5%	0.0%	2.2%	1.8%	7.4%	4.5%	4.6%	0.3%	2.0%	0.1%
	Other	1.0%	0.1%	0.1%	5.7%	6.9%	1.2%	2.6%	9.9%	0.8%	0.0%	1.7%	1.5%	7.5%	4.4%	3.5%	0.3%	2.4%	0.1%
	Pedestrian	1.5%	0.1%	0.1%	5.1%	8.6%	1.7%	3.1%	11.8%	1.4%	0.2%	0.9%	1.4%	11.0%	4.9%	4.1%	0.4%	3.8%	0.1%
	Rear End	1.1%	0.1%	0.0%	7.0%	10.2%	3.7%	4.8%	15.6%	2.9%	0.2%	2.1%	2.2%	14.5%	3.8%	7.4%	0.7%	6.7%	0.1%
	Right Turn	0.1%	0.0%	0.0%	0.6%	0.7%	0.1%	0.4%	1.2%	0.1%	0.0%	0.1%	0.1%	1.0%	0.2%	0.5%	0.0%	0.5%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.9%	1.0%	0.1%	0.6%	1.6%	0.0%	0.0%	0.7%	0.2%	0.8%	0.7%	0.7%	0.0%	0.3%	0.0%
	Sideswipe	0.2%	0.0%	0.0%	1.3%	1.8%	0.6%	0.9%	2.8%	0.5%	0.0%	0.4%	0.3%	2.6%	1.0%	1.4%	0.1%	0.8%	0.0%
	Unknown	0.1%	0.0%	0.0%	0.5%	0.7%	0.2%	0.4%	1.1%	0.1%	0.0%	0.2%	0.1%	1.0%	0.3%	0.5%	0.1%	0.4%	0.0%
Alcohol Related	Y	0.4%	0.0%	0.0%	2.7%	3.4%	0.7%	1.6%	5.2%	0.5%	0.0%	1.3%	0.7%	3.7%	2.3%	2.0%	0.2%	1.1%	0.0%
	N	6.1%	0.5%	0.3%	45.6%	59.2%	12.7%	22.4%	83.9%	9.6%	0.8%	12.2%	12.6%	69.5%	33.4%	32.8%	2.3%	25.2%	0.6%
Hit and Run	Y	0.8%	0.0%	0.0%	4.3%	6.3%	1.9%	1.9%	8.4%	0.8%	0.0%	0.8%	1.0%	7.4%	3.8%	2.5%	0.2%	2.6%	0.1%
	N	5.6%	0.5%	0.2%	43.9%	56.4%	22.1%	22.1%	80.7%	9.3%	0.8%	12.6%	12.3%	65.9%	31.8%	32.4%	2.4%	23.7%	0.5%
Aggressive Driving	Y	0.5%	0.1%	0.0%	2.8%	3.1%	1.3%	1.3%	4.6%	0.6%	0.0%	0.8%	1.0%	3.4%	2.3%	1.8%	0.1%	1.0%	0.0%
	N	5.9%	0.5%	0.2%	45.4%	59.5%	22.7%	22.7%	84.5%	9.5%	0.8%	12.7%	12.3%	69.8%	33.4%	33.1%	2.5%	25.3%	0.6%
Distracted Driving	Y	1.3%	0.1%	0.0%	13.9%	17.6%	6.5%	6.5%	24.9%	3.0%	0.2%	4.4%	3.7%	20.0%	9.5%	10.3%	0.9%	7.2%	0.1%
	N	5.1%	0.4%	0.3%	34.3%	45.0%	17.5%	17.5%	64.2%	7.0%	0.6%	9.1%	9.6%	53.2%	26.2%	24.5%	1.6%	19.1%	0.4%
Intersection Related	Y	2.5%	0.3%	0.2%	18.9%	25.6%	8.6%	8.6%	35.5%	4.8%	0.3%	4.5%	5.3%	30.7%	14.7%	13.6%	0.9%	11.2%	0.2%
	N	3.9%	0.3%	0.1%	29.3%	37.0%	15.4%	15.4%	53.6%	5.3%	0.5%	8.9%	7.9%	42.6%	21.0%	21.3%	1.7%	15.1%	0.4%
Drug Related	Y	0.2%	0.0%	0.0%	1.5%	2.1%	0.9%	0.9%	3.0%	0.3%	0.0%	0.7%	0.5%	2.2%	1.3%	1.3%	0.1%	0.7%	0.0%
	N	6.2%	0.5%	0.3%	46.7%	60.6%	23.1%	23.1%	86.1%	9.8%	0.8%	12.8%	12.8%	71.1%	34.4%	33.6%	2.5%	25.6%	0.6%
Aging Driver	Y	0.9%	0.1%	0.0%	6.9%	9.0%	3.7%	3.7%	13.1%	1.6%	0.2%	2.3%	2.0%	10.6%	5.4%	5.0%	0.4%	4.0%	0.1%
	N	5.5%	0.5%	0.2%	41.3%	53.6%	20.3%	20.3%	76.0%	8.4%	0.7%	11.1%	11.3%	62.6%	30.3%	29.9%	2.2%	22.3%	0.5%
Teenage Driver	Y	0.4%	0.0%	0.0%	6.1%	7.1%	3.0%	3.0%	10.2%	1.3%	0.1%	1.1%	1.8%	8.7%	3.7%	4.2%	0.3%	3.3%	0.1%
	N	6.0%	0.5%	0.2%	42.2%	55.6%	21.1%	21.1%	78.9%	8.7%	0.8%	12.3%	11.4%	64.6%	31.9%	30.7%	2.3%	23.0%	0.5%
Day of the Week	Monday	0.7%	0.1%	0.0%	6.6%	7.6%	3.1%	3.1%	12.3%	1.2%	0.1%	1.9%	1.9%	9.9%	5.1%	4.5%	0.4%	3.5%	0.1%
	Tuesday	0.7%	0.0%	0.0%	7.0%	7.7%	3.4%	3.4%	12.7%	1.2%	0.1%	1.9%	1.8%	10.3%	5.0%	4.8%	0.2%	3.8%	0.1%
	Wednesday	1.0%	0.1%	0.0%	6.8%	8.3%	2.7%	2.7%	12.4%	1.6%	0.2%	1.9%	2.0%	10.3%	5.1%	5.0%	0.3%	3.7%	0.1%
	Thursday	1.1%	0.1%	0.0%	6.8%	8.1%	3.3%	3.3%	12.8%	1.4%	0.1%	1.8%	1.9%	10.7%	5.1%	4.8%	0.4%	4.0%	0.1%
	Friday	1.1%	0.1%	0.0%	7.5%	8.7%	3.3%	3.3%	13.5%	1.8%	0.1%	2.0%	2.0%	11.5%	5.6%	5.3%	0.4%	4.1%	0.1%
	Saturday	1.1%	0.1%	0.1%	7.2%	8.7%	3.3%	3.3%	13.7%	1.6%	0.1%	2.0%	2.1%	11.4%	5.2%	5.5%	0.5%	4.1%	0.0%
	Sunday	0.7%	0.1%	0.1%	6.3%	7.5%	2.7%	2.7%	11.6%	1.2%	0.1%	2.0%	1.7%	9.3%	4.6%	4.9%	0.4%	3.0%	0.1%
Time of Day	12-3 AM	0.8%	0.1%	0.1%	3.4%	4.5%	2.0%	2.0%	7.6%	0.9%	0.1%	1.3%	1.1%	6.1%	2.7%	3.1%	0.3%	2.4%	0.1%
	3-6 AM	0.4%	0.1%	0.0%	2.8%	3.4%	1.4%	1.4%	5.4%	0.7%	0.0%	1.1%	0.9%	4.1%	2.1%	2.5%	0.2%	1.3%	0.0%
	6-9 AM	0.7%	0.1%	0.0%	6.2%	7.1%	2.8%	2.8%	11.1%	1.4%	0.1%	1.8%	1.5%	9.3%	4.3%	4.4%	0.3%	3.4%	0.1%
	9-Noon	0.7%	0.1%	0.0%	5.6%	6.8%	2.3%	2.3%	10.3%	1.1%	0.1%	1.6%	1.5%	8.5%	3.7%	4.0%	0.3%	3.4%	0.0%
	Noon-3 PM	0.9%	0.0%	0.0%	6.8%	7.7%	2.5%	2.5%	11.6%	1.1%	0.1%	1.6%	1.9%	9.5%	4.9%	4.2%	0.3%	3.5%	0.0%
	3-6 PM	1.1%	0.1%	0.0%	7.9%	9.1%	3.3%	3.3%	14.2%	1.4%	0.1%	1.8%	2.0%	11.9%	6.1%	5.4%	0.4%	3.7%	0.1%
	6-9 PM	1.0%	0.0%	0.0%	9.0%	9.8%	3.9%	3.9%	15.6%	1.7%	0.1%	2.1%	2.3%	13.1%	6.4%	5.8%	0.5%	4.6%	0.1%
	9-Midnight	0.9%	0.1%	0.0%	6.7%	8.2%	3.5%	3.5%	13.3%	1.8%	0.2%	2.2%	2.2%	10.8%	5.5%	5.4%	0.4%	3.8%	0.1%
Lighting Conditions	Dark - Lighted	2.7%	0.3%	0.2%	13.5%	17.5%	6.1%	6.1%	26.8%	3.6%	0.3%	2.4%	3.5%	24.9%	9.8%	11.0%	1.0%	8.7%	0.3%
	Dark - Not Lighted	0.3%	0.0%	0.0%	5.1%	4.9%	3.7%	3.7%	10.0%	0.9%	0.1%	3.5%	2.2%	5.2%	4.7%	3.9%	0.3%	2.0%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.1%	0.0%	0.0%	0.9%	1.1%	0.4%	0.4%	1.7%	0.3%	0.0%	0.4%	0.2%	1.3%	0.7%	0.6%	0.0%	0.6%	0.0%
	Daylight	3.2%	0.2%	0.1%	26.9%	31.2%	10.7%	10.7%	47.6%	4.9%	0.4%	6.7%	6.8%	39.4%	19.2%	18.3%	1.1%	14.0%	0.2%
	Dusk	0.2%	0.0%	0.0%	1.7%	1.8%	0.7%	0.7%	2.8%	0.3%	0.0%	0.4%	0.5%	2.3%	1.1%	0.9%	0.1%	1.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%

Attachment B-5
MetroPlan Orlando Region
Percent of All KSI Crashes involving only Car Truck 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	5.0%	3.8%	2.2%	3.7%	6.3%	1.0%	1.8%	3.2%	4.9%	0.9%	0.1%	2.8%	2.5%	2.8%	0.4%	0.3%	2.2%	3.6%	3.0%	3.2%	0.0%	0.2%	0.0%	3.4%	0.5%
	Animal	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	2.8%	1.6%	0.7%	2.8%	2.0%	0.2%	0.2%	0.8%	2.4%	1.2%	0.4%	1.9%	1.1%	1.3%	0.2%	0.0%	0.4%	2.3%	1.6%	1.4%	0.1%	0.6%	0.0%	1.2%	0.4%
	Left Turn	7.3%	11.7%	6.3%	4.2%	18.6%	2.2%	1.3%	4.9%	16.1%	2.9%	0.1%	7.2%	8.9%	6.0%	0.5%	0.3%	2.1%	6.2%	10.2%	9.6%	0.1%	0.7%	0.0%	8.7%	1.8%
	Off Road	5.6%	6.3%	2.3%	7.6%	6.2%	0.7%	2.3%	2.7%	7.2%	1.7%	0.3%	3.9%	3.8%	3.1%	0.4%	0.2%	3.1%	3.8%	5.1%	4.0%	0.1%	0.4%	0.0%	3.1%	1.0%
	Other	4.6%	4.3%	3.1%	5.0%	6.3%	1.1%	1.9%	2.4%	5.9%	1.4%	0.4%	4.2%	2.8%	2.5%	0.4%	0.1%	2.5%	3.3%	3.5%	4.5%	0.0%	0.4%	0.0%	3.5%	0.6%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	4.2%	9.9%	10.0%	5.0%	15.1%	3.8%	0.4%	2.5%	17.0%	4.1%	0.2%	11.2%	7.8%	3.6%	0.3%	0.2%	0.8%	3.2%	8.5%	14.6%	0.0%	0.5%	0.0%	10.9%	1.8%
	Right Turn	0.4%	0.8%	0.5%	0.3%	1.2%	0.2%	0.1%	0.4%	1.0%	0.2%	0.0%	0.5%	0.6%	0.4%	0.0%	0.0%	0.1%	0.4%	0.6%	0.8%	0.0%	0.0%	0.0%	0.6%	0.0%
	Rollover	0.6%	0.6%	0.1%	1.0%	0.3%	0.0%	0.2%	0.2%	0.4%	0.2%	0.4%	0.6%	0.2%	0.2%	0.0%	0.0%	0.3%	0.6%	0.3%	0.2%	0.0%	0.3%	0.0%	0.2%	0.1%
	Sideswipe	0.9%	1.6%	1.3%	1.1%	2.3%	0.4%	0.2%	0.7%	2.1%	0.7%	0.1%	1.7%	1.2%	0.5%	0.1%	0.0%	0.2%	0.8%	1.2%	2.0%	0.0%	0.2%	0.0%	1.6%	0.2%
	Unknown	0.4%	0.8%	0.4%	0.4%	1.0%	0.0%	0.1%	0.3%	0.9%	0.2%	0.1%	0.5%	0.5%	0.3%	0.0%	0.0%	0.1%	0.4%	0.6%	0.6%	0.0%	0.1%	0.0%	0.5%	0.2%
Alcohol Related	Y	2.2%	2.6%	1.6%	2.8%	3.1%	0.4%	0.6%	1.3%	3.3%	0.9%	0.3%	2.5%	1.5%	1.3%	0.2%	0.1%	0.7%	2.1%	1.7%	2.5%	0.1%	0.3%	0.0%	2.0%	0.4%
	N	29.6%	38.7%	25.4%	28.3%	56.2%	9.2%	7.9%	16.6%	54.7%	12.7%	1.8%	32.0%	28.0%	19.5%	2.2%	1.1%	11.0%	22.6%	32.8%	38.3%	0.2%	3.1%	0.1%	31.8%	6.1%
Hit and Run	Y	2.0%	2.8%	2.6%	2.0%	4.7%	0.7%	0.7%	1.2%	4.5%	0.9%	0.1%	2.8%	2.1%	1.6%	0.1%	0.1%	0.7%	1.6%	2.3%	3.7%	0.0%	0.1%	0.0%	2.8%	0.4%
	N	29.7%	38.4%	24.4%	29.1%	54.6%	8.9%	7.8%	16.7%	53.5%	12.7%	2.0%	31.7%	27.3%	19.3%	2.3%	1.0%	11.0%	23.1%	32.2%	37.1%	0.3%	3.4%	0.1%	31.0%	6.2%
Aggressive Driving	Y	2.3%	2.3%	1.0%	2.1%	3.2%	0.3%	0.7%	1.6%	2.6%	0.6%	0.1%	1.7%	1.2%	1.5%	0.2%	0.1%	0.9%	1.9%	1.8%	1.6%	0.0%	0.1%	0.0%	1.4%	0.4%
	N	29.4%	39.0%	25.9%	29.0%	56.1%	9.3%	7.8%	16.3%	55.3%	13.0%	2.0%	32.8%	28.2%	19.3%	2.2%	1.1%	10.8%	22.7%	32.7%	39.2%	0.3%	3.3%	0.1%	32.5%	6.1%
Distracted Driving	Y	10.0%	13.8%	8.9%	9.2%	19.9%	3.6%	2.2%	5.1%	19.8%	5.0%	0.7%	11.4%	10.5%	6.4%	0.6%	0.4%	3.3%	7.6%	12.0%	13.7%	0.1%	1.3%	0.1%	11.1%	2.6%
	N	21.7%	27.4%	18.0%	21.9%	39.4%	6.0%	6.3%	12.8%	38.2%	8.6%	1.3%	23.1%	18.9%	14.4%	1.8%	0.8%	8.4%	17.1%	22.5%	27.1%	0.2%	2.1%	0.0%	22.8%	3.9%
Intersection Related	Y	13.6%	17.5%	11.6%	8.9%	28.6%	4.5%	3.5%	9.0%	24.9%	5.0%	0.3%	13.7%	12.9%	9.3%	1.1%	0.5%	4.4%	11.0%	14.9%	16.5%	0.1%	1.2%	0.0%	15.3%	3.1%
	N	18.2%	23.8%	15.4%	22.3%	30.7%	5.1%	5.0%	8.9%	33.0%	8.6%	1.8%	20.8%	16.5%	11.5%	1.3%	0.7%	7.3%	13.7%	19.6%	24.3%	0.2%	2.3%	0.0%	18.5%	3.5%
Drug Related	Y	1.1%	1.5%	1.0%	1.4%	1.9%	0.3%	0.2%	0.6%	2.1%	0.6%	0.2%	1.6%	0.9%	0.7%	0.1%	0.1%	0.3%	1.0%	1.0%	1.7%	0.0%	0.2%	0.0%	1.2%	0.3%
	N	30.6%	39.8%	25.9%	29.7%	57.4%	9.2%	8.3%	17.3%	55.8%	13.0%	1.9%	32.9%	28.5%	20.2%	2.3%	1.1%	11.4%	23.6%	33.5%	39.1%	0.3%	3.2%	0.1%	32.6%	6.2%
Aging Driver	Y	5.6%	7.2%	4.2%	4.9%	10.3%	2.0%	1.3%	3.3%	9.7%	2.4%	0.4%	6.2%	4.9%	3.5%	0.5%	0.1%	2.0%	4.7%	5.6%	7.0%	0.1%	0.8%	0.0%	5.9%	1.1%
	N	26.1%	34.1%	22.7%	26.2%	49.0%	7.6%	7.2%	14.6%	48.3%	11.2%	1.7%	28.3%	24.5%	17.3%	1.9%	1.0%	9.7%	20.0%	28.9%	33.8%	0.2%	2.6%	0.1%	27.9%	5.4%
Teenage Driver	Y	4.5%	6.0%	3.5%	3.9%	8.6%	1.3%	1.3%	2.3%	8.4%	1.8%	0.1%	4.0%	4.4%	2.9%	0.4%	0.2%	1.9%	3.4%	4.6%	5.5%	0.0%	0.3%	0.0%	4.5%	1.0%
	N	27.3%	35.3%	23.5%	27.2%	50.7%	8.3%	7.2%	15.6%	49.5%	11.8%	2.0%	30.5%	25.0%	17.9%	2.0%	1.0%	9.8%	21.3%	29.9%	35.3%	0.3%	3.2%	0.0%	29.3%	5.5%
Day of the Week	Monday	5.0%	5.6%	3.4%	4.6%	8.1%	1.3%	1.2%	2.6%	8.2%	1.7%	0.3%	4.7%	3.9%	3.2%	0.3%	0.2%	1.7%	3.8%	4.6%	5.4%	0.0%	0.4%	0.0%	4.7%	1.0%
	Tuesday	4.2%	6.0%	3.8%	4.3%	8.5%	1.2%	1.2%	2.4%	8.2%	1.8%	0.3%	4.5%	4.5%	2.9%	0.3%	0.1%	1.7%	3.2%	5.3%	5.5%	0.1%	0.4%	0.0%	4.6%	0.8%
	Wednesday	4.5%	5.7%	4.2%	4.1%	9.1%	1.1%	1.2%	2.6%	8.3%	1.9%	0.3%	5.3%	3.8%	3.0%	0.3%	0.2%	1.7%	3.6%	4.4%	6.3%	0.0%	0.6%	0.0%	4.9%	0.9%
	Thursday	4.5%	6.1%	3.6%	4.6%	8.3%	1.3%	1.2%	2.3%	8.6%	1.8%	0.2%	4.6%	4.5%	3.0%	0.2%	0.2%	1.6%	3.6%	4.7%	5.9%	0.0%	0.5%	0.0%	4.7%	0.8%
	Friday	4.9%	6.0%	4.4%	4.7%	9.1%	1.6%	1.5%	2.6%	8.9%	2.1%	0.3%	5.5%	4.5%	2.9%	0.4%	0.2%	1.9%	3.6%	5.6%	6.1%	0.1%	0.5%	0.0%	5.4%	1.0%
	Saturday	4.4%	6.6%	4.3%	4.3%	9.2%	1.7%	1.1%	3.0%	8.7%	2.1%	0.4%	5.5%	4.4%	3.3%	0.3%	0.2%	1.5%	3.6%	5.4%	6.6%	0.0%	0.6%	0.0%	5.3%	1.1%
	Sunday	4.3%	5.3%	3.2%	4.6%	7.0%	1.3%	1.1%	2.4%	7.0%	2.1%	0.2%	4.4%	3.8%	2.5%	0.4%	0.1%	1.6%	3.3%	4.5%	5.0%	0.1%	0.4%	0.0%	4.2%	0.9%
Time of Day	12-3 AM	2.6%	3.7%	2.5%	3.0%	4.6%	1.0%	0.7%	1.6%	4.7%	1.4%	0.3%	3.5%	2.5%	1.7%	0.2%	0.0%	0.7%	2.3%	2.8%	3.8%	0.0%	0.3%	0.0%	3.2%	0.7%
	3-6 AM	2.1%	2.5%	1.9%	2.8%	3.1%	0.6%	0.5%	1.2%	3.5%	1.0%	0.3%	2.5%	1.8%	1.0%	0.2%	0.1%	0.8%	1.5%	2.2%	2.7%	0.0%	0.4%	0.0%	2.1%	0.5%
	6-9 AM	4.4%	5.7%	3.4%	3.8%	8.3%	1.3%	1.1%	2.2%	7.9%	1.9%	0.4%	4.0%	4.3%	3.0%	0.3%	0.1%	1.6%	3.4%	4.6%	5.4%	0.1%	0.7%	0.0%	4.4%	0.8%
	9-Noon	3.8%	5.4%	3.7%	3.8%	7.5%	1.6%	1.2%	2.1%	7.6%	1.8%	0.2%	4.7%	3.9%	2.4%	0.3%	0.1%	1.6%	2.8%	4.3%	5.8%	0.1%	0.6%	0.0%	4.5%	0.8%
	Noon-3 PM	4.4%	5.8%	3.6%	3.9%	8.8%	1.2%	1.2%	2.9%	8.2%	1.5%	0.1%	4.6%	4.2%	2.8%	0.4%	0.2%	1.8%	3.2%	5.0%	5.5%	0.0%	0.3%	0.0%	4.6%	0.8%
	3-6 PM	5.2%	6.6%	4.2%	5.2%	9.7%	1.1%	1.5%	2.8%	9.7%	1.7%	0.3%	5.5%	4.4%	3.5%	0.4%	0.2%	2.0%	4.1%	5.9%	5.9%	0.0%	0.4%	0.0%	5.2%	1.1%
	6-9 PM	4.7%	6.4%	4.2%	4.7%	9.0%	1.6%	1.1%	2.6%	9.2%	2.2%	0.2%	5.1%	4.7%	3.3%	0.3%	0.2%	1.7%	3.8%	5.4%	6.1%	0.1%	0.3%	0.0%	5.0%	0.9%
	9-Midnight	4.6%	5.2%	3.6%	4.0%	8.2%	1.2%	1.2%	2.5%	7.3%	2.1%	0.3%	4.7%	3.6%	3.1%	0.2%	0.2%	1.6%	3.5%	4.3%	5.5%	0.0%	0.4%	0.0%	4.8%	1.0%
Lighting Conditions	Dark - Lighted	7.5%	11.5%	9.1%	7.9%	17.1%	3.1%	2.4%	5.7%	16.6%	3.4%	0.2%	10.0%	8.5%	5.8%	0.6%	0.3%	2.9%	5.9%	9.4%	13.2%	0.0%	0.3%	0.0%	10.3%	1.9%
	Dark - Not Lighted	4.6%	3.6%	1.3%	4.6%	4.4%	0.4%	0.6%	1.4%	4.1%	2.5%	0.9%	3.8%	1.9%	2.2%	0.3%	0.1%	1.2%	4.0%	3.0%	2.3%	0.1%	1.2%	0.0%	2.6%	0.9%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.7%	0.7%	0.4%	0.6%	1.1%	0.1%	0.1%	0.3%	1.0%	0.2%	0.1%	0.6%	0.4%	0.6%	0.0%	0.0%	0.2%	0.6%	0.7%	0.6%	0.0%	0.2%	0.0%	0.6%	0.1%
	Daylight	17.9%	24.2%	15.3%	17.0%	35.0%	5.5%	5.0%	10.2%	34.3%	7.1%	0.9%	19.1%	17.7%	11.6%	1.5%	0.7%	6.9%	13.4%	20.4%	23.4%	0.2%	1.7%	0.1%	19.2%	3.5%
	Dusk	1.0%	1.2%	0.8%	1.0%	1.7%	0.4%	0.3%	0.4%	2.0%	0.4%	0.0%	0.9%	1.0%	0.6%	0.0%	0.0%	0.5%	0.7%	1.0%	1.2%	0.0%	0.1%	0.0%	1.1%	0.2%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment B-5
MetroPlan Orlando Region
Percent of All KSI Crashes involving only Car Truck 2018-2022

Mode:	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.7%	0.0%	0.1%	6.1%	7.5%	1.5%	1.9%	9.8%	1.1%	0.1%	1.6%	1.8%	7.6%	5.2%	3.2%	0.2%	2.3%	0.1%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.3%	0.0%	0.0%	2.4%	3.0%	0.3%	1.7%	4.9%	0.1%	0.0%	1.6%	0.9%	2.6%	2.9%	1.1%	0.1%	0.9%	0.0%
	Left Turn	1.2%	0.1%	0.0%	12.3%	16.5%	4.0%	4.8%	22.0%	3.1%	0.1%	2.8%	3.5%	19.0%	8.5%	9.2%	0.5%	7.0%	0.1%
	Off Road	0.3%	0.1%	0.0%	9.6%	9.3%	1.0%	3.9%	13.5%	0.7%	0.0%	2.8%	2.2%	9.2%	5.8%	5.7%	0.4%	2.3%	0.0%
	Other	1.1%	0.1%	0.1%	6.5%	8.0%	1.3%	2.7%	11.0%	1.0%	0.1%	1.9%	1.7%	8.3%	5.1%	4.0%	0.3%	2.6%	0.1%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	1.3%	0.0%	0.0%	9.3%	13.2%	4.8%	6.1%	20.0%	3.8%	0.3%	2.6%	2.7%	18.9%	4.8%	9.5%	0.9%	8.8%	0.1%
	Right Turn	0.1%	0.0%	0.0%	0.9%	1.0%	0.1%	0.5%	1.5%	0.1%	0.0%	0.2%	0.2%	1.3%	0.3%	0.6%	0.0%	0.7%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.6%	0.7%	0.1%	0.5%	1.2%	0.0%	0.0%	0.7%	0.1%	0.5%	0.5%	0.6%	0.0%	0.1%	0.0%
	Sideswipe	0.2%	0.0%	0.0%	1.6%	2.0%	0.7%	1.1%	3.2%	0.5%	0.1%	0.4%	0.4%	3.0%	1.2%	1.7%	0.1%	0.8%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.7%	0.8%	0.2%	0.4%	1.3%	0.2%	0.0%	0.2%	0.2%	1.1%	0.4%	0.7%	0.0%	0.4%	0.0%
Alcohol Related	Y	0.4%	0.0%	0.0%	3.0%	3.8%	0.8%	1.7%	5.7%	0.6%	0.0%	1.5%	0.8%	4.1%	2.5%	2.3%	0.2%	1.2%	0.0%
	N	4.9%	0.3%	0.2%	47.0%	58.5%	13.1%	22.0%	83.0%	10.0%	0.7%	13.3%	12.9%	67.4%	32.2%	34.0%	2.3%	24.7%	0.5%
Hit and Run	Y	0.5%	0.0%	0.0%	3.6%	4.9%	1.5%	1.5%	6.7%	0.7%	0.0%	0.7%	0.7%	6.0%	2.8%	2.2%	0.1%	2.2%	0.1%
	N	4.8%	0.3%	0.2%	46.3%	57.4%	22.3%	22.3%	82.0%	9.9%	0.7%	14.1%	13.0%	65.5%	31.9%	34.2%	2.5%	23.7%	0.4%
Aggressive Driving	Y	0.4%	0.0%	0.0%	3.2%	3.4%	1.4%	1.4%	5.0%	0.6%	0.0%	0.9%	1.1%	3.6%	2.5%	2.1%	0.1%	0.9%	0.0%
	N	4.9%	0.3%	0.2%	46.7%	58.9%	22.4%	22.4%	83.7%	10.0%	0.6%	13.8%	12.6%	67.9%	32.2%	34.3%	2.5%	25.0%	0.5%
Distracted Driving	Y	1.4%	0.0%	0.0%	16.1%	20.4%	7.5%	7.5%	28.7%	3.8%	0.3%	5.3%	4.3%	23.2%	10.5%	12.5%	1.1%	8.5%	0.2%
	N	3.9%	0.3%	0.2%	33.9%	41.9%	16.3%	16.3%	60.0%	6.8%	0.4%	9.5%	9.4%	48.3%	24.1%	23.9%	1.5%	17.4%	0.3%
Intersection Related	Y	2.2%	0.2%	0.1%	19.7%	26.8%	8.8%	8.8%	36.9%	5.4%	0.3%	5.1%	5.8%	31.7%	14.5%	15.1%	0.9%	11.8%	0.2%
	N	3.0%	0.2%	0.1%	30.3%	35.4%	15.0%	15.0%	51.8%	5.3%	0.4%	9.7%	8.0%	39.8%	20.2%	21.3%	1.6%	14.1%	0.2%
Drug Related	Y	0.2%	0.0%	0.0%	1.6%	2.1%	1.0%	1.0%	3.3%	0.4%	0.0%	0.7%	0.6%	2.3%	1.3%	1.5%	0.1%	0.7%	0.0%
	N	5.0%	0.4%	0.2%	48.4%	60.2%	22.7%	22.7%	85.4%	10.3%	0.6%	14.0%	13.2%	69.2%	33.3%	34.9%	2.5%	25.2%	0.5%
Aging Driver	Y	1.0%	0.1%	0.1%	8.1%	10.3%	4.2%	4.2%	14.8%	2.1%	0.2%	2.9%	2.3%	11.9%	6.1%	5.9%	0.5%	4.6%	0.1%
	N	4.3%	0.3%	0.1%	41.9%	52.0%	19.6%	19.6%	73.9%	8.6%	0.5%	11.9%	11.4%	59.7%	28.6%	30.5%	2.1%	21.3%	0.4%
Teenage Driver	Y	0.4%	0.0%	0.0%	7.5%	8.6%	3.6%	3.6%	12.4%	1.5%	0.1%	1.4%	2.2%	10.3%	4.4%	5.1%	0.3%	4.0%	0.1%
	N	4.9%	0.3%	0.1%	42.5%	53.7%	20.2%	20.2%	76.3%	9.2%	0.6%	13.4%	11.5%	61.2%	30.3%	31.2%	2.3%	21.9%	0.4%
Day of the Week	Monday	0.6%	0.1%	0.1%	7.0%	7.7%	3.3%	3.3%	12.7%	1.2%	0.1%	2.0%	1.9%	10.1%	4.9%	4.9%	0.4%	3.6%	0.1%
	Tuesday	0.7%	0.0%	0.0%	7.4%	8.0%	3.1%	3.1%	12.6%	1.3%	0.0%	2.2%	1.9%	9.9%	4.8%	4.9%	0.2%	4.0%	0.0%
	Wednesday	0.9%	0.1%	0.0%	7.0%	8.4%	2.7%	2.7%	12.6%	1.7%	0.1%	2.2%	2.1%	10.1%	5.1%	5.5%	0.4%	3.5%	0.1%
	Thursday	0.9%	0.0%	0.0%	7.2%	8.4%	3.1%	3.1%	12.8%	1.2%	0.1%	2.0%	1.9%	10.4%	5.0%	4.8%	0.2%	4.1%	0.1%
	Friday	0.7%	0.0%	0.0%	7.7%	8.4%	3.3%	3.3%	13.2%	2.0%	0.1%	2.2%	2.0%	11.1%	5.3%	5.6%	0.4%	4.1%	0.0%
	Saturday	0.8%	0.1%	0.0%	7.3%	8.4%	3.3%	3.3%	13.3%	1.8%	0.1%	2.2%	2.0%	11.0%	4.9%	5.9%	0.6%	3.8%	0.0%
	Sunday	0.7%	0.0%	0.0%	6.4%	7.5%	2.7%	2.7%	11.5%	1.3%	0.1%	2.0%	2.0%	8.9%	4.6%	4.8%	0.4%	3.0%	0.1%
Time of Day	12-3 AM	0.7%	0.0%	0.0%	3.6%	4.5%	2.2%	2.2%	7.6%	1.0%	0.1%	1.5%	1.2%	6.0%	2.6%	3.4%	0.3%	2.3%	0.1%
	3-6 AM	0.4%	0.1%	0.0%	3.1%	3.6%	1.5%	1.5%	5.8%	0.7%	0.0%	1.3%	0.9%	4.3%	2.1%	2.8%	0.2%	1.4%	0.0%
	6-9 AM	0.7%	0.0%	0.0%	6.9%	7.6%	2.9%	2.9%	11.9%	1.6%	0.1%	2.1%	1.4%	10.0%	4.7%	4.7%	0.4%	3.7%	0.1%
	9-Noon	0.7%	0.1%	0.0%	6.3%	7.5%	2.5%	2.5%	11.4%	1.4%	0.1%	1.9%	1.8%	9.2%	4.1%	4.6%	0.3%	3.8%	0.0%
	Noon-3 PM	0.9%	0.0%	0.0%	7.3%	8.3%	2.6%	2.6%	12.3%	1.4%	0.1%	1.7%	2.0%	10.1%	5.1%	4.6%	0.3%	3.8%	0.0%
	3-6 PM	0.9%	0.1%	0.0%	8.1%	9.4%	3.4%	3.4%	14.6%	1.4%	0.1%	1.8%	2.1%	12.0%	6.1%	5.8%	0.3%	3.7%	0.1%
	6-9 PM	0.5%	0.0%	0.0%	8.3%	8.6%	3.4%	3.4%	13.6%	1.6%	0.1%	2.0%	2.2%	11.0%	5.2%	5.6%	0.5%	3.8%	0.1%
	9-Midnight	0.6%	0.0%	0.0%	6.4%	7.2%	3.0%	3.0%	11.6%	1.7%	0.1%	2.4%	2.1%	8.9%	4.9%	4.8%	0.3%	3.3%	0.1%
Lighting Conditions	Dark - Lighted	1.8%	0.1%	0.1%	13.4%	16.2%	5.5%	5.5%	24.3%	3.7%	0.2%	2.6%	3.8%	21.8%	8.7%	10.7%	0.9%	7.6%	0.3%
	Dark - Not Lighted	0.2%	0.0%	0.0%	4.6%	4.1%	3.4%	3.4%	8.8%	0.7%	0.0%	3.6%	2.0%	3.9%	4.1%	3.6%	0.2%	1.5%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.1%	0.0%	0.0%	0.8%	0.9%	0.5%	0.5%	1.6%	0.2%	0.0%	0.4%	0.1%	1.2%	0.7%	0.6%	0.0%	0.5%	0.0%
	Daylight	3.1%	0.2%	0.1%	29.4%	33.8%	11.5%	11.5%	51.3%	5.7%	0.4%	7.6%	7.5%	42.3%	20.1%	20.4%	1.2%	15.4%	0.2%
	Dusk	0.1%	0.0%	0.0%	1.6%	1.7%	0.7%	0.7%	2.6%	0.4%	0.0%	0.4%	0.4%	2.2%	1.0%	1.0%	0.1%	0.9%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%

Attachment B-6
MetroPlan Orlando Region
Percent of All KSI Crashes involving Motorcyclists 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	3.4%	2.9%	0.8%	3.1%	3.8%	0.3%	1.8%	1.9%	3.1%	0.3%	0.0%	2.2%	1.4%	1.8%	0.3%	0.2%	1.3%	2.0%	2.6%	1.9%	0.0%	0.2%	0.0%	1.4%	0.3%
	Animal	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	1.5%	0.5%	0.0%	1.6%	0.4%	0.0%	0.2%	0.3%	0.7%	0.6%	0.1%	0.6%	0.3%	0.5%	0.1%	0.0%	0.4%	0.8%	0.8%	0.1%	0.0%	0.2%	0.0%	0.1%	0.3%
	Left Turn	10.7%	14.2%	4.9%	8.1%	20.0%	1.5%	2.4%	6.8%	17.4%	3.2%	0.0%	8.2%	9.1%	8.0%	1.1%	0.2%	3.1%	9.8%	11.3%	8.9%	0.0%	0.3%	0.1%	8.6%	2.4%
	Off Road	4.8%	5.4%	1.8%	6.6%	5.2%	0.5%	1.8%	2.6%	6.6%	1.0%	0.0%	2.5%	4.0%	2.6%	0.3%	0.1%	2.7%	3.2%	4.3%	3.2%	0.0%	0.0%	0.0%	3.1%	0.8%
	Other	6.5%	7.0%	5.1%	6.6%	10.4%	1.5%	2.6%	3.6%	9.4%	2.6%	0.2%	7.3%	4.7%	3.1%	0.5%	0.2%	2.7%	4.5%	6.4%	7.0%	0.1%	0.1%	0.0%	6.1%	1.3%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	3.3%	6.9%	6.3%	4.0%	9.7%	2.6%	0.2%	1.9%	11.1%	2.6%	0.5%	9.2%	4.7%	2.0%	0.1%	0.0%	0.3%	2.6%	5.8%	9.7%	0.0%	0.7%	0.0%	8.1%	1.3%
	Right Turn	0.2%	0.3%	0.5%	0.2%	0.6%	0.2%	0.1%	0.0%	0.5%	0.3%	0.1%	0.7%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.4%	0.6%	0.0%	0.1%	0.0%	0.6%	0.1%
	Rollover	3.2%	1.5%	1.2%	2.7%	2.7%	0.3%	0.3%	1.5%	2.8%	1.2%	0.1%	1.7%	1.1%	1.8%	0.5%	0.1%	0.6%	2.7%	1.3%	1.8%	0.1%	0.2%	0.0%	1.2%	0.6%
	Sideswipe	1.1%	1.8%	2.4%	1.5%	3.4%	0.4%	0.2%	0.5%	3.3%	1.1%	0.2%	3.1%	1.2%	0.7%	0.1%	0.0%	0.2%	1.1%	2.0%	2.6%	0.0%	0.1%	0.0%	3.1%	0.2%
	Unknown	0.2%	1.0%	0.6%	0.1%	1.5%	0.2%	0.0%	0.4%	1.0%	0.4%	0.0%	1.3%	0.3%	0.2%	0.0%	0.0%	0.0%	0.2%	0.5%	1.3%	0.0%	0.0%	0.0%	0.9%	0.0%
Alcohol Related	Y	2.3%	3.2%	1.5%	2.5%	4.0%	0.4%	0.6%	1.2%	3.9%	1.0%	0.3%	2.6%	1.3%	1.9%	0.3%	0.1%	0.7%	2.4%	2.3%	2.4%	0.0%	0.4%	0.0%	2.2%	0.6%
	N	32.6%	38.2%	22.1%	32.2%	53.7%	7.2%	9.2%	18.4%	51.9%	12.5%	1.0%	34.1%	25.6%	18.9%	2.8%	0.7%	10.8%	24.9%	33.3%	34.8%	0.2%	1.6%	0.1%	30.9%	6.7%
Hit and Run	Y	1.7%	2.1%	1.1%	0.9%	3.4%	0.5%	0.3%	1.1%	2.9%	0.6%	0.0%	1.8%	1.2%	1.3%	0.2%	0.1%	0.3%	1.1%	2.1%	1.8%	0.0%	0.1%	0.0%	1.9%	0.1%
	N	33.3%	39.3%	22.6%	33.8%	54.3%	7.1%	9.5%	18.5%	53.0%	12.8%	1.3%	34.9%	25.7%	19.6%	2.9%	0.7%	11.3%	26.2%	33.4%	35.4%	0.2%	1.9%	0.1%	31.3%	7.3%
Aggressive Driving	Y	3.1%	3.3%	1.4%	2.6%	4.6%	0.4%	0.7%	2.3%	4.3%	0.3%	0.0%	3.2%	1.5%	2.4%	0.1%	0.0%	0.5%	2.4%	2.6%	3.2%	0.0%	0.0%	0.0%	2.3%	0.5%
	N	31.9%	38.1%	22.2%	32.1%	53.1%	7.2%	9.1%	17.3%	51.5%	13.1%	1.3%	33.6%	25.4%	18.4%	3.1%	0.8%	11.1%	24.9%	32.9%	34.0%	0.2%	2.0%	0.1%	30.8%	6.8%
Distracted Driving	Y	8.7%	12.0%	5.8%	9.4%	15.4%	1.7%	2.5%	4.7%	14.8%	4.0%	0.4%	9.5%	7.6%	5.7%	0.4%	0.2%	3.1%	6.7%	9.8%	10.0%	0.0%	0.6%	0.0%	8.6%	1.5%
	N	26.3%	29.4%	17.8%	25.4%	42.3%	5.9%	7.3%	14.9%	41.0%	9.4%	0.8%	27.3%	19.3%	15.2%	2.7%	0.6%	8.5%	20.6%	25.7%	27.2%	0.2%	1.4%	0.1%	24.5%	5.9%
Intersection Related	Y	16.5%	17.8%	7.0%	12.4%	26.0%	2.6%	4.4%	8.8%	23.0%	4.7%	0.4%	12.7%	11.1%	11.1%	1.6%	0.3%	4.3%	13.6%	15.3%	12.8%	0.0%	0.7%	0.1%	11.8%	3.5%
	N	18.4%	23.6%	16.6%	22.3%	31.7%	4.9%	5.4%	10.8%	32.8%	8.8%	0.8%	24.0%	15.8%	9.8%	1.6%	0.5%	7.3%	13.7%	20.3%	24.4%	0.2%	1.3%	0.0%	21.4%	3.9%
Drug Related	Y	1.9%	1.8%	0.5%	1.3%	2.7%	0.2%	0.7%	0.4%	2.3%	0.5%	0.2%	0.9%	1.3%	1.2%	0.1%	0.1%	0.6%	1.5%	1.5%	1.0%	0.0%	0.2%	0.0%	0.9%	0.3%
	N	33.1%	39.6%	23.1%	33.5%	54.9%	7.4%	9.1%	19.2%	53.5%	12.9%	1.1%	35.8%	25.6%	19.7%	3.1%	0.7%	10.9%	25.7%	34.0%	36.2%	0.2%	1.8%	0.1%	32.2%	7.1%
Aging Driver	Y	3.8%	5.8%	2.8%	3.2%	8.0%	1.2%	0.8%	1.5%	7.6%	2.4%	0.0%	5.1%	3.4%	2.3%	0.4%	0.0%	1.2%	3.1%	4.5%	5.0%	0.0%	0.3%	0.0%	4.9%	1.3%
	N	31.1%	35.6%	20.9%	31.6%	49.7%	6.4%	9.0%	18.1%	48.2%	11.0%	1.3%	31.7%	23.5%	18.5%	2.7%	0.8%	10.4%	24.2%	31.0%	32.2%	0.2%	1.7%	0.1%	28.2%	6.1%
Teenage Driver	Y	3.0%	3.5%	2.0%	2.6%	5.2%	0.6%	0.8%	1.4%	4.3%	1.9%	0.0%	3.3%	1.4%	1.9%	0.4%	0.2%	1.3%	2.7%	2.6%	2.9%	0.0%	0.1%	0.1%	3.2%	0.5%
	N	32.0%	37.9%	21.6%	32.1%	52.5%	6.9%	9.0%	18.2%	51.5%	11.5%	1.3%	33.5%	25.5%	18.9%	2.7%	0.6%	10.3%	24.6%	32.9%	34.3%	0.2%	1.9%	0.0%	30.0%	6.8%
Day of the Week	Monday	5.7%	3.8%	2.4%	4.3%	6.7%	0.8%	1.2%	2.0%	6.7%	1.7%	0.4%	3.8%	3.8%	2.8%	0.2%	0.0%	1.3%	4.4%	3.8%	3.8%	0.1%	0.5%	0.0%	3.6%	0.9%
	Tuesday	3.0%	5.6%	3.8%	3.4%	8.0%	0.9%	0.8%	1.9%	6.9%	2.5%	0.2%	5.7%	3.1%	1.8%	0.5%	0.2%	1.1%	2.4%	5.0%	5.2%	0.0%	0.4%	0.1%	4.6%	1.1%
	Wednesday	3.4%	6.5%	2.6%	4.7%	6.8%	0.9%	0.8%	3.6%	7.3%	0.7%	0.0%	4.3%	3.9%	2.7%	0.2%	0.2%	1.2%	2.9%	5.2%	4.8%	0.1%	0.1%	0.0%	3.8%	0.9%
	Thursday	5.5%	5.9%	3.5%	5.2%	8.6%	1.1%	1.9%	3.2%	8.3%	1.6%	0.0%	5.3%	4.2%	2.9%	0.4%	0.0%	2.0%	3.2%	5.7%	5.6%	0.0%	0.2%	0.0%	4.7%	1.1%
	Friday	6.5%	6.4%	3.4%	6.3%	8.6%	1.3%	2.1%	3.2%	8.9%	1.8%	0.2%	5.4%	4.1%	4.0%	0.4%	0.4%	1.9%	5.8%	4.4%	5.8%	0.0%	0.2%	0.0%	4.6%	1.4%
	Saturday	5.6%	7.4%	4.2%	5.6%	10.2%	1.6%	1.7%	2.9%	10.0%	2.6%	0.1%	6.8%	4.1%	3.5%	0.9%	0.0%	2.0%	4.8%	5.6%	7.0%	0.0%	0.2%	0.0%	6.6%	1.1%
	Sunday	5.3%	5.8%	3.6%	5.3%	8.6%	0.9%	1.3%	2.9%	7.8%	2.4%	0.3%	5.5%	3.7%	3.1%	0.4%	0.0%	2.2%	3.8%	5.7%	4.9%	0.0%	0.3%	0.0%	5.2%	0.9%
Time of Day	12-3 AM	2.2%	3.7%	1.7%	2.9%	4.2%	0.4%	0.4%	1.3%	4.7%	1.2%	0.1%	3.2%	2.7%	1.3%	0.0%	0.0%	0.4%	1.4%	3.7%	3.0%	0.0%	0.1%	0.0%	2.5%	0.8%
	3-6 AM	1.0%	1.3%	0.8%	0.8%	1.9%	0.3%	0.1%	0.7%	1.6%	0.5%	0.1%	1.3%	1.1%	0.4%	0.1%	0.1%	0.1%	1.1%	1.2%	1.1%	0.0%	0.3%	0.0%	0.7%	0.4%
	6-9 AM	3.0%	3.4%	2.3%	2.5%	5.7%	0.4%	0.4%	2.2%	4.9%	1.0%	0.2%	3.4%	2.1%	1.7%	0.3%	0.0%	1.2%	2.1%	2.9%	3.5%	0.1%	0.3%	0.0%	3.3%	0.5%
	9-Noon	3.4%	3.8%	1.8%	4.0%	4.6%	0.3%	1.0%	2.5%	4.3%	0.8%	0.3%	3.3%	2.2%	1.8%	0.6%	0.0%	1.1%	3.2%	3.0%	2.7%	0.1%	0.2%	0.0%	2.7%	0.5%
	Noon-3 PM	5.2%	5.4%	3.7%	5.4%	8.3%	0.8%	2.1%	1.8%	7.8%	2.4%	0.1%	4.9%	3.7%	3.3%	0.3%	0.1%	2.2%	4.8%	4.3%	4.9%	0.0%	0.4%	0.0%	4.8%	0.7%
	3-6 PM	7.0%	7.6%	4.2%	6.1%	11.3%	1.4%	2.1%	3.4%	10.6%	2.6%	0.1%	7.5%	5.1%	4.1%	0.3%	0.1%	1.7%	5.1%	7.2%	7.0%	0.0%	0.2%	0.0%	6.7%	1.5%
	6-9 PM	8.3%	7.4%	3.8%	6.6%	11.4%	1.6%	3.0%	3.6%	10.3%	2.3%	0.3%	5.7%	4.3%	4.7%	1.1%	0.2%	3.6%	4.9%	7.4%	5.6%	0.0%	0.3%	0.0%	4.5%	1.2%
	9-Midnight	5.0%	8.8%	5.2%	6.3%	10.3%	2.3%	0.7%	4.0%	11.7%	2.5%	0.0%	7.6%	5.7%	3.6%	0.4%	0.3%	1.4%	4.6%	6.0%	9.4%	0.0%	0.1%	0.1%	7.8%	1.7%
Lighting Conditions	Dark - Lighted	8.5%	14.6%	9.2%	9.7%	19.5%	3.2%	2.0%	7.8%	18.6%	3.8%	0.0%	12.7%	8.6%	6.7%	0.7%	0.6%	2.8%	7.4%	10.7%	15.1%	0.0%	0.1%	0.0%	11.9%	1.8%
	Dark - Not Lighted	5.2%	4.3%	1.1%	4.7%	5.2%	0.6%	0.6%	1.3%	5.8%	2.3%	0.5%	3.9%	3.2%	1.8%	0.7%	0.0%	0.9%	3.9%	4.8%	2.1%	0.0%	0.9%	0.1%	2.7%	1.8%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.8%	0.7%	0.3%	0.7%	1.1%	0.1%	0.2%	0.3%	1.2%	0.2%	0.0%	0.5%	0.3%	0.7%	0.0%	0.0%	0.3%	0.8%	0.2%	0.7%	0.0%	0.0%	0.0%	0.5%	0.1%
	Daylight	19.3%	19.6%	12.1%	18.3%	29.4%	3.4%	6.6%	9.3%	27.3%	7.0%	0.7%	18.1%	13.6%	10.6%	1.6%	0.2%	6.9%	14.7%	17.5%	17.8%	0.2%	0.9%	0.0%	16.7%	3.7%
	Dusk	1.2%	2.1%	1.0%	1.3%	2.6%	0.3%	0.4%	0.8%	2.9%	0.1%	0.0%	1.5%	1.2%	0.9%	0.1%	0.0%	0.5%	0.5%	2.3%	1.4%	0.0%	0.0%	0.0%	1.3%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment B-6
MetroPlan Orlando Region
Percent of All KSI Crashes involving Motorcyclists 2018-2022

Mode: All	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.9%	0.0%	0.1%	4.2%	4.6%	1.2%	1.4%	6.4%	0.7%	0.0%	1.1%	1.2%	4.9%	4.0%	1.7%	0.0%	1.4%	0.0%
	Animal	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.1%	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.1%	0.0%	0.0%	1.3%	1.4%	0.0%	0.6%	2.0%	0.0%	0.0%	1.0%	0.5%	0.5%	1.6%	0.4%	0.0%	0.0%	0.0%
	Left Turn	2.1%	0.3%	0.0%	15.7%	20.0%	2.6%	7.1%	27.9%	1.6%	0.3%	3.1%	5.0%	21.7%	12.9%	8.5%	0.5%	7.7%	0.1%
	Off Road	0.6%	0.1%	0.1%	7.6%	8.9%	0.7%	2.3%	11.5%	0.3%	0.1%	1.9%	1.6%	8.5%	3.8%	4.9%	0.3%	2.8%	0.2%
	Other	1.4%	0.4%	0.1%	9.1%	10.8%	2.4%	5.3%	17.2%	1.4%	0.0%	2.5%	2.5%	13.5%	6.8%	6.0%	0.8%	4.9%	0.0%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	1.3%	0.2%	0.0%	4.7%	8.6%	2.9%	5.0%	14.2%	1.9%	0.3%	2.2%	2.5%	11.7%	4.1%	6.8%	0.3%	5.1%	0.1%
	Right Turn	0.0%	0.0%	0.0%	0.2%	0.3%	0.2%	0.5%	1.0%	0.1%	0.0%	0.1%	0.2%	0.7%	0.0%	0.7%	0.0%	0.3%	0.0%
	Rollover	0.2%	0.1%	0.0%	3.4%	3.6%	0.2%	2.0%	5.6%	0.1%	0.1%	1.4%	1.2%	3.3%	2.5%	1.8%	0.2%	1.2%	0.1%
	Sideswipe	0.4%	0.1%	0.0%	1.4%	2.9%	1.0%	1.5%	4.3%	1.0%	0.0%	0.6%	0.3%	4.3%	1.3%	1.7%	0.2%	1.9%	0.2%
	Unknown	0.4%	0.0%	0.0%	0.4%	1.1%	0.2%	0.5%	1.6%	0.2%	0.0%	0.3%	0.0%	1.5%	0.4%	0.2%	0.2%	1.0%	0.0%
Alcohol Related	Y	0.3%	0.1%	0.1%	3.2%	4.0%	0.6%	2.3%	6.7%	0.2%	0.1%	1.4%	0.7%	4.9%	2.8%	2.2%	0.3%	1.6%	0.1%
	N	7.2%	1.2%	0.2%	44.9%	58.2%	10.8%	24.0%	85.2%	7.1%	0.7%	13.0%	14.3%	65.7%	35.0%	30.5%	2.3%	24.6%	0.6%
Hit and Run	Y	0.4%	0.0%	0.0%	2.3%	3.7%	0.8%	0.8%	4.4%	0.4%	0.0%	0.5%	0.8%	3.5%	2.2%	1.2%	0.4%	1.1%	0.0%
	N	7.1%	1.3%	0.3%	45.8%	58.5%	25.5%	25.5%	87.4%	6.9%	0.8%	13.9%	14.2%	67.1%	35.5%	31.6%	2.2%	25.1%	0.7%
Aggressive Driving	Y	1.1%	0.2%	0.2%	3.4%	4.8%	2.0%	2.0%	7.3%	0.4%	0.0%	0.7%	1.5%	5.5%	3.0%	2.2%	0.0%	2.4%	0.1%
	N	6.4%	1.1%	0.1%	44.7%	57.4%	24.4%	24.4%	84.5%	6.9%	0.8%	13.7%	13.6%	65.0%	34.7%	30.5%	2.6%	23.7%	0.6%
Distracted Driving	Y	1.7%	0.4%	0.0%	13.6%	16.1%	7.0%	7.0%	24.5%	1.9%	0.1%	4.1%	4.7%	17.7%	10.7%	9.3%	0.8%	5.6%	0.0%
	N	5.8%	0.8%	0.3%	34.5%	46.1%	19.4%	19.4%	67.4%	5.4%	0.7%	10.3%	10.4%	52.9%	27.0%	23.4%	1.8%	20.6%	0.7%
Intersection Related	Y	3.5%	0.5%	0.2%	20.7%	25.7%	10.5%	10.5%	37.9%	3.1%	0.3%	5.7%	6.1%	29.4%	18.9%	11.7%	0.8%	9.7%	0.2%
	N	4.0%	0.7%	0.1%	27.4%	36.4%	15.9%	15.9%	53.9%	4.2%	0.5%	8.7%	8.9%	41.1%	18.9%	21.1%	1.8%	16.4%	0.5%
Drug Related	Y	0.1%	0.1%	0.0%	2.5%	2.9%	1.1%	1.1%	4.1%	0.1%	0.0%	1.0%	0.7%	2.5%	2.1%	1.2%	0.2%	0.7%	0.0%
	N	7.4%	1.2%	0.3%	45.6%	59.3%	25.3%	25.3%	87.7%	7.2%	0.8%	13.5%	14.3%	68.0%	35.6%	31.6%	2.4%	25.4%	0.7%
Aging Driver	Y	0.6%	0.2%	0.0%	4.9%	7.1%	4.1%	4.1%	11.5%	0.6%	0.2%	1.9%	1.5%	9.0%	4.2%	4.6%	0.1%	3.3%	0.2%
	N	6.8%	1.1%	0.3%	43.2%	55.1%	22.2%	22.2%	80.3%	6.7%	0.6%	12.5%	13.6%	61.5%	33.5%	28.2%	2.5%	22.9%	0.5%
Teenage Driver	Y	0.5%	0.2%	0.0%	3.8%	4.2%	2.4%	2.4%	7.1%	1.4%	0.0%	1.1%	1.6%	5.8%	3.3%	2.6%	0.1%	2.4%	0.0%
	N	6.9%	1.1%	0.3%	44.3%	57.9%	23.9%	23.9%	84.7%	5.9%	0.8%	13.3%	13.5%	64.7%	34.4%	30.1%	2.5%	23.7%	0.7%
Day of the Week	Monday	0.4%	0.0%	0.0%	6.3%	6.7%	2.9%	2.9%	11.4%	0.5%	0.0%	2.6%	2.0%	7.3%	5.4%	3.7%	0.4%	2.4%	0.0%
	Tuesday	0.7%	0.1%	0.0%	5.3%	5.7%	3.6%	3.6%	10.9%	1.2%	0.3%	1.5%	1.3%	9.6%	4.1%	4.4%	0.3%	3.4%	0.1%
	Wednesday	1.2%	0.4%	0.1%	5.9%	7.1%	2.3%	2.3%	11.3%	1.1%	0.1%	1.4%	2.0%	9.1%	3.7%	4.4%	0.1%	4.0%	0.2%
	Thursday	1.2%	0.1%	0.1%	7.5%	8.4%	2.7%	2.7%	13.5%	1.5%	0.0%	1.9%	1.9%	11.1%	6.3%	4.7%	0.5%	3.5%	0.0%
	Friday	1.8%	0.4%	0.0%	7.8%	9.0%	4.0%	4.0%	15.3%	0.8%	0.1%	2.2%	2.8%	11.2%	6.9%	4.2%	0.5%	4.1%	0.4%
	Saturday	1.7%	0.1%	0.0%	7.7%	9.5%	4.1%	4.1%	15.9%	1.2%	0.2%	1.7%	3.6%	12.0%	6.1%	5.1%	0.4%	5.6%	0.0%
	Sunday	0.5%	0.1%	0.1%	7.7%	7.6%	3.4%	3.4%	13.6%	1.1%	0.1%	3.1%	1.5%	10.2%	5.2%	6.1%	0.3%	3.1%	0.0%
Time of Day	12-3 AM	1.1%	0.1%	0.2%	2.7%	3.5%	2.6%	2.6%	7.2%	0.4%	0.0%	1.1%	1.3%	5.3%	2.5%	2.0%	0.5%	2.4%	0.1%
	3-6 AM	0.1%	0.2%	0.0%	1.3%	1.3%	0.9%	0.9%	2.8%	0.3%	0.0%	0.5%	0.7%	1.8%	1.3%	1.4%	0.0%	0.4%	0.0%
	6-9 AM	0.7%	0.0%	0.0%	3.7%	4.5%	2.5%	2.5%	7.8%	0.6%	0.2%	1.3%	1.1%	6.4%	3.1%	3.1%	0.2%	2.2%	0.1%
	9-Noon	0.5%	0.2%	0.0%	4.6%	5.0%	2.4%	2.4%	8.6%	0.4%	0.0%	1.6%	1.1%	6.4%	3.1%	3.4%	0.0%	2.5%	0.0%
	Noon-3 PM	0.7%	0.1%	0.0%	7.7%	8.2%	3.2%	3.2%	13.7%	0.6%	0.0%	2.4%	2.2%	9.6%	5.3%	5.0%	0.4%	3.6%	0.0%
	3-6 PM	1.6%	0.2%	0.0%	8.5%	9.9%	4.3%	4.3%	16.5%	2.1%	0.2%	2.8%	2.5%	13.6%	7.1%	5.6%	0.7%	5.2%	0.2%
	6-9 PM	1.4%	0.0%	0.1%	12.1%	11.5%	3.2%	3.2%	18.5%	0.8%	0.1%	3.3%	3.4%	12.8%	9.0%	5.5%	0.3%	4.6%	0.1%
	9-Midnight	1.4%	0.4%	0.0%	7.5%	10.2%	3.8%	3.8%	16.7%	1.9%	0.3%	1.5%	2.8%	14.7%	6.4%	6.8%	0.4%	5.2%	0.2%
Lighting Conditions	Dark - Lighted	3.3%	0.7%	0.3%	14.2%	17.8%	6.5%	6.5%	29.3%	2.8%	0.2%	1.9%	3.9%	26.5%	10.9%	11.3%	0.7%	8.8%	0.5%
	Dark - Not Lighted	0.2%	0.0%	0.0%	4.7%	4.5%	3.6%	3.6%	9.9%	0.5%	0.2%	3.7%	2.5%	4.3%	4.7%	3.0%	0.4%	2.5%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.2%	0.0%	0.0%	1.1%	1.1%	0.4%	0.4%	1.8%	0.1%	0.0%	0.2%	0.4%	1.3%	0.8%	0.4%	0.0%	0.6%	0.0%
	Daylight	3.4%	0.4%	0.0%	25.7%	28.3%	11.6%	11.6%	46.9%	3.7%	0.3%	7.8%	7.5%	35.6%	19.4%	17.1%	1.2%	13.1%	0.2%
	Dusk	0.4%	0.1%	0.0%	2.4%	2.4%	0.8%	0.8%	3.9%	0.2%	0.1%	0.7%	0.6%	2.9%	1.9%	1.0%	0.3%	1.1%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment B-7
MetroPlan Orlando Region
Percent of All KSI Crashes involving Bicyclist 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	35.4%	40.9%	23.7%	31.2%	59.6%	9.2%	13.2%	21.8%	54.8%	9.5%	0.6%	34.3%	22.6%	22.9%	3.7%	0.9%	15.6%	26.2%	30.9%	42.9%	0.0%	0.3%	0.3%	37.0%	5.5%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.0%	1.2%	0.3%	0.0%	1.5%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.6%	0.6%	0.3%	0.0%	0.0%	0.0%	0.0%	0.7%	1.1%	0.0%	0.0%	0.0%	0.6%	0.0%
	N	35.4%	39.7%	23.4%	31.2%	58.1%	9.2%	13.2%	21.8%	53.2%	9.5%	0.6%	33.6%	22.0%	22.6%	3.7%	0.9%	15.6%	26.2%	30.2%	41.8%	0.0%	0.3%	0.3%	36.4%	5.5%
Hit and Run	Y	7.1%	7.1%	4.6%	5.5%	11.0%	2.1%	2.2%	4.6%	9.8%	2.2%	0.0%	7.6%	3.1%	4.6%	0.6%	0.0%	2.8%	4.4%	5.8%	8.7%	0.0%	0.0%	0.0%	8.0%	0.6%
	N	28.3%	33.8%	19.1%	25.7%	48.6%	7.0%	11.1%	17.2%	44.9%	7.4%	0.6%	26.6%	19.6%	18.3%	3.1%	0.9%	12.8%	21.8%	25.1%	34.2%	0.0%	0.3%	0.3%	29.1%	4.9%
Aggressive Driving	Y	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	35.1%	40.9%	23.7%	30.9%	59.6%	9.2%	13.2%	21.5%	54.8%	9.5%	0.6%	34.3%	22.6%	22.6%	3.7%	0.9%	15.6%	26.2%	30.5%	42.9%	0.0%	0.3%	0.3%	37.0%	5.5%
Distracted Driving	Y	5.2%	8.0%	4.6%	4.0%	10.4%	3.4%	1.2%	3.4%	11.7%	1.5%	0.0%	5.8%	4.3%	4.6%	1.2%	0.0%	1.8%	3.3%	6.9%	8.7%	0.0%	0.3%	0.0%	7.3%	1.5%
	N	30.2%	32.9%	19.1%	27.2%	49.2%	5.8%	12.0%	18.5%	43.1%	8.0%	0.6%	28.4%	18.3%	18.3%	2.4%	0.9%	13.8%	22.9%	24.0%	34.2%	0.0%	0.0%	0.3%	29.7%	4.0%
Intersection Related	Y	17.8%	15.4%	9.2%	12.8%	26.0%	3.4%	5.8%	12.9%	19.7%	4.0%	0.0%	11.6%	8.6%	12.8%	1.8%	0.3%	7.0%	13.8%	12.0%	15.6%	0.0%	0.0%	0.0%	15.3%	1.5%
	N	17.5%	25.5%	14.5%	18.3%	33.6%	5.8%	7.4%	8.9%	35.1%	5.5%	0.6%	22.6%	14.1%	10.1%	1.8%	0.6%	8.6%	12.4%	18.9%	27.3%	0.0%	0.3%	0.3%	21.7%	4.0%
Drug Related	Y	0.3%	0.9%	0.3%	0.3%	1.2%	0.0%	0.3%	0.0%	1.2%	0.0%	0.0%	0.6%	0.3%	0.3%	0.0%	0.0%	0.3%	0.0%	0.7%	0.7%	0.0%	0.0%	0.0%	0.6%	0.0%
	N	35.1%	40.0%	23.4%	30.9%	58.4%	9.2%	12.9%	21.8%	53.5%	9.5%	0.6%	33.6%	22.3%	22.6%	3.7%	0.9%	15.3%	26.2%	30.2%	42.2%	0.0%	0.3%	0.3%	36.4%	5.5%
Aging Driver	Y	3.7%	3.4%	2.8%	3.1%	6.7%	0.3%	1.5%	2.8%	4.6%	0.9%	0.0%	3.7%	2.1%	2.8%	0.0%	0.0%	1.5%	2.5%	3.3%	4.4%	0.0%	0.0%	0.0%	2.8%	0.9%
	N	31.7%	37.5%	20.9%	28.1%	52.9%	8.9%	11.7%	19.1%	50.2%	8.6%	0.6%	30.6%	20.5%	20.2%	3.7%	0.9%	14.1%	23.6%	27.6%	38.5%	0.0%	0.3%	0.3%	34.3%	4.6%
Teenage Driver	Y	1.8%	3.1%	1.5%	1.5%	4.3%	0.9%	0.3%	2.2%	3.4%	0.6%	0.0%	1.8%	2.1%	1.8%	0.3%	0.0%	0.6%	1.5%	3.3%	2.5%	0.0%	0.0%	0.0%	3.1%	0.6%
	N	33.5%	37.8%	22.2%	29.7%	55.4%	8.3%	12.9%	19.7%	51.4%	8.9%	0.6%	32.4%	20.5%	21.1%	3.4%	0.9%	15.0%	24.7%	27.6%	40.4%	0.0%	0.3%	0.3%	33.9%	4.9%
Day of the Week	Monday	6.5%	5.8%	4.9%	5.2%	9.8%	2.1%	2.2%	3.7%	9.8%	1.5%	0.0%	5.8%	4.0%	3.7%	0.9%	0.0%	2.8%	3.6%	5.8%	7.6%	0.0%	0.0%	0.0%	7.0%	0.6%
	Tuesday	6.2%	5.2%	4.0%	5.5%	8.9%	0.9%	3.1%	2.5%	8.0%	1.5%	0.3%	5.2%	3.1%	3.1%	0.3%	0.3%	3.4%	3.3%	4.7%	6.2%	0.0%	0.3%	0.0%	6.1%	0.0%
	Wednesday	5.2%	5.2%	3.1%	3.1%	9.8%	0.9%	1.2%	4.0%	7.7%	0.6%	0.0%	4.0%	3.1%	4.0%	0.9%	0.0%	1.8%	5.5%	3.3%	5.5%	0.0%	0.0%	0.0%	5.8%	0.6%
	Thursday	4.0%	6.8%	3.4%	3.7%	9.2%	1.2%	0.9%	3.1%	7.7%	2.2%	0.3%	6.4%	2.8%	3.4%	0.0%	0.3%	1.2%	3.3%	5.8%	6.2%	0.0%	0.0%	0.0%	6.4%	0.6%
	Friday	6.2%	5.2%	3.1%	5.8%	6.4%	2.1%	2.2%	4.3%	6.5%	1.5%	0.0%	4.6%	2.8%	3.7%	0.9%	0.0%	2.4%	5.1%	4.4%	4.7%	0.0%	0.0%	0.3%	4.3%	0.9%
	Saturday	3.4%	7.7%	3.4%	4.6%	8.6%	1.5%	1.2%	2.2%	10.2%	0.9%	0.0%	5.5%	4.6%	2.1%	0.0%	0.3%	2.1%	2.2%	4.7%	7.6%	0.0%	0.0%	0.0%	4.9%	1.5%
	Sunday	4.0%	4.9%	1.8%	3.4%	7.0%	0.3%	2.5%	2.2%	4.9%	1.2%	0.0%	2.8%	2.4%	3.1%	0.6%	0.0%	1.8%	3.3%	2.2%	5.1%	0.0%	0.0%	0.0%	2.4%	1.2%
Time of Day	12-3 AM	1.2%	1.8%	0.9%	1.2%	2.4%	0.3%	0.3%	0.9%	1.5%	1.2%	0.0%	1.5%	1.2%	0.6%	0.0%	0.0%	0.6%	0.7%	1.5%	1.8%	0.0%	0.0%	0.0%	0.9%	0.0%
	3-6 AM	1.8%	0.9%	2.2%	2.1%	2.1%	0.6%	0.6%	0.9%	2.8%	0.6%	0.0%	2.4%	0.6%	0.6%	0.3%	0.0%	0.9%	1.1%	0.7%	2.9%	0.0%	0.0%	0.0%	1.8%	0.0%
	6-9 AM	6.5%	6.8%	3.4%	4.3%	10.7%	1.5%	1.8%	4.0%	9.2%	1.2%	0.3%	4.6%	4.0%	4.6%	0.9%	0.0%	2.4%	4.7%	5.8%	6.2%	0.0%	0.3%	0.0%	6.1%	0.9%
	9-Noon	4.6%	4.6%	4.6%	3.7%	8.9%	1.2%	1.5%	4.0%	7.7%	0.6%	0.0%	4.6%	4.0%	3.1%	0.6%	0.3%	1.2%	5.5%	1.8%	7.3%	0.0%	0.0%	0.0%	6.1%	0.6%
	Noon-3 PM	4.9%	5.8%	3.1%	3.7%	8.9%	1.5%	2.5%	3.4%	6.5%	1.5%	0.0%	5.2%	2.8%	3.1%	0.6%	0.0%	2.4%	2.9%	4.0%	6.9%	0.0%	0.0%	0.0%	5.8%	0.3%
	3-6 PM	6.5%	6.2%	4.0%	6.7%	9.8%	0.3%	3.4%	3.4%	8.6%	1.2%	0.0%	5.5%	2.8%	3.7%	0.3%	0.3%	4.3%	3.6%	4.7%	6.5%	0.0%	0.0%	0.0%	5.8%	0.9%
	6-9 PM	5.8%	9.2%	3.1%	5.5%	10.1%	2.4%	1.8%	3.1%	12.0%	1.2%	0.0%	5.5%	4.6%	4.9%	0.3%	0.3%	2.4%	4.4%	7.6%	6.5%	0.0%	0.0%	0.0%	6.4%	0.9%
	9-Midnight	4.0%	5.5%	2.5%	4.0%	6.7%	1.2%	1.2%	2.2%	6.5%	1.8%	0.3%	4.9%	2.8%	2.4%	0.6%	0.0%	1.2%	3.3%	4.7%	4.7%	0.0%	0.0%	0.3%	4.0%	1.8%
Lighting Conditions	Dark - Lighted	4.9%	9.2%	6.2%	5.2%	12.8%	2.1%	1.2%	4.0%	12.6%	2.5%	0.0%	9.5%	4.9%	2.8%	0.9%	0.3%	1.8%	2.9%	8.4%	10.5%	0.0%	0.0%	0.3%	6.4%	1.5%
	Dark - Not Lighted	4.6%	4.3%	2.2%	4.9%	4.9%	1.2%	0.6%	1.8%	6.2%	1.8%	0.6%	3.7%	2.4%	3.1%	0.6%	0.0%	1.2%	4.4%	2.9%	4.4%	0.0%	0.0%	0.0%	4.6%	0.6%
	Dark - Unknown Lighting	0.3%	0.3%	0.0%	0.3%	0.3%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	1.5%	1.5%	0.0%	0.6%	1.8%	0.6%	0.3%	1.2%	1.2%	0.3%	0.0%	0.0%	1.5%	1.2%	0.3%	0.0%	0.0%	1.5%	1.5%	0.7%	0.0%	0.3%	0.0%	0.9%	0.0%
	Daylight	23.1%	24.3%	14.8%	19.9%	37.6%	4.9%	10.5%	14.5%	32.3%	4.9%	0.0%	20.2%	12.8%	15.0%	1.8%	0.6%	11.9%	16.7%	16.7%	26.2%	0.0%	0.0%	0.0%	23.9%	3.4%
	Dusk	0.6%	0.9%	0.3%	0.3%	1.2%	0.3%	0.3%	0.0%	1.5%	0.0%	0.0%	0.3%	0.6%	0.6%	0.0%	0.0%	0.3%	0.4%	1.1%	0.4%	0.0%	0.0%	0.0%	0.6%	0.0%
	Other	0.0%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.3%	0.0%
	Unknown	0.3%	0.3%	0.0%	0.0%	0.6%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.4%	0.0%	0.4%	0.0%	0.0%	0.0%	0.3%	0.0%

Attachment B-7
MetroPlan Orlando Region
Percent of All KSI Crashes involving Bicyclist 2018-2022

Mode:	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	6.1%	0.0%	0.0%	50.8%	64.6%	11.4%	24.0%	90.2%	8.0%	1.8%	10.2%	9.2%	80.6%	41.2%	30.8%	0.9%	25.8%	1.2%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.0%	0.0%	0.0%	0.9%	0.9%	0.3%	0.3%	1.2%	0.3%	0.0%	0.3%	0.0%	1.2%	0.9%	0.3%	0.0%	0.3%	0.0%
	N	6.1%	0.0%	0.0%	49.8%	63.7%	11.1%	23.7%	88.9%	7.7%	1.8%	9.8%	9.2%	79.4%	40.3%	30.5%	0.9%	25.5%	1.2%
Hit and Run	Y	1.2%	0.0%	0.0%	8.9%	12.0%	4.9%	4.9%	17.5%	0.9%	0.3%	2.5%	2.2%	14.2%	8.3%	5.2%	0.0%	4.9%	0.3%
	N	4.9%	0.0%	0.0%	41.9%	52.6%	19.1%	19.1%	72.6%	7.1%	1.5%	7.7%	7.1%	66.5%	32.9%	25.5%	0.9%	20.9%	0.9%
Aggressive Driving	Y	0.0%	0.0%	0.0%	0.3%	0.0%	0.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%
	N	6.1%	0.0%	0.0%	50.5%	64.6%	23.7%	23.7%	89.8%	8.0%	1.8%	10.2%	9.2%	80.3%	40.9%	30.8%	0.9%	25.8%	1.2%
Distracted Driving	Y	0.6%	0.0%	0.0%	8.0%	12.0%	4.0%	4.0%	15.7%	1.5%	0.6%	1.5%	0.6%	15.7%	6.8%	4.0%	0.3%	6.5%	0.3%
	N	5.5%	0.0%	0.0%	42.8%	52.6%	20.0%	20.0%	74.5%	6.5%	1.2%	8.6%	8.6%	64.9%	34.5%	26.8%	0.6%	19.4%	0.9%
Intersection Related	Y	2.4%	0.0%	0.0%	22.9%	26.8%	10.5%	10.5%	37.5%	4.3%	0.6%	3.4%	3.4%	35.7%	19.4%	12.0%	0.9%	9.8%	0.3%
	N	3.7%	0.0%	0.0%	27.8%	37.8%	13.5%	13.5%	52.6%	3.7%	1.2%	6.8%	5.8%	44.9%	21.8%	18.8%	0.0%	16.0%	0.9%
Drug Related	Y	0.0%	0.0%	0.0%	0.9%	0.9%	0.3%	0.3%	1.2%	0.3%	0.0%	0.3%	0.0%	1.2%	0.9%	0.3%	0.0%	0.3%	0.0%
	N	6.1%	0.0%	0.0%	49.8%	63.7%	23.7%	23.7%	88.9%	7.7%	1.8%	9.8%	9.2%	79.4%	40.3%	30.5%	0.9%	25.5%	1.2%
Aging Driver	Y	0.9%	0.0%	0.0%	5.5%	6.8%	1.5%	1.5%	8.9%	0.9%	0.0%	0.3%	0.3%	9.2%	4.3%	1.8%	0.3%	3.4%	0.0%
	N	5.2%	0.0%	0.0%	45.3%	57.8%	22.5%	22.5%	81.2%	7.1%	1.8%	9.8%	8.9%	71.4%	36.9%	28.9%	0.6%	22.5%	1.2%
Teenage Driver	Y	0.0%	0.0%	0.0%	3.1%	3.4%	1.5%	1.5%	4.9%	1.5%	0.0%	0.3%	0.0%	6.2%	1.8%	2.2%	0.3%	1.8%	0.3%
	N	6.1%	0.0%	0.0%	47.7%	61.2%	22.5%	22.5%	85.2%	6.5%	1.8%	9.8%	9.2%	74.5%	39.4%	28.6%	0.6%	24.0%	0.9%
Day of the Week	Monday	0.6%	0.0%	0.0%	8.9%	10.4%	2.7%	2.7%	14.2%	2.2%	0.9%	1.2%	1.8%	14.2%	8.6%	2.5%	0.3%	5.2%	0.6%
	Tuesday	0.9%	0.0%	0.0%	8.0%	7.9%	4.9%	4.9%	15.1%	0.3%	0.0%	1.5%	2.2%	11.7%	5.8%	6.2%	0.0%	3.1%	0.3%
	Wednesday	0.0%	0.0%	0.0%	7.3%	7.4%	4.1%	4.1%	12.6%	0.3%	0.6%	1.2%	1.2%	11.1%	6.5%	4.3%	0.0%	2.5%	0.3%
	Thursday	0.9%	0.0%	0.0%	6.1%	6.0%	4.6%	4.6%	12.3%	1.5%	0.3%	2.5%	1.8%	9.8%	4.0%	6.5%	0.3%	3.4%	0.0%
	Friday	0.9%	0.0%	0.0%	8.0%	8.5%	1.6%	1.6%	12.6%	1.8%	0.0%	1.5%	1.2%	11.7%	6.2%	4.3%	0.0%	4.0%	0.0%
	Saturday	1.8%	0.0%	0.0%	6.4%	9.6%	2.2%	2.2%	13.2%	1.2%	0.0%	1.5%	0.9%	12.0%	5.8%	3.1%	0.3%	5.2%	0.0%
	Sunday	0.9%	0.0%	0.0%	6.1%	7.7%	1.1%	1.1%	10.2%	0.6%	0.0%	0.6%	0.0%	10.2%	4.3%	4.0%	0.0%	2.5%	0.0%
Time of Day	12-3 AM	0.6%	0.0%	0.0%	2.4%	2.5%	0.3%	0.3%	3.7%	0.3%	0.0%	0.3%	0.3%	3.4%	1.5%	1.2%	0.0%	1.2%	0.0%
	3-6 AM	0.0%	0.0%	0.0%	3.1%	2.5%	1.4%	1.4%	4.3%	0.3%	0.3%	0.3%	0.9%	3.7%	1.8%	1.5%	0.6%	0.3%	0.6%
	6-9 AM	0.3%	0.0%	0.0%	8.9%	9.3%	4.6%	4.6%	15.7%	0.6%	0.3%	2.2%	2.5%	12.0%	6.5%	4.9%	0.0%	4.9%	0.3%
	9-Noon	0.6%	0.0%	0.0%	6.4%	8.5%	2.5%	2.5%	12.0%	1.5%	0.3%	0.3%	0.6%	12.9%	4.9%	4.3%	0.0%	4.3%	0.3%
	Noon-3 PM	1.2%	0.0%	0.0%	6.7%	7.9%	2.5%	2.5%	12.0%	1.5%	0.3%	0.6%	1.5%	11.7%	6.2%	4.0%	0.0%	3.7%	0.0%
	3-6 PM	0.6%	0.0%	0.0%	9.5%	9.3%	3.6%	3.6%	15.1%	1.2%	0.3%	1.5%	1.8%	13.2%	6.8%	7.7%	0.3%	1.8%	0.0%
	6-9 PM	1.2%	0.0%	0.0%	9.5%	9.6%	4.9%	4.9%	16.3%	1.5%	0.3%	2.2%	0.3%	15.7%	8.6%	4.3%	0.0%	5.2%	0.0%
	9-Midnight	1.5%	0.0%	0.0%	4.3%	7.9%	1.6%	1.6%	11.1%	0.9%	0.0%	2.8%	1.2%	8.0%	4.9%	2.8%	0.0%	4.3%	0.0%
Lighting Conditions	Dark - Lighted	2.8%	0.0%	0.0%	9.2%	11.2%	4.4%	4.4%	19.1%	0.9%	0.3%	1.5%	0.9%	17.8%	7.7%	6.5%	0.3%	5.5%	0.3%
	Dark - Not Lighted	0.3%	0.0%	0.0%	5.5%	6.8%	1.6%	1.6%	9.5%	1.2%	0.3%	2.8%	1.8%	6.5%	4.6%	2.8%	0.3%	3.1%	0.3%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.6%	0.3%	0.3%	0.3%	0.6%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.3%	0.0%	0.0%	0.3%
	Dawn	0.0%	0.0%	0.0%	1.8%	2.5%	0.0%	0.0%	2.8%	0.3%	0.0%	0.9%	0.3%	1.8%	1.8%	0.0%	0.0%	1.2%	0.0%
	Daylight	3.1%	0.0%	0.0%	32.1%	35.0%	14.2%	14.2%	55.4%	5.5%	1.2%	4.3%	6.2%	51.7%	25.8%	20.9%	0.3%	14.8%	0.3%
	Dusk	0.0%	0.0%	0.0%	1.2%	1.1%	0.5%	0.5%	1.8%	0.0%	0.0%	0.0%	0.0%	1.8%	0.6%	0.0%	0.0%	1.2%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.3%	0.3%	0.3%	0.3%	0.6%	0.0%	0.0%	0.6%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%

Attachment B-8
MetroPlan Orlando Region
Percent of All KSI Crashes involving Pedestrians

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	26.1%	37.1%	36.9%	28.2%	61.2%	10.6%	10.4%	18.6%	59.3%	11.6%	0.1%	45.2%	24.7%	16.1%	2.3%	0.1%	11.6%	17.8%	31.1%	51.1%	0.0%	0.5%	0.0%	44.2%	3.9%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.9%	1.4%	0.3%	1.3%	1.1%	0.2%	0.3%	0.7%	1.2%	0.3%	0.0%	1.0%	0.7%	0.4%	0.2%	0.0%	0.2%	0.8%	1.2%	0.6%	0.0%	0.1%	0.0%	1.0%	0.1%
	N	25.2%	35.7%	36.5%	26.9%	60.2%	10.3%	10.0%	17.8%	58.1%	11.3%	0.1%	44.2%	24.0%	15.6%	2.1%	0.1%	11.4%	17.0%	29.9%	50.5%	0.0%	0.4%	0.0%	43.3%	3.8%
Hit and Run	Y	6.1%	6.5%	6.8%	6.0%	11.6%	1.7%	2.6%	3.6%	11.2%	2.0%	0.0%	8.3%	5.4%	2.2%	0.3%	0.0%	3.1%	3.0%	6.3%	9.1%	0.0%	0.1%	0.0%	7.2%	0.5%
	N	20.0%	30.6%	30.0%	22.2%	49.6%	8.9%	7.8%	15.0%	48.1%	9.6%	0.1%	36.9%	19.3%	13.8%	2.0%	0.1%	8.6%	14.8%	24.8%	42.0%	0.0%	0.4%	0.0%	37.1%	3.4%
Aggressive Driving	Y	0.6%	0.6%	0.7%	0.7%	1.2%	0.1%	0.4%	0.4%	1.1%	0.1%	0.0%	1.1%	0.3%	0.2%	0.0%	0.0%	0.4%	0.2%	0.6%	1.0%	0.0%	0.0%	0.0%	0.7%	0.0%
	N	25.4%	36.4%	36.1%	27.5%	60.1%	10.5%	9.9%	18.2%	58.2%	11.5%	0.1%	44.1%	24.4%	15.8%	2.3%	0.1%	11.2%	17.6%	30.5%	50.1%	0.0%	0.5%	0.0%	43.5%	3.9%
Distracted Driving	Y	3.5%	3.0%	2.8%	3.0%	5.8%	0.7%	1.3%	1.8%	5.9%	0.3%	0.0%	3.3%	2.0%	1.9%	0.3%	0.0%	2.0%	2.2%	2.5%	3.8%	0.0%	0.1%	0.0%	3.2%	0.3%
	N	22.5%	34.1%	34.1%	25.2%	55.4%	9.8%	9.1%	16.8%	53.4%	11.3%	0.1%	41.9%	22.7%	14.1%	2.0%	0.1%	9.6%	15.7%	28.6%	47.2%	0.0%	0.4%	0.0%	41.1%	3.6%
Intersection Related	Y	8.4%	10.0%	10.3%	5.5%	19.1%	3.9%	2.9%	6.5%	16.1%	3.2%	0.0%	11.1%	7.5%	5.4%	0.8%	0.1%	3.6%	6.1%	7.4%	14.6%	0.0%	0.1%	0.0%	11.4%	1.5%
	N	17.6%	27.0%	26.6%	22.7%	42.1%	6.7%	7.5%	12.1%	43.2%	8.4%	0.1%	34.1%	17.2%	10.7%	1.5%	0.0%	8.0%	11.7%	23.7%	36.5%	0.0%	0.4%	0.0%	32.8%	2.4%
Drug Related	Y	0.3%	0.9%	0.5%	0.6%	0.8%	0.2%	0.1%	0.2%	1.2%	0.2%	0.0%	0.6%	0.6%	0.1%	0.1%	0.0%	0.2%	0.1%	0.7%	0.8%	0.0%	0.0%	0.0%	0.5%	0.1%
	N	25.7%	36.2%	36.3%	27.6%	60.4%	10.3%	10.3%	18.4%	58.1%	11.4%	0.1%	44.6%	24.1%	15.9%	2.2%	0.1%	11.4%	17.7%	30.4%	50.2%	0.0%	0.5%	0.0%	43.7%	3.8%
Aging Driver	Y	2.2%	3.1%	2.6%	2.3%	5.1%	0.6%	0.9%	1.5%	4.7%	0.9%	0.0%	3.6%	2.3%	1.1%	0.1%	0.0%	1.0%	1.6%	2.4%	4.1%	0.0%	0.0%	0.0%	3.8%	0.2%
	N	23.8%	34.0%	34.3%	25.9%	56.2%	9.9%	9.5%	17.1%	54.6%	10.8%	0.1%	41.6%	22.4%	15.0%	2.2%	0.1%	10.7%	16.3%	28.7%	47.0%	0.0%	0.5%	0.0%	40.4%	3.7%
Teenage Driver	Y	1.0%	1.4%	2.4%	1.4%	3.1%	0.2%	0.5%	1.0%	2.6%	0.6%	0.0%	2.0%	1.6%	0.4%	0.1%	0.0%	0.5%	0.6%	0.5%	3.6%	0.0%	0.0%	0.0%	2.3%	0.0%
	N	25.1%	35.7%	34.5%	26.8%	58.2%	10.3%	9.8%	17.6%	56.7%	11.0%	0.1%	43.2%	23.1%	15.6%	2.2%	0.1%	11.1%	17.2%	30.6%	47.5%	0.0%	0.5%	0.0%	41.9%	3.9%
Day of the Week	Monday	3.8%	4.3%	4.3%	4.0%	7.2%	1.2%	1.7%	1.9%	6.9%	1.8%	0.0%	5.4%	3.0%	2.0%	0.2%	0.0%	1.8%	2.2%	3.7%	6.1%	0.0%	0.0%	0.0%	5.7%	0.6%
	Tuesday	4.2%	5.1%	6.0%	4.6%	9.1%	1.6%	1.5%	3.1%	9.0%	1.6%	0.1%	6.8%	3.5%	2.7%	0.4%	0.0%	1.9%	3.3%	3.6%	8.3%	0.0%	0.0%	0.0%	7.7%	0.5%
	Wednesday	4.4%	4.9%	5.4%	4.9%	8.2%	1.8%	2.1%	2.6%	8.1%	1.9%	0.0%	6.7%	2.6%	2.5%	0.7%	0.0%	2.3%	3.1%	3.9%	7.2%	0.0%	0.1%	0.0%	5.7%	1.0%
	Thursday	3.2%	5.4%	6.2%	2.7%	10.3%	1.8%	1.1%	3.2%	8.9%	1.7%	0.0%	7.6%	3.2%	2.3%	0.3%	0.1%	1.4%	2.2%	4.3%	8.7%	0.0%	0.1%	0.0%	7.2%	0.4%
	Friday	3.8%	6.6%	5.4%	4.3%	10.2%	1.5%	1.1%	3.1%	9.9%	1.8%	0.0%	7.0%	5.1%	2.2%	0.4%	0.0%	1.4%	3.5%	5.1%	8.0%	0.0%	0.1%	0.0%	6.1%	0.7%
	Saturday	3.6%	6.1%	4.8%	4.6%	8.7%	1.1%	2.0%	2.4%	9.0%	1.2%	0.0%	6.2%	4.1%	2.0%	0.0%	0.0%	2.0%	1.6%	5.9%	6.6%	0.0%	0.0%	0.0%	5.4%	0.4%
	Sunday	3.0%	4.6%	4.7%	3.0%	7.5%	1.7%	0.9%	2.4%	7.5%	1.6%	0.0%	5.6%	3.3%	2.2%	0.2%	0.0%	0.8%	2.0%	4.5%	6.2%	0.0%	0.2%	0.0%	6.4%	0.2%
Time of Day	12-3 AM	3.0%	3.1%	4.3%	3.7%	5.0%	1.7%	1.2%	1.8%	6.1%	1.3%	0.0%	5.3%	1.9%	1.7%	0.2%	0.0%	1.3%	1.9%	3.1%	5.3%	0.0%	0.0%	0.0%	5.1%	0.3%
	3-6 AM	2.1%	2.6%	2.8%	2.0%	3.8%	1.6%	0.5%	1.5%	4.4%	1.1%	0.0%	3.6%	1.8%	1.2%	0.1%	0.0%	0.7%	1.2%	2.6%	3.7%	0.0%	0.0%	0.0%	3.5%	0.2%
	6-9 AM	2.8%	3.7%	3.8%	2.4%	7.3%	0.6%	1.1%	2.0%	5.9%	1.4%	0.0%	4.1%	2.6%	2.0%	0.4%	0.0%	1.2%	2.0%	3.1%	5.3%	0.0%	0.0%	0.0%	4.1%	0.6%
	9-Noon	2.0%	2.1%	1.9%	1.8%	3.8%	0.4%	1.7%	1.1%	2.7%	0.6%	0.0%	2.2%	1.1%	1.1%	0.0%	0.1%	1.6%	1.0%	1.4%	2.6%	0.0%	0.0%	0.0%	1.9%	0.3%
	Noon-3 PM	2.6%	2.7%	1.5%	3.0%	3.6%	0.3%	1.1%	2.2%	3.3%	0.1%	0.0%	1.9%	2.0%	1.6%	0.0%	0.0%	1.4%	1.4%	2.8%	2.0%	0.0%	0.1%	0.0%	2.4%	0.4%
	3-6 PM	4.0%	3.3%	3.1%	4.0%	6.0%	0.6%	1.6%	2.2%	6.1%	0.4%	0.0%	3.0%	2.5%	2.7%	0.6%	0.0%	1.8%	3.6%	2.6%	3.8%	0.0%	0.0%	0.0%	3.7%	0.4%
	6-9 PM	5.0%	10.9%	10.5%	6.2%	17.4%	2.6%	1.5%	4.6%	16.9%	3.4%	0.0%	14.1%	5.9%	3.5%	0.7%	0.0%	2.0%	3.1%	9.0%	15.3%	0.0%	0.4%	0.0%	12.6%	0.6%
	9-Midnight	4.6%	8.7%	9.0%	5.1%	14.4%	2.6%	1.7%	3.1%	14.0%	3.3%	0.1%	11.0%	6.9%	2.3%	0.2%	0.0%	1.7%	3.6%	6.5%	13.0%	0.0%	0.0%	0.0%	11.0%	1.0%
Lighting Conditions	Dark - Lighted	7.3%	17.4%	21.6%	9.7%	30.5%	6.0%	2.8%	7.7%	30.0%	5.8%	0.0%	26.3%	11.2%	5.0%	0.4%	0.0%	3.4%	5.0%	14.2%	29.3%	0.0%	0.1%	0.0%	23.4%	0.8%
	Dark - Not Lighted	6.4%	7.9%	4.4%	6.1%	10.3%	2.0%	1.4%	2.9%	10.8%	3.5%	0.1%	7.7%	4.6%	3.9%	0.5%	0.0%	1.7%	4.7%	6.8%	7.5%	0.0%	0.3%	0.0%	8.6%	1.2%
	Dark - Unknown Lighting	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.4%	1.0%	1.0%	0.5%	1.4%	0.4%	0.2%	0.4%	1.4%	0.3%	0.0%	0.8%	1.0%	0.1%	0.2%	0.0%	0.2%	0.2%	0.8%	1.3%	0.0%	0.0%	0.0%	1.0%	0.2%
	Daylight	10.3%	9.9%	8.8%	10.1%	17.3%	1.7%	5.4%	6.6%	15.0%	1.9%	0.0%	9.1%	6.9%	6.2%	1.0%	0.1%	5.9%	6.9%	7.9%	11.5%	0.0%	0.1%	0.0%	10.0%	1.7%
	Dusk	1.4%	0.7%	1.0%	1.5%	1.4%	0.3%	0.4%	0.7%	1.8%	0.1%	0.0%	1.1%	1.0%	0.5%	0.2%	0.0%	0.4%	0.6%	1.3%	1.1%	0.0%	0.0%	0.0%	1.1%	0.0%
	Other	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.2%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%	0.0%
	Unknown	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment B-8
MetroPlan Orlando Region
Percent of All KSI Crashes involving Pedestrians

Mode:	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	11.3%	1.0%	0.7%	38.3%	64.2%	12.9%	22.9%	88.1%	10.5%	1.4%	6.9%	10.6%	82.5%	36.9%	30.8%	3.0%	28.6%	0.7%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.2%	0.0%	0.0%	1.2%	1.7%	0.2%	0.6%	2.2%	0.2%	0.1%	0.4%	0.4%	1.7%	1.4%	0.9%	0.0%	0.3%	0.0%
	N	11.1%	1.0%	0.7%	37.2%	62.5%	12.7%	22.2%	85.9%	10.3%	1.3%	6.5%	10.1%	80.8%	35.5%	29.9%	3.0%	28.3%	0.7%
Hit and Run	Y	2.5%	0.2%	0.3%	8.4%	13.7%	4.1%	4.1%	18.3%	1.2%	0.0%	1.1%	2.5%	15.9%	9.2%	4.1%	0.4%	5.6%	0.2%
	N	8.8%	0.7%	0.4%	29.9%	50.5%	18.8%	18.8%	69.9%	9.3%	1.4%	5.9%	8.1%	66.6%	27.7%	26.7%	2.6%	23.1%	0.5%
Aggressive Driving	Y	0.4%	0.1%	0.0%	0.7%	1.0%	0.6%	0.6%	1.6%	0.4%	0.0%	0.2%	0.1%	1.7%	1.1%	0.5%	0.0%	0.4%	0.0%
	N	10.9%	0.8%	0.7%	37.6%	63.2%	22.2%	22.2%	86.5%	10.0%	1.4%	6.7%	10.5%	80.8%	35.8%	30.2%	3.0%	28.2%	0.7%
Distracted Driving	Y	1.1%	0.1%	0.0%	4.8%	6.8%	1.8%	1.8%	8.9%	0.4%	0.0%	1.0%	0.9%	7.5%	4.1%	2.6%	0.2%	2.4%	0.1%
	N	10.2%	0.8%	0.7%	33.6%	57.4%	21.0%	21.0%	79.3%	10.0%	1.4%	6.0%	9.7%	75.0%	32.8%	28.2%	2.8%	26.3%	0.6%
Intersection Related	Y	3.0%	0.4%	0.6%	11.5%	18.7%	5.3%	5.3%	24.9%	3.5%	0.3%	1.1%	3.0%	24.7%	9.9%	8.3%	0.5%	9.8%	0.1%
	N	8.3%	0.5%	0.1%	26.8%	45.5%	17.5%	17.5%	63.2%	6.9%	1.1%	5.9%	7.6%	57.8%	26.9%	22.4%	2.5%	18.8%	0.6%
Drug Related	Y	0.3%	0.0%	0.0%	0.7%	1.3%	0.2%	0.2%	1.4%	0.2%	0.1%	0.2%	0.2%	1.3%	0.5%	0.5%	0.0%	0.6%	0.0%
	N	11.0%	1.0%	0.7%	37.6%	62.9%	22.6%	22.6%	86.8%	10.3%	1.3%	6.7%	10.4%	81.2%	36.3%	30.2%	3.0%	28.0%	0.7%
Aging Driver	Y	1.0%	0.0%	0.0%	3.1%	4.9%	2.0%	2.0%	7.2%	0.5%	0.2%	0.3%	1.1%	6.5%	3.1%	2.1%	0.1%	2.4%	0.2%
	N	10.3%	1.0%	0.7%	35.3%	59.3%	20.8%	20.8%	81.0%	9.9%	1.2%	6.6%	9.5%	76.0%	33.8%	28.6%	2.9%	26.3%	0.5%
Teenage Driver	Y	0.3%	0.0%	0.0%	2.0%	3.3%	0.9%	0.9%	4.2%	0.3%	0.2%	0.2%	0.7%	3.7%	1.5%	1.4%	0.3%	1.4%	0.1%
	N	11.0%	1.0%	0.7%	36.3%	60.9%	22.0%	22.0%	84.0%	10.1%	1.2%	6.7%	9.8%	78.7%	35.4%	29.4%	2.7%	27.2%	0.6%
Day of the Week	Monday	1.7%	0.0%	0.0%	4.3%	7.3%	2.0%	2.0%	10.5%	1.7%	0.2%	0.6%	1.9%	9.8%	4.4%	4.3%	0.4%	3.3%	0.0%
	Tuesday	1.2%	0.0%	0.0%	5.9%	8.6%	3.9%	3.9%	14.1%	1.1%	0.1%	1.3%	1.5%	12.5%	6.5%	4.4%	0.3%	4.0%	0.1%
	Wednesday	1.9%	0.0%	0.0%	6.2%	9.3%	2.1%	2.1%	12.8%	1.7%	0.2%	1.2%	1.6%	12.0%	6.1%	3.4%	0.2%	4.9%	0.1%
	Thursday	1.9%	0.4%	0.0%	4.9%	7.1%	4.2%	4.2%	12.3%	2.2%	0.3%	0.9%	1.7%	12.3%	4.9%	4.2%	0.9%	4.8%	0.1%
	Friday	2.5%	0.1%	0.1%	6.3%	9.9%	2.7%	2.7%	13.9%	1.8%	0.2%	0.7%	1.5%	13.7%	5.7%	5.6%	0.2%	4.5%	0.0%
	Saturday	1.5%	0.1%	0.4%	6.5%	9.0%	3.1%	3.1%	13.5%	1.0%	0.1%	1.1%	1.2%	12.3%	5.3%	4.8%	0.4%	3.7%	0.2%
	Sunday	0.6%	0.3%	0.2%	4.1%	7.2%	2.7%	2.7%	11.1%	1.0%	0.2%	1.2%	1.2%	9.9%	4.0%	4.2%	0.5%	3.4%	0.2%
Time of Day	12-3 AM	1.3%	0.2%	0.1%	3.4%	6.8%	1.3%	1.3%	9.0%	1.2%	0.2%	1.2%	1.0%	8.2%	4.1%	3.1%	0.0%	3.1%	0.1%
	3-6 AM	0.7%	0.1%	0.1%	2.7%	4.7%	1.2%	1.2%	6.3%	1.1%	0.1%	1.0%	0.6%	5.9%	2.9%	2.0%	0.0%	2.6%	0.0%
	6-9 AM	1.3%	0.4%	0.0%	3.9%	6.3%	1.7%	1.7%	8.9%	1.4%	0.1%	0.5%	1.7%	8.1%	3.3%	3.8%	0.4%	2.8%	0.0%
	9-Noon	0.8%	0.0%	0.1%	2.9%	4.2%	1.1%	1.1%	5.8%	0.3%	0.0%	0.3%	0.3%	5.4%	2.1%	1.5%	0.3%	2.1%	0.0%
	Noon-3 PM	0.7%	0.0%	0.1%	3.1%	4.4%	1.1%	1.1%	6.2%	0.4%	0.1%	0.4%	1.1%	5.2%	3.0%	1.9%	0.0%	1.7%	0.1%
	3-6 PM	1.3%	0.0%	0.0%	5.3%	7.0%	1.7%	1.7%	9.6%	0.6%	0.1%	0.7%	0.7%	8.9%	4.9%	2.5%	0.5%	2.5%	0.0%
	6-9 PM	3.2%	0.1%	0.1%	9.3%	13.8%	6.6%	6.6%	23.1%	3.1%	0.2%	1.1%	2.5%	22.9%	8.8%	7.8%	1.0%	8.7%	0.2%
	9-Midnight	2.0%	0.1%	0.2%	7.8%	11.3%	6.2%	6.2%	19.3%	2.4%	0.5%	1.7%	2.7%	17.8%	7.8%	8.1%	0.7%	5.2%	0.3%
Lighting Conditions	Dark - Lighted	6.3%	0.7%	0.5%	14.3%	26.4%	9.3%	9.3%	40.0%	5.4%	0.9%	1.7%	3.0%	41.6%	14.6%	13.9%	1.6%	15.6%	0.5%
	Dark - Not Lighted	0.8%	0.0%	0.0%	7.6%	9.0%	5.5%	5.5%	16.1%	2.2%	0.3%	3.2%	3.1%	12.4%	7.7%	7.1%	0.5%	3.3%	0.1%
	Dark - Unknown Lighting	0.1%	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.1%	0.0%
	Dawn	0.0%	0.1%	0.0%	1.1%	1.4%	0.4%	0.4%	1.8%	0.5%	0.0%	0.2%	0.5%	1.6%	0.6%	0.9%	0.0%	0.9%	0.0%
	Daylight	3.6%	0.1%	0.2%	13.4%	19.4%	4.7%	4.7%	26.9%	1.8%	0.2%	1.7%	3.1%	24.1%	12.3%	8.0%	0.9%	7.7%	0.1%
	Dusk	0.4%	0.0%	0.0%	1.7%	1.7%	0.9%	0.9%	2.9%	0.2%	0.0%	0.1%	0.7%	2.2%	1.3%	0.9%	0.0%	1.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%	0.1%	0.2%	0.1%	0.1%	0.0%	0.1%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%

Attachment C-1
Orange County
All Crashes 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification			
All		3 Lanes or Less	4-5 Lanes	6+ Lanes				25 or less	30-35	40-45	50-55	60+													
		2-3	4-5	6-8	None	1 to 2	3+	0-25	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C
Type	Angle	5948	4213	1713	4877	6310	988	2585	4580	4214	479	16	2536	2744	3589	388	265	2653	3797	2994	2537	0	76	0	2545
	Animal	90	116	24	133	83	15	31	38	98	32	31	70	45	52	19	2	43	83	64	39	0	28	0	29
	Bicycle	557	634	399	514	949	136	267	407	814	99	3	489	436	350	54	13	257	347	415	572	0	4	0	525
	Head On	893	647	280	813	905	150	332	599	758	127	4	439	444	551	51	15	368	515	535	447	0	16	0	420
	Left Turn	7965	11131	4149	5619	16034	1811	2364	7216	12460	1189	16	4956	7718	6593	739	255	3203	5565	7879	6668	2	208	0	6149
	Off Road	5214	3187	1308	5740	4044	443	2784	2353	3943	550	79	1823	2182	2446	401	144	3231	2534	2323	2033	12	148	0	1803
	Other	11167	6955	3602	13579	9770	1645	7354	6057	7250	999	64	5151	4734	4330	506	240	10033	4587	4930	5251	7	124	0	4698
	Pedestrian	749	848	650	764	1321	209	405	570	1106	166	0	760	627	449	45	15	398	415	572	895	0	7	0	748
	Rear End	14500	26230	22833	12708	40672	10580	2696	15467	37596	7739	65	26586	20193	12494	835	362	3490	9781	19201	31308	4	450	0	26436
	Right Turn	1066	1716	1196	809	2572	657	335	943	2392	299	9	1204	1417	864	85	37	431	703	1212	1671	0	24	0	1614
	Rollover	289	319	158	331	380	68	85	207	328	112	34	273	181	189	24	8	104	224	212	236	0	55	0	211
	Sideswipe	4977	9135	7293	4898	13308	3449	1536	5944	11930	1971	24	8900	6643	3926	278	110	1798	3316	6599	9878	6	123	0	8151
	Unknown	1183	1854	1242	1125	2580	634	388	1488	2072	324	7	1689	1229	902	49	39	431	844	1323	1712	0	23	0	1330
Alcohol Related	Y	1005	900	646	1027	1300	293	479	698	1142	218	14	851	626	579	70	30	464	621	630	885	3	27	0	823
	N	53593	66085	44201	50883	97628	20492	20683	45171	83819	13868	338	54025	47967	36156	3404	1475	25976	32090	47629	62362	28	1259	0	53836
Hit and Run	Y	9009	9150	6930	9334	14045	3132	4434	6567	12011	2051	26	8374	6896	5056	464	218	5503	4789	6631	9442	1	128	0	8094
	N	45589	57835	37917	42576	84883	17653	16728	39302	72950	12035	326	46502	41697	31679	3010	1287	20937	27922	41628	53805	30	1158	0	46565
Aggressive Driving	Y	1339	1493	851	1315	2091	355	512	1271	1599	284	17	1255	925	875	89	39	578	847	1070	1243	1	56	0	1003
	N	53259	65492	43996	50595	96837	20430	20650	44598	83362	13802	335	53621	47668	35860	3385	1466	25862	31864	47189	62004	30	1230	0	53656
Distracted Driving	Y	14760	19573	13297	13969	28710	6079	5313	11074	27037	4103	103	15465	14527	10357	1070	509	6830	8336	14253	18991	9	494	0	16886
	N	39838	47412	31550	37941	70218	14706	15849	34795	57924	9983	249	39411	34066	26378	2404	996	19610	24375	34006	44256	22	792	0	37773
Intersection Related	Y	19307	21291	11628	13307	32737	6430	6429	16562	25743	3442	50	14706	14806	13865	1546	667	6884	13003	15464	16676	2	443	0	16476
	N	35291	45694	33219	38603	66191	14355	14733	29307	59218	10644	302	40170	33787	22870	1928	838	19556	19708	32795	46571	29	843	0	38183
Drug Related	Y	257	293	211	249	443	92	107	169	406	76	3	261	199	173	22	9	120	171	189	299	1	4	0	259
	N	54341	66692	44636	51661	98485	20693	21055	45700	84555	14010	349	54615	48394	36562	3452	1496	26320	32540	48070	62948	30	1282	0	54400
Aging Driver	Y	7321	9762	5855	6705	14062	2836	2704	6664	11755	1776	39	8002	6775	4964	448	232	3182	4712	6678	8875	4	205	0	7840
	N	47277	57223	38992	45205	84866	17949	18458	39205	73206	12310	313	46874	41818	31771	3026	1273	23258	27999	41581	54372	27	1081	0	46819
Teenage Driver	Y	6450	8248	5614	6147	12410	2389	2351	5107	11110	1718	26	6369	5870	4678	603	221	3205	4030	5793	7796	3	169	0	6692
	N	48148	58737	39233	45763	86518	18396	18811	40762	73851	12368	326	48507	42723	32057	2871	1284	23235	28681	42466	55451	28	1117	0	47967
Day of the Week	Monday	8060	9995	6634	7559	14869	3029	3078	6641	12824	2093	53	8294	7204	5346	535	219	3859	4862	7086	9522	10	209	0	8262
	Tuesday	8205	10187	6770	7665	15073	3190	3077	6875	13059	2109	42	8396	7391	5507	530	200	3904	4909	7214	9774	2	176	0	8339
	Wednesday	8168	10185	6626	7846	14908	3056	3073	6949	12868	2044	45	8339	7288	5550	537	230	3866	4952	7251	9592	4	179	0	8239
	Thursday	8268	10467	6942	7863	15386	3210	3153	7166	13120	2187	51	8633	7435	5640	551	245	3955	5143	7338	9862	6	187	0	8382
	Friday	9027	11324	7480	8515	16772	3448	3410	7634	14402	2336	49	9310	8094	6155	557	258	4361	5393	8111	10726	3	205	0	9256
	Saturday	6841	8148	5791	6586	12114	2721	2812	5756	10380	1780	52	6606	6146	4605	388	187	3489	3968	6177	7658	3	174	0	6733
	Sunday	6029	6679	4604	5876	9806	2131	2559	4848	8308	1537	60	5298	5035	3932	376	166	3006	3484	5082	6113	3	156	0	5448
Time of Day	12-3 AM	3021	2825	2104	3079	4058	1024	1354	2292	3565	695	44	2470	2185	1837	161	69	1439	1725	2192	2731	3	77	0	2386
	3-6 AM	1887	1828	1313	1833	2664	628	798	1204	2481	505	40	1613	1368	1071	139	45	889	1046	1349	1807	5	76	0	1616
	6-9 AM	6834	8111	5087	6024	12024	2371	2495	5050	10629	1794	64	6469	5884	4433	511	183	2939	4107	5699	7561	3	233	0	6654
	9-Noon	7443	8969	6096	7174	13341	2949	2998	6301	11353	1824	32	7638	6536	4723	414	186	3967	4378	6239	8763	6	164	0	7556
	Noon-3 PM	10000	12692	8728	9838	18890	3995	4013	8949	15991	2431	36	11173	8975	6357	630	308	5280	5914	8743	12574	4	210	0	10362
	3-6 PM	12286	15896	10280	11641	23448	4561	4476	10929	19837	3169	51	12945	11312	8671	792	353	5577	7720	11377	14775	5	254	0	12624
	6-9 PM	8460	10919	7118	7812	16041	3346	3184	7166	13832	2273	42	8201	7911	6258	550	244	4035	5115	8160	9749	3	180	0	8644
	9-Midnight	4667	5745	4121	4509	8462	1911	1844	3978	7273	1395	43	4367	4422	3385	277	117	2314	2706	4500	5287	2	92	0	4817
Lighting Conditions	Dark - Lighted	11165	14427	10326	10809	21151	4881	4458	10356	17925	3148	31	11664	10645	8135	657	291	5449	6673	10940	13567	2	139	0	11787
	Dark - Not Lighted	2608	1772	988	2501	2484	470	963	1060	2481	739	125	1333	1351	1412	195	69	1095	1493	1370	1455	8	225	0	1645
	Dark - Unknown Lighting	231	110	67	211	184	29	115	151	123	19	0	98	85	112	15	3	111	120	93	99	0	5	0	84
	Dawn	883	1065	680	812	1535	336	315	630	1397	271	15	845	756	627	63	19	373	573	804	925	2	41	0	931
	Daylight	37578	47129	31167	35527	69956	14289	14436	32149	59726	9392	171	39138	33869	24966	2401	1071	18327	22616	33182	44977	19	837	0	38183
	Dusk	1836	2398	1578	1722	3481	765	659	1415	3219	509	10	1734	1823	1393	132	47	839	1125	1816	2158	0	38	0	1968
	Other	28	17	17	40	24	5	17	17	23	5	0	24	10	15	1	0	19	16	8	26	0	0	0	24
	Unknown	262	66	23	281	109	10	196	87	65	3	0	39	52	73	10	5	221	92	45	39	0	1	0	35

Attachmebt C-1

Limited access facilites, parking lots and roadways for which contextual data was not available were not included in this analysis.

Attachment C-1
Orange County
All Crashes 2018-2022

Context Classification					Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
C3R	C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
311	1740	154	156	0	9011	1228	1635	10981	843	50	966	1785	9123	6719	2607	162	2341	45
20	5	1	1	0	124	19	87	214	14	2	89	35	106	88	112	4	24	2
80	161	10	19	0	1089	164	337	1452	123	15	74	152	1364	670	469	19	406	26
71	230	21	23	0	1318	189	313	1689	120	11	163	280	1377	1040	338	18	413	11
1230	2398	179	103	0	16639	2493	4113	21309	1830	106	1749	2811	18685	9823	7087	476	5708	147
417	578	71	58	0	7335	710	1664	9224	451	34	1500	1762	6447	5098	2682	170	1686	69
629	2466	267	336	0	16488	2034	3202	20253	1351	120	2043	2887	16794	12199	4623	361	4367	172
86	297	25	32	0	1552	265	430	2021	207	19	130	198	1919	996	593	24	618	16
3081	7937	642	358	0	38255	11624	13684	53311	9345	907	4068	6912	52583	17383	21597	1979	21926	664
193	335	25	13	0	2706	591	681	3453	486	39	193	375	3410	1215	1125	96	1521	21
35	78	5	8	0	473	109	184	690	73	3	153	107	506	308	277	22	156	3
761	3229	385	359	0	13921	3483	4001	18631	2571	203	1499	2286	17620	6551	6583	745	7324	201
113	816	80	91	0	2759	703	817	3725	505	49	240	475	3564	1620	1198	110	1317	34
110	292	33	35	0	1754	345	452	2262	262	27	230	368	1953	1110	710	67	639	25
6917	19978	1832	1522	0	109916	23267	30696	144691	17657	1531	12637	19697	131545	62600	48581	4119	47168	1386
838	3116	284	308	0	17564	4059	4059	22146	2693	250	1741	2977	20371	10716	6412	561	7179	220
6189	17154	1581	1249	0	94106	27089	27089	124807	15226	1308	11126	17088	113127	52994	42879	3625	40628	1191
134	512	63	30	0	2376	771	771	3258	395	30	353	533	2797	1545	1093	74	911	59
6893	19758	1802	1527	0	109294	30377	30377	143695	17524	1528	12514	19532	130701	62165	48198	4112	46896	1352
2311	4535	352	174	0	32102	8958	8958	42100	5147	383	3734	5727	38169	17264	14875	1228	14002	252
4716	15735	1513	1383	0	79568	22190	22190	104853	12772	1175	9133	14338	95329	46446	34416	2958	33805	1159
2584	6364	661	512	0	35861	8932	8932	46155	5672	399	3891	6793	41542	21074	14600	1205	14921	420
4443	13906	1204	1045	0	75809	22216	22216	100798	12247	1159	8976	13272	91956	42636	34691	2981	32886	991
52	66	7	5	0	498	148	148	660	93	8	71	105	585	275	241	20	216	9
6975	20204	1858	1552	0	111172	31000	31000	146293	17826	1550	12796	19960	132913	63435	49050	4166	47591	1402
1036	3294	316	164	0	15378	4283	4283	20237	2472	229	1518	2655	18765	8906	6609	521	6671	227
5991	16976	1549	1393	0	96292	26865	26865	126716	15447	1329	11349	17410	114733	54804	42682	3665	41136	1184
1144	1884	146	87	0	13117	4350	4350	17814	2301	197	1378	2519	16415	7267	6494	432	5933	182
5883	18386	1719	1470	0	98553	26798	26798	129139	15618	1361	11489	17546	117083	56443	42797	3754	41874	1229
1026	3039	282	231	0	16553	4670	4670	21833	2630	226	1899	2992	19798	9422	7309	623	7114	220
1055	3191	287	197	0	16920	4642	4642	22147	2768	247	1968	3002	20192	9544	7317	608	7466	223
1083	3146	285	225	0	16764	4795	4795	22156	2588	235	1780	3057	20142	9702	7274	584	7203	210
1088	3289	308	229	0	17240	4774	4774	22680	2766	231	2002	2988	20687	9804	7571	648	7445	208
1193	3379	282	235	0	18537	5344	5344	24585	3006	240	2108	3290	22433	10655	8179	674	8054	262
860	2361	230	236	0	13944	3814	3814	18266	2302	212	1698	2478	16604	7839	6354	569	5861	155
722	1865	191	204	0	11712	3109	3109	15286	1859	167	1412	2258	13642	6744	5287	480	4664	133
297	971	111	205	0	5493	1293	1293	7055	831	64	751	1096	6103	3301	2226	269	2070	82
221	520	69	92	0	3411	858	858	4404	580	44	609	634	3785	2025	1472	154	1338	38
962	2237	232	155	0	13701	3608	3608	17811	2036	185	1755	2520	15757	7718	5872	498	5747	191
890	3022	274	207	0	15309	4020	4020	19895	2422	191	1665	2696	18147	8658	6438	533	6690	188
1261	4496	389	257	0	21061	5868	5868	27697	3415	308	2177	3581	25662	12200	8950	680	9307	281
1539	4900	429	281	0	25642	7540	7540	34078	4025	359	2628	4493	31341	14919	11450	870	10900	320
1206	2707	230	176	0	17490	5219	5219	23297	2928	272	1936	3168	21393	9746	8247	678	7611	211
651	1417	131	184	0	9563	2742	2742	12716	1682	135	1346	1877	11310	5143	4636	504	4144	100
1492	4192	424	557	0	23879	6524	6524	31338	4204	376	2455	4180	29283	12863	11025	1146	10550	324
315	245	17	13	0	3434	1231	1231	4838	496	34	1210	1049	3109	2515	1724	130	975	24
14	58	3	5	0	286	68	68	368	38	2	38	82	288	236	83	13	69	7
122	259	29	13	0	1741	507	507	2310	285	33	288	337	2003	1002	767	78	762	18
4806	15022	1354	935	0	78078	21668	21668	102543	12264	1067	8402	13607	93865	44716	33756	2664	33724	1000
266	467	34	29	0	3899	1106	1106	5154	614	44	427	740	4645	2081	1865	152	1676	38
1	5	0	0	0	44	9	9	53	8	1	5	13	44	31	17	2	12	0
11	22	4	5	0	302	33	33	340	10	1	39	56	256	258	53	1	39	0

Attachmebt C-1
Limited access facilites, parking lots and roadways for which contextual data was not available were not included in this analysis.

Attachment C-2
Orange County
All KSI Crashes 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification			
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+													
Type	Angle	203	167	91	159	274	38	82	137	201	38	3	111	117	127	16	9	91	129	123	119	0	7	0	135
	Animal	3	3	0	4	2	0	2	0	1	2	1	2	1	0	1	0	2	2	2	0	0	2	0	0
	Bicycle	81	102	62	79	143	25	33	58	133	20	1	83	55	58	10	3	38	53	61	94	0	0	0	93
	Head On	75	58	22	75	72	8	12	37	79	26	1	41	42	51	6	2	13	53	47	41	0	4	0	37
	Left Turn	270	559	284	211	818	89	61	211	728	109	4	290	427	275	21	13	92	216	413	390	1	27	0	376
	Off Road	211	231	89	289	241	23	83	112	276	50	10	122	157	135	15	8	116	132	160	139	3	14	0	116
	Other	193	215	153	230	301	52	84	116	294	54	13	188	150	115	19	6	105	127	148	200	2	10	0	164
	Pedestrian	160	262	270	195	433	73	69	139	414	70	0	301	199	110	12	1	78	95	192	335	0	3	0	294
	Rear End	159	426	443	217	655	163	13	114	741	150	10	455	368	159	14	10	29	113	312	575	0	22	0	474
	Right Turn	13	34	28	15	50	11	1	15	47	11	1	25	29	17	1	1	3	13	25	35	0	1	0	29
	Rollover	28	26	13	41	23	4	7	14	25	11	10	29	8	17	2	0	12	23	13	20	0	10	0	16
	Sideswipe	37	70	70	50	108	20	8	31	103	34	1	84	52	24	6	2	10	23	53	90	0	4	0	85
	Unknown	12	36	20	16	50	2	3	14	41	9	1	24	23	16	2	0	3	15	23	27	0	3	0	26
Alcohol Related	Y	79	118	72	105	148	17	25	59	145	31	9	106	64	65	8	4	23	72	77	96	2	11	0	95
	N	1366	2071	1473	1476	3022	491	433	939	2938	553	47	1649	1564	1039	117	51	569	922	1495	1969	4	96	0	1750
Hit and Run	Y	158	197	181	144	343	52	58	105	319	52	2	193	160	110	10	7	59	93	154	229	0	3	0	196
	N	1287	1992	1364	1437	2827	456	400	893	2764	532	54	1562	1468	994	115	48	533	901	1418	1836	6	104	0	1649
Aggressive Driving	Y	91	105	51	78	156	15	24	77	128	15	3	81	56	80	8	1	23	68	79	79	0	4	0	58
	N	1354	2084	1494	1503	3014	493	434	921	2955	569	53	1674	1572	1024	117	54	569	926	1493	1986	6	103	0	1787
Distracted Driving	Y	388	647	427	411	915	160	112	238	930	166	16	463	516	310	28	20	149	263	469	593	2	41	0	513
	N	1057	1542	1118	1170	2255	348	346	760	2153	418	40	1292	1112	794	97	35	443	731	1103	1472	4	66	0	1332
Intersection Related	Y	632	898	612	485	1445	217	190	476	1250	215	11	660	687	505	54	25	216	466	665	781	1	40	0	749
	N	813	1291	933	1096	1725	291	268	522	1833	369	45	1095	941	599	71	30	376	528	907	1284	5	67	0	1096
Drug Related	Y	43	69	44	45	94	17	13	24	97	20	2	59	45	34	3	3	12	32	45	66	1	2	0	53
	N	1402	2120	1501	1536	3076	491	445	974	2986	564	54	1696	1583	1070	122	52	580	962	1527	1999	5	105	0	1792
Aging Driver	Y	213	319	194	205	457	81	58	149	430	84	5	244	233	153	22	6	85	151	231	272	0	23	0	270
	N	1232	1870	1351	1376	2713	427	400	849	2653	500	51	1511	1395	951	103	49	507	843	1341	1793	6	84	0	1575
Teenage Driver	Y	160	264	179	166	389	56	49	100	387	66	1	180	200	134	17	7	73	122	162	250	0	9	0	218
	N	1285	1925	1366	1415	2781	452	409	898	2696	518	55	1575	1428	970	108	48	519	872	1410	1815	6	98	0	1627
Day of the Week	Monday	232	274	208	232	425	67	65	134	430	76	9	239	209	167	22	8	79	155	207	276	2	14	0	262
	Tuesday	191	321	231	226	471	61	64	142	446	82	9	239	249	155	19	4	92	134	240	290	1	13	0	266
	Wednesday	197	310	226	216	470	60	62	156	427	80	8	259	219	156	18	10	84	146	213	298	0	17	0	255
	Thursday	205	327	209	216	463	73	64	140	449	81	7	248	240	161	12	11	80	135	224	305	1	16	0	268
	Friday	233	338	249	249	497	87	78	157	485	94	6	286	264	154	20	10	99	158	252	318	1	17	0	289
	Saturday	195	349	238	223	479	90	67	145	471	89	10	270	249	170	14	8	81	139	236	329	0	17	0	276
	Sunday	192	270	184	219	365	70	58	124	375	82	7	214	198	141	20	4	77	127	200	249	1	13	0	229
Time of Day	12-3 AM	102	184	150	153	232	54	33	89	243	59	12	185	133	77	6	2	36	77	126	197	0	12	0	167
	3-6 AM	92	118	101	109	166	37	22	67	171	47	4	114	98	56	11	4	29	59	92	130	2	8	0	108
	6-9 AM	208	315	191	197	457	67	55	136	432	78	13	215	235	165	22	5	79	147	216	275	2	25	0	242
	9-Noon	179	267	196	192	386	74	63	119	379	75	6	215	208	124	16	6	83	121	182	263	1	17	0	225
	Noon-3 PM	200	289	184	210	421	62	66	143	398	63	3	211	219	142	20	8	93	135	217	242	0	10	0	237
	3-6 PM	233	331	209	259	477	53	88	143	459	76	7	247	227	188	17	8	102	162	250	271	1	14	0	259
	6-9 PM	230	381	267	248	556	88	71	157	553	91	6	296	273	193	20	14	96	148	288	350	0	11	0	308
	9-Midnight	201	304	247	213	475	73	60	144	448	95	5	272	235	159	13	8	74	145	201	337	0	10	0	299
Lighting Conditions	Dark - Lighted	374	714	602	466	1052	192	116	351	1030	187	6	658	526	328	30	20	148	265	495	790	1	10	0	641
	Dark - Not Lighted	167	144	78	167	200	25	33	66	191	78	21	138	94	92	13	3	52	117	106	114	1	32	0	142
	Dark - Unknown Lighting	1	1	2	1	3	0	1	0	3	0	0	2	1	0	0	0	1	0	1	2	0	0	0	0
	Dawn	39	48	24	35	69	8	11	21	63	13	3	31	30	33	4	1	13	31	29	38	1	5	0	36
	Daylight	815	1213	784	856	1747	260	281	531	1683	291	26	871	924	611	73	29	355	554	885	1052	3	57	0	960
	Dusk	44	68	51	53	93	22	16	25	108	14	0	51	52	36	5	2	22	23	56	64	0	3	0	61
	Other	2	1	4	2	4	1	0	2	4	1	0	4	1	2	0	0	0	2	0	5	0	0	0	5
	Unknown	3	0	0	1	2	0	0	2	1	0	0	0	0	2	0	0	1	2	0	0	0	0	0	0

Attachmebt C-1
Limited access facilites, parking lots and roadways for which contextual data was not available were not included in this analysis.

Attachment C-2
Orange County
All KSI Crashes 2018-2022

Context Classification					Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
C3R	C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
21	35	2	5	0	319	65	77	410	49	2	63	64	334	230	128	4	98	1
0	0	0	0	0	3	0	3	6	0	0	5	0	1	3	3	0	0	0
14	15	0	0	0	160	27	58	222	19	4	22	17	206	95	79	1	66	4
8	16	0	0	0	109	9	37	150	4	1	29	26	100	88	34	2	31	0
75	55	7	0	0	743	172	198	967	142	4	98	139	876	376	404	13	317	3
37	18	4	1	0	374	40	117	506	23	2	90	76	365	217	199	8	103	4
34	56	5	5	0	375	66	120	509	49	3	82	66	413	222	186	14	133	6
27	88	8	7	0	460	90	142	603	81	8	41	56	595	257	211	11	210	3
66	65	3	0	0	581	205	242	843	173	12	87	94	847	203	403	31	388	3
2	4	0	0	0	44	8	23	67	8	0	7	5	63	13	29	0	33	0
6	3	1	0	0	43	4	20	64	3	0	21	7	39	24	29	3	10	1
5	11	2	1	0	100	34	43	149	26	2	12	18	147	50	74	4	49	0
6	6	0	0	0	37	11	20	60	8	0	7	4	57	17	27	1	23	0
18	23	3	1	0	171	34	64	241	27	1	47	24	198	106	93	8	61	1
283	349	29	18	0	3177	697	1036	4315	558	37	517	548	3845	1689	1713	84	1400	24
22	47	2	3	0	371	100	100	488	47	1	39	51	446	228	141	8	154	5
279	325	30	16	0	2977	1000	1000	4068	538	37	525	521	3597	1567	1665	84	1307	20
17	30	4	3	0	161	50	50	218	28	1	27	42	178	109	78	2	56	2
284	342	28	16	0	3187	1050	1050	4338	557	37	537	530	3865	1686	1728	90	1405	23
108	80	5	1	0	956	293	293	1280	171	11	170	158	1134	464	530	34	427	7
193	292	27	18	0	2392	807	807	3276	414	27	394	414	2909	1331	1276	58	1034	18
138	149	14	14	0	1385	403	403	1843	286	13	202	237	1703	754	722	31	627	8
163	223	18	5	0	1963	697	697	2713	299	25	362	335	2340	1041	1084	61	834	17
15	14	1	0	0	107	25	25	135	19	2	20	22	114	61	52	1	42	0
286	358	31	19	0	3241	1075	1075	4421	566	36	544	550	3929	1734	1754	91	1419	25
42	49	3	3	0	461	154	154	628	89	9	90	77	559	258	240	10	216	2
259	323	29	16	0	2887	946	946	3928	496	29	474	495	3484	1537	1566	82	1245	23
37	24	2	2	0	372	144	144	523	76	4	42	76	485	183	219	9	189	3
264	348	30	17	0	2976	956	956	4033	509	34	522	496	3558	1612	1587	83	1272	22
46	45	4	3	0	459	157	157	634	74	6	76	75	563	261	236	18	193	6
32	47	2	2	0	470	177	177	668	75	0	82	86	575	256	261	3	220	3
44	58	5	1	0	489	130	130	633	91	9	73	100	560	245	265	10	207	6
40	59	7	2	0	474	170	170	657	77	7	87	80	574	272	246	8	214	1
48	65	4	2	0	524	169	169	710	104	6	85	87	648	289	276	14	239	2
48	61	6	5	0	506	161	161	682	93	7	85	78	619	250	281	25	224	2
43	37	4	4	0	426	136	136	572	71	3	76	66	504	222	241	14	164	5
30	51	4	5	0	261	106	106	375	58	3	52	40	344	125	156	11	139	5
21	21	7	1	0	199	63	63	272	37	2	54	35	222	110	120	8	70	3
39	43	5	0	0	462	152	152	628	81	5	75	76	563	236	251	17	206	4
41	42	3	3	0	422	128	128	569	71	2	76	68	498	203	224	9	205	1
36	44	0	3	0	448	136	136	598	69	6	77	80	516	252	226	11	183	1
47	61	5	2	0	517	159	159	692	75	6	68	87	618	299	264	12	197	1
41	52	2	3	0	570	189	189	774	96	8	80	96	702	307	298	16	251	6
46	58	6	2	0	469	167	167	648	98	6	82	90	580	263	267	8	210	4
94	162	19	11	0	1087	344	344	1459	216	15	114	158	1418	533	585	38	516	18
29	13	0	0	0	208	125	125	341	45	3	121	71	197	167	149	4	68	1
0	2	0	0	0	3	1	1	4	0	0	0	0	4	0	1	0	1	2
6	5	2	0	0	72	23	23	98	13	0	17	13	81	44	35	0	32	0
167	185	11	8	0	1875	565	565	2505	289	18	294	307	2211	998	977	44	789	4
5	5	0	0	0	97	40	40	141	20	2	16	21	126	49	56	4	54	0
0	0	0	0	0	4	1	1	5	2	0	1	2	4	1	3	2	1	0
0	0	0	0	0	2	1	1	3	0	0	1	0	2	3	0	0	0	0

Attachmebt C-1
Limited access facilites, parking lots and roadways for which contextual data was not available were not included in this analysis.

Attachment C-3
Orange County
Percent of All Crashes that Result in a KSI - 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	3.4%	4.0%	5.3%	3.3%	4.3%	3.8%	3.2%	3.0%	4.8%	7.9%	18.8%	4.4%	4.3%	3.5%	4.1%	3.4%	3.4%	3.4%	4.1%	4.7%	-	9.2%	-	5.3%	6.8%
	Animal	3.3%	2.6%	0.0%	3.0%	2.4%	0.0%	6.5%	0.0%	1.0%	6.3%	3.2%	2.9%	2.2%	0.0%	5.3%	0.0%	4.7%	2.4%	3.1%	0.0%	-	7.1%	-	0.0%	0.0%
	Bicycle	14.5%	16.1%	15.5%	15.4%	15.1%	18.4%	12.4%	14.3%	16.3%	20.2%	33.3%	17.0%	12.6%	16.6%	18.5%	23.1%	14.8%	15.3%	14.7%	16.4%	-	0.0%	-	17.7%	17.5%
	Head On	8.4%	9.0%	7.9%	9.2%	8.0%	5.3%	3.6%	6.2%	10.4%	20.5%	25.0%	9.3%	9.5%	9.3%	11.8%	13.3%	3.5%	10.3%	8.8%	9.2%	-	25.0%	-	8.8%	11.3%
	Left Turn	3.4%	5.0%	6.8%	3.8%	5.1%	4.9%	2.6%	2.9%	5.8%	9.2%	25.0%	5.9%	5.5%	4.2%	2.8%	5.1%	2.9%	3.9%	5.2%	5.8%	50.0%	13.0%	-	6.1%	6.1%
	Off Road	4.0%	7.2%	6.8%	5.0%	6.0%	5.2%	3.0%	4.8%	7.0%	9.1%	12.7%	6.7%	7.2%	5.5%	3.7%	5.6%	3.6%	5.2%	6.9%	6.8%	25.0%	9.5%	-	6.4%	8.9%
	Other	1.7%	3.1%	4.2%	1.7%	3.1%	3.2%	1.1%	1.9%	4.1%	5.4%	20.3%	3.6%	3.2%	2.7%	3.8%	2.5%	1.0%	2.8%	3.0%	3.8%	28.6%	8.1%	-	3.5%	5.4%
	Pedestrian	21.4%	30.9%	41.5%	25.5%	32.8%	34.9%	17.0%	24.4%	37.4%	42.2%	-	39.6%	31.7%	24.5%	26.7%	6.7%	19.6%	22.9%	33.6%	37.4%	-	42.9%	-	39.3%	31.4%
	Rear End	1.1%	1.6%	1.9%	1.7%	1.6%	1.5%	0.5%	0.7%	2.0%	1.9%	15.4%	1.7%	1.8%	1.3%	1.7%	2.8%	0.8%	1.2%	1.6%	1.8%	0.0%	4.9%	-	1.8%	2.1%
	Right Turn	1.2%	2.0%	2.3%	1.9%	1.9%	1.7%	0.3%	1.6%	2.0%	3.7%	11.1%	2.1%	2.0%	2.0%	1.2%	2.7%	0.7%	1.8%	2.1%	2.1%	-	4.2%	-	1.8%	1.0%
	Rollover	9.7%	8.2%	8.2%	12.4%	6.1%	5.9%	8.2%	6.8%	7.6%	9.8%	29.4%	10.6%	4.4%	9.0%	8.3%	0.0%	11.5%	10.3%	6.1%	8.5%	-	18.2%	-	7.6%	17.1%
	Sideswipe	0.7%	0.8%	1.0%	1.0%	0.8%	0.6%	0.5%	0.5%	0.9%	1.7%	4.2%	0.9%	0.8%	0.6%	2.2%	1.8%	0.6%	0.7%	0.8%	0.9%	0.0%	3.3%	-	1.0%	0.7%
	Unknown	1.0%	1.9%	1.6%	1.4%	1.9%	0.3%	0.8%	0.9%	2.0%	2.8%	14.3%	1.4%	1.9%	1.8%	4.1%	0.0%	0.7%	1.8%	1.7%	1.6%	-	13.0%	-	2.0%	5.3%
Alcohol Related	Y	7.9%	13.1%	11.1%	10.2%	11.4%	5.8%	5.2%	8.5%	12.7%	14.2%	64.3%	12.5%	10.2%	11.2%	11.4%	13.3%	5.0%	11.6%	12.2%	10.8%	66.7%	40.7%	-	11.5%	16.4%
	N	2.5%	3.1%	3.3%	2.9%	3.1%	2.4%	2.1%	2.1%	3.5%	4.0%	13.9%	3.1%	3.3%	2.9%	3.4%	3.5%	2.2%	2.9%	3.1%	3.2%	14.3%	7.6%	-	3.3%	4.1%
Hit and Run	Y	1.8%	2.2%	2.6%	1.5%	2.4%	1.7%	1.3%	1.6%	2.7%	2.5%	7.7%	2.3%	2.3%	2.2%	2.2%	3.2%	1.1%	1.9%	2.3%	2.4%	0.0%	2.3%	-	2.4%	2.6%
	N	2.8%	3.4%	3.6%	3.4%	3.3%	2.6%	2.4%	2.3%	3.8%	4.4%	16.6%	3.4%	3.5%	3.1%	3.8%	3.7%	2.5%	3.2%	3.4%	3.4%	20.0%	9.0%	-	3.5%	4.5%
Aggressive Driving	Y	6.8%	7.0%	6.0%	5.9%	7.5%	4.2%	4.7%	6.1%	8.0%	5.3%	17.6%	6.5%	6.1%	9.1%	9.0%	2.6%	4.0%	8.0%	7.4%	6.4%	0.0%	7.1%	-	5.8%	12.7%
	N	2.5%	3.2%	3.4%	3.0%	3.1%	2.4%	2.1%	2.1%	3.5%	4.1%	15.8%	3.1%	3.3%	2.9%	3.5%	3.7%	2.2%	2.9%	3.2%	3.2%	20.0%	8.4%	-	3.3%	4.1%
Distracted Driving	Y	2.6%	3.3%	3.2%	2.9%	3.2%	2.6%	2.1%	2.1%	3.4%	4.0%	15.5%	3.0%	3.6%	3.0%	2.6%	3.9%	2.2%	3.2%	3.3%	3.1%	22.2%	8.3%	-	3.0%	4.7%
	N	2.7%	3.3%	3.5%	3.1%	3.2%	2.4%	2.2%	2.2%	3.7%	4.2%	16.1%	3.3%	3.3%	3.0%	4.0%	3.5%	2.3%	3.0%	3.2%	3.3%	18.2%	8.3%	-	3.5%	4.1%
Intersection Related	Y	3.3%	4.2%	5.3%	3.6%	4.4%	3.4%	3.0%	2.9%	4.9%	6.2%	22.0%	4.5%	4.6%	3.6%	3.5%	3.7%	3.1%	3.6%	4.3%	4.7%	50.0%	9.0%	-	4.5%	5.3%
	N	2.3%	2.8%	2.8%	2.8%	2.6%	2.0%	1.8%	1.8%	3.1%	3.5%	14.9%	2.7%	2.8%	2.6%	3.7%	3.6%	1.9%	2.7%	2.8%	2.8%	17.2%	7.9%	-	2.9%	3.7%
Drug Related	Y	16.7%	23.5%	20.9%	18.1%	21.2%	18.5%	12.1%	14.2%	23.9%	26.3%	66.7%	22.6%	22.6%	19.7%	13.6%	33.3%	10.0%	18.7%	23.8%	22.1%	100.0%	50.0%	-	20.5%	28.8%
	N	2.6%	3.2%	3.4%	3.0%	3.1%	2.4%	2.1%	2.1%	3.5%	4.0%	15.5%	3.1%	3.3%	2.9%	3.5%	3.5%	2.2%	3.0%	3.2%	3.2%	16.7%	8.2%	-	3.3%	4.1%
Aging Driver	Y	2.9%	3.3%	3.3%	3.1%	3.2%	2.9%	2.1%	2.2%	3.7%	4.7%	12.8%	3.0%	3.4%	3.1%	4.9%	2.6%	2.7%	3.2%	3.5%	3.1%	0.0%	11.2%	-	3.4%	4.1%
	N	2.6%	3.3%	3.5%	3.0%	3.2%	2.4%	2.2%	2.2%	3.6%	4.1%	16.3%	3.2%	3.3%	3.0%	3.4%	3.8%	2.2%	3.0%	3.2%	3.3%	22.2%	7.8%	-	3.4%	4.3%
Teenage Driver	Y	2.5%	3.2%	3.2%	2.7%	3.1%	2.3%	2.1%	2.0%	3.5%	3.8%	3.8%	2.8%	3.4%	2.9%	2.8%	3.2%	2.3%	3.0%	2.8%	3.2%	0.0%	5.3%	-	3.3%	3.2%
	N	2.7%	3.3%	3.5%	3.1%	3.2%	2.5%	2.2%	2.2%	3.7%	4.2%	16.9%	3.2%	3.3%	3.0%	3.8%	3.7%	2.2%	3.0%	3.3%	3.3%	21.4%	8.8%	-	3.4%	4.5%
Day of the Week	Monday	2.9%	2.7%	3.1%	3.1%	2.9%	2.2%	2.1%	2.0%	3.4%	3.6%	17.0%	2.9%	2.9%	3.1%	4.1%	3.7%	2.0%	3.2%	2.9%	2.9%	20.0%	6.7%	-	3.2%	4.5%
	Tuesday	2.3%	3.2%	3.4%	2.9%	3.1%	1.9%	2.1%	2.1%	3.4%	3.9%	21.4%	2.8%	3.4%	2.8%	3.6%	2.0%	2.4%	2.7%	3.3%	3.0%	50.0%	7.4%	-	3.2%	3.0%
	Wednesday	2.4%	3.0%	3.4%	2.8%	3.2%	2.0%	2.0%	2.2%	3.3%	3.9%	17.8%	3.1%	3.0%	2.8%	3.4%	4.3%	2.2%	2.9%	2.9%	3.1%	0.0%	9.5%	-	3.1%	4.1%
	Thursday	2.5%	3.1%	3.0%	2.7%	3.0%	2.3%	2.0%	2.0%	3.4%	3.7%	13.7%	2.9%	3.2%	2.9%	2.2%	4.5%	2.0%	2.6%	3.1%	3.1%	16.7%	8.6%	-	3.2%	3.7%
	Friday	2.6%	3.0%	3.3%	2.9%	3.0%	2.5%	2.3%	2.1%	3.4%	4.0%	12.2%	3.1%	3.3%	2.5%	3.6%	3.9%	2.3%	2.9%	3.1%	3.0%	33.3%	8.3%	-	3.1%	4.0%
	Saturday	2.9%	4.3%	4.1%	3.4%	4.0%	3.3%	2.4%	2.5%	4.5%	5.0%	19.2%	4.1%	4.1%	3.7%	3.6%	4.3%	2.3%	3.5%	3.8%	4.3%	0.0%	9.8%	-	4.1%	5.6%
	Sunday	3.2%	4.0%	4.0%	3.7%	3.7%	3.3%	2.3%	2.6%	4.5%	5.3%	11.7%	4.0%	3.9%	3.6%	5.3%	2.4%	2.6%	3.6%	3.9%	4.1%	33.3%	8.3%	-	4.2%	6.0%
Time of Day	12-3 AM	3.4%	6.5%	7.1%	5.0%	5.7%	5.3%	2.4%	3.9%	6.8%	8.5%	27.3%	7.5%	6.1%	4.2%	3.7%	2.9%	2.5%	4.5%	5.7%	7.2%	0.0%	15.6%	-	7.0%	10.1%
	3-6 AM	4.9%	6.5%	7.7%	5.9%	6.2%	5.9%	2.8%	5.6%	6.9%	9.3%	10.0%	7.1%	7.2%	5.2%	7.9%	8.9%	3.3%	5.6%	6.8%	7.2%	40.0%	10.5%	-	6.7%	9.5%
	6-9 AM	3.0%	3.9%	3.8%	3.3%	3.8%	2.8%	2.2%	2.7%	4.1%	4.3%	20.3%	3.3%	4.0%	3.7%	4.3%	2.7%	2.7%	3.6%	3.8%	3.6%	66.7%	10.7%	-	3.6%	4.1%
	9-Noon	2.4%	3.0%	3.2%	2.7%	2.9%	2.5%	2.1%	1.9%	3.3%	4.1%	18.8%	2.8%	3.2%	2.6%	3.9%	3.2%	2.1%	2.8%	2.9%	3.0%	16.7%	10.4%	-	3.0%	4.6%
	Noon-3 PM	2.0%	2.3%	2.1%	2.1%	2.2%	1.6%	1.6%	1.6%	2.5%	2.6%	8.3%	1.9%	2.4%	2.2%	3.2%	2.6%	1.8%	2.3%	2.5%	1.9%	0.0%	4.8%	-	2.3%	2.9%
	3-6 PM	1.9%	2.1%	2.0%	2.2%	2.0%	1.2%	2.0%	1.3%	2.3%	2.4%	13.7%	1.9%	2.0%	2.2%	2.1%	2.3%	1.8%	2.1%	2.2%	1.8%	20.0%	5.5%	-	2.1%	3.1%
	6-9 PM	2.7%	3.5%	3.8%	3.2%	3.5%	2.6%	2.2%	2.2%	4.0%	4.0%	14.3%	3.6%	3.5%	3.1%	3.6%	5.7%	2.4%	2.9%	3.5%	3.6%	0.0%	6.1%	-	3.6%	3.4%
	9-Midnight	4.3%	5.3%	6.0%	4.7%	5.6%	3.8%	3.3%	3.6%	6.2%	6.8%	11.6%	6.2%	5.3%	4.7%	4.7%	6.8%	3.2%	5.4%	4.5%	6.4%	0.0%	10.9%	-	6.2%	7.1%
Lighting Conditions	Dark - Lighted	3.3%	4.9%	5.8%	4.3%	5.0%	3.9%	2.6%	3.4%	5.7%	5.9%	19.4%	5.6%	4.9%	4.0%	4.6%	6.9%	2.7%	4.0%	4.5%	5.8%	50.0%	7.2%	-	5.4%	6.3%
	Dark - Not Lighted	6.4%	8.1%	7.9%	6.7%	8.1%	5.3%	3.4%	6.2%	7.7%	10.6%	16.8%	10.4%	7.0%	6.5%	6.7%	4.3%	4.7%	7.8%	7.7%	7.8%	12.5%	14.2%	-	8.6%	9.2%
	Dark - Unknown Lighting	0.4%	0.9%	3.0%	0.5%	1.6%	0.0%	0.9%	0.0%	2.4%	0.0%	-	2.0%	1.2%	0.0%	0.0%	0.0%	0.9%	0.0%	1.1%	2.0%	-	0.0%	-	0.0%	0.0%
	Dawn	4.4%	4.5%	3.5%	4.3%	4.5%	2.4%	3.5%	3.3%	4.5%	4.8%	20.0%	3.7%	4.0%	5.3%	6.3%	5.3%	3.5%	5.4%	3.6%	4.1%	50.0%	12.2%	-	3.9%	4.9%
	Daylight	2.2%	2.6%	2.5%	2.4%	2.5%	1.8%	1.9%	1.7%	2.8%	3.1%	15.2%	2.2%	2.7%	2.4%	3.0%	2.7%	1.9%	2.4%	2.7%	2.3%	15.8%	6.8%	-	2.5%	3.5%
	Dusk	2.4%	2.8%	3.2%	3.1%	2.7%	2.9%	2.4%	1.8%	3.4%	2.8%	0.0%	2.9%	2.9%	2.6%	3.8%	4.3%	2.6%	2.0%	3.1%	3.0%	-	7.9%	-	3.1%	1.9%
	Other	7.1%	5.9%	23.5%	5.0%	16.7%	20.0%	0.0%	11.8%	17.4%	20.0%	-	16.7%	10.0%	13.3%	0.0%	-	0.0%	12.5%	0.0%	19.2%	-	-	-	20.8%	0.0%
	Unknown	1.1%	0.0%	0.0%	0.4%	1.8%	0.0%	0.0%	2.3%	1.5%	0.0%	-	0.0%	0.0%	2.7%	0.0%	0.0%	0.5%	2.2%	0.0%	0.0%	-	0.0%	-	0.0%	0.0%

Attachment C-3
Orange County
Percent of All Crashes that Result in a KSI - 2018-2022

Mode:	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	2.0%	1.3%	3.2%	-	3.5%	5.3%	4.7%	3.7%	5.8%	4.0%	6.5%	3.6%	3.7%	3.4%	4.9%	2.5%	4.2%	2.2%
	Animal	0.0%	0.0%	0.0%	-	2.4%	0.0%	3.4%	2.8%	0.0%	0.0%	5.6%	0.0%	0.9%	3.4%	2.7%	0.0%	0.0%	0.0%
	Bicycle	9.3%	0.0%	0.0%	-	14.7%	16.5%	17.2%	15.3%	15.4%	26.7%	29.7%	11.2%	15.1%	14.2%	16.8%	5.3%	16.3%	15.4%
	Head On	7.0%	0.0%	0.0%	-	8.3%	4.8%	11.8%	8.9%	3.3%	9.1%	17.8%	9.3%	7.3%	8.5%	10.1%	11.1%	7.5%	0.0%
	Left Turn	2.3%	3.9%	0.0%	-	4.5%	6.9%	4.8%	4.5%	7.8%	3.8%	5.6%	4.9%	4.7%	3.8%	5.7%	2.7%	5.6%	2.0%
	Off Road	3.1%	5.6%	1.7%	-	5.1%	5.6%	7.0%	5.5%	5.1%	5.9%	6.0%	4.3%	5.7%	4.3%	7.4%	4.7%	6.1%	5.8%
	Other	2.3%	1.9%	1.5%	-	2.3%	3.2%	3.7%	2.5%	3.6%	2.5%	4.0%	2.3%	2.5%	1.8%	4.0%	3.9%	3.0%	3.5%
	Pedestrian	29.6%	32.0%	21.9%	-	29.6%	34.0%	33.0%	29.8%	39.1%	42.1%	31.5%	28.3%	31.0%	25.8%	35.6%	45.8%	34.0%	18.8%
	Rear End	0.8%	0.5%	0.0%	-	1.5%	1.8%	1.8%	1.6%	1.9%	1.3%	2.1%	1.4%	1.6%	1.2%	1.9%	1.6%	1.8%	0.5%
	Right Turn	1.2%	0.0%	0.0%	-	1.6%	1.4%	3.4%	1.9%	1.6%	0.0%	3.6%	1.3%	1.8%	1.1%	2.6%	0.0%	2.2%	0.0%
	Rollover	3.8%	20.0%	0.0%	-	9.1%	3.7%	10.9%	9.3%	4.1%	0.0%	13.7%	6.5%	7.7%	7.8%	10.5%	13.6%	6.4%	33.3%
	Sideswipe	0.3%	0.5%	0.3%	-	0.7%	1.0%	1.1%	0.8%	1.0%	1.0%	0.8%	0.8%	0.8%	0.8%	1.1%	0.5%	0.7%	0.0%
	Unknown	0.7%	0.0%	0.0%	-	1.3%	1.6%	2.4%	1.6%	1.6%	0.0%	2.9%	0.8%	1.6%	1.0%	2.3%	0.9%	1.7%	0.0%
Alcohol Related	Y	7.9%	9.1%	2.9%	-	9.7%	9.9%	14.2%	10.7%	10.3%	3.7%	20.4%	6.5%	10.1%	9.5%	13.1%	11.9%	9.5%	4.0%
	N	1.7%	1.6%	1.2%	-	2.9%	3.0%	3.4%	3.0%	3.2%	2.4%	4.1%	2.8%	2.9%	2.7%	3.5%	2.0%	3.0%	1.7%
Hit and Run	Y	1.5%	0.7%	1.0%	-	2.1%	2.5%	2.5%	2.2%	1.7%	0.4%	2.2%	1.7%	2.2%	2.1%	2.2%	1.4%	2.1%	2.3%
	N	1.9%	1.9%	1.3%	-	3.2%	3.7%	3.7%	3.3%	3.5%	2.8%	4.7%	3.0%	3.2%	3.0%	3.9%	2.3%	3.2%	1.7%
Aggressive Driving	Y	5.9%	6.3%	10.0%	-	6.8%	6.5%	6.5%	6.7%	7.1%	3.3%	7.6%	7.9%	6.4%	7.1%	7.1%	2.7%	6.1%	3.4%
	N	1.7%	1.6%	1.0%	-	2.9%	3.5%	3.5%	3.0%	3.2%	2.4%	4.3%	2.7%	3.0%	2.7%	3.6%	2.2%	3.0%	1.7%
Distracted Driving	Y	1.8%	1.4%	0.6%	-	3.0%	3.3%	3.3%	3.0%	3.3%	2.9%	4.6%	2.8%	3.0%	2.7%	3.6%	2.8%	3.0%	2.8%
	N	1.9%	1.8%	1.3%	-	3.0%	3.6%	3.6%	3.1%	3.2%	2.3%	4.3%	2.9%	3.1%	2.9%	3.7%	2.0%	3.1%	1.6%
Intersection Related	Y	2.3%	2.1%	2.7%	-	3.9%	4.5%	4.5%	4.0%	5.0%	3.3%	5.2%	3.5%	4.1%	3.6%	4.9%	2.6%	4.2%	1.9%
	N	1.6%	1.5%	0.5%	-	2.6%	3.1%	3.1%	2.7%	2.4%	2.2%	4.0%	2.5%	2.5%	2.4%	3.1%	2.0%	2.5%	1.7%
Drug Related	Y	21.2%	14.3%	0.0%	-	21.5%	16.9%	16.9%	20.5%	20.4%	25.0%	28.2%	21.0%	19.5%	22.2%	21.6%	5.0%	19.4%	0.0%
	N	1.8%	1.7%	1.2%	-	2.9%	3.5%	3.5%	3.0%	3.2%	2.3%	4.3%	2.8%	3.0%	2.7%	3.6%	2.2%	3.0%	1.8%
Aging Driver	Y	1.5%	0.9%	1.8%	-	3.0%	3.6%	3.6%	3.1%	3.6%	3.9%	5.9%	2.9%	3.0%	2.9%	3.6%	1.9%	3.2%	0.9%
	N	1.9%	1.9%	1.1%	-	3.0%	3.5%	3.5%	3.1%	3.2%	2.2%	4.2%	2.8%	3.0%	2.8%	3.7%	2.2%	3.0%	1.9%
Teenage Driver	Y	1.3%	1.4%	2.3%	-	2.8%	3.3%	3.3%	2.9%	3.3%	2.0%	3.0%	3.0%	3.0%	2.5%	3.4%	2.1%	3.2%	1.6%
	N	1.9%	1.7%	1.2%	-	3.0%	3.6%	3.6%	3.1%	3.3%	2.5%	4.5%	2.8%	3.0%	2.9%	3.7%	2.2%	3.0%	1.8%
Day of the Week	Monday	1.5%	1.4%	1.3%	-	2.8%	3.4%	3.4%	2.9%	2.8%	2.7%	4.0%	2.5%	2.8%	2.8%	3.2%	2.9%	2.7%	2.7%
	Tuesday	1.5%	0.7%	1.0%	-	2.8%	3.8%	3.8%	3.0%	2.7%	0.0%	4.2%	2.9%	2.8%	2.7%	3.6%	0.5%	2.9%	1.3%
	Wednesday	1.8%	1.8%	0.4%	-	2.9%	2.7%	2.7%	2.9%	3.5%	3.8%	4.1%	3.3%	2.8%	2.5%	3.6%	1.7%	2.9%	2.9%
	Thursday	1.8%	2.3%	0.9%	-	2.7%	3.6%	3.6%	2.9%	2.8%	3.0%	4.3%	2.7%	2.8%	2.8%	3.2%	1.2%	2.9%	0.5%
	Friday	1.9%	1.4%	0.9%	-	2.8%	3.2%	3.2%	2.9%	3.5%	2.5%	4.0%	2.6%	2.9%	2.7%	3.4%	2.1%	3.0%	0.8%
	Saturday	2.6%	2.6%	2.1%	-	3.6%	4.2%	4.2%	3.7%	4.0%	3.3%	5.0%	3.1%	3.7%	3.2%	4.4%	4.4%	3.8%	1.3%
	Sunday	2.0%	2.1%	2.0%	-	3.6%	4.4%	4.4%	3.7%	3.8%	1.8%	5.4%	2.9%	3.7%	3.3%	4.6%	2.9%	3.5%	3.8%
Time of Day	12-3 AM	5.3%	3.6%	2.4%	-	4.8%	8.2%	8.2%	5.3%	7.0%	4.7%	6.9%	3.6%	5.6%	3.8%	7.0%	4.1%	6.7%	6.1%
	3-6 AM	4.0%	10.1%	1.1%	-	5.8%	7.3%	7.3%	6.2%	6.4%	4.5%	8.9%	5.5%	5.9%	5.4%	8.2%	5.2%	5.2%	7.9%
	6-9 AM	1.9%	2.2%	0.0%	-	3.4%	4.2%	4.2%	3.5%	4.0%	2.7%	4.3%	3.0%	3.6%	3.1%	4.3%	3.4%	3.6%	2.1%
	9-Noon	1.4%	1.1%	1.4%	-	2.8%	3.2%	3.2%	2.9%	2.9%	1.0%	4.6%	2.5%	2.7%	2.3%	3.5%	1.7%	3.1%	0.5%
	Noon-3 PM	1.0%	0.0%	1.2%	-	2.1%	2.3%	2.3%	2.2%	2.0%	1.9%	3.5%	2.2%	2.0%	2.1%	2.5%	1.6%	2.0%	0.4%
	3-6 PM	1.2%	1.2%	0.7%	-	2.0%	2.1%	2.1%	2.0%	1.9%	1.7%	2.6%	1.9%	2.0%	2.0%	2.3%	1.4%	1.8%	0.3%
	6-9 PM	1.9%	0.9%	1.7%	-	3.3%	3.6%	3.6%	3.3%	3.3%	2.9%	4.1%	3.0%	3.3%	3.2%	3.6%	2.4%	3.3%	2.8%
	9-Midnight	4.1%	4.6%	1.1%	-	4.9%	6.1%	6.1%	5.1%	5.8%	4.4%	6.1%	4.8%	5.1%	5.1%	5.8%	1.6%	5.1%	4.0%
Lighting Conditions	Dark - Lighted	3.9%	4.5%	2.0%	-	4.6%	5.3%	5.3%	4.7%	5.1%	4.0%	4.6%	3.8%	4.8%	4.1%	5.3%	3.3%	4.9%	5.6%
	Dark - Not Lighted	5.3%	0.0%	0.0%	-	6.1%	10.2%	10.2%	7.0%	9.1%	8.8%	10.0%	6.8%	6.3%	6.6%	8.6%	3.1%	7.0%	4.2%
	Dark - Unknown Lighting	3.4%	0.0%	0.0%	-	1.0%	1.5%	1.5%	1.1%	0.0%	0.0%	0.0%	0.0%	1.4%	0.0%	1.2%	0.0%	1.4%	28.6%
	Dawn	1.9%	6.9%	0.0%	-	4.1%	4.5%	4.5%	4.2%	4.6%	0.0%	5.9%	3.9%	4.0%	4.4%	4.6%	0.0%	4.2%	0.0%
	Daylight	1.2%	0.8%	0.9%	-	2.4%	2.6%	2.6%	2.4%	2.4%	1.7%	3.5%	2.3%	2.4%	2.2%	2.9%	1.7%	2.3%	0.4%
	Dusk	1.1%	0.0%	0.0%	-	2.5%	3.6%	3.6%	2.7%	3.3%	4.5%	3.7%	2.8%	2.7%	2.4%	3.0%	2.6%	3.2%	0.0%
	Other	0.0%	-	-	-	9.1%	11.1%	11.1%	9.4%	25.0%	0.0%	20.0%	15.4%	9.1%	3.2%	17.6%	100.0%	8.3%	-
	Unknown	0.0%	0.0%	0.0%	-	0.7%	3.0%	3.0%	0.9%	0.0%	0.0%	2.6%	0.0%	0.8%	1.2%	0.0%	0.0%	0.0%	-

Attachment C-4
Orange County
Percent of All KSI Crashes 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	3.9%	3.2%	1.8%	3.0%	5.2%	0.7%	1.6%	2.6%	3.9%	0.7%	0.1%	2.1%	2.2%	2.4%	0.3%	0.2%	1.7%	2.8%	2.7%	2.6%	0.0%	0.3%	0.0%	5.0%	0.8%
	Animal	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
	Bicycle	1.6%	2.0%	1.2%	1.5%	2.7%	0.5%	0.6%	1.1%	2.6%	0.4%	0.0%	1.6%	1.0%	1.1%	0.2%	0.1%	0.7%	1.1%	1.3%	2.0%	0.0%	0.0%	0.0%	3.5%	0.5%
	Head On	1.4%	1.1%	0.4%	1.4%	1.4%	0.2%	0.2%	0.7%	1.5%	0.5%	0.0%	0.8%	0.8%	1.0%	0.1%	0.0%	0.2%	1.1%	1.0%	0.9%	0.0%	0.1%	0.0%	1.4%	0.3%
	Left Turn	5.2%	10.8%	5.5%	4.0%	15.6%	1.7%	1.2%	4.1%	14.1%	2.1%	0.1%	5.5%	8.1%	5.2%	0.4%	0.2%	1.7%	4.7%	8.9%	8.4%	0.0%	1.0%	0.0%	14.0%	2.8%
	Off Road	4.1%	4.5%	1.7%	5.5%	4.6%	0.4%	1.6%	2.2%	5.3%	1.0%	0.2%	2.3%	3.0%	2.6%	0.3%	0.2%	2.2%	2.9%	3.5%	3.0%	0.1%	0.5%	0.0%	4.3%	1.4%
	Other	3.7%	4.2%	3.0%	4.4%	5.7%	1.0%	1.6%	2.2%	5.7%	1.0%	0.3%	3.6%	2.9%	2.2%	0.4%	0.1%	2.0%	2.7%	3.2%	4.3%	0.1%	0.4%	0.0%	6.1%	1.3%
	Pedestrian	3.1%	5.1%	5.2%	3.7%	8.2%	1.4%	1.3%	2.7%	8.0%	1.4%	0.0%	5.7%	3.8%	2.1%	0.2%	0.0%	1.5%	2.1%	4.1%	7.2%	0.0%	0.1%	0.0%	11.0%	1.0%
	Rear End	3.1%	8.2%	8.6%	4.1%	12.5%	3.1%	0.3%	2.2%	14.3%	2.9%	0.2%	8.7%	7.0%	3.0%	0.3%	0.2%	0.6%	2.4%	6.7%	12.4%	0.0%	0.8%	0.0%	17.7%	2.5%
	Right Turn	0.3%	0.7%	0.5%	0.3%	1.0%	0.2%	0.0%	0.3%	0.9%	0.2%	0.0%	0.5%	0.6%	0.3%	0.0%	0.0%	0.1%	0.3%	0.5%	0.8%	0.0%	0.0%	0.0%	1.1%	0.1%
	Rollover	0.5%	0.5%	0.3%	0.8%	0.4%	0.1%	0.1%	0.3%	0.5%	0.2%	0.2%	0.6%	0.2%	0.3%	0.0%	0.0%	0.2%	0.5%	0.3%	0.4%	0.0%	0.4%	0.0%	0.6%	0.2%
	Sideswipe	0.7%	1.4%	1.4%	1.0%	2.1%	0.4%	0.2%	0.6%	2.0%	0.7%	0.0%	1.6%	1.0%	0.5%	0.1%	0.0%	0.2%	0.5%	1.1%	1.9%	0.0%	0.1%	0.0%	3.2%	0.2%
	Unknown	0.2%	0.7%	0.4%	0.3%	1.0%	0.0%	0.1%	0.3%	0.8%	0.2%	0.0%	0.5%	0.4%	0.3%	0.0%	0.0%	0.1%	0.3%	0.5%	0.6%	0.0%	0.1%	0.0%	1.0%	0.2%
Alcohol Related	Y	1.5%	2.3%	1.4%	2.0%	2.8%	0.3%	0.5%	1.1%	2.8%	0.6%	0.2%	2.0%	1.2%	1.2%	0.2%	0.1%	0.4%	1.6%	1.7%	2.1%	0.1%	0.4%	0.0%	3.5%	0.7%
	N	26.4%	40.0%	28.4%	28.1%	57.5%	9.3%	8.4%	18.1%	56.7%	10.7%	0.9%	31.4%	29.7%	19.8%	2.2%	1.0%	10.8%	19.9%	32.3%	42.5%	0.1%	3.6%	0.0%	65.2%	10.6%
Hit and Run	Y	3.1%	3.8%	3.5%	2.7%	6.5%	1.0%	1.1%	2.0%	6.2%	1.0%	0.0%	3.7%	3.0%	2.1%	0.2%	0.1%	1.1%	2.0%	3.3%	4.9%	0.0%	0.1%	0.0%	7.3%	0.8%
	N	24.9%	38.5%	26.3%	27.3%	53.8%	8.7%	7.7%	17.2%	53.4%	10.3%	1.0%	29.7%	27.9%	18.9%	2.2%	0.9%	10.1%	19.5%	30.6%	39.6%	0.2%	3.9%	0.0%	61.5%	10.4%
Aggressive Driving	Y	1.8%	2.0%	1.0%	1.5%	3.0%	0.3%	0.5%	1.5%	2.5%	0.3%	0.1%	1.5%	1.1%	1.5%	0.2%	0.0%	0.4%	1.5%	1.7%	1.7%	0.0%	0.1%	0.0%	2.2%	0.6%
	N	26.1%	40.2%	28.8%	28.6%	57.3%	9.4%	8.4%	17.8%	57.1%	11.0%	1.0%	31.8%	29.9%	19.5%	2.2%	1.0%	10.8%	20.0%	32.2%	42.9%	0.2%	3.8%	0.0%	66.6%	10.6%
Distracted Driving	Y	7.5%	12.5%	8.2%	7.8%	17.4%	3.0%	2.2%	4.6%	18.0%	3.2%	0.3%	8.8%	9.8%	5.9%	0.5%	0.4%	2.8%	5.7%	10.1%	12.8%	0.1%	1.5%	0.0%	19.1%	4.0%
	N	20.4%	29.8%	21.6%	22.2%	42.9%	6.6%	6.7%	14.7%	41.6%	8.1%	0.8%	24.6%	21.1%	15.1%	1.8%	0.7%	8.4%	15.8%	23.8%	31.8%	0.1%	2.5%	0.0%	49.7%	7.2%
Intersection Related	Y	12.2%	17.3%	11.8%	9.2%	27.5%	4.1%	3.7%	9.2%	24.1%	4.2%	0.2%	12.5%	13.1%	9.6%	1.0%	0.5%	4.1%	10.1%	14.4%	16.9%	0.0%	1.5%	0.0%	27.9%	5.1%
	N	15.7%	24.9%	18.0%	20.8%	32.8%	5.5%	5.2%	10.1%	35.4%	7.1%	0.9%	20.8%	17.9%	11.4%	1.4%	0.6%	7.1%	11.4%	19.6%	27.7%	0.2%	2.5%	0.0%	40.9%	6.1%
Drug Related	Y	0.8%	1.3%	0.8%	0.9%	1.8%	0.3%	0.3%	0.5%	1.9%	0.4%	0.0%	1.1%	0.9%	0.6%	0.1%	0.1%	0.2%	0.7%	1.0%	1.4%	0.0%	0.1%	0.0%	2.0%	0.6%
	N	27.1%	40.9%	29.0%	29.2%	58.5%	9.3%	8.6%	18.8%	57.7%	10.9%	1.0%	32.2%	30.1%	20.3%	2.3%	1.0%	11.0%	20.8%	33.0%	43.2%	0.2%	3.9%	0.0%	66.8%	10.7%
Aging Driver	Y	4.1%	6.2%	3.7%	3.9%	8.7%	1.5%	1.1%	2.9%	8.3%	1.6%	0.1%	4.6%	4.4%	2.9%	0.4%	0.1%	1.6%	3.3%	5.0%	5.9%	0.0%	0.9%	0.0%	10.1%	1.6%
	N	23.8%	36.1%	26.1%	26.2%	51.6%	8.1%	7.7%	16.4%	51.2%	9.7%	1.0%	28.7%	26.5%	18.1%	2.0%	0.9%	9.6%	18.2%	29.0%	38.7%	0.2%	3.1%	0.0%	58.7%	9.7%
Teenage Driver	Y	3.1%	5.1%	3.5%	3.2%	7.4%	1.1%	0.9%	1.9%	7.5%	1.3%	0.0%	3.4%	3.8%	2.5%	0.3%	0.1%	1.4%	2.6%	3.5%	5.4%	0.0%	0.3%	0.0%	8.1%	1.4%
	N	24.8%	37.2%	26.4%	26.9%	52.9%	8.6%	7.9%	17.3%	52.1%	10.0%	1.1%	29.9%	27.2%	18.4%	2.1%	0.9%	9.9%	18.8%	30.4%	39.2%	0.2%	3.7%	0.0%	60.7%	9.8%
Day of the Week	Monday	4.5%	5.3%	4.0%	4.4%	8.1%	1.3%	1.3%	2.6%	8.3%	1.5%	0.2%	4.5%	4.0%	3.2%	0.4%	0.2%	1.5%	3.3%	4.5%	6.0%	0.1%	0.5%	0.0%	9.8%	1.7%
	Tuesday	3.7%	6.2%	4.5%	4.3%	9.0%	1.2%	1.2%	2.7%	8.6%	1.6%	0.2%	4.5%	4.7%	2.9%	0.4%	0.1%	1.7%	2.9%	5.2%	6.3%	0.0%	0.5%	0.0%	9.9%	1.2%
	Wednesday	3.8%	6.0%	4.4%	4.1%	8.9%	1.1%	1.2%	3.0%	8.2%	1.5%	0.2%	4.9%	4.2%	3.0%	0.3%	0.2%	1.6%	3.2%	4.6%	6.4%	0.0%	0.6%	0.0%	9.5%	1.6%
	Thursday	4.0%	6.3%	4.0%	4.1%	8.8%	1.4%	1.2%	2.7%	8.7%	1.6%	0.1%	4.7%	4.6%	3.1%	0.2%	0.2%	1.5%	2.9%	4.8%	6.6%	0.0%	0.6%	0.0%	10.0%	1.5%
	Friday	4.5%	6.5%	4.8%	4.7%	9.5%	1.7%	1.5%	3.0%	9.4%	1.8%	0.1%	5.4%	5.0%	2.9%	0.4%	0.2%	1.9%	3.4%	5.4%	6.9%	0.0%	0.6%	0.0%	10.8%	1.8%
	Saturday	3.8%	6.7%	4.6%	4.2%	9.1%	1.7%	1.3%	2.8%	9.1%	1.7%	0.2%	5.1%	4.7%	3.2%	0.3%	0.2%	1.5%	3.0%	5.1%	7.1%	0.0%	0.6%	0.0%	10.3%	1.8%
	Sunday	3.7%	5.2%	3.6%	4.2%	6.9%	1.3%	1.1%	2.4%	7.2%	1.6%	0.1%	4.1%	3.8%	2.7%	0.4%	0.1%	1.5%	2.7%	4.3%	5.4%	0.0%	0.5%	0.0%	8.5%	1.6%
Time of Day	12-3 AM	2.0%	3.6%	2.9%	2.9%	4.4%	1.0%	0.6%	1.7%	4.7%	1.1%	0.2%	3.5%	2.5%	1.5%	0.1%	0.0%	0.7%	1.7%	2.7%	4.3%	0.0%	0.4%	0.0%	6.2%	1.1%
	3-6 AM	1.8%	2.3%	2.0%	2.1%	3.2%	0.7%	0.4%	1.3%	3.3%	0.9%	0.1%	2.2%	1.9%	1.1%	0.2%	0.1%	0.6%	1.3%	2.0%	2.8%	0.1%	0.3%	0.0%	4.0%	0.8%
	6-9 AM	4.0%	6.1%	3.7%	3.7%	8.7%	1.3%	1.1%	2.6%	8.3%	1.5%	0.3%	4.1%	4.5%	3.1%	0.4%	0.1%	1.5%	3.2%	4.7%	5.9%	0.1%	0.9%	0.0%	9.0%	1.5%
	9-Noon	3.5%	5.2%	3.8%	3.7%	7.3%	1.4%	1.2%	2.3%	7.3%	1.4%	0.1%	4.1%	4.0%	2.4%	0.3%	0.1%	1.6%	2.6%	3.9%	5.7%	0.0%	0.6%	0.0%	8.4%	1.5%
	Noon-3 PM	3.9%	5.6%	3.6%	4.0%	8.0%	1.2%	1.3%	2.8%	7.7%	1.2%	0.1%	4.0%	4.2%	2.7%	0.4%	0.2%	1.8%	2.9%	4.7%	5.2%	0.0%	0.4%	0.0%	8.8%	1.3%
	3-6 PM	4.5%	6.4%	4.0%	4.9%	9.1%	1.0%	1.7%	2.8%	8.9%	1.5%	0.1%	4.7%	4.3%	3.6%	0.3%	0.2%	1.9%	3.5%	5.4%	5.9%	0.0%	0.5%	0.0%	9.7%	1.8%
	6-9 PM	4.4%	7.4%	5.2%	4.7%	10.6%	1.7%	1.4%	3.0%	10.7%	1.8%	0.1%	5.6%	5.2%	3.7%	0.4%	0.3%	1.8%	3.2%	6.2%	7.6%	0.0%	0.4%	0.0%	11.5%	1.5%
	9-Midnight	3.9%	5.9%	4.8%	4.1%	9.0%	1.4%	1.2%	2.8%	8.7%	1.8%	0.1%	5.2%	4.5%	3.0%	0.2%	0.2%	1.4%	3.1%	4.3%	7.3%	0.0%	0.4%	0.0%	11.1%	1.7%
Lighting Conditions	Dark - Lighted	7.2%	13.8%	11.6%	8.9%	20.0%	3.7%	2.2%	6.8%	19.9%	3.6%	0.1%	12.5%	10.0%	6.2%	0.6%	0.4%	2.8%	5.7%	10.7%	17.1%	0.0%	0.4%	0.0%	23.9%	3.5%
	Dark - Not Lighted	3.2%	2.8%	1.5%	3.2%	3.8%	0.5%	0.6%	1.3%	3.7%	1.5%	0.4%	2.6%	1.8%	1.7%	0.2%	0.1%	1.0%	2.5%	2.3%	2.5%	0.0%	1.2%	0.0%	5.3%	1.1%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.8%	0.9%	0.5%	0.7%	1.3%	0.2%	0.2%	0.4%	1.2%	0.3%	0.1%	0.6%	0.6%	0.6%	0.1%	0.0%	0.2%	0.7%	0.6%	0.8%	0.0%	0.2%	0.0%	1.3%	0.2%
	Daylight	15.7%	23.4%	15.1%	16.3%	33.2%	4.9%	5.4%	10.3%	32.5%	5.6%	0.5%	16.6%	17.6%	11.6%	1.4%	0.6%	6.8%	12.0%	19.1%	22.7%	0.1%	2.1%	0.0%	35.8%	6.2%
	Dusk	0.8%	1.3%	1.0%	1.0%	1.8%	0.4%	0.3%	0.5%	2.1%	0.3%	0.0%	1.0%	1.0%	0.7%	0.1%	0.0%	0.4%	0.5%	1.2%	1.4%	0.0%	0.1%	0.0%	2.3%	0.2%
	Other	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%
	Unknown	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment C-4
Orange County
Percent of All KSI Crashes 2018-2022

Mode:	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	1.3%	0.1%	0.2%	0.0%	6.2%	1.3%	1.5%	7.9%	0.9%	0.0%	1.2%	1.2%	6.4%	4.4%	2.5%	0.1%	1.9%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%
	Bicycle	0.6%	0.0%	0.0%	0.0%	3.1%	0.5%	1.1%	4.3%	0.4%	0.1%	0.4%	0.3%	4.0%	1.8%	1.5%	0.0%	1.3%	0.1%
	Head On	0.6%	0.0%	0.0%	0.0%	2.1%	0.2%	0.7%	2.9%	0.1%	0.0%	0.6%	0.5%	1.9%	1.7%	0.7%	0.0%	0.6%	0.0%
	Left Turn	2.1%	0.3%	0.0%	0.0%	14.3%	3.3%	3.8%	18.7%	2.7%	0.1%	1.9%	2.7%	16.9%	7.3%	7.8%	0.3%	6.1%	0.1%
	Off Road	0.7%	0.1%	0.0%	0.0%	7.2%	0.8%	2.3%	9.8%	0.4%	0.0%	1.7%	1.5%	7.0%	4.2%	3.8%	0.2%	2.0%	0.1%
	Other	2.1%	0.2%	0.2%	0.0%	7.2%	1.3%	2.3%	9.8%	0.9%	0.1%	1.6%	1.3%	8.0%	4.3%	3.6%	0.3%	2.6%	0.1%
	Pedestrian	3.3%	0.3%	0.3%	0.0%	8.9%	1.7%	2.7%	11.6%	1.6%	0.2%	0.8%	1.1%	11.5%	5.0%	4.1%	0.2%	4.1%	0.1%
	Rear End	2.4%	0.1%	0.0%	0.0%	11.2%	4.0%	4.7%	16.3%	3.3%	0.2%	1.7%	1.8%	16.4%	3.9%	7.8%	0.6%	7.5%	0.1%
	Right Turn	0.1%	0.0%	0.0%	0.0%	0.8%	0.2%	0.4%	1.3%	0.2%	0.0%	0.1%	0.1%	1.2%	0.3%	0.6%	0.0%	0.6%	0.0%
	Rollover	0.1%	0.0%	0.0%	0.0%	0.8%	0.1%	0.4%	1.2%	0.1%	0.0%	0.4%	0.1%	0.8%	0.5%	0.6%	0.1%	0.2%	0.0%
	Sideswipe	0.4%	0.1%	0.0%	0.0%	1.9%	0.7%	0.8%	2.9%	0.5%	0.0%	0.2%	0.3%	2.8%	1.0%	1.4%	0.1%	0.9%	0.0%
	Unknown	0.2%	0.0%	0.0%	0.0%	0.7%	0.2%	0.4%	1.2%	0.2%	0.0%	0.1%	0.1%	1.1%	0.3%	0.5%	0.0%	0.4%	0.0%
Alcohol Related	Y	0.9%	0.1%	0.0%	0.0%	3.3%	0.7%	1.2%	4.7%	0.5%	0.0%	0.9%	0.5%	3.8%	2.0%	1.8%	0.2%	1.2%	0.0%
	N	13.0%	1.1%	0.7%	0.0%	61.3%	13.5%	20.0%	83.3%	10.8%	0.7%	10.0%	10.6%	74.2%	32.6%	33.1%	1.6%	27.0%	0.5%
Hit and Run	Y	1.8%	0.1%	0.1%	0.0%	7.2%	1.9%	1.9%	9.4%	0.9%	0.0%	0.8%	1.0%	8.6%	4.4%	2.7%	0.2%	3.0%	0.1%
	N	12.1%	1.1%	0.6%	0.0%	57.5%	19.3%	19.3%	78.5%	10.4%	0.7%	10.1%	10.1%	69.5%	30.3%	32.1%	1.6%	25.2%	0.4%
Aggressive Driving	Y	1.1%	0.1%	0.1%	0.0%	3.1%	1.0%	1.0%	4.2%	0.5%	0.0%	0.5%	0.8%	3.4%	2.1%	1.5%	0.0%	1.1%	0.0%
	N	12.8%	1.0%	0.6%	0.0%	61.5%	20.3%	20.3%	83.8%	10.8%	0.7%	10.4%	10.2%	74.6%	32.6%	33.4%	1.7%	27.1%	0.4%
Distracted Driving	Y	3.0%	0.2%	0.0%	0.0%	18.5%	5.7%	5.7%	24.7%	3.3%	0.2%	3.3%	3.1%	21.9%	9.0%	10.2%	0.7%	8.2%	0.1%
	N	10.9%	1.0%	0.7%	0.0%	46.2%	15.6%	15.6%	63.3%	8.0%	0.5%	7.6%	8.0%	56.2%	25.7%	24.6%	1.1%	20.0%	0.3%
Intersection Related	Y	5.6%	0.5%	0.5%	0.0%	26.7%	7.8%	7.8%	35.6%	5.5%	0.3%	3.9%	4.6%	32.9%	14.6%	13.9%	0.6%	12.1%	0.2%
	N	8.3%	0.7%	0.2%	0.0%	37.9%	13.5%	13.5%	52.4%	5.8%	0.5%	7.0%	6.5%	45.2%	20.1%	20.9%	1.2%	16.1%	0.3%
Drug Related	Y	0.5%	0.0%	0.0%	0.0%	2.1%	0.5%	0.5%	2.6%	0.4%	0.0%	0.4%	0.4%	2.2%	1.2%	1.0%	0.0%	0.8%	0.0%
	N	13.3%	1.2%	0.7%	0.0%	62.6%	20.8%	20.8%	85.4%	10.9%	0.7%	10.5%	10.6%	75.9%	33.5%	33.9%	1.8%	27.4%	0.5%
Aging Driver	Y	1.8%	0.1%	0.1%	0.0%	8.9%	3.0%	3.0%	12.1%	1.7%	0.2%	1.7%	1.5%	10.8%	5.0%	4.6%	0.2%	4.2%	0.0%
	N	12.0%	1.1%	0.6%	0.0%	55.7%	18.3%	18.3%	75.8%	9.6%	0.6%	9.2%	9.6%	67.3%	29.7%	30.2%	1.6%	24.0%	0.4%
Teenage Driver	Y	0.9%	0.1%	0.1%	0.0%	7.2%	2.8%	2.8%	10.1%	1.5%	0.1%	0.8%	1.5%	9.4%	3.5%	4.2%	0.2%	3.6%	0.1%
	N	13.0%	1.1%	0.6%	0.0%	57.5%	18.5%	18.5%	77.9%	9.8%	0.7%	10.1%	9.6%	68.7%	31.1%	30.6%	1.6%	24.6%	0.4%
Day of the Week	Monday	1.7%	0.1%	0.1%	0.0%	8.3%	2.8%	2.8%	12.2%	1.4%	0.1%	1.5%	1.4%	10.9%	5.0%	4.6%	0.3%	3.7%	0.1%
	Tuesday	1.8%	0.1%	0.1%	0.0%	8.5%	3.2%	3.2%	12.9%	1.4%	0.0%	1.6%	1.7%	11.1%	4.9%	5.0%	0.1%	4.2%	0.1%
	Wednesday	2.2%	0.2%	0.0%	0.0%	8.8%	2.3%	2.3%	12.2%	1.8%	0.2%	1.4%	1.9%	10.8%	4.7%	5.1%	0.2%	4.0%	0.1%
	Thursday	2.2%	0.3%	0.1%	0.0%	8.5%	3.1%	3.1%	12.7%	1.5%	0.1%	1.7%	1.5%	11.1%	5.3%	4.7%	0.2%	4.1%	0.0%
	Friday	2.4%	0.1%	0.1%	0.0%	9.4%	3.0%	3.0%	13.7%	2.0%	0.1%	1.6%	1.7%	12.5%	5.6%	5.3%	0.3%	4.6%	0.0%
	Saturday	2.3%	0.2%	0.2%	0.0%	9.1%	2.9%	2.9%	13.2%	1.8%	0.1%	1.6%	1.5%	12.0%	4.8%	5.4%	0.5%	4.3%	0.0%
	Sunday	1.4%	0.1%	0.1%	0.0%	7.7%	2.5%	2.5%	11.0%	1.4%	0.1%	1.5%	1.3%	9.7%	4.3%	4.7%	0.3%	3.2%	0.1%
Time of Day	12-3 AM	1.9%	0.1%	0.2%	0.0%	4.7%	1.9%	1.9%	7.2%	1.1%	0.1%	1.0%	0.8%	6.6%	2.4%	3.0%	0.2%	2.7%	0.1%
	3-6 AM	0.8%	0.3%	0.0%	0.0%	3.6%	1.1%	1.1%	5.3%	0.7%	0.0%	1.0%	0.7%	4.3%	2.1%	2.3%	0.2%	1.4%	0.1%
	6-9 AM	1.6%	0.2%	0.0%	0.0%	8.3%	2.7%	2.7%	12.1%	1.6%	0.1%	1.4%	1.5%	10.9%	4.6%	4.8%	0.3%	4.0%	0.1%
	9-Noon	1.6%	0.1%	0.1%	0.0%	7.6%	2.3%	2.3%	11.0%	1.4%	0.0%	1.5%	1.3%	9.6%	3.9%	4.3%	0.2%	4.0%	0.0%
	Noon-3 PM	1.6%	0.0%	0.1%	0.0%	8.1%	2.5%	2.5%	11.5%	1.3%	0.1%	1.5%	1.5%	10.0%	4.9%	4.4%	0.2%	3.5%	0.0%
	3-6 PM	2.3%	0.2%	0.1%	0.0%	9.3%	2.9%	2.9%	13.4%	1.4%	0.1%	1.3%	1.7%	11.9%	5.8%	5.1%	0.2%	3.8%	0.0%
	6-9 PM	1.9%	0.1%	0.1%	0.0%	10.3%	3.4%	3.4%	14.9%	1.9%	0.2%	1.5%	1.9%	13.6%	5.9%	5.8%	0.3%	4.8%	0.1%
	9-Midnight	2.2%	0.2%	0.1%	0.0%	8.5%	3.0%	3.0%	12.5%	1.9%	0.1%	1.6%	1.7%	11.2%	5.1%	5.2%	0.2%	4.1%	0.1%
Lighting Conditions	Dark - Lighted	6.0%	0.7%	0.4%	0.0%	19.6%	6.2%	6.2%	28.2%	4.2%	0.3%	2.2%	3.1%	27.4%	10.3%	11.3%	0.7%	10.0%	0.3%
	Dark - Not Lighted	0.5%	0.0%	0.0%	0.0%	3.7%	2.3%	2.3%	6.6%	0.9%	0.1%	2.3%	1.4%	3.8%	3.2%	2.9%	0.1%	1.3%	0.0%
	Dark - Unknown Lighting	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.2%	0.1%	0.0%	0.0%	1.3%	0.4%	0.4%	1.9%	0.3%	0.0%	0.3%	0.3%	1.6%	0.8%	0.7%	0.0%	0.6%	0.0%
	Daylight	6.9%	0.4%	0.3%	0.0%	33.8%	10.2%	10.2%	48.4%	5.6%	0.3%	5.7%	5.9%	42.7%	19.3%	18.9%	0.8%	15.2%	0.1%
	Dusk	0.2%	0.0%	0.0%	0.0%	1.7%	0.7%	0.7%	2.7%	0.4%	0.0%	0.3%	0.4%	2.4%	0.9%	1.1%	0.1%	1.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%

Attachment C-5
Orange County
Percent of All KSI Crashes involving only Car Truck 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	5.0%	4.1%	2.3%	3.7%	6.7%	0.9%	1.9%	3.4%	5.0%	1.0%	0.1%	2.6%	3.0%	3.1%	0.4%	0.2%	2.2%	3.6%	3.3%	3.3%	0.0%	0.3%	0.0%	6.9%	1.2%
	Animal	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	1.9%	1.5%	0.6%	1.8%	1.8%	0.2%	0.3%	1.0%	2.1%	0.6%	0.0%	1.0%	1.1%	1.3%	0.1%	0.1%	0.3%	1.5%	1.3%	1.2%	0.0%	0.2%	0.0%	2.0%	0.4%
	Left Turn	5.9%	12.9%	7.0%	4.3%	19.0%	2.2%	1.2%	4.7%	17.3%	2.6%	0.1%	6.6%	10.1%	6.1%	0.4%	0.3%	1.9%	5.2%	11.0%	10.3%	0.1%	1.4%	0.0%	17.8%	3.6%
	Off Road	4.9%	5.4%	2.1%	6.7%	5.5%	0.6%	1.9%	2.6%	6.4%	1.3%	0.3%	3.0%	3.6%	3.1%	0.3%	0.2%	2.6%	3.4%	4.3%	3.6%	0.2%	0.8%	0.0%	5.4%	1.8%
	Other	4.4%	4.6%	3.3%	5.0%	6.4%	1.2%	2.0%	2.5%	6.4%	1.0%	0.3%	3.9%	3.2%	2.5%	0.4%	0.1%	2.5%	3.1%	3.5%	4.8%	0.1%	0.5%	0.0%	6.8%	1.4%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	3.9%	10.6%	11.1%	5.2%	16.2%	4.0%	0.3%	2.8%	18.5%	3.8%	0.2%	10.9%	9.1%	4.0%	0.4%	0.3%	0.8%	3.1%	8.7%	15.9%	0.0%	1.0%	0.0%	23.3%	3.2%
	Right Turn	0.4%	0.9%	0.7%	0.4%	1.3%	0.3%	0.0%	0.4%	1.2%	0.2%	0.0%	0.5%	0.8%	0.5%	0.0%	0.0%	0.1%	0.4%	0.7%	1.0%	0.0%	0.0%	0.0%	1.4%	0.1%
	Rollover	0.3%	0.5%	0.1%	0.7%	0.2%	0.1%	0.1%	0.1%	0.3%	0.1%	0.2%	0.5%	0.1%	0.2%	0.0%	0.0%	0.2%	0.4%	0.2%	0.2%	0.0%	0.5%	0.0%	0.5%	0.2%
	Sideswipe	0.9%	1.7%	1.5%	1.1%	2.4%	0.5%	0.2%	0.7%	2.3%	0.8%	0.0%	1.8%	1.2%	0.5%	0.1%	0.1%	0.3%	0.6%	1.3%	2.3%	0.0%	0.2%	0.0%	3.7%	0.2%
	Unknown	0.3%	0.8%	0.4%	0.4%	1.1%	0.0%	0.1%	0.3%	0.9%	0.2%	0.0%	0.5%	0.5%	0.4%	0.1%	0.0%	0.1%	0.4%	0.6%	0.6%	0.0%	0.2%	0.0%	1.2%	0.3%
Alcohol Related	Y	1.8%	2.3%	1.7%	2.3%	3.0%	0.4%	0.6%	1.2%	3.1%	0.7%	0.2%	2.3%	1.4%	1.3%	0.2%	0.1%	0.5%	1.8%	1.7%	2.4%	0.1%	0.4%	0.0%	4.1%	0.8%
	N	26.1%	40.8%	27.4%	27.1%	57.7%	9.5%	7.5%	17.2%	57.4%	10.9%	1.2%	29.1%	31.2%	20.3%	2.1%	1.1%	10.5%	20.1%	33.3%	40.8%	0.2%	4.8%	0.0%	64.7%	11.7%
Hit and Run	Y	2.2%	3.2%	3.1%	2.1%	5.5%	0.8%	0.8%	1.5%	5.2%	0.9%	0.1%	2.9%	2.7%	1.8%	0.1%	0.2%	0.7%	1.7%	2.6%	4.3%	0.0%	0.1%	0.0%	6.2%	0.8%
	N	25.7%	39.8%	26.0%	27.3%	55.2%	9.1%	7.3%	16.9%	55.3%	10.7%	1.3%	28.5%	29.9%	19.8%	2.2%	1.1%	10.2%	20.2%	32.4%	38.8%	0.3%	5.1%	0.0%	62.6%	11.7%
Aggressive Driving	Y	1.8%	2.1%	1.0%	1.5%	3.1%	0.3%	0.5%	1.5%	2.5%	0.4%	0.1%	1.4%	1.1%	1.5%	0.2%	0.0%	0.5%	1.6%	1.8%	1.5%	0.0%	0.2%	0.0%	2.3%	0.8%
	N	26.1%	41.0%	28.1%	27.9%	57.6%	9.6%	7.6%	16.9%	58.1%	11.2%	1.3%	30.0%	31.4%	20.0%	2.1%	1.2%	10.5%	20.2%	33.2%	41.6%	0.3%	5.0%	0.0%	66.6%	11.7%
Distracted Driving	Y	8.3%	14.6%	9.7%	8.7%	20.3%	3.7%	2.2%	5.1%	21.0%	3.9%	0.4%	10.0%	11.8%	6.6%	0.6%	0.5%	3.1%	6.5%	12.0%	14.7%	0.1%	2.0%	0.0%	22.9%	5.3%
	N	19.5%	28.4%	19.4%	20.8%	40.4%	6.2%	5.9%	13.3%	39.5%	7.7%	0.9%	21.4%	20.8%	15.0%	1.7%	0.7%	7.9%	15.4%	23.0%	28.5%	0.2%	3.2%	0.0%	45.9%	7.2%
Intersection Related	Y	12.3%	18.5%	12.7%	9.0%	29.4%	4.4%	3.5%	9.2%	26.1%	4.5%	0.2%	12.9%	14.7%	9.7%	0.9%	0.5%	4.1%	10.1%	15.7%	17.6%	0.1%	2.0%	0.0%	30.7%	6.2%
	N	15.6%	24.6%	16.4%	20.4%	31.3%	5.5%	4.6%	9.3%	34.4%	7.1%	1.1%	18.5%	17.9%	11.9%	1.3%	0.7%	6.9%	11.7%	19.3%	25.6%	0.2%	3.2%	0.0%	38.1%	6.3%
Drug Related	Y	0.8%	1.3%	1.0%	0.9%	1.7%	0.4%	0.2%	0.5%	1.9%	0.4%	0.0%	1.3%	0.8%	0.7%	0.1%	0.1%	0.1%	0.7%	0.9%	1.6%	0.1%	0.1%	0.0%	2.3%	0.6%
	N	27.1%	41.8%	28.1%	28.5%	59.0%	9.5%	8.0%	17.9%	58.6%	11.2%	1.3%	30.1%	31.8%	20.9%	2.2%	1.2%	10.8%	21.1%	34.1%	41.6%	0.2%	5.2%	0.0%	66.5%	11.9%
Aging Driver	Y	4.8%	7.2%	4.3%	4.4%	10.0%	1.9%	1.2%	3.4%	9.7%	1.9%	0.1%	5.3%	5.2%	3.4%	0.5%	0.2%	1.8%	3.9%	5.7%	6.8%	0.0%	1.2%	0.0%	11.9%	1.9%
	N	23.1%	35.8%	24.7%	25.0%	50.7%	8.0%	7.0%	15.0%	50.8%	9.7%	1.2%	26.1%	27.3%	18.2%	1.8%	1.1%	9.1%	17.9%	29.3%	36.4%	0.3%	4.0%	0.0%	57.0%	10.6%
Teenage Driver	Y	3.7%	6.2%	4.0%	3.6%	8.8%	1.3%	1.1%	2.1%	9.1%	1.5%	0.0%	3.9%	4.8%	3.0%	0.4%	0.1%	1.6%	3.1%	4.4%	6.2%	0.0%	0.5%	0.0%	9.7%	2.0%
	N	24.2%	36.9%	25.1%	25.8%	51.8%	8.6%	7.0%	16.3%	51.4%	10.1%	1.3%	27.5%	27.8%	18.6%	1.9%	1.1%	9.4%	18.7%	30.6%	36.9%	0.3%	4.7%	0.0%	59.2%	10.5%
Day of the Week	Monday	4.5%	5.7%	3.9%	4.4%	8.4%	1.3%	1.1%	2.8%	8.6%	1.5%	0.2%	4.5%	4.1%	3.4%	0.4%	0.2%	1.4%	3.5%	4.8%	5.8%	0.1%	0.7%	0.0%	9.9%	2.0%
	Tuesday	3.9%	6.4%	4.2%	4.3%	9.1%	1.2%	1.2%	2.7%	8.9%	1.5%	0.2%	4.0%	5.2%	3.2%	0.4%	0.0%	1.7%	3.1%	5.5%	5.9%	0.1%	0.5%	0.0%	9.4%	1.4%
	Wednesday	3.9%	6.0%	4.4%	3.9%	9.3%	1.1%	1.1%	2.7%	8.4%	1.9%	0.2%	4.8%	4.4%	3.1%	0.3%	0.2%	1.5%	3.3%	4.5%	6.6%	0.0%	0.9%	0.0%	9.8%	1.9%
	Thursday	3.9%	6.3%	3.8%	4.2%	8.5%	1.3%	1.2%	2.3%	8.9%	1.5%	0.2%	4.2%	4.8%	3.1%	0.2%	0.2%	1.5%	3.0%	4.8%	6.2%	0.1%	0.8%	0.0%	9.7%	1.7%
	Friday	4.3%	6.5%	4.7%	4.4%	9.3%	1.7%	1.4%	2.8%	9.3%	1.9%	0.1%	5.0%	5.2%	2.8%	0.3%	0.2%	1.9%	3.0%	5.7%	6.5%	0.1%	0.8%	0.0%	11.1%	1.8%
	Saturday	3.7%	6.7%	4.6%	3.9%	9.3%	1.9%	1.1%	2.9%	9.1%	1.8%	0.3%	5.0%	4.8%	3.4%	0.2%	0.2%	1.4%	3.1%	5.3%	6.9%	0.0%	0.9%	0.0%	10.6%	2.0%
	Sunday	3.6%	5.4%	3.5%	4.2%	6.8%	1.4%	1.0%	2.3%	7.4%	1.6%	0.1%	3.9%	3.9%	2.6%	0.4%	0.1%	1.4%	2.7%	4.4%	5.3%	0.1%	0.6%	0.0%	8.3%	1.8%
Time of Day	12-3 AM	2.0%	3.6%	2.9%	2.8%	4.5%	1.0%	0.6%	1.7%	4.8%	1.0%	0.3%	3.3%	2.6%	1.6%	0.2%	0.1%	0.6%	1.9%	2.6%	4.2%	0.0%	0.6%	0.0%	6.2%	1.3%
	3-6 AM	1.7%	2.4%	2.1%	2.2%	3.3%	0.7%	0.4%	1.2%	3.5%	1.0%	0.1%	2.1%	2.1%	1.1%	0.2%	0.1%	0.5%	1.3%	2.0%	3.0%	0.1%	0.4%	0.0%	4.1%	1.0%
	6-9 AM	4.4%	6.7%	3.8%	4.2%	9.2%	1.5%	1.1%	2.6%	9.1%	1.8%	0.3%	4.1%	5.2%	3.4%	0.4%	0.1%	1.6%	3.5%	5.2%	6.2%	0.1%	1.3%	0.0%	9.7%	1.5%
	9-Noon	3.8%	6.0%	4.3%	3.9%	8.4%	1.8%	1.2%	2.3%	8.6%	1.8%	0.1%	4.6%	4.7%	2.7%	0.3%	0.1%	1.7%	2.8%	4.8%	6.5%	0.0%	0.9%	0.0%	9.8%	1.9%
	Noon-3 PM	3.9%	6.0%	3.9%	3.9%	8.8%	1.3%	1.2%	2.9%	8.5%	1.2%	0.1%	4.4%	4.6%	2.6%	0.4%	0.2%	1.8%	2.8%	5.1%	5.7%	0.0%	0.3%	0.0%	9.9%	1.5%
	3-6 PM	4.5%	6.8%	4.0%	4.8%	9.5%	1.1%	1.5%	2.8%	9.4%	1.5%	0.2%	4.6%	4.7%	3.7%	0.4%	0.2%	1.8%	3.5%	6.0%	5.7%	0.1%	0.7%	0.0%	9.9%	2.2%
	6-9 PM	3.9%	6.5%	4.5%	4.2%	9.1%	1.5%	1.1%	2.6%	9.5%	1.6%	0.1%	4.4%	5.0%	3.3%	0.3%	0.3%	1.6%	3.1%	5.4%	6.4%	0.0%	0.5%	0.0%	10.0%	1.5%
	9-Midnight	3.7%	5.0%	3.6%	3.4%	7.8%	1.1%	1.1%	2.3%	7.2%	1.6%	0.1%	3.8%	3.8%	3.1%	0.1%	0.2%	1.3%	2.9%	3.9%	5.5%	0.0%	0.5%	0.0%	9.2%	1.6%
Lighting Conditions	Dark - Lighted	7.2%	12.6%	9.9%	8.2%	18.0%	3.3%	2.2%	6.1%	18.0%	3.2%	0.2%	9.8%	9.7%	6.4%	0.5%	0.4%	2.7%	5.8%	10.1%	14.3%	0.1%	0.5%	0.0%	21.2%	4.1%
	Dark - Not Lighted	2.7%	2.2%	1.2%	2.8%	2.8%	0.3%	0.5%	0.9%	2.7%	1.4%	0.5%	2.1%	1.3%	1.5%	0.2%	0.1%	0.8%	2.3%	1.6%	1.8%	0.1%	1.5%	0.0%	3.6%	0.9%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.7%	0.8%	0.4%	0.6%	1.2%	0.1%	0.2%	0.3%	1.1%	0.3%	0.1%	0.6%	0.5%	0.6%	0.1%	0.0%	0.2%	0.6%	0.6%	0.6%	0.1%	0.3%	0.0%	1.3%	0.2%
	Daylight	16.4%	26.1%	16.6%	16.8%	36.7%	5.8%	4.9%	10.7%	36.6%	6.4%	0.6%	17.9%	20.1%	12.5%	1.5%	0.7%	6.7%	12.5%	21.7%	25.0%	0.1%	2.7%	0.0%	40.4%	7.0%
	Dusk	0.8%	1.3%	0.9%	0.9%	1.8%	0.4%	0.3%	0.4%	2.0%	0.3%	0.0%	0.9%	1.0%	0.7%	0.1%	0.1%	0.5%	0.6%	1.0%	1.4%	0.0%	0.2%	0.0%	2.2%	0.3%
	Other	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment C-5
Orange County
Percent of All KSI Crashes involving only Car Truck 2018-2022

Mode: All	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	1.5%	0.1%	0.2%	0.0%	8.0%	1.6%	1.8%	10.1%	1.2%	0.1%	1.6%	1.7%	8.1%	5.7%	3.2%	0.1%	2.4%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.8%	0.0%	0.0%	0.0%	2.8%	0.2%	0.9%	3.8%	0.1%	0.0%	0.7%	0.6%	2.7%	2.2%	0.9%	0.1%	0.9%	0.0%
	Left Turn	2.2%	0.3%	0.0%	0.0%	17.1%	4.4%	4.3%	22.1%	3.6%	0.1%	2.4%	3.0%	20.5%	8.2%	9.7%	0.3%	7.5%	0.1%
	Off Road	0.7%	0.2%	0.0%	0.0%	8.6%	0.9%	2.9%	11.8%	0.6%	0.1%	2.2%	1.9%	8.4%	5.2%	4.7%	0.2%	2.3%	0.1%
	Other	2.6%	0.2%	0.2%	0.0%	8.5%	1.3%	2.4%	11.1%	1.0%	0.1%	1.9%	1.4%	9.0%	5.1%	3.9%	0.3%	2.7%	0.2%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	3.2%	0.1%	0.0%	0.0%	14.5%	5.2%	5.9%	20.9%	4.4%	0.2%	2.2%	2.2%	21.3%	5.0%	9.9%	0.8%	9.9%	0.1%
	Right Turn	0.2%	0.0%	0.0%	0.0%	1.2%	0.2%	0.5%	1.7%	0.2%	0.0%	0.2%	0.1%	1.6%	0.4%	0.7%	0.0%	0.9%	0.0%
	Rollover	0.1%	0.0%	0.0%	0.0%	0.5%	0.1%	0.4%	0.9%	0.1%	0.0%	0.4%	0.1%	0.5%	0.3%	0.5%	0.0%	0.1%	0.0%
	Sideswipe	0.4%	0.1%	0.1%	0.0%	2.3%	0.8%	1.0%	3.4%	0.6%	0.1%	0.3%	0.4%	3.3%	1.2%	1.8%	0.1%	1.0%	0.0%
	Unknown	0.1%	0.0%	0.0%	0.0%	0.8%	0.2%	0.5%	1.4%	0.2%	0.0%	0.1%	0.1%	1.3%	0.4%	0.7%	0.0%	0.4%	0.0%
Alcohol Related	Y	1.0%	0.1%	0.0%	0.0%	3.6%	0.8%	1.3%	5.1%	0.7%	0.0%	1.0%	0.5%	4.2%	2.2%	2.0%	0.2%	1.3%	0.0%
	N	10.8%	0.7%	0.5%	0.0%	60.7%	14.1%	19.4%	82.4%	11.3%	0.6%	10.9%	10.9%	72.4%	31.4%	34.1%	1.7%	26.7%	0.4%
Hit and Run	Y	1.3%	0.1%	0.0%	0.0%	5.7%	1.6%	1.6%	7.6%	0.9%	0.0%	0.6%	0.7%	7.3%	3.2%	2.5%	0.1%	2.6%	0.1%
	N	10.6%	0.8%	0.5%	0.0%	58.7%	19.1%	19.1%	79.8%	11.0%	0.6%	11.4%	10.8%	69.3%	30.4%	33.6%	1.8%	25.4%	0.3%
Aggressive Driving	Y	1.0%	0.1%	0.1%	0.0%	3.3%	0.9%	0.9%	4.3%	0.6%	0.0%	0.6%	0.9%	3.4%	2.2%	1.7%	0.1%	0.9%	0.0%
	N	10.9%	0.8%	0.4%	0.0%	61.1%	19.7%	19.7%	83.2%	11.4%	0.6%	11.4%	10.6%	73.2%	31.4%	34.4%	1.9%	27.0%	0.4%
Distracted Driving	Y	3.2%	0.1%	0.1%	0.0%	21.1%	6.4%	6.4%	28.2%	4.2%	0.2%	3.9%	3.5%	25.2%	9.8%	12.2%	0.9%	9.6%	0.1%
	N	8.6%	0.8%	0.4%	0.0%	43.2%	14.3%	14.3%	59.3%	7.7%	0.4%	8.0%	7.9%	51.4%	23.8%	23.9%	1.1%	18.3%	0.2%
Intersection Related	Y	4.9%	0.4%	0.3%	0.0%	28.0%	7.8%	7.8%	37.0%	6.2%	0.2%	4.5%	5.0%	34.0%	14.5%	15.4%	0.7%	12.7%	0.1%
	N	6.9%	0.4%	0.2%	0.0%	36.3%	12.8%	12.8%	50.4%	5.7%	0.4%	7.5%	6.5%	42.6%	19.1%	20.7%	1.3%	15.2%	0.2%
Drug Related	Y	0.6%	0.0%	0.0%	0.0%	2.0%	0.5%	0.5%	2.6%	0.4%	0.0%	0.4%	0.4%	2.2%	1.2%	1.1%	0.0%	0.8%	0.0%
	N	11.3%	0.8%	0.5%	0.0%	62.4%	20.1%	20.1%	84.8%	11.5%	0.6%	11.5%	11.0%	74.4%	32.4%	35.0%	1.9%	27.2%	0.4%
Aging Driver	Y	2.0%	0.1%	0.2%	0.0%	10.3%	3.3%	3.3%	13.9%	2.2%	0.2%	2.3%	1.9%	12.2%	5.6%	5.6%	0.3%	4.9%	0.0%
	N	9.9%	0.7%	0.3%	0.0%	54.1%	17.3%	17.3%	73.5%	9.7%	0.4%	9.7%	9.6%	64.4%	28.0%	30.5%	1.7%	23.1%	0.4%
Teenage Driver	Y	1.0%	0.1%	0.1%	0.0%	8.6%	3.4%	3.4%	12.1%	1.7%	0.1%	1.0%	1.8%	11.1%	4.1%	5.2%	0.2%	4.4%	0.1%
	N	10.9%	0.8%	0.4%	0.0%	55.8%	17.3%	17.3%	75.3%	10.3%	0.5%	10.9%	9.7%	65.5%	29.5%	30.9%	1.8%	23.6%	0.3%
Day of the Week	Monday	1.4%	0.2%	0.2%	0.0%	8.4%	3.0%	3.0%	12.6%	1.4%	0.1%	1.6%	1.4%	11.1%	4.8%	4.9%	0.3%	3.9%	0.1%
	Tuesday	1.6%	0.1%	0.1%	0.0%	8.9%	2.9%	2.9%	12.9%	1.5%	0.0%	1.8%	1.8%	10.8%	4.9%	5.1%	0.1%	4.3%	0.1%
	Wednesday	1.9%	0.1%	0.0%	0.0%	8.9%	2.4%	2.4%	12.3%	2.0%	0.1%	1.6%	2.0%	10.7%	4.7%	5.6%	0.2%	3.8%	0.1%
	Thursday	2.0%	0.1%	0.1%	0.0%	8.8%	2.9%	2.9%	12.6%	1.3%	0.1%	1.8%	1.5%	10.7%	5.1%	4.7%	0.1%	4.1%	0.0%
	Friday	1.5%	0.0%	0.1%	0.0%	9.2%	3.0%	3.0%	13.1%	2.2%	0.1%	1.9%	1.7%	11.9%	5.1%	5.5%	0.3%	4.6%	0.0%
	Saturday	2.0%	0.2%	0.1%	0.0%	8.9%	3.0%	3.0%	13.0%	2.0%	0.1%	1.8%	1.5%	11.8%	4.6%	5.7%	0.6%	4.1%	0.0%
	Sunday	1.5%	0.1%	0.1%	0.0%	7.8%	2.4%	2.4%	10.9%	1.5%	0.0%	1.5%	1.5%	9.5%	4.3%	4.6%	0.3%	3.3%	0.1%
Time of Day	12-3 AM	1.8%	0.1%	0.1%	0.0%	4.6%	2.1%	2.1%	7.2%	1.2%	0.1%	1.2%	0.8%	6.5%	2.3%	3.2%	0.3%	2.6%	0.1%
	3-6 AM	0.8%	0.2%	0.0%	0.0%	3.8%	1.1%	1.1%	5.4%	0.8%	0.0%	1.2%	0.7%	4.4%	2.0%	2.7%	0.2%	1.4%	0.0%
	6-9 AM	1.5%	0.1%	0.0%	0.0%	9.2%	2.8%	2.8%	13.1%	1.8%	0.1%	1.7%	1.5%	11.8%	5.1%	5.1%	0.4%	4.3%	0.1%
	9-Noon	1.6%	0.2%	0.1%	0.0%	8.6%	2.6%	2.6%	12.3%	1.7%	0.0%	1.9%	1.6%	10.6%	4.4%	5.1%	0.2%	4.4%	0.0%
	Noon-3 PM	1.8%	0.0%	0.1%	0.0%	8.6%	2.6%	2.6%	12.2%	1.5%	0.1%	1.6%	1.6%	10.7%	5.0%	4.7%	0.2%	3.9%	0.0%
	3-6 PM	1.9%	0.2%	0.1%	0.0%	9.7%	3.0%	3.0%	13.8%	1.4%	0.1%	1.3%	1.8%	12.2%	5.8%	5.5%	0.2%	3.8%	0.0%
	6-9 PM	1.0%	0.1%	0.1%	0.0%	9.1%	3.0%	3.0%	12.9%	1.8%	0.1%	1.5%	1.8%	11.6%	4.9%	5.4%	0.3%	4.1%	0.1%
	9-Midnight	1.5%	0.1%	0.0%	0.0%	7.2%	2.5%	2.5%	10.5%	1.7%	0.0%	1.7%	1.7%	8.9%	4.2%	4.4%	0.2%	3.4%	0.1%
Lighting Conditions	Dark - Lighted	4.3%	0.3%	0.2%	0.0%	18.1%	5.6%	5.6%	25.4%	4.1%	0.2%	2.5%	3.3%	23.9%	9.2%	10.7%	0.8%	8.7%	0.3%
	Dark - Not Lighted	0.4%	0.0%	0.0%	0.0%	2.9%	2.0%	2.0%	5.4%	0.6%	0.0%	2.3%	1.2%	2.5%	2.5%	2.4%	0.1%	1.0%	0.0%
	Dark - Unknown Lighting	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.2%	0.1%	0.0%	0.0%	1.1%	0.4%	0.4%	1.7%	0.2%	0.0%	0.4%	0.2%	1.4%	0.7%	0.7%	0.0%	0.5%	0.0%
	Daylight	6.8%	0.4%	0.3%	0.0%	37.0%	10.8%	10.8%	52.2%	6.5%	0.4%	6.4%	6.4%	46.3%	20.3%	21.1%	1.0%	16.7%	0.1%
	Dusk	0.1%	0.0%	0.0%	0.0%	1.7%	0.7%	0.7%	2.6%	0.4%	0.0%	0.3%	0.4%	2.4%	0.9%	1.1%	0.1%	1.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment C-6
Orange County
Percent of All KSI Crashes involving Motorcyclists 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	3.5%	3.1%	1.3%	3.4%	4.2%	0.5%	1.9%	2.4%	3.1%	0.5%	0.0%	2.6%	1.3%	2.2%	0.3%	0.2%	1.4%	2.2%	2.7%	2.4%	0.0%	0.3%	0.0%	3.2%	0.0%
	Animal	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	1.1%	0.8%	0.0%	1.3%	0.6%	0.0%	0.3%	0.3%	0.6%	0.6%	0.0%	0.5%	0.3%	0.6%	0.2%	0.0%	0.3%	0.7%	0.9%	0.2%	0.0%	0.3%	0.0%	0.3%	0.0%
	Left Turn	8.9%	14.8%	5.0%	8.3%	18.9%	1.3%	2.7%	6.8%	16.6%	2.6%	0.0%	7.2%	8.8%	7.8%	0.8%	0.3%	3.5%	8.3%	10.0%	10.0%	0.0%	0.3%	0.0%	16.4%	3.2%
	Off Road	5.3%	5.6%	1.9%	6.9%	5.9%	0.3%	2.1%	3.1%	7.1%	0.6%	0.0%	1.9%	4.2%	3.4%	0.5%	0.2%	3.0%	3.6%	3.8%	3.8%	0.0%	0.0%	0.0%	5.8%	1.3%
	Other	5.6%	7.7%	5.6%	7.0%	10.6%	1.4%	2.1%	4.2%	9.8%	2.6%	0.3%	7.2%	5.3%	3.7%	0.5%	0.3%	2.1%	4.7%	6.4%	8.2%	0.3%	0.0%	0.0%	13.2%	2.6%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	2.7%	6.8%	6.6%	4.2%	9.1%	2.7%	0.2%	1.9%	11.4%	2.3%	0.3%	8.5%	5.4%	1.8%	0.2%	0.0%	0.2%	2.0%	5.3%	10.7%	0.0%	1.3%	0.0%	15.8%	2.3%
	Right Turn	0.0%	0.3%	0.6%	0.3%	0.5%	0.2%	0.0%	0.0%	0.5%	0.3%	0.2%	0.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.7%	0.0%	0.3%	0.0%	1.3%	0.0%
	Rollover	2.7%	1.3%	1.3%	2.4%	2.6%	0.3%	0.3%	1.6%	2.3%	1.0%	0.2%	1.6%	0.8%	1.8%	0.3%	0.0%	0.8%	1.8%	1.1%	2.2%	0.0%	0.3%	0.0%	2.3%	0.6%
	Sideswipe	0.8%	1.4%	2.7%	1.4%	3.2%	0.3%	0.2%	0.8%	3.1%	1.0%	0.0%	2.9%	1.1%	0.8%	0.2%	0.0%	0.0%	0.7%	2.0%	2.9%	0.0%	0.0%	0.0%	5.8%	0.3%
	Unknown	0.3%	1.0%	0.6%	0.2%	1.6%	0.2%	0.0%	0.5%	1.1%	0.3%	0.0%	1.1%	0.5%	0.3%	0.0%	0.0%	0.0%	0.4%	0.5%	1.3%	0.0%	0.0%	0.0%	1.6%	0.0%
Alcohol Related	Y	1.6%	3.5%	1.0%	2.1%	4.0%	0.0%	0.5%	1.1%	3.2%	0.8%	0.5%	2.1%	1.1%	1.9%	0.2%	0.2%	0.6%	2.0%	2.0%	2.2%	0.0%	1.0%	0.0%	3.5%	0.6%
	N	29.8%	39.3%	24.8%	33.6%	53.1%	7.2%	9.5%	20.5%	52.3%	11.1%	0.5%	32.2%	26.7%	20.5%	2.9%	0.8%	10.9%	22.9%	30.9%	40.1%	0.3%	1.9%	0.0%	62.1%	9.6%
Hit and Run	Y	2.1%	2.3%	1.1%	1.4%	3.4%	0.6%	0.3%	1.3%	3.2%	0.6%	0.0%	1.4%	1.4%	1.8%	0.3%	0.2%	0.3%	1.5%	2.0%	2.2%	0.0%	0.3%	0.0%	3.9%	0.0%
	N	29.3%	40.6%	24.6%	34.2%	53.8%	6.6%	9.7%	20.3%	52.3%	11.3%	1.0%	32.8%	26.4%	20.6%	2.7%	0.8%	11.2%	23.4%	30.9%	40.1%	0.3%	2.6%	0.0%	61.7%	10.3%
Aggressive Driving	Y	3.4%	3.9%	1.3%	2.9%	5.1%	0.5%	0.8%	2.9%	4.8%	0.0%	0.0%	2.9%	1.9%	3.2%	0.0%	0.0%	0.5%	2.4%	2.9%	3.8%	0.0%	0.0%	0.0%	3.5%	1.0%
	N	28.0%	39.0%	24.5%	32.8%	52.0%	6.7%	9.2%	18.7%	50.7%	11.9%	1.0%	31.4%	25.9%	19.2%	3.0%	1.0%	11.0%	22.5%	29.9%	38.5%	0.3%	2.9%	0.0%	62.1%	9.3%
Distracted Driving	Y	8.1%	11.8%	6.4%	9.6%	14.9%	1.6%	2.9%	4.8%	15.1%	3.2%	0.2%	8.3%	8.3%	6.6%	0.2%	0.3%	2.4%	6.5%	8.3%	11.8%	0.0%	1.3%	0.0%	16.7%	1.3%
	N	23.3%	31.1%	19.3%	26.1%	42.2%	5.6%	7.1%	16.7%	40.4%	8.7%	0.8%	25.9%	19.5%	15.8%	2.9%	0.6%	9.1%	18.3%	24.5%	30.5%	0.3%	1.6%	0.0%	48.9%	9.0%
Intersection Related	Y	14.3%	18.8%	7.7%	13.1%	25.0%	2.6%	4.7%	9.7%	22.2%	4.0%	0.3%	12.2%	10.7%	11.8%	1.3%	0.5%	4.2%	12.9%	14.0%	14.3%	0.0%	1.0%	0.0%	23.5%	4.2%
	N	17.1%	24.0%	18.0%	22.6%	32.2%	4.6%	5.3%	11.9%	33.3%	7.9%	0.6%	22.1%	17.1%	10.6%	1.8%	0.5%	7.4%	12.0%	18.9%	27.9%	0.3%	1.9%	0.0%	42.1%	6.1%
Drug Related	Y	1.8%	2.1%	0.5%	1.1%	3.0%	0.2%	0.8%	0.6%	2.3%	0.5%	0.2%	0.6%	1.4%	1.3%	0.2%	0.2%	0.6%	1.6%	1.3%	1.3%	0.0%	0.3%	0.0%	1.9%	1.0%
	N	29.6%	40.7%	25.3%	34.6%	54.1%	7.0%	9.2%	20.9%	53.3%	11.4%	0.8%	33.6%	26.4%	21.1%	2.9%	0.8%	10.9%	23.2%	31.6%	41.0%	0.3%	2.6%	0.0%	63.7%	9.3%
Aging Driver	Y	2.9%	4.5%	1.9%	2.6%	5.6%	1.1%	1.0%	1.1%	5.8%	1.4%	0.0%	3.0%	2.9%	1.9%	0.3%	0.0%	1.1%	1.6%	4.2%	3.4%	0.0%	0.3%	0.0%	7.4%	1.0%
	N	28.5%	38.3%	23.8%	33.1%	51.5%	6.1%	9.0%	20.5%	49.8%	10.5%	1.0%	31.2%	25.0%	20.5%	2.7%	1.0%	10.4%	23.2%	28.7%	38.8%	0.3%	2.6%	0.0%	58.2%	9.3%
Teenage Driver	Y	2.3%	3.7%	2.3%	2.6%	5.1%	0.5%	0.8%	1.4%	4.7%	1.3%	0.0%	3.4%	1.0%	1.9%	0.3%	0.3%	1.3%	2.4%	2.0%	3.4%	0.0%	0.0%	0.0%	6.1%	0.3%
	N	29.1%	39.1%	23.5%	33.1%	52.0%	6.7%	9.2%	20.1%	50.9%	10.6%	1.0%	30.9%	26.9%	20.5%	2.7%	0.6%	10.2%	22.5%	30.9%	38.8%	0.3%	2.9%	0.0%	59.5%	10.0%
Day of the Week	Monday	5.0%	3.7%	2.4%	4.3%	6.1%	0.6%	1.4%	1.8%	6.6%	1.0%	0.3%	2.7%	3.7%	2.9%	0.3%	0.0%	1.4%	3.8%	3.1%	4.0%	0.3%	0.3%	0.0%	6.8%	1.0%
	Tuesday	2.4%	5.8%	3.9%	3.4%	8.0%	0.6%	0.8%	2.4%	6.6%	2.1%	0.2%	5.1%	3.0%	2.1%	0.6%	0.3%	0.8%	2.4%	4.5%	5.6%	0.0%	1.0%	0.0%	8.7%	1.0%
	Wednesday	3.5%	7.1%	2.7%	5.3%	7.4%	0.6%	1.0%	4.5%	7.1%	0.8%	0.0%	4.5%	4.2%	2.9%	0.2%	0.3%	1.3%	2.4%	6.4%	4.9%	0.0%	0.0%	0.0%	7.7%	1.3%
	Thursday	5.2%	6.8%	4.5%	5.1%	9.9%	1.3%	1.6%	4.0%	9.0%	1.8%	0.0%	5.8%	5.0%	3.5%	0.3%	0.0%	1.8%	3.3%	5.8%	7.4%	0.0%	0.3%	0.0%	11.3%	1.6%
	Friday	5.6%	7.1%	4.2%	6.6%	9.3%	1.1%	2.1%	3.1%	9.7%	1.9%	0.2%	6.4%	3.7%	4.2%	0.5%	0.3%	1.9%	5.3%	4.4%	7.3%	0.0%	0.6%	0.0%	10.0%	2.3%
	Saturday	5.0%	6.9%	4.3%	5.6%	9.1%	1.8%	1.9%	2.7%	9.3%	2.3%	0.0%	5.6%	4.3%	3.4%	0.8%	0.0%	2.4%	4.2%	3.6%	8.2%	0.0%	0.0%	0.0%	12.2%	1.3%
	Sunday	4.7%	5.5%	3.7%	5.4%	7.4%	1.1%	1.1%	3.1%	7.2%	2.1%	0.3%	4.2%	4.0%	3.5%	0.3%	0.0%	1.9%	3.6%	5.1%	4.9%	0.0%	0.6%	0.0%	9.0%	1.9%
Time of Day	12-3 AM	1.8%	3.9%	1.4%	2.9%	3.7%	0.5%	0.3%	1.4%	4.0%	1.1%	0.2%	2.7%	2.9%	1.1%	0.0%	0.0%	0.3%	1.3%	3.1%	3.3%	0.0%	0.3%	0.0%	5.1%	1.3%
	3-6 AM	0.8%	1.1%	0.8%	0.6%	1.9%	0.2%	0.2%	0.8%	1.3%	0.5%	0.0%	1.1%	0.8%	0.3%	0.2%	0.2%	0.2%	0.9%	0.9%	1.1%	0.0%	0.3%	0.0%	1.6%	0.3%
	6-9 AM	2.4%	4.0%	2.7%	2.4%	6.2%	0.5%	0.3%	2.4%	5.3%	1.0%	0.2%	4.0%	2.4%	1.6%	0.3%	0.0%	0.8%	2.0%	3.1%	4.4%	0.0%	0.6%	0.0%	6.8%	1.3%
	9-Noon	2.7%	3.2%	1.9%	4.0%	3.5%	0.3%	0.8%	2.7%	3.7%	0.5%	0.2%	2.7%	1.9%	1.4%	0.6%	0.0%	1.1%	2.4%	2.5%	2.7%	0.3%	0.0%	0.0%	4.8%	0.6%
	Noon-3 PM	5.5%	5.5%	3.9%	5.9%	8.0%	1.1%	2.1%	2.1%	8.2%	2.3%	0.2%	4.2%	4.0%	4.0%	0.3%	0.0%	2.6%	4.9%	4.4%	4.9%	0.0%	1.0%	0.0%	9.0%	1.3%
	3-6 PM	5.8%	7.6%	4.7%	6.6%	10.1%	1.3%	2.6%	3.4%	9.5%	2.4%	0.2%	7.0%	4.8%	4.0%	0.2%	0.2%	1.8%	4.5%	5.8%	8.0%	0.0%	0.6%	0.0%	13.2%	1.3%
	6-9 PM	7.7%	7.9%	3.9%	5.9%	12.2%	1.4%	2.7%	3.9%	10.8%	1.9%	0.2%	4.2%	5.1%	5.9%	0.8%	0.3%	3.2%	4.2%	8.0%	6.0%	0.0%	0.0%	0.0%	8.4%	2.3%
	9-Midnight	4.7%	9.7%	6.4%	7.4%	11.5%	1.9%	1.0%	4.8%	12.7%	2.3%	0.0%	8.3%	5.9%	4.0%	0.6%	0.3%	1.6%	4.7%	5.1%	12.0%	0.0%	0.0%	0.0%	16.7%	1.9%
Lighting Conditions	Dark - Lighted	8.7%	17.6%	10.6%	11.8%	21.9%	3.2%	2.1%	9.3%	20.9%	4.5%	0.0%	13.9%	10.4%	7.8%	0.8%	0.8%	3.2%	7.6%	11.3%	19.1%	0.0%	0.0%	0.0%	26.0%	2.9%
	Dark - Not Lighted	3.4%	2.3%	0.8%	2.7%	3.7%	0.0%	0.5%	1.1%	3.4%	1.3%	0.2%	2.1%	1.8%	1.1%	0.6%	0.0%	0.8%	2.4%	2.2%	1.8%	0.0%	1.0%	0.0%	4.2%	1.3%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	1.3%	1.1%	0.3%	1.1%	1.4%	0.2%	0.3%	0.5%	1.8%	0.2%	0.0%	0.6%	0.5%	1.1%	0.0%	0.0%	0.5%	1.3%	0.4%	0.9%	0.0%	0.0%	0.0%	1.3%	0.3%
	Daylight	17.2%	19.8%	12.6%	18.7%	27.4%	3.5%	6.8%	9.7%	26.6%	5.8%	0.8%	16.0%	14.1%	11.2%	1.4%	0.2%	6.7%	13.4%	16.7%	18.5%	0.3%	1.9%	0.0%	30.9%	5.8%
	Dusk	0.8%	2.1%	1.4%	1.3%	2.7%	0.3%	0.3%	1.0%	2.9%	0.2%	0.0%	1.6%	1.1%	1.1%	0.2%	0.0%	0.3%	0.2%	2.4%	2.0%	0.0%	0.0%	0.0%	3.2%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment C-6
Orange County
Percent of All KSI Crashes involving Motorcyclists 2018-2022

Mode:	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	2.3%	0.0%	0.3%	0.0%	5.0%	1.1%	1.8%	7.1%	0.8%	0.0%	1.0%	0.6%	6.3%	4.0%	2.1%	0.0%	1.8%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.3%	0.0%	0.0%	0.0%	1.3%	0.0%	0.6%	1.9%	0.0%	0.0%	0.6%	0.6%	0.6%	1.4%	0.5%	0.0%	0.0%	0.0%
	Left Turn	4.8%	0.6%	0.0%	0.0%	19.6%	2.3%	6.8%	26.7%	1.8%	0.2%	1.9%	5.2%	21.6%	12.9%	8.2%	0.2%	7.2%	0.2%
	Off Road	1.6%	0.3%	0.3%	0.0%	9.8%	1.1%	1.9%	12.4%	0.5%	0.0%	1.6%	1.3%	10.0%	4.3%	4.7%	0.2%	3.4%	0.3%
	Other	2.9%	0.6%	0.3%	0.0%	11.0%	2.9%	5.2%	17.2%	1.8%	0.0%	2.3%	2.6%	14.2%	5.8%	6.9%	0.5%	5.8%	0.0%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	2.3%	0.6%	0.0%	0.0%	9.2%	2.4%	4.5%	13.7%	1.9%	0.5%	1.4%	2.3%	12.4%	3.5%	7.4%	0.3%	4.8%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.6%	0.8%	0.2%	0.0%	0.2%	0.0%	0.8%	0.0%	0.6%	0.0%	0.3%	0.0%
	Rollover	0.6%	0.3%	0.0%	0.0%	3.9%	0.3%	1.1%	5.2%	0.2%	0.0%	1.1%	0.6%	3.5%	2.1%	1.8%	0.3%	1.0%	0.2%
	Sideswipe	1.0%	0.3%	0.0%	0.0%	2.7%	1.0%	1.3%	4.0%	1.0%	0.0%	0.2%	0.5%	4.3%	1.3%	1.4%	0.0%	2.3%	0.0%
	Unknown	1.3%	0.0%	0.0%	0.0%	1.1%	0.3%	0.5%	1.6%	0.3%	0.0%	0.3%	0.0%	1.6%	0.6%	0.2%	0.0%	1.1%	0.0%
Alcohol Related	Y	0.6%	0.3%	0.3%	0.0%	3.9%	0.3%	1.9%	6.1%	0.0%	0.0%	1.0%	0.5%	4.7%	2.3%	2.3%	0.0%	1.4%	0.2%
	N	16.4%	2.6%	0.6%	0.0%	60.1%	11.3%	22.5%	84.9%	8.4%	0.6%	10.0%	13.2%	70.7%	34.1%	31.6%	1.4%	26.2%	0.5%
Hit and Run	Y	0.6%	0.0%	0.0%	0.0%	4.0%	1.0%	1.0%	5.0%	0.5%	0.0%	0.8%	1.0%	3.7%	2.9%	1.3%	0.2%	1.1%	0.0%
	N	16.4%	2.9%	1.0%	0.0%	59.9%	23.5%	23.5%	86.0%	7.9%	0.6%	10.1%	12.7%	71.7%	33.5%	32.5%	1.3%	26.6%	0.6%
Aggressive Driving	Y	2.6%	0.6%	0.6%	0.0%	5.6%	1.8%	1.8%	8.1%	0.5%	0.0%	0.5%	1.6%	6.4%	3.4%	2.1%	0.0%	2.9%	0.2%
	N	14.5%	2.3%	0.3%	0.0%	58.3%	22.7%	22.7%	82.9%	7.9%	0.6%	10.5%	12.1%	68.9%	33.0%	31.7%	1.4%	24.8%	0.5%
Distracted Driving	Y	3.9%	1.0%	0.0%	0.0%	17.1%	6.4%	6.4%	24.5%	1.6%	0.2%	2.9%	4.0%	19.3%	10.5%	9.3%	0.2%	6.3%	0.0%
	N	13.2%	1.9%	1.0%	0.0%	46.9%	18.0%	18.0%	66.5%	6.8%	0.5%	8.1%	9.7%	56.0%	25.9%	24.5%	1.3%	21.4%	0.6%
Intersection Related	Y	8.4%	0.6%	0.6%	0.0%	26.1%	9.7%	9.7%	37.0%	3.5%	0.3%	4.0%	5.8%	31.1%	17.4%	12.7%	0.5%	10.0%	0.3%
	N	8.7%	2.3%	0.3%	0.0%	37.8%	14.8%	14.8%	53.9%	4.8%	0.3%	6.9%	7.9%	44.3%	19.0%	21.1%	1.0%	17.7%	0.3%
Drug Related	Y	0.0%	0.3%	0.0%	0.0%	3.2%	0.8%	0.8%	4.2%	0.2%	0.0%	0.6%	1.0%	2.7%	2.1%	1.3%	0.0%	1.0%	0.0%
	N	17.0%	2.6%	1.0%	0.0%	60.7%	23.7%	23.7%	86.8%	8.2%	0.6%	10.3%	12.7%	72.6%	34.3%	32.5%	1.4%	26.7%	0.6%
Aging Driver	Y	1.0%	0.3%	0.0%	0.0%	5.8%	2.7%	2.7%	8.5%	0.6%	0.2%	1.0%	1.0%	7.4%	3.7%	3.2%	0.0%	2.4%	0.0%
	N	16.1%	2.6%	1.0%	0.0%	58.1%	21.7%	21.7%	82.4%	7.7%	0.5%	10.0%	12.7%	68.0%	32.7%	30.6%	1.4%	25.3%	0.6%
Teenage Driver	Y	1.0%	0.3%	0.0%	0.0%	4.2%	2.1%	2.1%	6.6%	1.6%	0.0%	0.6%	1.0%	6.6%	2.9%	2.7%	0.0%	2.6%	0.0%
	N	16.1%	2.6%	1.0%	0.0%	59.7%	22.4%	22.4%	84.4%	6.8%	0.6%	10.3%	12.7%	68.8%	33.5%	31.1%	1.4%	25.1%	0.6%
Day of the Week	Monday	1.0%	0.0%	0.0%	0.0%	6.4%	2.6%	2.6%	10.3%	0.8%	0.0%	1.6%	2.1%	7.4%	5.6%	3.2%	0.2%	2.1%	0.0%
	Tuesday	1.9%	0.3%	0.0%	0.0%	5.8%	3.3%	3.3%	10.8%	1.3%	0.0%	1.3%	1.3%	9.5%	3.9%	4.2%	0.0%	4.0%	0.0%
	Wednesday	2.9%	1.0%	0.3%	0.0%	7.8%	2.4%	2.4%	12.1%	1.1%	0.2%	1.4%	1.9%	10.0%	3.4%	5.0%	0.2%	4.5%	0.3%
	Thursday	2.3%	0.3%	0.3%	0.0%	9.6%	2.6%	2.6%	14.7%	1.8%	0.0%	1.8%	1.6%	13.0%	6.8%	5.2%	0.3%	4.2%	0.0%
	Friday	4.8%	1.0%	0.0%	0.0%	9.6%	4.3%	4.3%	16.1%	0.8%	0.0%	1.3%	3.1%	12.6%	6.8%	4.8%	0.3%	4.7%	0.3%
	Saturday	3.2%	0.3%	0.0%	0.0%	9.8%	3.1%	3.1%	14.3%	1.6%	0.3%	1.3%	2.7%	12.2%	5.5%	5.2%	0.2%	5.5%	0.0%
	Sunday	1.0%	0.0%	0.3%	0.0%	7.6%	3.4%	3.4%	12.7%	1.0%	0.2%	2.3%	1.0%	10.6%	4.5%	6.3%	0.3%	2.7%	0.0%
Time of Day	12-3 AM	2.3%	0.3%	0.6%	0.0%	3.4%	2.1%	2.1%	6.6%	0.5%	0.0%	0.6%	1.0%	5.5%	1.9%	2.1%	0.2%	2.7%	0.2%
	3-6 AM	0.0%	0.6%	0.0%	0.0%	1.3%	1.0%	1.0%	2.7%	0.0%	0.0%	0.2%	0.8%	1.8%	1.3%	1.3%	0.0%	0.2%	0.0%
	6-9 AM	2.3%	0.0%	0.0%	0.0%	4.7%	2.6%	2.6%	8.1%	1.0%	0.2%	1.0%	0.8%	7.4%	2.3%	3.9%	0.2%	2.7%	0.2%
	9-Noon	1.3%	0.0%	0.0%	0.0%	4.6%	2.0%	2.0%	7.6%	0.3%	0.0%	1.0%	1.0%	6.0%	2.4%	2.9%	0.0%	2.6%	0.0%
	Noon-3 PM	1.0%	0.0%	0.0%	0.0%	9.0%	3.0%	3.0%	13.8%	1.0%	0.0%	2.6%	2.3%	10.0%	5.6%	5.5%	0.5%	3.2%	0.0%
	3-6 PM	4.2%	0.6%	0.0%	0.0%	9.7%	3.7%	3.7%	15.3%	2.6%	0.2%	2.1%	2.3%	13.7%	6.9%	5.0%	0.3%	5.8%	0.0%
	6-9 PM	2.3%	0.0%	0.3%	0.0%	12.4%	3.1%	3.1%	18.7%	0.6%	0.2%	2.7%	3.1%	13.7%	8.5%	5.8%	0.2%	4.8%	0.2%
	9-Midnight	3.9%	1.3%	0.0%	0.0%	11.6%	4.1%	4.1%	18.2%	2.4%	0.2%	0.8%	2.6%	17.4%	7.4%	7.4%	0.2%	5.6%	0.2%
Lighting Conditions	Dark - Lighted	8.0%	2.3%	1.0%	0.0%	20.5%	7.6%	7.6%	33.2%	3.5%	0.2%	1.8%	4.0%	31.1%	12.1%	13.2%	0.5%	10.5%	0.6%
	Dark - Not Lighted	0.3%	0.0%	0.0%	0.0%	2.9%	2.4%	2.4%	6.1%	0.3%	0.0%	1.8%	1.6%	3.1%	3.1%	1.8%	0.0%	1.6%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.6%	0.0%	0.0%	0.0%	1.7%	0.4%	0.4%	2.6%	0.2%	0.0%	0.2%	0.6%	1.9%	1.3%	0.6%	0.0%	0.8%	0.0%
	Daylight	7.7%	0.6%	0.0%	0.0%	29.4%	10.3%	10.3%	45.2%	4.0%	0.3%	6.6%	6.6%	36.4%	18.4%	16.9%	0.6%	13.7%	0.0%
	Dusk	0.3%	0.0%	0.0%	0.0%	2.1%	1.0%	1.0%	3.9%	0.3%	0.2%	0.6%	0.8%	2.9%	1.6%	1.3%	0.3%	1.1%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment C-7
Orange County
Percent of All KSI Crashes involving Bicyclist 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	33.1%	41.6%	25.3%	32.0%	57.9%	10.1%	13.5%	23.7%	54.3%	8.2%	0.4%	33.6%	22.3%	23.5%	4.0%	1.2%	15.4%	25.5%	29.3%	45.2%	0.0%	0.0%	0.0%	76.2%	11.5%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.0%	1.2%	0.4%	0.0%	1.6%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.4%	0.8%	0.4%	0.0%	0.0%	0.0%	0.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.8%	0.0%
	N	33.1%	40.4%	24.9%	32.0%	56.3%	10.1%	13.5%	23.7%	52.7%	8.2%	0.4%	33.2%	21.5%	23.1%	4.0%	1.2%	15.4%	25.5%	28.4%	44.2%	0.0%	0.0%	0.0%	75.4%	11.5%
Hit and Run	Y	6.9%	8.2%	5.3%	5.3%	12.6%	2.4%	2.4%	4.9%	11.0%	2.0%	0.0%	8.5%	3.6%	4.9%	0.8%	0.0%	2.4%	4.3%	7.2%	9.6%	0.0%	0.0%	0.0%	18.0%	1.6%
	N	26.1%	33.5%	20.0%	26.7%	45.3%	7.7%	11.0%	18.8%	43.3%	6.1%	0.4%	25.1%	18.6%	18.6%	3.2%	1.2%	13.0%	21.2%	22.1%	35.6%	0.0%	0.0%	0.0%	58.2%	9.8%
Aggressive Driving	Y	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	32.7%	41.6%	25.3%	31.6%	57.9%	10.1%	13.5%	23.3%	54.3%	8.2%	0.4%	33.6%	22.3%	23.1%	4.0%	1.2%	15.4%	25.5%	28.8%	45.2%	0.0%	0.0%	0.0%	76.2%	11.5%
Distracted Driving	Y	4.9%	8.6%	5.7%	4.0%	11.3%	3.6%	1.2%	3.7%	13.1%	1.2%	0.0%	6.5%	4.9%	4.9%	1.2%	0.0%	1.6%	2.9%	7.2%	10.6%	0.0%	0.0%	0.0%	16.4%	4.1%
	N	28.2%	33.1%	19.6%	27.9%	46.6%	6.5%	12.2%	20.0%	41.2%	6.9%	0.4%	27.1%	17.4%	18.6%	2.8%	1.2%	13.8%	22.6%	22.1%	34.6%	0.0%	0.0%	0.0%	59.8%	7.4%
Intersection Related	Y	18.0%	17.1%	10.2%	13.8%	27.9%	3.2%	6.1%	14.3%	21.2%	3.7%	0.0%	12.1%	8.5%	15.0%	2.4%	0.4%	6.5%	15.9%	12.0%	17.3%	0.0%	0.0%	0.0%	32.8%	2.5%
	N	15.1%	24.5%	15.1%	18.2%	30.0%	6.9%	7.3%	9.4%	33.1%	4.5%	0.4%	21.5%	13.8%	8.5%	1.6%	0.8%	8.9%	9.6%	17.3%	27.9%	0.0%	0.0%	0.0%	43.4%	9.0%
Drug Related	Y	0.4%	0.8%	0.4%	0.4%	1.2%	0.0%	0.4%	0.0%	1.2%	0.0%	0.0%	0.4%	0.4%	0.4%	0.0%	0.0%	0.4%	0.0%	1.0%	0.5%	0.0%	0.0%	0.0%	0.8%	0.0%
	N	32.7%	40.8%	24.9%	31.6%	56.7%	10.1%	13.1%	23.7%	53.1%	8.2%	0.4%	33.2%	21.9%	23.1%	4.0%	1.2%	15.0%	25.5%	28.4%	44.7%	0.0%	0.0%	0.0%	75.4%	11.5%
Aging Driver	Y	4.1%	4.1%	2.9%	3.6%	7.3%	0.4%	1.6%	3.3%	5.7%	0.4%	0.0%	3.6%	2.8%	3.2%	0.0%	0.0%	1.6%	2.9%	3.8%	4.8%	0.0%	0.0%	0.0%	4.9%	2.5%
	N	29.0%	37.6%	22.4%	28.3%	50.6%	9.7%	11.8%	20.4%	48.6%	7.8%	0.4%	30.0%	19.4%	20.2%	4.0%	1.2%	13.8%	22.6%	25.5%	40.4%	0.0%	0.0%	0.0%	71.3%	9.0%
Teenage Driver	Y	2.0%	2.9%	1.2%	2.0%	3.6%	0.8%	0.4%	2.9%	2.9%	0.0%	0.0%	1.2%	1.6%	2.4%	0.4%	0.0%	0.8%	1.9%	2.4%	2.4%	0.0%	0.0%	0.0%	5.7%	0.0%
	N	31.0%	38.8%	24.1%	30.0%	54.3%	9.3%	13.1%	20.8%	51.4%	8.2%	0.4%	32.4%	20.6%	21.1%	3.6%	1.2%	14.6%	23.6%	26.9%	42.8%	0.0%	0.0%	0.0%	70.5%	11.5%
Day of the Week	Monday	6.5%	6.1%	5.3%	6.1%	9.3%	2.4%	2.0%	4.1%	10.6%	1.2%	0.0%	5.7%	4.5%	4.0%	1.2%	0.0%	2.4%	3.8%	5.8%	8.7%	0.0%	0.0%	0.0%	16.4%	0.8%
	Tuesday	5.3%	6.1%	4.9%	5.3%	9.7%	1.2%	2.9%	3.3%	8.6%	1.6%	0.0%	6.1%	2.4%	3.6%	0.0%	0.4%	3.6%	2.4%	5.3%	7.2%	0.0%	0.0%	0.0%	13.9%	0.0%
	Wednesday	3.7%	4.9%	4.1%	3.2%	8.9%	0.8%	1.2%	3.7%	7.3%	0.4%	0.0%	4.9%	2.4%	3.2%	0.8%	0.0%	1.6%	4.3%	3.4%	5.8%	0.0%	0.0%	0.0%	11.5%	0.8%
	Thursday	3.7%	6.5%	2.0%	3.6%	7.3%	1.2%	0.8%	3.7%	6.1%	1.2%	0.4%	5.3%	1.6%	3.6%	0.0%	0.4%	1.2%	3.4%	4.8%	4.8%	0.0%	0.0%	0.0%	11.5%	0.8%
	Friday	6.5%	4.9%	4.1%	6.1%	6.5%	2.8%	2.9%	4.9%	6.1%	1.6%	0.0%	4.9%	3.2%	3.2%	1.2%	0.0%	2.8%	5.8%	3.8%	5.3%	0.0%	0.0%	0.0%	9.8%	1.6%
	Saturday	2.9%	7.3%	3.3%	4.5%	8.1%	1.2%	1.2%	1.6%	9.8%	0.8%	0.0%	3.6%	5.7%	2.0%	0.0%	0.4%	2.0%	1.9%	3.8%	7.7%	0.0%	0.0%	0.0%	7.4%	4.1%
	Sunday	4.5%	5.7%	1.6%	3.2%	8.1%	0.4%	2.4%	2.4%	5.7%	1.2%	0.0%	3.2%	2.4%	3.6%	0.8%	0.0%	1.6%	3.8%	2.4%	5.8%	0.0%	0.0%	0.0%	5.7%	3.3%
Time of Day	12-3 AM	1.6%	2.0%	1.2%	1.6%	2.8%	0.4%	0.4%	1.2%	1.6%	1.6%	0.0%	2.0%	1.2%	0.8%	0.0%	0.0%	0.8%	1.0%	1.9%	1.9%	0.0%	0.0%	0.0%	2.5%	0.0%
	3-6 AM	2.4%	1.2%	1.2%	2.8%	1.6%	0.4%	0.8%	1.2%	2.4%	0.4%	0.0%	2.0%	0.4%	0.8%	0.4%	0.0%	1.2%	1.4%	1.0%	1.9%	0.0%	0.0%	0.0%	3.3%	0.0%
	6-9 AM	6.1%	7.3%	4.1%	4.5%	10.9%	2.0%	1.6%	4.9%	9.8%	1.2%	0.0%	5.3%	3.2%	6.1%	0.4%	0.0%	2.4%	4.8%	5.3%	7.7%	0.0%	0.0%	0.0%	13.9%	1.6%
	9-Noon	4.5%	5.7%	5.3%	4.0%	10.1%	1.2%	1.6%	4.1%	9.0%	0.8%	0.0%	5.3%	4.9%	2.8%	0.8%	0.4%	1.2%	5.8%	2.4%	8.2%	0.0%	0.0%	0.0%	14.8%	1.6%
	Noon-3 PM	4.5%	6.1%	2.9%	3.2%	8.5%	2.0%	2.0%	3.7%	6.5%	1.2%	0.0%	4.9%	3.2%	3.2%	0.8%	0.0%	1.6%	3.4%	3.8%	7.2%	0.0%	0.0%	0.0%	12.3%	0.8%
	3-6 PM	5.3%	6.5%	4.5%	7.3%	8.9%	0.4%	2.9%	3.7%	9.0%	0.8%	0.0%	5.7%	2.4%	3.6%	0.4%	0.4%	4.0%	2.9%	4.8%	7.2%	0.0%	0.0%	0.0%	11.5%	1.6%
	6-9 PM	5.3%	9.0%	3.7%	5.7%	9.7%	2.4%	2.4%	2.9%	11.4%	1.2%	0.0%	5.7%	4.5%	4.5%	0.4%	0.4%	2.4%	3.8%	7.2%	7.2%	0.0%	0.0%	0.0%	13.1%	2.5%
	9-Midnight	3.3%	3.7%	2.4%	2.8%	5.3%	1.2%	1.6%	2.0%	4.5%	0.8%	0.4%	2.8%	2.4%	1.6%	0.8%	0.0%	1.6%	2.4%	2.9%	3.8%	0.0%	0.0%	0.0%	4.9%	3.3%
Lighting Conditions	Dark - Lighted	5.3%	9.0%	7.8%	6.1%	13.0%	2.8%	1.6%	4.9%	13.1%	2.4%	0.0%	10.1%	5.3%	2.8%	1.2%	0.4%	2.0%	3.4%	7.7%	12.5%	0.0%	0.0%	0.0%	14.8%	2.5%
	Dark - Not Lighted	3.7%	3.7%	0.8%	3.6%	3.6%	0.8%	0.8%	1.6%	4.5%	0.8%	0.4%	2.0%	1.6%	2.0%	0.8%	0.0%	1.6%	2.9%	2.9%	1.9%	0.0%	0.0%	0.0%	6.6%	1.6%
	Dark - Unknown Lighting	0.4%	0.4%	0.0%	0.4%	0.4%	0.0%	0.4%	0.0%	0.4%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.4%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	1.2%	1.6%	0.0%	0.4%	1.6%	0.8%	0.4%	1.2%	1.2%	0.0%	0.0%	0.0%	1.2%	1.6%	0.0%	0.0%	0.0%	1.4%	1.0%	1.0%	0.0%	0.0%	0.0%	1.6%	0.0%
	Daylight	21.2%	26.5%	15.9%	21.1%	37.7%	5.3%	9.8%	15.5%	33.5%	4.9%	0.0%	20.6%	13.8%	15.8%	2.0%	0.8%	10.9%	16.8%	16.8%	28.8%	0.0%	0.0%	0.0%	50.8%	7.4%
	Dusk	0.8%	0.4%	0.4%	0.4%	0.8%	0.4%	0.4%	0.0%	1.2%	0.0%	0.0%	0.4%	0.0%	0.8%	0.0%	0.0%	0.4%	0.5%	0.5%	0.5%	0.0%	0.0%	0.0%	1.6%	0.0%
	Other	0.0%	0.0%	0.4%	0.0%	0.4%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.8%	0.0%
	Unknown	0.4%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment C-7
Orange County
Percent of All KSI Crashes involving Bicyclist 2018-2022

Mode: All	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	12.3%	0.0%	0.0%	0.0%	65.3%	11.0%	23.7%	90.6%	7.8%	1.6%	9.0%	6.9%	84.1%	38.8%	32.2%	0.4%	26.9%	1.6%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.0%	0.0%	0.0%	0.0%	1.2%	0.4%	0.0%	1.2%	0.4%	0.0%	0.0%	0.0%	1.6%	0.8%	0.4%	0.0%	0.4%	0.0%
	N	12.3%	0.0%	0.0%	0.0%	64.1%	10.6%	23.7%	89.4%	7.3%	1.6%	9.0%	6.9%	82.4%	38.0%	31.8%	0.4%	26.5%	1.6%
Hit and Run	Y	2.5%	0.0%	0.0%	0.0%	12.7%	5.3%	5.3%	18.8%	1.2%	0.4%	2.4%	1.6%	16.3%	8.6%	5.7%	0.0%	5.7%	0.4%
	N	9.8%	0.0%	0.0%	0.0%	52.7%	18.4%	18.4%	71.8%	6.5%	1.2%	6.5%	5.3%	67.8%	30.2%	26.5%	0.4%	21.2%	1.2%
Aggressive Driving	Y	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%
	N	12.3%	0.0%	0.0%	0.0%	65.3%	23.3%	23.3%	90.2%	7.8%	1.6%	9.0%	6.9%	83.7%	38.4%	32.2%	0.4%	26.9%	1.6%
Distracted Driving	Y	0.8%	0.0%	0.0%	0.0%	13.5%	4.1%	4.1%	17.1%	1.6%	0.4%	0.8%	0.8%	17.6%	6.1%	4.5%	0.0%	8.2%	0.4%
	N	11.5%	0.0%	0.0%	0.0%	51.8%	19.6%	19.6%	73.5%	6.1%	1.2%	8.2%	6.1%	66.5%	32.7%	27.8%	0.4%	18.8%	1.2%
Intersection Related	Y	5.7%	0.0%	0.0%	0.0%	29.0%	11.0%	11.0%	40.4%	4.5%	0.4%	3.3%	2.9%	39.2%	20.0%	13.9%	0.4%	10.6%	0.4%
	N	6.6%	0.0%	0.0%	0.0%	36.3%	12.7%	12.7%	50.2%	3.3%	1.2%	5.7%	4.1%	44.9%	18.8%	18.4%	0.0%	16.3%	1.2%
Drug Related	Y	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	1.2%	0.4%	0.0%	0.0%	0.0%	1.6%	0.8%	0.4%	0.0%	0.4%	0.0%
	N	12.3%	0.0%	0.0%	0.0%	64.1%	23.7%	23.7%	89.4%	7.3%	1.6%	9.0%	6.9%	82.4%	38.0%	31.8%	0.4%	26.5%	1.6%
Aging Driver	Y	2.5%	0.0%	0.0%	0.0%	8.2%	1.2%	1.2%	10.2%	0.8%	0.0%	0.4%	0.0%	10.6%	5.3%	2.0%	0.0%	3.7%	0.0%
	N	9.8%	0.0%	0.0%	0.0%	57.1%	22.4%	22.4%	80.4%	6.9%	1.6%	8.6%	6.9%	73.5%	33.5%	30.2%	0.4%	23.3%	1.6%
Teenage Driver	Y	0.0%	0.0%	0.0%	0.0%	4.1%	0.8%	0.8%	4.9%	1.2%	0.0%	0.0%	0.0%	6.1%	2.0%	2.0%	0.0%	1.6%	0.4%
	N	12.3%	0.0%	0.0%	0.0%	61.2%	22.9%	22.9%	85.7%	6.5%	1.6%	9.0%	6.9%	78.0%	36.7%	30.2%	0.4%	25.3%	1.2%
Day of the Week	Monday	0.8%	0.0%	0.0%	0.0%	11.6%	2.2%	2.2%	14.7%	2.4%	0.8%	1.2%	1.6%	15.1%	9.0%	2.0%	0.4%	5.7%	0.8%
	Tuesday	2.5%	0.0%	0.0%	0.0%	7.6%	5.8%	5.8%	15.9%	0.4%	0.0%	0.8%	1.6%	13.9%	4.9%	6.9%	0.0%	4.1%	0.4%
	Wednesday	0.0%	0.0%	0.0%	0.0%	6.9%	3.6%	3.6%	11.8%	0.4%	0.4%	0.8%	1.2%	10.6%	5.3%	4.9%	0.0%	2.0%	0.4%
	Thursday	1.6%	0.0%	0.0%	0.0%	5.4%	4.3%	4.3%	10.6%	1.2%	0.4%	2.4%	1.2%	8.6%	3.7%	6.5%	0.0%	2.0%	0.0%
	Friday	2.5%	0.0%	0.0%	0.0%	9.4%	1.4%	1.4%	13.9%	1.6%	0.0%	1.2%	0.4%	13.9%	6.9%	4.1%	0.0%	4.5%	0.0%
	Saturday	2.5%	0.0%	0.0%	0.0%	9.1%	2.2%	2.2%	12.7%	0.8%	0.0%	1.6%	0.8%	11.0%	4.5%	3.3%	0.0%	5.7%	0.0%
	Sunday	2.5%	0.0%	0.0%	0.0%	8.0%	1.4%	1.4%	11.0%	0.8%	0.0%	0.8%	0.0%	11.0%	4.5%	4.5%	0.0%	2.9%	0.0%
Time of Day	12-3 AM	1.6%	0.0%	0.0%	0.0%	2.9%	0.4%	0.4%	4.5%	0.4%	0.0%	0.4%	0.0%	4.5%	2.0%	1.6%	0.0%	1.2%	0.0%
	3-6 AM	0.0%	0.0%	0.0%	0.0%	2.5%	1.4%	1.4%	4.5%	0.0%	0.4%	0.4%	0.8%	3.7%	2.4%	0.8%	0.4%	0.4%	0.8%
	6-9 AM	0.8%	0.0%	0.0%	0.0%	9.8%	5.1%	5.1%	16.7%	0.4%	0.4%	1.6%	2.9%	13.1%	5.7%	5.3%	0.0%	6.1%	0.4%
	9-Noon	1.6%	0.0%	0.0%	0.0%	8.7%	3.3%	3.3%	13.1%	2.0%	0.4%	0.4%	0.4%	14.7%	5.3%	4.9%	0.0%	4.9%	0.4%
	Noon-3 PM	2.5%	0.0%	0.0%	0.0%	7.2%	2.5%	2.5%	11.0%	2.0%	0.4%	0.8%	1.2%	11.4%	6.1%	4.1%	0.0%	3.3%	0.0%
	3-6 PM	1.6%	0.0%	0.0%	0.0%	9.4%	3.3%	3.3%	15.1%	1.2%	0.0%	1.6%	1.6%	13.1%	6.1%	8.6%	0.0%	1.6%	0.0%
	6-9 PM	1.6%	0.0%	0.0%	0.0%	9.8%	4.7%	4.7%	16.7%	1.2%	0.0%	1.6%	0.0%	16.3%	7.3%	5.3%	0.0%	5.3%	0.0%
	9-Midnight	2.5%	0.0%	0.0%	0.0%	7.6%	0.4%	0.4%	9.0%	0.4%	0.0%	2.0%	0.0%	7.3%	3.7%	1.6%	0.0%	4.1%	0.0%
Lighting Conditions	Dark - Lighted	5.7%	0.0%	0.0%	0.0%	13.8%	3.3%	3.3%	20.8%	0.8%	0.4%	1.2%	0.0%	20.8%	7.8%	6.5%	0.4%	6.9%	0.4%
	Dark - Not Lighted	0.0%	0.0%	0.0%	0.0%	4.7%	1.8%	1.8%	7.3%	0.4%	0.4%	2.0%	0.8%	5.3%	3.7%	2.0%	0.0%	2.0%	0.4%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.4%	0.4%	0.4%	0.8%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.4%	0.0%	0.0%	0.4%
	Dawn	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	2.4%	0.4%	0.0%	0.4%	0.0%	2.4%	1.6%	0.0%	0.0%	1.2%	0.0%
	Daylight	6.6%	0.0%	0.0%	0.0%	35.1%	15.2%	15.2%	56.7%	6.1%	0.8%	4.9%	6.1%	52.7%	24.9%	22.9%	0.0%	15.5%	0.4%
	Dusk	0.0%	0.0%	0.0%	0.0%	1.1%	0.4%	0.4%	1.6%	0.0%	0.0%	0.0%	0.0%	1.6%	0.4%	0.0%	0.0%	1.2%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.4%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%

Attachment C-8
Orange County
Percent of All KSI Crashes involving Pedestrians 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	23.1%	37.9%	39.0%	27.8%	61.8%	10.4%	10.0%	20.1%	59.8%	10.1%	0.0%	42.9%	28.4%	15.7%	1.7%	0.1%	11.1%	15.3%	30.9%	53.9%	0.0%	0.7%	0.0%	68.9%	6.3%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.7%	1.4%	0.4%	1.0%	1.3%	0.3%	0.1%	1.0%	1.2%	0.3%	0.0%	1.1%	0.7%	0.6%	0.0%	0.0%	0.1%	0.6%	1.4%	0.6%	0.0%	0.2%	0.0%	1.9%	0.2%
	N	22.4%	36.4%	38.6%	26.8%	60.5%	10.1%	9.8%	19.1%	58.7%	9.8%	0.0%	41.8%	27.7%	15.1%	1.7%	0.1%	11.0%	14.6%	29.4%	53.2%	0.0%	0.5%	0.0%	67.0%	6.1%
Hit and Run	Y	6.9%	6.6%	7.1%	6.3%	12.7%	1.6%	3.0%	4.5%	11.8%	1.3%	0.0%	7.8%	6.1%	2.9%	0.3%	0.0%	3.4%	3.5%	6.8%	9.0%	0.0%	0.0%	0.0%	11.5%	1.2%
	N	16.2%	31.2%	31.9%	21.5%	49.1%	8.8%	6.9%	15.6%	48.0%	8.8%	0.0%	35.1%	22.3%	12.8%	1.4%	0.1%	7.7%	11.7%	24.1%	44.9%	0.0%	0.7%	0.0%	57.4%	5.2%
Aggressive Driving	Y	0.6%	0.7%	1.0%	0.6%	1.6%	0.1%	0.3%	0.6%	1.3%	0.1%	0.0%	1.4%	0.3%	0.3%	0.0%	0.0%	0.3%	0.3%	0.6%	1.3%	0.0%	0.0%	0.0%	1.4%	0.0%
	N	22.5%	37.1%	38.0%	27.2%	60.2%	10.3%	9.7%	19.5%	58.5%	10.0%	0.0%	41.5%	28.1%	15.4%	1.7%	0.1%	10.8%	15.0%	30.2%	52.6%	0.0%	0.7%	0.0%	67.4%	6.3%
Distracted Driving	Y	3.5%	3.5%	3.2%	3.1%	6.4%	0.9%	1.4%	2.2%	6.4%	0.1%	0.0%	3.6%	2.6%	1.9%	0.1%	0.0%	2.3%	1.8%	2.9%	4.5%	0.0%	0.2%	0.0%	5.4%	0.7%
	N	19.7%	34.4%	35.8%	24.7%	55.3%	9.6%	8.5%	17.9%	53.5%	10.0%	0.0%	39.4%	25.8%	13.8%	1.6%	0.1%	8.8%	13.5%	28.0%	49.4%	0.0%	0.5%	0.0%	63.5%	5.6%
Intersection Related	Y	7.9%	10.1%	11.4%	5.4%	19.5%	4.3%	2.9%	7.1%	16.8%	2.7%	0.0%	11.4%	8.3%	5.4%	0.7%	0.1%	3.3%	5.5%	8.4%	15.3%	0.0%	0.2%	0.0%	18.0%	2.1%
	N	15.2%	27.7%	27.6%	22.4%	42.2%	6.1%	7.1%	13.0%	43.1%	7.4%	0.0%	31.5%	20.1%	10.3%	1.0%	0.0%	7.8%	9.8%	22.5%	38.6%	0.0%	0.5%	0.0%	50.8%	4.2%
Drug Related	Y	0.3%	1.0%	0.7%	0.6%	1.1%	0.3%	0.1%	0.3%	1.4%	0.1%	0.0%	0.7%	0.9%	0.1%	0.0%	0.0%	0.3%	0.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.9%	0.2%
	N	22.8%	36.8%	38.3%	27.2%	60.6%	10.1%	9.8%	19.8%	58.4%	10.0%	0.0%	42.2%	27.5%	15.5%	1.7%	0.1%	10.8%	15.3%	29.9%	52.9%	0.0%	0.7%	0.0%	67.9%	6.1%
Aging Driver	Y	1.9%	2.7%	2.6%	2.3%	4.9%	0.3%	0.9%	1.4%	4.3%	0.6%	0.0%	3.1%	2.3%	1.0%	0.1%	0.0%	0.9%	1.3%	2.4%	3.7%	0.0%	0.0%	0.0%	5.9%	0.2%
	N	21.2%	35.1%	36.4%	25.5%	56.9%	10.1%	9.1%	18.6%	55.5%	9.5%	0.0%	39.8%	26.1%	14.7%	1.6%	0.1%	10.3%	14.0%	28.5%	50.2%	0.0%	0.7%	0.0%	63.0%	6.1%
Teenage Driver	Y	1.0%	1.6%	2.5%	1.6%	3.1%	0.3%	0.6%	1.0%	2.9%	0.6%	0.0%	1.9%	2.0%	0.6%	0.0%	0.0%	0.6%	0.6%	0.6%	3.7%	0.0%	0.0%	0.0%	3.7%	0.0%
	N	22.1%	36.3%	36.6%	26.2%	58.6%	10.1%	9.4%	19.1%	56.9%	9.5%	0.0%	41.1%	26.4%	15.1%	1.7%	0.1%	10.6%	14.6%	30.2%	50.2%	0.0%	0.7%	0.0%	65.1%	6.3%
Day of the Week	Monday	3.3%	4.3%	5.3%	4.0%	7.7%	1.3%	1.7%	1.9%	7.4%	2.0%	0.0%	5.8%	3.3%	2.0%	0.3%	0.0%	1.6%	1.9%	3.5%	7.4%	0.0%	0.0%	0.0%	9.6%	1.2%
	Tuesday	3.3%	5.5%	6.4%	5.0%	8.8%	1.4%	1.4%	3.3%	8.8%	1.6%	0.0%	6.1%	4.6%	2.3%	0.3%	0.0%	2.0%	2.6%	3.9%	8.5%	0.0%	0.0%	0.0%	11.9%	0.7%
	Wednesday	3.6%	5.1%	5.6%	4.3%	8.3%	2.0%	1.7%	2.9%	8.7%	1.0%	0.0%	6.1%	3.3%	2.4%	0.6%	0.0%	2.1%	2.6%	4.0%	7.4%	0.0%	0.2%	0.0%	8.9%	1.2%
	Thursday	3.0%	5.8%	5.8%	2.7%	9.8%	2.0%	1.3%	3.3%	8.2%	1.7%	0.0%	6.6%	3.9%	2.3%	0.3%	0.1%	1.4%	1.8%	4.2%	8.7%	0.0%	0.2%	0.0%	10.1%	0.7%
	Friday	3.8%	6.9%	6.2%	4.1%	11.4%	1.4%	0.9%	3.6%	10.8%	1.6%	0.0%	7.3%	5.8%	2.3%	0.3%	0.0%	1.3%	3.2%	5.5%	9.0%	0.0%	0.2%	0.0%	10.3%	1.6%
	Saturday	3.2%	6.4%	5.1%	4.7%	8.7%	1.0%	1.9%	2.9%	8.8%	1.0%	0.0%	6.0%	4.4%	2.4%	0.0%	0.0%	1.6%	1.6%	5.9%	6.9%	0.0%	0.0%	0.0%	8.2%	0.7%
	Sunday	2.9%	3.9%	4.6%	3.0%	7.0%	1.3%	1.0%	2.2%	7.1%	1.2%	0.0%	5.0%	3.1%	2.0%	0.0%	0.0%	1.1%	1.6%	3.9%	5.9%	0.0%	0.0%	0.0%	9.8%	0.2%
Time of Day	12-3 AM	2.3%	3.5%	4.9%	3.7%	5.1%	1.9%	1.2%	2.2%	5.9%	1.4%	0.0%	5.7%	2.4%	1.3%	0.0%	0.0%	1.3%	1.1%	3.2%	6.3%	0.0%	0.0%	0.0%	8.2%	0.5%
	3-6 AM	2.6%	2.9%	2.6%	2.3%	4.3%	1.4%	0.6%	2.0%	4.5%	1.0%	0.0%	3.4%	2.1%	1.6%	0.1%	0.0%	0.7%	1.6%	3.1%	3.5%	0.0%	0.0%	0.0%	5.6%	0.5%
	6-9 AM	2.5%	4.2%	3.9%	2.6%	7.3%	0.7%	1.2%	2.3%	6.4%	0.7%	0.0%	3.6%	3.1%	2.1%	0.6%	0.0%	1.1%	1.9%	3.2%	5.5%	0.0%	0.0%	0.0%	6.3%	1.2%
	9-Noon	2.2%	2.2%	2.3%	1.9%	4.1%	0.6%	1.7%	1.2%	3.2%	0.6%	0.0%	2.3%	1.4%	1.0%	0.0%	0.1%	1.7%	1.0%	1.3%	3.2%	0.0%	0.0%	0.0%	3.3%	0.7%
	Noon-3 PM	2.2%	3.2%	1.6%	2.9%	3.7%	0.4%	0.9%	2.5%	3.5%	0.1%	0.0%	1.6%	2.6%	1.7%	0.0%	0.0%	1.1%	1.4%	2.9%	2.3%	0.0%	0.2%	0.0%	3.0%	0.9%
	3-6 PM	3.0%	3.2%	3.3%	3.4%	5.8%	0.6%	1.7%	1.7%	5.5%	0.6%	0.0%	2.9%	2.7%	2.3%	0.1%	0.0%	1.9%	2.6%	2.3%	4.2%	0.0%	0.0%	0.0%	5.4%	0.2%
	6-9 PM	3.9%	11.0%	10.4%	6.0%	17.0%	2.3%	1.2%	4.8%	16.6%	2.7%	0.0%	13.1%	6.6%	3.3%	0.6%	0.0%	1.7%	2.4%	8.7%	15.3%	0.0%	0.5%	0.0%	19.7%	0.9%
	9-Midnight	4.5%	7.8%	10.0%	5.1%	14.4%	2.6%	1.6%	3.5%	14.3%	2.9%	0.0%	10.4%	7.4%	2.4%	0.3%	0.0%	1.6%	3.2%	6.3%	13.7%	0.0%	0.0%	0.0%	17.3%	1.4%
Lighting Conditions	Dark - Lighted	6.6%	18.2%	23.1%	10.8%	31.1%	6.1%	2.7%	8.5%	31.5%	5.2%	0.0%	26.1%	13.0%	5.3%	0.4%	0.0%	3.3%	4.7%	14.5%	31.4%	0.0%	0.0%	0.0%	36.5%	1.9%
	Dark - Not Lighted	5.9%	6.1%	4.0%	5.1%	9.0%	1.7%	1.4%	3.3%	8.7%	2.6%	0.0%	5.8%	4.6%	3.4%	0.1%	0.0%	1.9%	3.5%	5.8%	6.4%	0.0%	0.5%	0.0%	12.9%	1.4%
	Dark - Unknown Lighting	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.3%	1.0%	1.0%	0.6%	1.6%	0.1%	0.1%	0.6%	1.3%	0.3%	0.0%	0.7%	1.0%	0.1%	0.3%	0.0%	0.1%	0.2%	0.6%	1.6%	0.0%	0.0%	0.0%	1.4%	0.2%
	Daylight	9.0%	11.4%	9.5%	9.7%	18.4%	1.9%	5.3%	6.6%	16.0%	1.9%	0.0%	8.8%	8.7%	6.1%	0.6%	0.1%	5.6%	6.3%	8.5%	12.7%	0.0%	0.2%	0.0%	15.5%	2.8%
	Dusk	1.0%	1.0%	1.0%	1.4%	1.3%	0.4%	0.3%	0.7%	1.9%	0.1%	0.0%	1.1%	1.0%	0.4%	0.3%	0.0%	0.3%	0.3%	1.4%	1.3%	0.0%	0.0%	0.0%	2.1%	0.0%
	Other	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.3%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.5%	0.0%
	Unknown	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment C-8
Orange County
Percent of All KSI Crashes involving Pedestrians 2018-2022

Mode:	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	20.6%	1.9%	1.6%	0.0%	66.5%	13.0%	20.5%	87.1%	11.7%	1.2%	5.9%	8.1%	86.0%	37.1%	30.5%	1.6%	30.3%	0.4%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.5%	0.0%	0.0%	0.0%	1.7%	0.1%	0.7%	2.3%	0.1%	0.1%	0.4%	0.4%	1.7%	1.4%	0.7%	0.0%	0.4%	0.0%
	N	20.1%	1.9%	1.6%	0.0%	64.7%	12.9%	19.8%	84.8%	11.6%	1.0%	5.5%	7.7%	84.2%	35.7%	29.8%	1.6%	29.9%	0.4%
Hit and Run	Y	4.4%	0.2%	0.7%	0.0%	15.6%	3.5%	3.5%	19.5%	1.2%	0.0%	1.2%	2.5%	17.1%	10.4%	4.0%	0.3%	5.8%	0.1%
	N	16.2%	1.6%	0.9%	0.0%	50.9%	17.1%	17.1%	67.6%	10.5%	1.2%	4.8%	5.6%	68.9%	26.7%	26.4%	1.3%	24.6%	0.3%
Aggressive Driving	Y	0.9%	0.2%	0.0%	0.0%	1.0%	0.7%	0.7%	1.7%	0.6%	0.0%	0.3%	0.1%	1.9%	1.2%	0.6%	0.0%	0.6%	0.0%
	N	19.7%	1.6%	1.6%	0.0%	65.5%	19.8%	19.8%	85.4%	11.1%	1.2%	5.6%	7.9%	84.1%	36.0%	29.9%	1.6%	29.8%	0.4%
Distracted Driving	Y	1.9%	0.2%	0.0%	0.0%	7.5%	1.9%	1.9%	9.5%	0.6%	0.0%	1.0%	0.4%	8.7%	4.2%	2.7%	0.3%	2.7%	0.1%
	N	18.7%	1.6%	1.6%	0.0%	59.0%	18.6%	18.6%	77.6%	11.1%	1.2%	4.9%	7.7%	77.3%	32.9%	27.7%	1.3%	27.6%	0.3%
Intersection Related	Y	6.1%	0.9%	1.4%	0.0%	19.8%	4.6%	4.6%	25.0%	4.0%	0.4%	0.9%	2.0%	26.6%	10.3%	7.7%	0.3%	11.3%	0.0%
	N	14.5%	0.9%	0.2%	0.0%	46.7%	15.9%	15.9%	62.1%	7.7%	0.7%	5.1%	6.1%	59.4%	26.9%	22.8%	1.3%	19.1%	0.4%
Drug Related	Y	0.7%	0.0%	0.0%	0.0%	1.6%	0.1%	0.1%	1.6%	0.3%	0.1%	0.1%	0.1%	1.7%	0.6%	0.6%	0.0%	0.9%	0.0%
	N	19.9%	1.9%	1.6%	0.0%	64.9%	20.4%	20.4%	85.5%	11.4%	1.0%	5.8%	7.9%	84.2%	36.6%	29.9%	1.6%	29.5%	0.4%
Aging Driver	Y	1.6%	0.0%	0.0%	0.0%	4.8%	2.0%	2.0%	6.8%	0.3%	0.1%	0.1%	0.6%	6.5%	2.9%	2.0%	0.0%	2.2%	0.1%
	N	19.0%	1.9%	1.6%	0.0%	61.7%	18.5%	18.5%	80.3%	11.4%	1.0%	5.8%	7.5%	79.5%	34.2%	28.5%	1.6%	28.2%	0.3%
Teenage Driver	Y	0.7%	0.0%	0.0%	0.0%	3.6%	1.0%	1.0%	4.5%	0.4%	0.1%	0.1%	0.9%	4.0%	1.7%	1.4%	0.3%	1.6%	0.0%
	N	19.9%	1.9%	1.6%	0.0%	62.9%	19.5%	19.5%	82.7%	11.3%	1.0%	5.8%	7.2%	81.9%	35.4%	29.0%	1.3%	28.8%	0.4%
Day of the Week	Monday	3.5%	0.0%	0.0%	0.0%	8.1%	2.3%	2.3%	11.0%	1.9%	0.1%	0.9%	0.9%	11.3%	4.2%	4.6%	0.6%	3.6%	0.0%
	Tuesday	2.1%	0.0%	0.0%	0.0%	8.9%	3.5%	3.5%	13.7%	1.4%	0.0%	1.0%	1.2%	13.0%	6.2%	4.8%	0.1%	4.0%	0.0%
	Wednesday	3.3%	0.0%	0.0%	0.0%	9.9%	1.3%	1.3%	12.3%	1.7%	0.3%	0.7%	1.6%	12.0%	5.8%	3.0%	0.0%	5.5%	0.0%
	Thursday	3.3%	0.9%	0.0%	0.0%	7.5%	3.9%	3.9%	12.1%	2.3%	0.1%	0.7%	1.6%	12.3%	5.1%	4.2%	0.1%	5.1%	0.1%
	Friday	4.7%	0.2%	0.2%	0.0%	10.6%	3.0%	3.0%	14.5%	2.2%	0.3%	0.7%	1.0%	15.2%	6.4%	5.5%	0.1%	4.9%	0.0%
	Saturday	2.8%	0.2%	0.9%	0.0%	9.7%	2.7%	2.7%	13.3%	1.2%	0.1%	1.0%	0.9%	12.7%	5.3%	4.8%	0.3%	4.0%	0.1%
	Sunday	0.9%	0.5%	0.5%	0.0%	7.1%	2.4%	2.4%	10.3%	1.0%	0.1%	0.9%	1.0%	9.5%	4.2%	3.6%	0.3%	3.2%	0.1%
Time of Day	12-3 AM	2.3%	0.5%	0.2%	0.0%	7.1%	1.2%	1.2%	9.0%	1.6%	0.1%	0.7%	0.6%	9.4%	3.6%	3.5%	0.0%	3.6%	0.0%
	3-6 AM	1.4%	0.2%	0.2%	0.0%	4.8%	1.3%	1.3%	6.8%	1.3%	0.0%	1.2%	0.6%	6.4%	3.6%	2.0%	0.0%	2.5%	0.0%
	6-9 AM	1.9%	0.9%	0.0%	0.0%	6.9%	1.9%	1.9%	9.2%	1.3%	0.0%	0.6%	1.6%	8.4%	3.5%	4.0%	0.4%	2.6%	0.0%
	9-Noon	1.6%	0.0%	0.2%	0.0%	5.0%	0.9%	0.9%	6.4%	0.3%	0.0%	0.3%	0.3%	6.1%	2.5%	1.4%	0.1%	2.6%	0.0%
	Noon-3 PM	1.2%	0.0%	0.2%	0.0%	4.7%	1.2%	1.2%	6.5%	0.4%	0.0%	0.3%	0.9%	5.8%	3.2%	1.7%	0.0%	1.9%	0.1%
	3-6 PM	2.8%	0.0%	0.0%	0.0%	6.7%	1.5%	1.5%	8.8%	0.6%	0.1%	0.6%	0.6%	8.4%	4.5%	1.7%	0.4%	2.9%	0.0%
	6-9 PM	5.6%	0.0%	0.2%	0.0%	14.5%	5.5%	5.5%	21.5%	3.5%	0.3%	0.9%	1.6%	22.8%	8.4%	7.9%	0.4%	8.4%	0.1%
	9-Midnight	3.7%	0.2%	0.5%	0.0%	12.1%	5.5%	5.5%	18.9%	2.7%	0.6%	1.4%	2.0%	18.8%	7.9%	8.1%	0.1%	5.9%	0.1%
Lighting Conditions	Dark - Lighted	11.9%	1.4%	1.2%	0.0%	28.5%	9.1%	9.1%	40.9%	6.4%	0.7%	1.2%	2.0%	44.8%	15.5%	14.3%	0.7%	17.2%	0.3%
	Dark - Not Lighted	1.2%	0.0%	0.0%	0.0%	8.7%	3.6%	3.6%	13.0%	2.7%	0.3%	3.0%	2.5%	10.5%	6.9%	6.5%	0.3%	2.3%	0.0%
	Dark - Unknown Lighting	0.2%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%
	Dawn	0.0%	0.2%	0.0%	0.0%	1.3%	0.5%	0.5%	2.0%	0.3%	0.0%	0.1%	0.4%	1.7%	0.7%	0.7%	0.0%	0.9%	0.0%
	Daylight	6.8%	0.2%	0.5%	0.0%	21.0%	5.0%	5.0%	28.0%	1.7%	0.1%	1.4%	2.6%	25.9%	12.9%	7.7%	0.6%	8.7%	0.1%
	Dusk	0.5%	0.0%	0.0%	0.0%	1.9%	0.8%	0.8%	2.7%	0.3%	0.0%	0.1%	0.4%	2.5%	0.9%	1.2%	0.0%	1.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.3%	0.0%	0.0%	0.1%	0.3%	0.1%	0.1%	0.0%	0.1%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%

Attachment D-1
Osceola County
All Crashes 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification			
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+													
Type	Angle	1701	806	280	1112	1455	276	600	1010	983	185	9	570	488	870	64	89	762	1094	518	440	1	39	10	509
	Animal	105	74	10	124	61	4	9	19	49	62	50	84	42	38	7	1	17	103	49	19	0	35	0	21
	Bicycle	143	91	66	83	186	32	33	67	165	33	2	106	60	79	16	1	39	98	84	79	0	4	1	91
	Head On	296	131	71	230	235	41	66	83	219	96	34	188	99	108	8	1	102	173	138	92	2	38	1	98
	Left Turn	2995	1920	794	1114	4031	618	522	1634	2871	671	11	1669	1294	1644	168	75	913	2031	1543	1251	12	106	9	1692
	Off Road	1422	730	353	1371	1053	149	516	509	910	457	113	816	412	488	83	29	745	724	620	466	9	109	10	502
	Other	3064	1163	887	3192	2273	424	1749	916	1854	524	71	1444	689	939	125	66	2626	1195	971	1069	1	140	6	1208
	Pedestrian	212	117	133	137	286	45	61	92	248	59	2	190	75	97	7	4	95	115	98	156	0	2	4	168
	Rear End	6315	6133	5662	3388	11598	3192	705	2620	10539	4136	110	9588	4213	2904	260	122	1091	3653	5578	7800	45	425	44	7944
	Right Turn	383	319	182	174	570	152	83	225	466	108	2	347	171	179	21	8	170	244	220	269	1	7	0	308
	Rollover	254	144	83	248	214	23	48	72	157	104	100	238	72	92	9	8	66	197	106	110	0	78	0	85
	Sideswipe	1543	1992	1758	1084	3261	1008	319	870	3163	855	86	2833	1137	781	72	34	496	1106	1380	2369	5	138	7	2239
	Unknown	254	202	252	160	443	110	59	130	408	100	11	349	144	130	7	7	76	189	157	287	0	16	0	286
Alcohol Related	Y	247	174	122	183	298	74	83	95	263	88	14	231	90	102	23	4	105	144	141	161	0	24	1	188
	N	18440	13648	10409	12234	25368	6000	4687	8152	21769	7302	587	18191	8806	8247	824	441	7093	10778	11321	14246	76	1113	91	14963
Hit and Run	Y	1989	1324	1157	1443	2528	624	713	837	2234	636	50	1911	821	828	58	38	939	1034	1080	1519	3	76	6	1625
	N	16698	12498	9374	10974	23138	5450	4057	7410	19798	6754	551	16511	8075	7521	789	407	6259	9888	10382	12888	73	1061	86	13526
Aggressive Driving	Y	308	192	160	214	384	75	97	139	294	124	6	270	105	163	14	9	112	193	160	203	0	19	0	203
	N	18379	13630	10371	12203	25282	5999	4673	8108	21738	7266	595	18152	8791	8186	833	436	7086	10729	11302	14204	76	1118	92	14948
Distracted Driving	Y	5522	4280	3267	3621	7802	1835	1203	2314	6756	2622	174	5865	2820	2283	265	117	1908	3102	3685	4518	37	337	31	4676
	N	13165	9542	7264	8796	17864	4239	3567	5933	15276	4768	427	12557	6076	6066	582	328	5290	7820	7777	9889	39	800	61	10475
Intersection Related	Y	5359	3616	1783	2262	6868	1683	1067	2776	5210	1662	43	3674	2306	2479	293	180	1881	3244	2936	2686	21	234	26	3444
	N	13328	10206	8748	10155	18798	4391	3703	5471	16822	5728	558	14748	6590	5870	554	265	5317	7678	8526	11721	55	903	66	11707
Drug Related	Y	95	65	52	82	119	18	23	37	96	47	9	104	36	34	3	3	39	60	50	67	0	15	0	74
	N	18592	13757	10479	12335	25547	6056	4747	8210	21936	7343	592	18318	8860	8315	844	442	7159	10862	11412	14340	76	1122	92	15077
Aging Driver	Y	2836	2343	1754	1871	4231	1056	744	1382	3641	1092	74	2994	1462	1369	132	71	1130	1729	1784	2507	13	178	11	2387
	N	15851	11479	8777	10546	21435	5018	4026	6865	18391	6298	527	15428	7434	6980	715	374	6068	9193	9678	11900	63	959	81	12764
Teenage Driver	Y	2679	1948	1342	1679	3632	773	647	1128	2992	1132	70	2427	1231	1282	152	62	930	1559	1666	1909	12	169	17	1942
	N	16008	11874	9189	10738	22034	5301	4123	7119	19040	6258	531	15995	7665	7067	695	383	6268	9363	9796	12498	64	968	75	13209
Day of the Week	Monday	2882	2084	1550	1906	3863	918	699	1281	3354	1091	91	2727	1358	1349	136	56	1061	1739	1749	2120	7	152	17	2279
	Tuesday	2862	2121	1636	1896	3967	939	736	1258	3372	1155	98	2843	1395	1261	134	67	1102	1666	1742	2270	13	178	17	2317
	Wednesday	2853	2108	1516	1858	3853	932	757	1214	3333	1101	72	2681	1366	1343	126	61	1066	1685	1769	2094	8	184	10	2244
	Thursday	2779	2119	1590	1792	3949	901	642	1255	3398	1122	71	2728	1384	1329	135	75	991	1687	1732	2198	14	154	15	2229
	Friday	3183	2403	1832	2132	4437	1045	806	1437	3758	1326	91	3224	1554	1432	142	68	1194	1882	1949	2560	19	196	19	2617
	Saturday	2223	1721	1370	1528	3181	728	617	1033	2711	856	97	2400	1011	896	95	72	963	1215	1422	1815	6	139	5	1932
	Sunday	1905	1266	1037	1305	2416	611	513	769	2106	739	81	1819	828	739	79	46	821	1048	1099	1350	9	134	9	1533
Time of Day	12-3 AM	764	513	374	584	883	210	236	291	769	314	41	692	319	296	41	11	318	412	460	482	5	52	4	593
	3-6 AM	600	423	257	461	660	178	149	246	585	237	63	567	253	194	26	11	248	317	359	368	3	68	1	437
	6-9 AM	2656	1938	1172	1670	3392	791	619	996	2860	1185	106	2332	1302	1165	125	55	874	1548	1676	1725	9	189	13	1836
	9-Noon	2433	1936	1573	1785	3509	877	742	1142	3049	947	62	2562	1203	1097	99	65	1145	1376	1502	2120	7	121	13	2115
	Noon-3 PM	3527	2574	2047	2359	4890	1235	968	1670	4154	1278	78	3416	1682	1589	172	92	1533	2086	1989	2863	11	190	14	2866
	3-6 PM	4403	3211	2587	2851	6233	1353	1068	1965	5377	1690	101	4401	2082	2130	203	122	1499	2645	2763	3477	17	247	26	3572
	6-9 PM	2914	2109	1628	1809	4070	891	626	1310	3494	1145	76	2915	1372	1315	115	55	998	1707	1814	2233	24	169	17	2388
	9-Midnight	1390	1118	893	898	2029	539	362	627	1744	594	74	1537	683	563	66	34	583	831	899	1139	0	101	4	1344
Lighting Conditions	Dark - Lighted	2852	2360	2127	1688	4572	1225	788	1493	3980	1057	21	3301	1495	1251	142	56	1240	1596	1958	2673	6	95	9	3054
	Dark - Not Lighted	1573	956	308	1251	1376	234	301	421	1115	788	212	1213	531	574	61	27	455	957	824	607	18	229	8	725
	Dark - Unknown Lighting	25	6	5	14	20	3	12	7	15	2	0	5	9	10	0	0	13	11	4	9	0	0	0	7
	Dawn	396	302	163	246	492	139	66	181	406	180	28	350	189	175	30	11	122	252	251	244	1	28	1	283
	Daylight	13286	9834	7656	8843	18503	4341	3454	5914	15906	5178	324	13071	6429	6107	591	336	5153	7798	8120	10499	47	755	69	10707
	Dusk	503	348	266	321	683	130	109	225	593	178	12	464	236	223	23	14	174	295	292	367	4	27	5	367
	Other	6	3	1	4	5	1	2	1	6	1	0	4	1	3	0	0	2	5	2	1	0	0	0	3
	Unknown	46	13	5	50	15	1	38	5	11	6	4	14	6	6	0	1	39	8	11	7	0	3	0	5

Note: Limited access facilites, parking lots and roadways for which contextual data was not available were not included in this analysis.

Attachment D-1
Osceola County
All Crashes 2018-2022

Context Classification					Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
C3R	C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
46	146	96	0	0	2202	230	355	2610	168	9	531	702	1554	1598	624	79	483	1
11	1	0	0	0	101	16	72	188	1	0	114	33	42	98	77	3	11	0
10	14	2	0	0	193	23	84	282	15	3	42	59	199	148	94	11	47	0
43	22	2	0	0	319	59	120	468	27	3	148	113	237	278	100	10	109	0
357	269	49	0	0	3813	793	1103	5258	425	26	989	1290	3430	2554	1679	241	1231	4
88	49	6	0	0	1684	223	598	2390	106	9	809	568	1128	1206	830	83	382	3
150	268	87	0	0	3689	443	982	4812	283	19	958	860	3296	2826	1288	151	840	4
9	42	5	0	0	283	58	121	424	32	6	67	92	303	213	123	21	105	0
1135	1190	219	0	0	9932	3179	4999	15989	1935	186	2876	3752	11482	4969	7266	1082	4757	27
38	45	7	0	0	582	126	176	794	84	6	111	201	572	316	281	70	217	0
24	38	8	0	0	288	41	152	461	20	0	215	79	187	240	154	4	82	1
228	315	96	0	0	3049	724	1520	4770	487	36	802	994	3497	1335	2165	277	1501	7
27	76	16	0	0	460	87	161	647	59	2	94	106	508	230	243	14	221	0
21	38	6	0	0	322	89	132	488	51	4	114	107	322	220	184	25	113	1
2145	2437	587	0	0	26273	5913	10311	38605	3591	301	7642	8742	26113	15791	14740	2021	9873	46
172	287	91	0	0	2858	1037	1037	4098	349	23	728	873	2869	1780	1454	213	1016	3
1994	2188	502	0	0	23737	9406	9406	34995	3293	282	7028	7976	23566	14231	13470	1833	8970	44
21	53	2	0	0	424	154	154	604	53	3	116	152	392	269	204	24	162	1
2145	2422	591	0	0	26171	10289	10289	38489	3589	302	7640	8697	26043	15742	14720	2022	9824	46
836	601	129	0	0	7751	3421	3421	11802	1163	104	2557	2791	7721	4668	4757	734	2896	10
1330	1874	464	0	0	18844	7022	7022	27291	2479	201	5199	6058	18714	11343	10167	1312	7090	37
677	428	121	0	0	6885	2203	2203	9695	1001	62	1999	2578	6181	4240	3570	605	2332	9
1489	2047	472	0	0	19710	8240	8240	29398	2641	243	5757	6271	20254	11771	11354	1441	7654	38
11	11	0	0	0	121	67	67	194	16	2	54	40	118	81	79	12	40	0
2155	2464	593	0	0	26474	10376	10376	38899	3626	303	7702	8809	26317	15930	14845	2034	9946	47
357	527	129	0	0	4396	1598	1598	6298	586	49	1088	1419	4426	2567	2312	305	1733	10
1809	1948	464	0	0	22199	8845	8845	32795	3056	256	6668	7430	22009	13444	12612	1741	8253	37
377	332	67	0	0	3611	1500	1500	5427	507	35	1012	1332	3625	2232	2057	296	1378	5
1789	2143	526	0	0	22984	8943	8943	33666	3135	270	6744	7517	22810	13779	12867	1750	8608	42
347	373	86	0	0	4065	1577	1577	5935	523	58	1175	1359	3982	2515	2211	310	1472	5
324	390	104	0	0	4088	1589	1589	6017	558	44	1164	1380	4075	2468	2294	311	1536	5
359	374	84	0	0	4016	1567	1567	5898	541	38	1145	1329	4003	2480	2177	303	1506	7
299	375	95	0	0	3990	1588	1588	5892	558	38	1078	1336	4074	2404	2268	311	1493	10
398	448	121	0	0	4561	1821	1821	6734	631	53	1339	1495	4584	2761	2564	316	1763	9
217	318	64	0	0	3300	1285	1285	4814	463	37	981	1103	3230	1844	1912	280	1266	7
222	197	39	0	0	2575	1016	1016	3803	368	37	874	847	2487	1539	1498	215	950	4
76	64	19	0	0	992	430	430	1524	111	16	362	358	931	654	589	101	304	2
48	55	16	0	0	781	340	340	1184	92	4	290	280	710	474	482	60	257	5
381	258	53	0	0	3521	1459	1459	5250	468	48	1134	1291	3341	2222	2040	273	1225	6
297	434	83	0	0	3741	1376	1376	5387	518	37	1004	1139	3799	2152	2089	280	1413	5
408	565	126	0	0	5162	1875	1875	7423	672	53	1320	1660	5168	2997	2746	343	2048	6
495	623	167	0	0	6319	2485	2485	9289	852	60	1794	2016	6391	3879	3384	456	2461	15
310	317	84	0	0	4065	1649	1649	6028	566	57	1194	1422	4035	2465	2293	342	1541	6
151	159	45	0	0	2014	829	829	3008	363	30	658	683	2060	1168	1301	191	737	2
264	421	129	0	0	4473	1751	1751	6535	735	69	893	1478	4968	2338	2770	428	1791	9
191	33	8	0	0	1601	842	842	2642	178	17	1125	680	1032	1355	940	162	377	1
2	2	1	0	0	25	8	8	34	2	0	7	4	25	23	5	2	6	0
71	32	12	0	0	513	215	215	776	78	7	170	205	486	310	319	35	192	3
1590	1925	427	0	0	19237	7332	7332	28008	2562	206	5331	6241	19204	11509	10499	1363	7353	33
44	61	16	0	0	689	282	282	1025	86	6	205	232	680	427	376	52	262	0
1	0	0	0	0	7	1	1	9	1	0	4	1	5	4	2	1	2	1
3	1	0	0	0	50	12	12	64	0	0	21	8	35	45	13	3	3	0

Note: Limited access facilites, parking lots and roadways for which contextual data was not available were not included in this analysis.

Attachment D-2
Osceola County
All Crashes that Result in a KSI 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification			
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+													
Type	Angle	47	23	13	32	42	10	11	27	33	10	2	28	12	17	2	6	19	30	12	20	0	6	1	22
	Animal	1	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	1
	Bicycle	20	17	10	14	28	5	2	9	27	8	1	19	11	11	1	0	5	14	15	13	0	1	1	15
	Head On	51	17	3	52	19	0	0	1	21	30	19	37	15	11	2	0	6	36	20	9	1	21	0	10
	Left Turn	128	77	34	43	174	22	14	60	116	49	0	85	54	66	5	2	27	94	72	45	3	9	1	64
	Off Road	52	59	24	71	61	7	19	22	60	30	4	56	25	20	3	3	32	25	47	32	1	3	0	26
	Other	61	40	38	58	72	12	20	23	58	30	8	65	22	27	4	0	24	38	37	44	0	10	1	44
	Pedestrian	42	34	44	29	77	15	9	12	70	28	1	65	18	21	3	0	14	27	29	51	0	2	0	59
	Rear End	53	68	69	46	114	31	4	13	103	64	6	123	43	15	0	1	9	29	66	86	2	7	2	80
	Right Turn	5	1	3	0	8	1	3	0	3	3	0	5	0	2	0	0	2	1	3	3	1	0	0	5
	Rollover	20	12	1	24	9	0	3	7	7	8	8	10	7	8	0	0	8	18	6	1	0	6	0	2
	Sideswipe	15	7	7	9	18	2	0	5	8	9	7	17	5	5	1	0	1	15	6	7	0	6	0	9
	Unknown	5	5	3	6	7	0	0	2	5	4	2	8	3	2	0	0	0	4	5	4	0	2	0	3
Alcohol Related	Y	38	33	12	45	35	4	8	15	34	18	8	34	14	17	4	0	15	31	17	21	0	10	0	19
	N	462	327	237	339	595	101	77	166	477	256	50	484	201	189	17	12	132	301	301	294	8	63	6	321
Hit and Run	Y	22	26	21	22	41	8	1	9	39	18	2	42	9	11	0	1	8	14	19	29	0	3	0	29
	N	478	334	228	362	589	97	84	172	472	256	56	476	206	195	21	11	139	318	299	286	8	70	6	311
Aggressive Driving	Y	22	21	7	17	30	3	8	13	15	12	2	19	7	11	0	2	11	18	9	11	0	2	0	13
	N	478	339	242	367	600	102	77	168	496	262	56	499	208	195	21	10	136	314	309	304	8	71	6	327
Distracted Driving	Y	196	149	80	149	236	44	29	66	190	117	23	198	85	74	9	3	60	124	136	107	4	29	3	121
	N	304	211	169	235	394	61	56	115	321	157	35	320	130	132	12	9	87	208	182	208	4	44	3	219
Intersection Related	Y	186	122	68	85	243	49	25	80	176	89	6	150	77	85	5	4	56	122	101	95	4	17	3	117
	N	314	238	181	299	387	56	60	101	335	185	52	368	138	121	16	8	91	210	217	220	4	56	3	223
Drug Related	Y	25	18	9	31	20	2	3	6	20	15	8	29	7	7	1	1	8	19	12	13	0	9	0	11
	N	475	342	240	353	610	103	82	175	491	259	50	489	208	199	20	11	139	313	306	302	8	64	6	329
Aging Driver	Y	73	64	45	62	101	22	12	21	80	56	13	98	39	27	1	1	19	52	45	68	4	16	1	52
	N	427	296	204	322	529	83	73	160	431	218	45	420	176	179	20	11	128	280	273	247	4	57	5	288
Teenage Driver	Y	65	50	23	41	84	14	16	29	50	40	3	53	33	21	6	2	24	36	47	31	1	5	3	38
	N	435	310	226	343	546	91	69	152	461	234	55	465	182	185	15	10	123	296	271	284	7	68	3	302
Day of the Week	Monday	81	46	24	53	81	17	13	25	69	34	10	62	34	30	1	1	23	50	42	35	1	9	1	39
	Tuesday	58	45	30	47	75	12	8	13	62	40	10	70	19	24	4	2	15	39	42	37	2	11	2	48
	Wednesday	76	49	42	58	94	16	12	31	85	33	6	75	27	35	5	2	24	51	38	53	0	14	1	47
	Thursday	71	52	41	57	97	14	13	27	80	38	6	73	36	32	1	2	24	48	45	50	0	8	0	48
	Friday	75	48	35	60	87	13	18	25	65	41	9	75	32	29	4	2	18	53	46	43	3	10	1	40
	Saturday	68	62	45	57	98	21	13	29	82	42	9	89	29	32	4	2	20	46	54	54	0	10	0	62
	Sunday	71	58	32	52	98	12	8	31	68	46	8	74	38	24	2	1	23	45	51	43	2	11	1	56
Time of Day	12-3 AM	57	42	20	41	65	13	10	18	56	31	4	52	23	27	3	0	14	39	39	27	1	6	0	45
	3-6 AM	33	31	20	44	37	6	7	13	36	18	10	45	14	8	2	0	18	23	24	22	0	12	0	25
	6-9 AM	49	28	30	33	65	9	6	16	39	36	10	51	19	21	1	2	13	32	26	35	1	10	1	32
	9-Noon	35	31	18	24	49	11	10	13	33	21	7	43	17	13	1	0	10	26	23	25	2	8	1	23
	Noon-3 PM	62	40	33	39	90	9	11	28	65	29	2	59	30	29	1	3	16	41	36	43	1	7	0	32
	3-6 PM	84	45	41	62	98	11	15	26	88	33	8	80	27	30	5	4	25	51	47	46	0	8	1	52
	6-9 PM	95	68	46	73	115	23	14	34	100	56	5	92	46	40	3	1	29	61	60	60	3	11	1	58
	9-Midnight	85	75	41	68	111	23	12	33	94	50	12	96	39	38	5	2	22	59	63	57	0	11	2	73
Lighting Conditions	Dark - Lighted	100	100	88	72	187	32	23	52	148	62	3	140	62	47	6	1	35	67	86	103	0	9	2	125
	Dark - Not Lighted	127	97	25	114	119	17	10	34	97	80	28	122	38	56	7	2	25	98	80	45	3	30	1	56
	Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dawn	9	4	4	6	8	3	1	2	7	5	2	7	5	3	1	0	1	5	7	4	0	3	0	5
	Daylight	243	150	126	176	298	51	46	89	238	123	23	237	101	93	7	9	78	150	138	154	4	29	3	146
	Dusk	19	8	6	14	17	2	4	4	20	4	1	10	9	7	0	0	7	11	7	8	1	1	0	7
	Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unknown	2	1	0	2	1	0	1	0	1	0	1	2	0	0	0	0	1	1	0	1	0	1	0	1

Note: Limited access facilites, parking lots and roadways for which contextual data was not available were not included in this analysis.

Attachment D-2
Osceola County
All Crashes that Result in a KSI 2018-2022

Context Classification					Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
C3R	C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
1	3	0	0	0	54	10	19	76	7	0	21	24	38	41	23	6	13	0
0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	0
4	3	0	0	0	29	7	11	40	5	2	9	11	27	23	12	2	10	0
9	0	0	0	0	33	4	34	71	0	0	41	18	12	48	14	1	8	0
18	16	1	0	0	156	37	46	219	19	1	53	63	123	102	80	15	42	0
5	1	1	0	0	84	7	44	129	6	0	43	23	69	48	61	11	15	0
6	9	2	0	0	75	17	47	130	9	0	31	32	76	55	53	7	24	0
3	10	1	0	0	60	20	40	110	8	2	16	28	76	42	41	12	25	0
22	8	1	0	0	89	39	62	165	21	4	50	46	94	46	79	11	54	0
1	0	0	0	0	4	1	4	9	0	0	2	4	3	0	6	1	2	0
2	0	0	0	0	18	1	14	33	0	0	20	4	9	17	10	0	6	0
2	1	0	0	0	11	5	13	24	5	0	13	2	14	13	10	2	4	0
1	0	1	0	0	6	2	5	11	2	0	6	3	4	4	5	2	2	0
5	1	0	0	0	40	11	32	78	5	0	32	18	33	37	31	5	10	0
69	50	7	0	0	579	140	307	940	77	9	273	241	512	403	363	65	195	0
2	6	1	0	0	42	20	20	65	4	0	12	18	39	22	26	4	17	0
72	45	6	0	0	577	319	319	953	78	9	293	241	506	418	368	66	188	0
2	3	0	0	0	25	15	15	43	7	0	14	13	23	21	23	2	4	0
72	48	7	0	0	594	324	324	975	75	9	291	246	522	419	371	68	201	0
35	11	2	0	0	229	132	132	385	36	4	129	98	198	173	171	27	54	0
39	40	5	0	0	390	207	207	633	46	5	176	161	347	267	223	43	151	0
30	15	5	0	0	216	94	94	337	36	3	91	97	188	157	130	24	65	0
44	36	2	0	0	403	245	245	681	46	6	214	162	357	283	264	46	140	0
5	1	0	0	0	23	28	28	52	0	0	25	11	16	22	24	3	3	0
69	50	7	0	0	596	311	311	966	82	9	280	248	529	418	370	67	202	0
15	9	2	0	0	96	60	60	164	17	1	56	44	82	66	69	14	33	0
59	42	5	0	0	523	279	279	854	65	8	249	215	463	374	325	56	172	0
13	3	1	0	0	78	42	42	126	12	0	29	35	74	52	52	9	25	0
61	48	6	0	0	541	297	297	892	70	9	276	224	471	388	342	61	180	0
14	2	1	0	0	82	48	48	139	10	2	47	38	66	65	50	11	25	0
8	1	0	0	0	60	57	57	124	8	1	38	30	65	54	47	10	22	0
13	8	2	0	0	99	47	47	155	11	1	51	33	83	71	58	9	29	0
10	9	0	0	0	94	51	51	148	14	2	31	34	99	57	58	15	34	0
12	10	1	0	0	87	49	49	139	18	1	46	38	74	65	58	9	26	0
8	12	1	0	0	100	50	50	162	12	1	41	47	87	67	64	8	36	0
9	9	2	0	0	97	37	37	151	9	1	51	39	71	61	59	8	33	0
7	6	0	0	0	66	35	35	110	7	2	34	31	54	49	45	8	17	0
5	3	1	0	0	49	26	26	77	7	0	24	17	43	24	40	5	15	0
9	8	0	0	0	52	41	41	95	11	1	42	18	47	44	38	5	20	0
4	1	2	0	0	51	27	27	79	5	0	24	21	39	30	33	8	13	0
8	13	2	0	0	91	29	29	126	7	2	25	36	74	50	38	7	40	0
13	5	1	0	0	94	58	58	158	11	1	45	39	86	76	62	9	23	0
13	11	1	0	0	113	61	61	194	14	1	52	49	108	91	65	15	38	0
15	4	0	0	0	103	62	62	179	20	2	59	48	94	76	73	13	39	0
17	15	2	0	0	154	83	83	257	28	3	45	63	180	85	125	24	54	0
19	5	0	0	0	121	88	88	233	15	1	103	63	83	119	76	15	39	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	8	6	6	13	4	0	8	3	6	6	5	1	5	0
37	28	4	0	0	311	152	152	480	34	5	140	121	258	210	182	27	100	0
0	3	1	0	0	24	8	8	32	1	0	6	9	18	17	6	3	7	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	2	2	3	0	0	3	0	0	3	0	0	0	0

Note: Limited access facilites, parking lots and roadways for which contextual data was not available were not included in this analysis.

Attachment D-3
Osceola County
Percent of All Crashes that Result in a KSI - 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	2.8%	2.9%	4.6%	2.9%	2.9%	3.6%	1.8%	2.7%	3.4%	5.4%	22.2%	4.9%	2.5%	2.0%	3.1%	6.7%	2.5%	2.7%	2.3%	4.5%	0.0%	15.4%	10.0%	4.3%	2.2%
	Animal	1.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	-	0.0%	-	4.8%	0.0%
	Bicycle	14.0%	18.7%	15.2%	16.9%	15.1%	15.6%	6.1%	13.4%	16.4%	24.2%	50.0%	17.9%	18.3%	13.9%	6.3%	0.0%	12.8%	14.3%	17.9%	16.5%	-	25.0%	100.0%	16.5%	40.0%
	Head On	17.2%	13.0%	4.2%	22.6%	8.1%	0.0%	0.0%	1.2%	9.6%	31.3%	55.9%	19.7%	15.2%	10.2%	25.0%	0.0%	5.9%	20.8%	14.5%	9.8%	50.0%	55.3%	0.0%	10.2%	20.9%
	Left Turn	4.3%	4.0%	4.3%	3.9%	4.3%	3.6%	2.7%	3.7%	4.0%	7.3%	0.0%	5.1%	4.2%	4.0%	3.0%	2.7%	3.0%	4.6%	4.7%	3.6%	25.0%	8.5%	11.1%	3.8%	5.0%
	Off Road	3.7%	8.1%	6.8%	5.2%	5.8%	4.7%	3.7%	4.3%	6.6%	6.6%	3.5%	6.9%	6.1%	4.1%	3.6%	10.3%	4.3%	3.5%	7.6%	6.9%	11.1%	2.8%	0.0%	5.2%	5.7%
	Other	2.0%	3.4%	4.3%	1.8%	3.2%	2.8%	1.1%	2.5%	3.1%	5.7%	11.3%	4.5%	3.2%	2.9%	3.2%	0.0%	0.9%	3.2%	3.8%	4.1%	0.0%	7.1%	16.7%	3.6%	4.0%
	Pedestrian	19.8%	29.1%	33.1%	21.2%	26.9%	33.3%	14.8%	13.0%	28.2%	47.5%	50.0%	34.2%	24.0%	21.6%	42.9%	0.0%	14.7%	23.5%	29.6%	32.7%	-	100.0%	0.0%	35.1%	33.3%
	Rear End	0.8%	1.1%	1.2%	1.4%	1.0%	1.0%	0.6%	0.5%	1.0%	1.5%	5.5%	1.3%	1.0%	0.5%	0.0%	0.8%	0.8%	0.8%	1.2%	1.1%	4.4%	1.6%	4.5%	1.0%	1.9%
	Right Turn	1.3%	0.3%	1.6%	0.0%	1.4%	0.7%	3.6%	0.0%	0.6%	2.8%	0.0%	1.4%	0.0%	1.1%	0.0%	0.0%	1.2%	0.4%	1.4%	1.1%	100.0%	0.0%	-	1.6%	2.6%
	Rollover	7.9%	8.3%	1.2%	9.7%	4.2%	0.0%	6.3%	9.7%	4.5%	7.7%	8.0%	4.2%	9.7%	8.7%	0.0%	0.0%	12.1%	9.1%	5.7%	0.9%	-	7.7%	-	2.4%	8.3%
	Sideswipe	1.0%	0.4%	0.4%	0.8%	0.6%	0.2%	0.0%	0.6%	0.3%	1.1%	8.1%	0.6%	0.4%	0.6%	1.4%	0.0%	0.2%	1.4%	0.4%	0.3%	0.0%	4.3%	0.0%	0.4%	0.9%
	Unknown	2.0%	2.5%	1.2%	3.8%	1.6%	0.0%	0.0%	1.5%	1.2%	4.0%	18.2%	2.3%	2.1%	1.5%	0.0%	0.0%	0.0%	2.1%	3.2%	1.4%	-	12.5%		1.0%	3.7%
Alcohol Related	Y	15.4%	19.0%	9.8%	24.6%	11.7%	5.4%	9.6%	15.8%	12.9%	20.5%	57.1%	14.7%	15.6%	16.7%	17.4%	0.0%	14.3%	21.5%	12.1%	13.0%	-	41.7%	0.0%	10.1%	23.8%
	N	2.5%	2.4%	2.3%	2.8%	2.3%	1.7%	1.6%	2.0%	2.2%	3.5%	8.5%	2.7%	2.3%	2.3%	2.1%	2.7%	1.9%	2.8%	2.7%	2.1%	10.5%	5.7%	6.6%	2.1%	3.2%
Hit and Run	Y	1.1%	2.0%	1.8%	1.5%	1.6%	1.3%	0.1%	1.1%	1.7%	2.8%	4.0%	2.2%	1.1%	1.3%	0.0%	2.6%	0.9%	1.4%	1.8%	1.9%	0.0%	3.9%	0.0%	1.8%	1.2%
	N	2.9%	2.7%	2.4%	3.3%	2.5%	1.8%	2.1%	2.3%	2.4%	3.8%	10.2%	2.9%	2.6%	2.6%	2.7%	2.7%	2.2%	3.2%	2.9%	2.2%	11.0%	6.6%	7.0%	2.3%	3.6%
Aggressive Driving	Y	7.1%	10.9%	4.4%	7.9%	7.8%	4.0%	8.2%	9.4%	5.1%	9.7%	33.3%	7.0%	6.7%	6.7%	0.0%	22.2%	9.8%	9.3%	5.6%	5.4%	-	10.5%	-	6.4%	9.5%
	N	2.6%	2.5%	2.3%	3.0%	2.4%	1.7%	1.6%	2.1%	2.3%	3.6%	9.4%	2.7%	2.4%	2.4%	2.5%	2.3%	1.9%	2.9%	2.7%	2.1%	10.5%	6.4%	6.5%	2.2%	3.4%
Distracted Driving	Y	3.5%	3.5%	2.4%	4.1%	3.0%	2.4%	2.4%	2.9%	2.8%	4.5%	13.2%	3.4%	3.0%	3.2%	3.4%	2.6%	3.1%	4.0%	3.7%	2.4%	10.8%	8.6%	9.7%	2.6%	4.2%
	N	2.3%	2.2%	2.3%	2.7%	2.2%	1.4%	1.6%	1.9%	2.1%	3.3%	8.2%	2.5%	2.1%	2.2%	2.1%	2.7%	1.6%	2.7%	2.3%	2.1%	10.3%	5.5%	4.9%	2.1%	2.9%
Intersection Related	Y	3.5%	3.4%	3.8%	3.8%	3.5%	2.9%	2.3%	2.9%	3.4%	5.4%	14.0%	4.1%	3.3%	3.4%	1.7%	2.2%	3.0%	3.8%	3.4%	3.5%	19.0%	7.3%	11.5%	3.4%	4.4%
	N	2.4%	2.3%	2.1%	2.9%	2.1%	1.3%	1.6%	1.8%	2.0%	3.2%	9.3%	2.5%	2.1%	2.1%	2.9%	3.0%	1.7%	2.7%	2.5%	1.9%	7.3%	6.2%	4.5%	1.9%	3.0%
Drug Related	Y	26.3%	27.7%	17.3%	37.8%	16.8%	11.1%	13.0%	16.2%	20.8%	31.9%	88.9%	27.9%	19.4%	20.6%	33.3%	33.3%	20.5%	31.7%	24.0%	19.4%	-	60.0%	-	14.9%	45.5%
	N	2.6%	2.5%	2.3%	2.9%	2.4%	1.7%	1.7%	2.1%	2.2%	3.5%	8.4%	2.7%	2.3%	2.4%	2.4%	2.5%	1.9%	2.9%	2.7%	2.1%	10.5%	5.7%	6.5%	2.2%	3.2%
Aging Driver	Y	2.6%	2.7%	2.6%	3.3%	2.4%	2.1%	1.6%	1.5%	2.2%	5.1%	17.6%	3.3%	2.7%	2.0%	0.8%	1.4%	1.7%	3.0%	2.5%	2.7%	30.8%	9.0%	9.1%	2.2%	4.2%
	N	2.7%	2.6%	2.3%	3.1%	2.5%	1.7%	1.8%	2.3%	2.3%	3.5%	8.5%	2.7%	2.4%	2.6%	2.8%	2.9%	2.1%	3.0%	2.8%	2.1%	6.3%	5.9%	6.2%	2.3%	3.3%
Teenage Driver	Y	2.4%	2.6%	1.7%	2.4%	2.3%	1.8%	2.5%	2.6%	1.7%	3.5%	4.3%	2.2%	2.7%	1.6%	3.9%	3.2%	2.6%	2.3%	2.8%	1.6%	8.3%	3.0%	17.6%	2.0%	3.4%
	N	2.7%	2.6%	2.5%	3.2%	2.5%	1.7%	1.7%	2.1%	2.4%	3.7%	10.4%	2.9%	2.4%	2.6%	2.2%	2.6%	2.0%	3.2%	2.8%	2.3%	10.9%	7.0%	4.0%	2.3%	3.4%
Day of the Week	Monday	2.8%	2.2%	1.5%	2.8%	2.1%	1.9%	1.9%	2.0%	2.1%	3.1%	11.0%	2.3%	2.5%	2.2%	0.7%	1.8%	2.2%	2.9%	2.4%	1.7%	14.3%	5.9%	5.9%	1.7%	4.0%
	Tuesday	2.0%	2.1%	1.8%	2.5%	1.9%	1.3%	1.1%	1.0%	1.8%	3.5%	10.2%	2.5%	1.4%	1.9%	3.0%	3.0%	1.4%	2.3%	2.4%	1.6%	15.4%	6.2%	11.8%	2.1%	2.5%
	Wednesday	2.7%	2.3%	2.8%	3.1%	2.4%	1.7%	1.6%	2.6%	2.6%	3.0%	8.3%	2.8%	2.0%	2.6%	4.0%	3.3%	2.3%	3.0%	2.1%	2.5%	0.0%	7.6%	10.0%	2.1%	3.6%
	Thursday	2.6%	2.5%	2.6%	3.2%	2.5%	1.6%	2.0%	2.2%	2.4%	3.4%	8.5%	2.7%	2.6%	2.4%	0.7%	2.7%	2.4%	2.8%	2.6%	2.3%	0.0%	5.2%	0.0%	2.2%	3.3%
	Friday	2.4%	2.0%	1.9%	2.8%	2.0%	1.2%	2.2%	1.7%	1.7%	3.1%	9.9%	2.3%	2.1%	2.0%	2.8%	2.9%	1.5%	2.8%	2.4%	1.7%	15.8%	5.1%	5.3%	1.5%	3.0%
	Saturday	3.1%	3.6%	3.3%	3.7%	3.1%	2.9%	2.1%	2.8%	3.0%	4.9%	9.3%	3.7%	2.9%	3.6%	4.2%	2.8%	2.1%	3.8%	3.8%	3.0%	0.0%	7.2%	0.0%	3.2%	3.7%
	Sunday	3.7%	4.6%	3.1%	4.0%	4.1%	2.0%	1.6%	4.0%	3.2%	6.2%	9.9%	4.1%	4.6%	3.2%	2.5%	2.2%	2.8%	4.3%	4.6%	3.2%	22.2%	8.2%	11.1%	3.7%	4.1%
Time of Day	12-3 AM	7.5%	8.2%	5.3%	7.0%	7.4%	6.2%	4.2%	6.2%	7.3%	9.9%	9.8%	7.5%	7.2%	9.1%	7.3%	0.0%	4.4%	9.5%	8.5%	5.6%	20.0%	11.5%	0.0%	7.6%	9.2%
	3-6 AM	5.5%	7.3%	7.8%	9.5%	5.6%	3.4%	4.7%	5.3%	6.2%	7.6%	15.9%	7.9%	5.5%	4.1%	7.7%	0.0%	7.3%	7.3%	6.7%	6.0%	0.0%	17.6%	0.0%	5.7%	10.4%
	6-9 AM	1.8%	1.4%	2.6%	2.0%	1.9%	1.1%	1.0%	1.6%	1.4%	3.0%	9.4%	2.2%	1.5%	1.8%	0.8%	3.6%	1.5%	2.1%	1.6%	2.0%	11.1%	5.3%	7.7%	1.7%	2.4%
	9-Noon	1.4%	1.6%	1.1%	1.3%	1.4%	1.3%	1.3%	1.1%	1.1%	2.2%	11.3%	1.7%	1.4%	1.2%	1.0%	0.0%	0.9%	1.9%	1.5%	1.2%	28.6%	6.6%	7.7%	1.1%	1.3%
	Noon-3 PM	1.8%	1.6%	1.6%	1.7%	1.8%	0.7%	1.1%	1.7%	1.6%	2.3%	2.6%	1.7%	1.8%	1.8%	0.6%	3.3%	1.0%	2.0%	1.8%	1.5%	9.1%	3.7%	0.0%	1.1%	2.0%
	3-6 PM	1.9%	1.4%	1.6%	2.2%	1.6%	0.8%	1.4%	1.3%	1.6%	2.0%	7.9%	1.8%	1.3%	1.4%	2.5%	3.3%	1.7%	1.9%	1.7%	1.3%	0.0%	3.2%	3.8%	1.5%	2.6%
	6-9 PM	3.3%	3.2%	2.8%	4.0%	2.8%	2.6%	2.2%	2.6%	2.9%	4.9%	6.6%	3.2%	3.4%	3.0%	2.6%	1.8%	2.9%	3.6%	3.3%	2.7%	12.5%	6.5%	5.9%	2.4%	4.2%
	9-Midnight	6.1%	6.7%	4.6%	7.6%	5.5%	4.3%	3.3%	5.3%	5.4%	8.4%	16.2%	6.2%	5.7%	6.7%	7.6%	5.9%	3.8%	7.1%	7.0%	5.0%	-	10.9%	50.0%	5.4%	9.9%
Lighting Conditions	Dark - Lighted	3.5%	4.2%	4.1%	4.3%	4.1%	2.6%	2.9%	3.5%	3.7%	5.9%	14.3%	4.2%	4.1%	3.8%	4.2%	1.8%	2.8%	4.2%	4.4%	3.9%	0.0%	9.5%	22.2%	4.1%	6.4%
	Dark - Not Lighted	8.1%	10.1%	8.1%	9.1%	8.6%	7.3%	3.3%	8.1%	8.7%	10.2%	13.2%	10.1%	7.2%	9.8%	11.5%	7.4%	5.5%	10.2%	9.7%	7.4%	16.7%	13.1%	12.5%	7.7%	9.9%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	-	-	0.0%	0.0%	0.0%	0.0%	-	-	-	0.0%	0.0%
	Dawn	2.3%	1.3%	2.5%	2.4%	1.6%	2.2%	1.5%	1.1%	1.7%	2.8%	7.1%	2.0%	2.6%	1.7%	3.3%	0.0%	0.8%	2.0%	2.8%	1.6%	0.0%	10.7%	0.0%	1.8%	1.4%
	Daylight	1.8%	1.5%	1.6%	2.0%	1.6%	1.2%	1.3%	1.5%	1.5%	2.4%	7.1%	1.8%	1.6%	1.5%	1.2%	2.7%	1.5%	1.9%	1.7%	1.5%	8.5%	3.8%	4.3%	1.4%	2.3%
	Dusk	3.8%	2.3%	2.3%	4.4%	2.5%	1.5%	3.7%	1.8%	3.4%	2.2%	8.3%	2.2%	3.8%	3.1%	0.0%	0.0%	4.0%	3.7%	2.4%	2.2%	25.0%	3.7%	0.0%	1.9%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	-	-	0.0%	0.0%	0.0%	0.0%	-	-	-	0.0%	0.0%
	Unknown	4.3%	7.7%	0.0%	4.0%	6.7%	0.0%	2.6%	0.0%	9.1%	0.0%	25.0%	14.3%	0.0%	0.0%	-	0.0%	2.6%	12.5%	0.0%	14.3%	-	33.3%	-	20.0%	0.0%

Attachment D-3
Osceola County
Percent of All Crashes that Result in a KSI - 2018-2022

Mode: All	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	2.1%	0.0%	-	-	2.5%	4.3%	5.4%	2.9%	4.2%	0.0%	4.0%	3.4%	2.4%	2.6%	3.7%	7.6%	2.7%	0.0%
	Animal	0.0%	-	-	-	0.0%	6.3%	0.0%	0.5%	0.0%	-	0.0%	3.0%	0.0%	1.0%	0.0%	0.0%	0.0%	-
	Bicycle	21.4%	0.0%	-	-	15.0%	30.4%	13.1%	14.2%	33.3%	66.7%	21.4%	18.6%	13.6%	15.5%	12.8%	18.2%	21.3%	-
	Head On	0.0%	0.0%	-	-	10.3%	6.8%	28.3%	15.2%	0.0%	0.0%	27.7%	15.9%	5.1%	17.3%	14.0%	10.0%	7.3%	-
	Left Turn	5.9%	2.0%	-	-	4.1%	4.7%	4.2%	4.2%	4.5%	3.8%	5.4%	4.9%	3.6%	4.0%	4.8%	6.2%	3.4%	0.0%
	Off Road	2.0%	16.7%	-	-	5.0%	3.1%	7.4%	5.4%	5.7%	0.0%	5.3%	4.0%	6.1%	4.0%	7.3%	13.3%	3.9%	0.0%
	Other	3.4%	2.3%	-	-	2.0%	3.8%	4.8%	2.7%	3.2%	0.0%	3.2%	3.7%	2.3%	1.9%	4.1%	4.6%	2.9%	0.0%
	Pedestrian	23.8%	20.0%	-	-	21.2%	34.5%	33.1%	25.9%	25.0%	33.3%	23.9%	30.4%	25.1%	19.7%	33.3%	57.1%	23.8%	-
	Rear End	0.7%	0.5%	-	-	0.9%	1.2%	1.2%	1.0%	1.1%	2.2%	1.7%	1.2%	0.8%	0.9%	1.1%	1.0%	1.1%	0.0%
	Right Turn	0.0%	0.0%	-	-	0.7%	0.8%	2.3%	1.1%	0.0%	0.0%	1.8%	2.0%	0.5%	0.0%	2.1%	1.4%	0.9%	-
	Rollover	0.0%	0.0%	-	-	6.3%	2.4%	9.2%	7.2%	0.0%	-	9.3%	5.1%	4.8%	7.1%	6.5%	0.0%	7.3%	0.0%
	Sideswipe	0.3%	0.0%	-	-	0.4%	0.7%	0.9%	0.5%	1.0%	0.0%	1.6%	0.2%	0.4%	1.0%	0.5%	0.7%	0.3%	0.0%
	Unknown	0.0%	6.3%	-	-	1.3%	2.3%	3.1%	1.7%	3.4%	0.0%	6.4%	2.8%	0.8%	1.7%	2.1%	14.3%	0.9%	-
Alcohol Related	Y	2.6%	0.0%	-	-	12.4%	12.4%	24.2%	16.0%	9.8%	0.0%	28.1%	16.8%	10.2%	16.8%	16.8%	20.0%	8.8%	0.0%
	N	2.1%	1.2%	-	-	2.2%	2.4%	3.0%	2.4%	2.1%	3.0%	3.6%	2.8%	2.0%	2.6%	2.5%	3.2%	2.0%	0.0%
Hit and Run	Y	2.1%	1.1%	-	-	1.5%	1.9%	1.9%	1.6%	1.1%	0.0%	1.6%	2.1%	1.4%	1.2%	1.8%	1.9%	1.7%	0.0%
	N	2.1%	1.2%	-	-	2.4%	3.4%	3.4%	2.7%	2.4%	3.2%	4.2%	3.0%	2.1%	2.9%	2.7%	3.6%	2.1%	0.0%
Aggressive Driving	Y	5.7%	0.0%	-	-	5.9%	9.7%	9.7%	7.1%	13.2%	0.0%	12.1%	8.6%	5.9%	7.8%	11.3%	8.3%	2.5%	0.0%
	N	2.0%	1.2%	-	-	2.3%	3.1%	3.1%	2.5%	2.1%	3.0%	3.8%	2.8%	2.0%	2.7%	2.5%	3.4%	2.0%	0.0%
Distracted Driving	Y	1.8%	1.6%	-	-	3.0%	3.9%	3.9%	3.3%	3.1%	3.8%	5.0%	3.5%	2.6%	3.7%	3.6%	3.7%	1.9%	0.0%
	N	2.1%	1.1%	-	-	2.1%	2.9%	2.9%	2.3%	1.9%	2.5%	3.4%	2.7%	1.9%	2.4%	2.2%	3.3%	2.1%	0.0%
Intersection Related	Y	3.5%	4.1%	-	-	3.1%	4.3%	4.3%	3.5%	3.6%	4.8%	4.6%	3.8%	3.0%	3.7%	3.6%	4.0%	2.8%	0.0%
	N	1.8%	0.4%	-	-	2.0%	3.0%	3.0%	2.3%	1.7%	2.5%	3.7%	2.6%	1.8%	2.4%	2.3%	3.2%	1.8%	0.0%
Drug Related	Y	9.1%	-	-	-	19.0%	41.8%	41.8%	26.8%	0.0%	0.0%	46.3%	27.5%	13.6%	27.2%	30.4%	25.0%	7.5%	-
	N	2.0%	1.2%	-	-	2.3%	3.0%	3.0%	2.5%	2.3%	3.0%	3.6%	2.8%	2.0%	2.6%	2.5%	3.3%	2.0%	0.0%
Aging Driver	Y	1.7%	1.6%	-	-	2.2%	3.8%	3.8%	2.6%	2.9%	2.0%	5.1%	3.1%	1.9%	2.6%	3.0%	4.6%	1.9%	0.0%
	N	2.2%	1.1%	-	-	2.4%	3.2%	3.2%	2.6%	2.1%	3.1%	3.7%	2.9%	2.1%	2.8%	2.6%	3.2%	2.1%	0.0%
Teenage Driver	Y	0.9%	1.5%	-	-	2.2%	2.8%	2.8%	2.3%	2.4%	0.0%	2.9%	2.6%	2.0%	2.3%	2.5%	3.0%	1.8%	0.0%
	N	2.2%	1.1%	-	-	2.4%	3.3%	3.3%	2.6%	2.2%	3.3%	4.1%	3.0%	2.1%	2.8%	2.7%	3.5%	2.1%	0.0%
Day of the Week	Monday	0.5%	1.2%	-	-	2.0%	3.0%	3.0%	2.3%	1.9%	3.4%	4.0%	2.8%	1.7%	2.6%	2.3%	3.5%	1.7%	0.0%
	Tuesday	0.3%	0.0%	-	-	1.5%	3.6%	3.6%	2.1%	1.4%	2.3%	3.3%	2.2%	1.6%	2.2%	2.0%	3.2%	1.4%	0.0%
	Wednesday	2.1%	2.4%	-	-	2.5%	3.0%	3.0%	2.6%	2.0%	2.6%	4.5%	2.5%	2.1%	2.9%	2.7%	3.0%	1.9%	0.0%
	Thursday	2.4%	0.0%	-	-	2.4%	3.2%	3.2%	2.5%	2.5%	5.3%	2.9%	2.5%	2.4%	2.4%	2.6%	4.8%	2.3%	0.0%
	Friday	2.2%	0.8%	-	-	1.9%	2.7%	2.7%	2.1%	2.9%	1.9%	3.4%	2.5%	1.6%	2.4%	2.3%	2.8%	1.5%	0.0%
	Saturday	3.8%	1.6%	-	-	3.0%	3.9%	3.9%	3.4%	2.6%	2.7%	4.2%	4.3%	2.7%	3.6%	3.3%	2.9%	2.8%	0.0%
	Sunday	4.6%	5.1%	-	-	3.8%	3.6%	3.6%	4.0%	2.4%	2.7%	5.8%	4.6%	2.9%	4.0%	3.9%	3.7%	3.5%	0.0%
Time of Day	12-3 AM	9.4%	0.0%	-	-	6.7%	8.1%	8.1%	7.2%	6.3%	12.5%	9.4%	8.7%	5.8%	7.5%	7.6%	7.9%	5.6%	0.0%
	3-6 AM	5.5%	6.3%	-	-	6.3%	7.6%	7.6%	6.5%	7.6%	0.0%	8.3%	6.1%	6.1%	5.1%	8.3%	8.3%	5.8%	0.0%
	6-9 AM	3.1%	0.0%	-	-	1.5%	2.8%	2.8%	1.8%	2.4%	2.1%	3.7%	1.4%	1.4%	2.0%	1.9%	1.8%	1.6%	0.0%
	9-Noon	0.2%	2.4%	-	-	1.4%	2.0%	2.0%	1.5%	1.0%	0.0%	2.4%	1.8%	1.0%	1.4%	1.6%	2.9%	0.9%	0.0%
	Noon-3 PM	2.3%	1.6%	-	-	1.8%	1.5%	1.5%	1.7%	1.0%	3.8%	1.9%	2.2%	1.4%	1.7%	1.4%	2.0%	2.0%	0.0%
	3-6 PM	0.8%	0.6%	-	-	1.5%	2.3%	2.3%	1.7%	1.3%	1.7%	2.5%	1.9%	1.3%	2.0%	1.8%	2.0%	0.9%	0.0%
	6-9 PM	3.5%	1.2%	-	-	2.8%	3.7%	3.7%	3.2%	2.5%	1.8%	4.4%	3.4%	2.7%	3.7%	2.8%	4.4%	2.5%	0.0%
	9-Midnight	2.5%	0.0%	-	-	5.1%	7.5%	7.5%	6.0%	5.5%	6.7%	9.0%	7.0%	4.6%	6.5%	5.6%	6.8%	5.3%	0.0%
Lighting Conditions	Dark - Lighted	3.6%	1.6%	-	-	3.4%	4.7%	4.7%	3.9%	3.8%	4.3%	5.0%	4.3%	3.6%	3.6%	4.5%	5.6%	3.0%	0.0%
	Dark - Not Lighted	15.2%	0.0%	-	-	7.6%	10.5%	10.5%	8.8%	8.4%	5.9%	9.2%	9.3%	8.0%	8.8%	8.1%	9.3%	10.3%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-
	Dawn	0.0%	0.0%	-	-	1.6%	2.8%	2.8%	1.7%	5.1%	0.0%	4.7%	1.5%	1.2%	1.9%	1.6%	2.9%	2.6%	0.0%
	Daylight	1.5%	0.9%	-	-	1.6%	2.1%	2.1%	1.7%	1.3%	2.4%	2.6%	1.9%	1.3%	1.8%	1.7%	2.0%	1.4%	0.0%
	Dusk	4.9%	6.3%	-	-	3.5%	2.8%	2.8%	3.1%	1.2%	0.0%	2.9%	3.9%	2.6%	4.0%	1.6%	5.8%	2.7%	-
	Other	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	-	-	-	2.0%	16.7%	16.7%	4.7%	-	-	14.3%	0.0%	0.0%	6.7%	0.0%	0.0%	0.0%	-

Attachment D-4
Osceola County
Percent of All KSI Crashes 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	4.2%	2.1%	1.2%	2.9%	3.8%	0.9%	1.0%	2.4%	3.0%	0.9%	0.2%	2.5%	1.1%	1.5%	0.2%	0.5%	1.7%	3.1%	1.2%	2.1%	0.0%	1.1%	0.2%	3.9%	0.2%
	Animal	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%
	Bicycle	1.8%	1.5%	0.9%	1.3%	2.5%	0.4%	0.2%	0.8%	2.4%	0.7%	0.1%	1.7%	1.0%	1.0%	0.1%	0.0%	0.4%	1.5%	1.6%	1.3%	0.0%	0.2%	0.2%	2.7%	0.7%
	Head On	4.6%	1.5%	0.3%	4.6%	1.7%	0.0%	0.0%	0.1%	1.9%	2.7%	1.7%	3.3%	1.3%	1.0%	0.2%	0.0%	0.5%	3.7%	2.1%	0.9%	0.2%	3.8%	0.0%	1.8%	1.6%
	Left Turn	11.5%	6.9%	3.1%	3.8%	15.5%	2.0%	1.3%	5.4%	10.5%	4.4%	0.0%	7.6%	4.8%	5.9%	0.4%	0.2%	2.4%	9.7%	7.5%	4.7%	0.5%	1.6%	0.2%	11.4%	3.2%
	Off Road	4.7%	5.3%	2.2%	6.3%	5.5%	0.6%	1.7%	2.0%	5.4%	2.7%	0.4%	5.0%	2.2%	1.8%	0.3%	0.3%	2.9%	2.6%	4.9%	3.3%	0.2%	0.5%	0.0%	4.7%	0.9%
	Other	5.5%	3.6%	3.4%	5.2%	6.4%	1.1%	1.8%	2.1%	5.2%	2.7%	0.7%	5.8%	2.0%	2.4%	0.4%	0.0%	2.1%	3.9%	3.8%	4.6%	0.0%	1.8%	0.2%	7.9%	1.1%
	Pedestrian	3.8%	3.1%	4.0%	2.6%	6.9%	1.3%	0.8%	1.1%	6.3%	2.5%	0.1%	5.8%	1.6%	1.9%	0.3%	0.0%	1.3%	2.8%	3.0%	5.3%	0.0%	0.4%	0.0%	10.6%	0.5%
	Rear End	4.8%	6.1%	6.2%	4.1%	10.2%	2.8%	0.4%	1.2%	9.3%	5.8%	0.5%	11.0%	3.8%	1.3%	0.0%	0.1%	0.8%	3.0%	6.8%	8.9%	0.4%	1.3%	0.4%	14.3%	3.9%
	Right Turn	0.5%	0.1%	0.3%	0.0%	0.7%	0.1%	0.3%	0.0%	0.3%	0.3%	0.0%	0.4%	0.0%	0.2%	0.0%	0.0%	0.2%	0.1%	0.3%	0.3%	0.2%	0.0%	0.0%	0.9%	0.2%
	Rollover	1.8%	1.1%	0.1%	2.1%	0.8%	0.0%	0.3%	0.6%	0.6%	0.7%	0.7%	0.9%	0.6%	0.7%	0.0%	0.0%	0.7%	1.9%	0.6%	0.1%	0.0%	1.1%	0.0%	0.4%	0.4%
	Sideswipe	1.4%	0.6%	0.6%	0.8%	1.6%	0.2%	0.0%	0.5%	0.7%	0.8%	0.6%	1.5%	0.4%	0.4%	0.1%	0.0%	0.1%	1.6%	0.6%	0.7%	0.0%	1.1%	0.0%	1.6%	0.4%
	Unknown	0.5%	0.5%	0.3%	0.5%	0.6%	0.0%	0.0%	0.2%	0.5%	0.4%	0.2%	0.7%	0.3%	0.2%	0.0%	0.0%	0.0%	0.4%	0.5%	0.4%	0.0%	0.4%	0.0%	0.5%	0.2%
Alcohol Related	Y	3.4%	3.0%	1.1%	4.0%	3.1%	0.4%	0.7%	1.4%	3.1%	1.6%	0.7%	3.0%	1.3%	1.5%	0.4%	0.0%	1.3%	3.2%	1.8%	2.2%	0.0%	1.8%	0.0%	3.4%	0.9%
	N	41.7%	29.5%	21.4%	30.3%	53.2%	9.0%	6.9%	15.0%	43.0%	23.1%	4.5%	43.3%	18.0%	16.9%	1.5%	1.1%	11.8%	31.2%	31.2%	30.5%	1.4%	11.3%	1.1%	57.4%	12.3%
Hit and Run	Y	2.0%	2.3%	1.9%	2.0%	3.7%	0.7%	0.1%	0.8%	3.5%	1.6%	0.2%	3.8%	0.8%	1.0%	0.0%	0.1%	0.7%	1.5%	2.0%	3.0%	0.0%	0.5%	0.0%	5.2%	0.4%
	N	43.1%	30.1%	20.6%	32.4%	52.6%	8.7%	7.6%	15.5%	42.6%	23.1%	5.0%	42.5%	18.4%	17.4%	1.9%	1.0%	12.4%	33.0%	31.0%	29.6%	1.4%	12.5%	1.1%	55.6%	12.9%
Aggressive Driving	Y	2.0%	1.9%	0.6%	1.5%	2.7%	0.3%	0.7%	1.2%	1.4%	1.1%	0.2%	1.7%	0.6%	1.0%	0.0%	0.2%	1.0%	1.9%	0.9%	1.1%	0.0%	0.4%	0.0%	2.3%	0.4%
	N	43.1%	30.6%	21.8%	32.8%	53.6%	9.1%	6.9%	15.1%	44.7%	23.6%	5.0%	44.6%	18.6%	17.4%	1.9%	0.9%	12.2%	32.5%	32.0%	31.5%	1.4%	12.7%	1.1%	58.5%	12.9%
Distracted Driving	Y	17.7%	13.4%	7.2%	13.3%	21.1%	3.9%	2.6%	6.0%	17.1%	10.6%	2.1%	17.7%	7.6%	6.6%	0.8%	0.3%	5.4%	12.8%	14.1%	11.1%	0.7%	5.2%	0.5%	21.6%	6.3%
	N	27.4%	19.0%	15.2%	21.0%	35.2%	5.5%	5.0%	10.4%	28.9%	14.2%	3.2%	28.6%	11.6%	11.8%	1.1%	0.8%	7.8%	21.6%	18.9%	21.6%	0.7%	7.9%	0.5%	39.2%	7.0%
Intersection Related	Y	16.8%	11.0%	6.1%	7.6%	21.7%	4.4%	2.3%	7.2%	15.9%	8.0%	0.5%	13.4%	6.9%	7.6%	0.4%	0.4%	5.0%	12.6%	10.5%	9.8%	0.7%	3.0%	0.5%	20.9%	5.4%
	N	28.3%	21.5%	16.3%	26.7%	34.6%	5.0%	5.4%	9.1%	30.2%	16.7%	4.7%	32.9%	12.3%	10.8%	1.4%	0.7%	8.1%	21.8%	22.5%	22.8%	0.7%	10.0%	0.5%	39.9%	7.9%
Drug Related	Y	2.3%	1.6%	0.8%	2.8%	1.8%	0.2%	0.3%	0.5%	1.8%	1.4%	0.7%	2.6%	0.6%	0.6%	0.1%	0.1%	0.7%	2.0%	1.2%	1.3%	0.0%	1.6%	0.0%	2.0%	0.9%
	N	42.8%	30.8%	21.6%	31.5%	54.5%	9.2%	7.4%	15.8%	44.3%	23.4%	4.5%	43.7%	18.6%	17.8%	1.8%	1.0%	12.4%	32.4%	31.7%	31.3%	1.4%	11.4%	1.1%	58.9%	12.3%
Aging Driver	Y	6.6%	5.8%	4.1%	5.5%	9.0%	2.0%	1.1%	1.9%	7.2%	5.0%	1.2%	8.8%	3.5%	2.4%	0.1%	0.1%	1.7%	5.4%	4.7%	7.0%	0.7%	2.9%	0.2%	9.3%	2.7%
	N	38.5%	26.7%	18.4%	28.8%	47.3%	7.4%	6.6%	14.4%	38.9%	19.7%	4.1%	37.5%	15.7%	16.0%	1.8%	1.0%	11.4%	29.0%	28.3%	25.6%	0.7%	10.2%	0.9%	51.5%	10.6%
Teenage Driver	Y	5.9%	4.5%	2.1%	3.7%	7.5%	1.3%	1.4%	2.6%	4.5%	3.6%	0.3%	4.7%	2.9%	1.9%	0.5%	0.2%	2.1%	3.7%	4.9%	3.2%	0.2%	0.9%	0.5%	6.8%	2.3%
	N	39.2%	28.0%	20.4%	30.7%	48.8%	8.1%	6.2%	13.7%	41.6%	21.1%	5.0%	41.6%	16.3%	16.5%	1.3%	0.9%	11.0%	30.7%	28.1%	29.4%	1.3%	12.2%	0.5%	54.0%	10.9%
Day of the Week	Monday	7.3%	4.1%	2.2%	4.7%	7.2%	1.5%	1.2%	2.3%	6.2%	3.1%	0.9%	5.5%	3.0%	2.7%	0.1%	0.1%	2.1%	5.2%	4.4%	3.6%	0.2%	1.6%	0.2%	7.0%	2.5%
	Tuesday	5.2%	4.1%	2.7%	4.2%	6.7%	1.1%	0.7%	1.2%	5.6%	3.6%	0.9%	6.3%	1.7%	2.1%	0.4%	0.2%	1.3%	4.0%	4.4%	3.8%	0.4%	2.0%	0.4%	8.6%	1.4%
	Wednesday	6.9%	4.4%	3.8%	5.2%	8.4%	1.4%	1.1%	2.8%	7.7%	3.0%	0.5%	6.7%	2.4%	3.1%	0.4%	0.2%	2.1%	5.3%	3.9%	5.5%	0.0%	2.5%	0.2%	8.4%	2.3%
	Thursday	6.4%	4.7%	3.7%	5.1%	8.7%	1.3%	1.2%	2.4%	7.2%	3.4%	0.5%	6.5%	3.2%	2.9%	0.1%	0.2%	2.1%	5.0%	4.7%	5.2%	0.0%	1.4%	0.0%	8.6%	1.8%
	Friday	6.8%	4.3%	3.2%	5.4%	7.8%	1.2%	1.6%	2.3%	5.9%	3.7%	0.8%	6.7%	2.9%	2.6%	0.4%	0.2%	1.6%	5.5%	4.8%	4.5%	0.5%	1.8%	0.2%	7.2%	2.1%
	Saturday	6.1%	5.6%	4.1%	5.1%	8.8%	1.9%	1.2%	2.6%	7.4%	3.8%	0.8%	8.0%	2.6%	2.9%	0.4%	0.2%	1.8%	4.8%	5.6%	5.6%	0.0%	1.8%	0.0%	11.1%	1.4%
	Sunday	6.4%	5.2%	2.9%	4.6%	8.8%	1.1%	0.7%	2.8%	6.1%	4.1%	0.7%	6.6%	3.4%	2.1%	0.2%	0.1%	2.1%	4.7%	5.3%	4.5%	0.4%	2.0%	0.2%	10.0%	1.6%
Time of Day	12-3 AM	5.1%	3.8%	1.8%	3.7%	5.8%	1.2%	0.9%	1.6%	5.0%	2.8%	0.4%	4.6%	2.1%	2.4%	0.3%	0.0%	1.3%	4.0%	4.0%	2.8%	0.2%	1.1%	0.0%	8.1%	1.3%
	3-6 AM	3.0%	2.8%	1.8%	3.9%	3.3%	0.5%	0.6%	1.2%	3.2%	1.6%	0.9%	4.0%	1.3%	0.7%	0.2%	0.0%	1.6%	2.4%	2.5%	2.3%	0.0%	2.1%	0.0%	4.5%	0.9%
	6-9 AM	4.4%	2.5%	2.7%	2.9%	5.8%	0.8%	0.5%	1.4%	3.5%	3.2%	0.9%	4.6%	1.7%	1.9%	0.1%	0.2%	1.2%	3.3%	2.7%	3.6%	0.2%	1.8%	0.2%	5.7%	1.6%
	9-Noon	3.2%	2.8%	1.6%	2.1%	4.4%	1.0%	0.9%	1.2%	3.0%	1.9%	0.6%	3.8%	1.5%	1.2%	0.1%	0.0%	0.9%	2.7%	2.4%	2.6%	0.4%	1.4%	0.2%	4.1%	0.7%
	Noon-3 PM	5.6%	3.6%	3.0%	3.5%	8.0%	0.8%	1.0%	2.5%	5.9%	2.6%	0.2%	5.3%	2.7%	2.6%	0.1%	0.3%	1.4%	4.2%	3.7%	4.5%	0.2%	1.3%	0.0%	5.7%	1.4%
	3-6 PM	7.6%	4.1%	3.7%	5.5%	8.8%	1.0%	1.4%	2.3%	7.9%	3.0%	0.7%	7.1%	2.4%	2.7%	0.4%	0.4%	2.2%	5.3%	4.9%	4.8%	0.0%	1.4%	0.2%	9.3%	2.3%
	6-9 PM	8.6%	6.1%	4.1%	6.5%	10.3%	2.1%	1.3%	3.1%	9.0%	5.0%	0.5%	8.2%	4.1%	3.6%	0.3%	0.1%	2.6%	6.3%	6.2%	6.2%	0.5%	2.0%	0.2%	10.4%	2.3%
	9-Midnight	7.7%	6.8%	3.7%	6.1%	9.9%	2.1%	1.1%	3.0%	8.5%	4.5%	1.1%	8.6%	3.5%	3.4%	0.4%	0.2%	2.0%	6.1%	6.5%	5.9%	0.0%	2.0%	0.4%	13.1%	2.7%
Lighting Conditions	Dark - Lighted	9.0%	9.0%	7.9%	6.4%	16.7%	2.9%	2.1%	4.7%	13.3%	5.6%	0.3%	12.5%	5.5%	4.2%	0.5%	0.1%	3.1%	6.9%	8.9%	10.7%	0.0%	1.6%	0.4%	22.4%	3.0%
	Dark - Not Lighted	11.5%	8.7%	2.3%	10.2%	10.6%	1.5%	0.9%	3.1%	8.7%	7.2%	2.5%	10.9%	3.4%	5.0%	0.6%	0.2%	2.2%	10.2%	8.3%	4.7%	0.5%	5.4%	0.2%	10.0%	3.4%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.8%	0.4%	0.4%	0.5%	0.7%	0.3%	0.1%	0.2%	0.6%	0.5%	0.2%	0.6%	0.4%	0.3%	0.1%	0.0%	0.1%	0.5%	0.7%	0.4%	0.0%	0.5%	0.0%	0.9%	0.2%
	Daylight	21.9%	13.5%	11.4%	15.7%	26.6%	4.6%	4.1%	8.0%	21.5%	11.1%	2.1%	21.2%	9.0%	8.3%	0.6%	0.8%	7.0%	15.5%	14.3%	16.0%	0.7%	5.2%	0.5%	26.1%	6.6%
	Dusk	1.7%	0.7%	0.5%	1.3%	1.5%	0.2%	0.4%	0.4%	1.8%	0.4%	0.1%	0.9%	0.8%	0.6%	0.0%	0.0%	0.6%	1.1%	0.7%	0.8%	0.2%	0.2%	0.0%	1.3%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.2%	0.1%	0.0%	0.2%	0.1%	0.0%	0.1%	0.0%	0.1%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.1%	0.0%	0.2%	0.0%	0.2%	0.0%

Attachment D-4
Osceola County
Percent of All KSI Crashes 2018-2022

Mode:	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.5%	0.0%	0.0%	0.0%	4.9%	0.9%	1.7%	6.9%	0.6%	0.0%	1.9%	2.2%	3.4%	3.7%	2.1%	0.5%	1.2%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.5%	0.0%	0.0%	0.0%	2.6%	0.6%	1.0%	3.6%	0.5%	0.2%	0.8%	1.0%	2.4%	2.1%	1.1%	0.2%	0.9%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	3.0%	0.4%	3.1%	6.4%	0.0%	0.0%	3.7%	1.6%	1.1%	4.3%	1.3%	0.1%	0.7%	0.0%
	Left Turn	2.9%	0.2%	0.0%	0.0%	14.1%	3.3%	4.1%	19.7%	1.7%	0.1%	4.8%	5.7%	11.1%	9.2%	7.2%	1.4%	3.8%	0.0%
	Off Road	0.2%	0.2%	0.0%	0.0%	7.6%	0.6%	4.0%	11.6%	0.5%	0.0%	3.9%	2.1%	6.2%	4.3%	5.5%	1.0%	1.4%	0.0%
	Other	1.6%	0.4%	0.0%	0.0%	6.8%	1.5%	4.2%	11.7%	0.8%	0.0%	2.8%	2.9%	6.9%	5.0%	4.8%	0.6%	2.2%	0.0%
	Pedestrian	1.8%	0.2%	0.0%	0.0%	5.4%	1.8%	3.6%	9.9%	0.7%	0.2%	1.4%	2.5%	6.9%	3.8%	3.7%	1.1%	2.3%	0.0%
	Rear End	1.4%	0.2%	0.0%	0.0%	8.0%	3.5%	5.6%	14.9%	1.9%	0.4%	4.5%	4.1%	8.5%	4.1%	7.1%	1.0%	4.9%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.4%	0.1%	0.4%	0.8%	0.0%	0.0%	0.2%	0.4%	0.3%	0.0%	0.5%	0.1%	0.2%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	1.6%	0.1%	1.3%	3.0%	0.0%	0.0%	1.8%	0.4%	0.8%	1.5%	0.9%	0.0%	0.5%	0.0%
	Sideswipe	0.2%	0.0%	0.0%	0.0%	1.0%	0.5%	1.2%	2.2%	0.5%	0.0%	1.2%	0.2%	1.3%	1.2%	0.9%	0.2%	0.4%	0.0%
	Unknown	0.0%	0.2%	0.0%	0.0%	0.5%	0.2%	0.5%	1.0%	0.2%	0.0%	0.5%	0.3%	0.4%	0.4%	0.5%	0.2%	0.2%	0.0%
Alcohol Related	Y	0.2%	0.0%	0.0%	0.0%	3.6%	1.0%	2.9%	7.0%	0.5%	0.0%	2.9%	1.6%	3.0%	3.3%	2.8%	0.5%	0.9%	0.0%
	N	8.9%	1.3%	0.0%	0.0%	52.2%	12.6%	27.7%	84.8%	6.9%	0.8%	24.6%	21.7%	46.2%	36.3%	32.7%	5.9%	17.6%	0.0%
Hit and Run	Y	1.1%	0.2%	0.0%	0.0%	3.8%	1.8%	1.8%	5.9%	0.4%	0.0%	1.1%	1.6%	3.5%	2.0%	2.3%	0.4%	1.5%	0.0%
	N	8.1%	1.1%	0.0%	0.0%	52.0%	28.8%	28.8%	85.9%	7.0%	0.8%	26.4%	21.7%	45.6%	37.7%	33.2%	6.0%	17.0%	0.0%
Aggressive Driving	Y	0.5%	0.0%	0.0%	0.0%	2.3%	1.4%	1.4%	3.9%	0.6%	0.0%	1.3%	1.2%	2.1%	1.9%	2.1%	0.2%	0.4%	0.0%
	N	8.6%	1.3%	0.0%	0.0%	53.6%	29.2%	29.2%	87.9%	6.8%	0.8%	26.2%	22.2%	47.1%	37.8%	33.5%	6.1%	18.1%	0.0%
Distracted Driving	Y	2.0%	0.4%	0.0%	0.0%	20.6%	11.9%	11.9%	34.7%	3.2%	0.4%	11.6%	8.8%	17.9%	15.6%	15.4%	2.4%	4.9%	0.0%
	N	7.2%	0.9%	0.0%	0.0%	35.2%	18.7%	18.7%	57.1%	4.1%	0.5%	15.9%	14.5%	31.3%	24.1%	20.1%	3.9%	13.6%	0.0%
Intersection Related	Y	2.7%	0.9%	0.0%	0.0%	19.5%	8.5%	8.5%	30.4%	3.2%	0.3%	8.2%	8.7%	17.0%	14.2%	11.7%	2.2%	5.9%	0.0%
	N	6.4%	0.4%	0.0%	0.0%	36.3%	22.1%	22.1%	61.4%	4.1%	0.5%	19.3%	14.6%	32.2%	25.5%	23.8%	4.1%	12.6%	0.0%
Drug Related	Y	0.2%	0.0%	0.0%	0.0%	2.1%	2.5%	2.5%	4.7%	0.0%	0.0%	2.3%	1.0%	1.4%	2.0%	2.2%	0.3%	0.3%	0.0%
	N	8.9%	1.3%	0.0%	0.0%	53.7%	28.0%	28.0%	87.1%	7.4%	0.8%	25.2%	22.4%	47.7%	37.7%	33.4%	6.0%	18.2%	0.0%
Aging Driver	Y	1.6%	0.4%	0.0%	0.0%	8.7%	5.4%	5.4%	14.8%	1.5%	0.1%	5.0%	4.0%	7.4%	6.0%	6.2%	1.3%	3.0%	0.0%
	N	7.5%	0.9%	0.0%	0.0%	47.2%	25.2%	25.2%	77.0%	5.9%	0.7%	22.5%	19.4%	41.7%	33.7%	29.3%	5.0%	15.5%	0.0%
Teenage Driver	Y	0.5%	0.2%	0.0%	0.0%	7.0%	3.8%	3.8%	11.4%	1.1%	0.0%	2.6%	3.2%	6.7%	4.7%	4.7%	0.8%	2.3%	0.0%
	N	8.6%	1.1%	0.0%	0.0%	48.8%	26.8%	26.8%	80.4%	6.3%	0.8%	24.9%	20.2%	42.5%	35.0%	30.8%	5.5%	16.2%	0.0%
Day of the Week	Monday	0.4%	0.2%	0.0%	0.0%	6.3%	3.7%	3.7%	12.5%	0.9%	0.2%	4.2%	3.4%	6.0%	5.9%	4.5%	1.0%	2.3%	0.0%
	Tuesday	0.2%	0.0%	0.0%	0.0%	4.6%	4.4%	4.4%	11.2%	0.7%	0.1%	3.4%	2.7%	5.9%	4.9%	4.2%	0.9%	2.0%	0.0%
	Wednesday	1.4%	0.4%	0.0%	0.0%	7.6%	3.6%	3.6%	14.0%	1.0%	0.1%	4.6%	3.0%	7.5%	6.4%	5.2%	0.8%	2.6%	0.0%
	Thursday	1.6%	0.0%	0.0%	0.0%	7.2%	3.9%	3.9%	13.3%	1.3%	0.2%	2.8%	3.1%	8.9%	5.1%	5.2%	1.4%	3.1%	0.0%
	Friday	1.8%	0.2%	0.0%	0.0%	6.7%	3.8%	3.8%	12.5%	1.6%	0.1%	4.1%	3.4%	6.7%	5.9%	5.2%	0.8%	2.3%	0.0%
	Saturday	2.1%	0.2%	0.0%	0.0%	7.7%	3.9%	3.9%	14.6%	1.1%	0.1%	3.7%	4.2%	7.8%	6.0%	5.8%	0.7%	3.2%	0.0%
	Sunday	1.6%	0.4%	0.0%	0.0%	7.5%	2.9%	2.9%	13.6%	0.8%	0.1%	4.6%	3.5%	6.4%	5.5%	5.3%	0.7%	3.0%	0.0%
Time of Day	12-3 AM	1.1%	0.0%	0.0%	0.0%	5.1%	2.7%	2.7%	9.9%	0.6%	0.2%	3.1%	2.8%	4.9%	4.4%	4.1%	0.7%	1.5%	0.0%
	3-6 AM	0.5%	0.2%	0.0%	0.0%	3.8%	2.0%	2.0%	6.9%	0.6%	0.0%	2.2%	1.5%	3.9%	2.2%	3.6%	0.5%	1.4%	0.0%
	6-9 AM	1.4%	0.0%	0.0%	0.0%	4.0%	3.2%	3.2%	8.6%	1.0%	0.1%	3.8%	1.6%	4.2%	4.0%	3.4%	0.5%	1.8%	0.0%
	9-Noon	0.2%	0.4%	0.0%	0.0%	3.9%	2.1%	2.1%	7.1%	0.5%	0.0%	2.2%	1.9%	3.5%	2.7%	3.0%	0.7%	1.2%	0.0%
	Noon-3 PM	2.3%	0.4%	0.0%	0.0%	7.0%	2.2%	2.2%	11.4%	0.6%	0.2%	2.3%	3.2%	6.7%	4.5%	3.4%	0.6%	3.6%	0.0%
	3-6 PM	0.9%	0.2%	0.0%	0.0%	7.2%	4.5%	4.5%	14.2%	1.0%	0.1%	4.1%	3.5%	7.8%	6.9%	5.6%	0.8%	2.1%	0.0%
	6-9 PM	2.0%	0.2%	0.0%	0.0%	8.7%	4.7%	4.7%	17.5%	1.3%	0.1%	4.7%	4.4%	9.7%	8.2%	5.9%	1.4%	3.4%	0.0%
	9-Midnight	0.7%	0.0%	0.0%	0.0%	7.9%	4.8%	4.8%	16.1%	1.8%	0.2%	5.3%	4.3%	8.5%	6.9%	6.6%	1.2%	3.5%	0.0%
Lighting Conditions	Dark - Lighted	2.7%	0.4%	0.0%	0.0%	11.9%	6.4%	6.4%	23.2%	2.5%	0.3%	4.1%	5.7%	16.2%	7.7%	11.3%	2.2%	4.9%	0.0%
	Dark - Not Lighted	0.9%	0.0%	0.0%	0.0%	9.3%	6.8%	6.8%	21.0%	1.4%	0.1%	9.3%	5.7%	7.5%	10.7%	6.9%	1.4%	3.5%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.0%	0.0%	0.0%	0.0%	0.6%	0.5%	0.5%	1.2%	0.4%	0.0%	0.7%	0.3%	0.5%	0.5%	0.5%	0.1%	0.5%	0.0%
	Daylight	5.0%	0.7%	0.0%	0.0%	24.0%	11.7%	11.7%	43.3%	3.1%	0.5%	12.6%	10.9%	23.3%	18.9%	16.4%	2.4%	9.0%	0.0%
	Dusk	0.5%	0.2%	0.0%	0.0%	1.9%	0.6%	0.6%	2.9%	0.1%	0.0%	0.5%	0.8%	1.6%	1.5%	0.5%	0.3%	0.6%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.2%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%

Attachment D-5
Osceola County
Percent of All KSI Crashes involving only Car Truck 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	5.4%	2.4%	1.7%	3.5%	4.7%	1.3%	1.2%	3.2%	3.6%	1.3%	0.3%	3.3%	1.0%	2.0%	0.3%	0.7%	2.4%	4.1%	1.2%	2.6%	0.0%	1.4%	0.3%	5.4%	0.0%
	Animal	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	6.0%	2.2%	0.4%	6.0%	2.5%	0.0%	0.0%	0.1%	2.4%	3.7%	2.4%	4.6%	1.8%	1.3%	0.3%	0.0%	0.5%	5.2%	2.8%	1.4%	0.3%	5.4%	0.0%	2.7%	1.9%
	Left Turn	13.1%	7.4%	3.6%	3.8%	17.5%	2.5%	1.3%	6.0%	11.5%	5.3%	0.0%	8.6%	5.1%	6.4%	0.5%	0.3%	2.9%	10.6%	7.8%	6.0%	0.8%	2.2%	0.0%	13.5%	3.5%
	Off Road	6.2%	7.1%	2.9%	8.4%	7.2%	0.9%	2.2%	2.5%	7.4%	3.6%	0.5%	6.7%	3.0%	2.4%	0.4%	0.4%	3.7%	3.5%	6.3%	4.8%	0.3%	0.8%	0.0%	6.5%	1.1%
	Other	5.6%	3.6%	3.8%	5.6%	6.5%	1.0%	1.6%	2.1%	5.0%	3.2%	1.1%	6.5%	1.6%	2.7%	0.4%	0.0%	2.0%	4.4%	3.5%	5.2%	0.0%	2.7%	0.3%	8.9%	1.1%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	6.0%	7.7%	7.4%	5.2%	12.2%	3.5%	0.5%	1.5%	11.5%	7.1%	0.4%	13.4%	4.8%	1.4%	0.0%	0.1%	1.2%	3.4%	8.7%	10.9%	0.5%	1.4%	0.5%	17.8%	5.1%
	Right Turn	0.4%	0.0%	0.3%	0.0%	0.7%	0.0%	0.3%	0.0%	0.1%	0.3%	0.0%	0.4%	0.0%	0.1%	0.0%	0.0%	0.1%	0.2%	0.2%	0.3%	0.3%	0.0%	0.0%	0.8%	0.0%
	Rollover	1.7%	1.2%	0.0%	2.4%	0.5%	0.0%	0.4%	0.5%	0.4%	0.5%	1.1%	0.9%	0.7%	0.4%	0.0%	0.0%	0.9%	1.7%	0.6%	0.0%	0.0%	1.6%	0.0%	0.0%	0.3%
	Sideswipe	1.5%	0.7%	0.3%	0.8%	1.4%	0.1%	0.0%	0.7%	0.4%	0.7%	0.7%	1.3%	0.5%	0.4%	0.1%	0.0%	0.0%	1.7%	0.6%	0.5%	0.0%	1.4%	0.0%	1.4%	0.3%
	Unknown	0.7%	0.5%	0.3%	0.8%	0.7%	0.0%	0.0%	0.3%	0.5%	0.4%	0.3%	0.8%	0.4%	0.3%	0.0%	0.0%	0.0%	0.6%	0.6%	0.5%	0.0%	0.5%	0.0%	0.5%	0.3%
Alcohol Related	Y	3.6%	3.6%	0.9%	4.6%	3.1%	0.4%	0.5%	1.6%	3.0%	1.9%	1.1%	3.3%	1.6%	1.6%	0.3%	0.0%	1.4%	3.5%	2.0%	2.3%	0.0%	2.4%	0.0%	3.2%	1.4%
	N	43.0%	29.2%	19.7%	31.9%	50.9%	9.0%	7.0%	15.2%	39.8%	24.3%	5.6%	43.2%	17.4%	16.0%	1.7%	1.4%	12.2%	32.1%	30.4%	29.8%	2.2%	14.9%	1.1%	54.6%	12.2%
Hit and Run	Y	1.3%	1.7%	0.9%	1.3%	2.6%	0.3%	0.0%	0.5%	2.2%	0.9%	0.3%	2.5%	0.3%	0.9%	0.0%	0.1%	0.4%	1.4%	1.2%	1.7%	0.0%	0.5%	0.0%	3.5%	0.3%
	N	45.2%	31.1%	19.7%	35.2%	51.4%	9.2%	7.5%	16.3%	40.6%	25.3%	6.3%	44.0%	18.7%	16.6%	2.0%	1.3%	13.2%	34.2%	31.1%	30.4%	2.2%	16.8%	1.1%	54.3%	13.2%
Aggressive Driving	Y	2.1%	2.5%	0.5%	1.8%	3.0%	0.3%	0.8%	1.3%	1.5%	1.3%	0.3%	1.7%	0.9%	1.0%	0.0%	0.3%	1.2%	2.0%	1.2%	1.1%	0.0%	0.5%	0.0%	2.2%	0.5%
	N	44.4%	30.3%	20.1%	34.7%	51.0%	9.2%	6.7%	15.5%	41.4%	24.9%	6.3%	44.8%	18.1%	16.5%	2.0%	1.2%	12.4%	33.6%	31.1%	31.0%	2.2%	16.8%	1.1%	55.7%	13.0%
Distracted Driving	Y	21.0%	14.7%	8.5%	15.2%	24.3%	4.6%	2.9%	7.0%	18.8%	12.8%	2.6%	20.8%	8.8%	7.6%	0.7%	0.4%	5.9%	15.0%	16.0%	13.3%	1.1%	7.0%	0.8%	24.3%	7.0%
	N	25.5%	18.1%	12.2%	21.3%	29.7%	4.8%	4.6%	9.8%	24.1%	13.4%	4.0%	25.7%	10.2%	9.9%	1.3%	1.0%	7.7%	20.6%	16.4%	18.7%	1.1%	10.3%	0.3%	33.5%	6.5%
Intersection Related	Y	16.8%	12.2%	6.3%	7.5%	22.9%	4.7%	2.0%	7.8%	16.4%	8.6%	0.5%	14.9%	6.8%	7.1%	0.5%	0.5%	5.2%	12.9%	10.9%	10.6%	1.1%	4.1%	0.5%	23.2%	4.9%
	N	29.8%	20.6%	14.3%	29.1%	31.2%	4.7%	5.6%	9.0%	26.5%	17.6%	6.1%	31.5%	12.2%	10.5%	1.4%	0.9%	8.4%	22.7%	21.5%	21.5%	1.1%	13.2%	0.5%	34.6%	8.6%
Drug Related	Y	2.2%	2.1%	0.9%	3.3%	1.8%	0.3%	0.1%	0.8%	1.9%	1.6%	0.9%	3.0%	0.9%	0.5%	0.0%	0.1%	0.8%	2.1%	1.4%	1.7%	0.0%	2.2%	0.0%	1.9%	1.4%
	N	44.3%	30.7%	19.7%	33.2%	52.2%	9.2%	7.4%	16.0%	41.0%	24.6%	5.7%	43.5%	18.1%	17.0%	2.0%	1.3%	12.8%	33.4%	31.0%	30.4%	2.2%	15.1%	1.1%	55.9%	12.2%
Aging Driver	Y	8.1%	5.8%	4.1%	6.8%	9.2%	2.2%	1.3%	2.2%	7.1%	5.6%	1.7%	9.4%	3.7%	2.7%	0.1%	0.1%	2.1%	6.4%	5.1%	7.2%	1.1%	4.1%	0.3%	9.2%	3.2%
	N	38.5%	27.0%	16.5%	29.7%	44.9%	7.2%	6.2%	14.6%	35.7%	20.6%	4.9%	37.0%	15.3%	14.8%	1.8%	1.3%	11.5%	29.1%	27.3%	24.8%	1.1%	13.2%	0.8%	48.6%	10.3%
Teenage Driver	Y	7.5%	5.4%	1.9%	4.8%	8.6%	1.3%	2.0%	3.4%	5.3%	3.7%	0.4%	5.2%	3.4%	2.4%	0.7%	0.3%	2.9%	4.6%	5.7%	3.4%	0.3%	1.1%	0.5%	6.8%	2.2%
	N	39.0%	27.4%	18.8%	31.7%	45.4%	8.1%	5.6%	13.4%	37.6%	22.5%	6.2%	41.2%	15.6%	15.2%	1.3%	1.2%	10.7%	31.0%	26.7%	28.7%	1.9%	16.2%	0.5%	51.1%	11.4%
Day of the Week	Monday	7.5%	4.4%	2.1%	5.2%	6.8%	1.8%	1.2%	2.2%	6.3%	3.2%	1.1%	5.8%	2.9%	2.9%	0.1%	0.1%	2.1%	5.5%	4.3%	3.8%	0.3%	2.2%	0.3%	7.3%	2.4%
	Tuesday	5.3%	4.0%	2.5%	4.2%	6.4%	1.2%	0.7%	1.6%	4.8%	3.8%	0.9%	6.2%	1.6%	2.0%	0.3%	0.3%	1.6%	3.8%	3.8%	4.1%	0.5%	2.4%	0.3%	8.6%	1.1%
	Wednesday	7.3%	4.8%	3.7%	5.6%	8.6%	1.3%	1.2%	2.9%	7.8%	3.0%	0.8%	7.6%	2.4%	2.6%	0.4%	0.3%	2.4%	5.2%	4.8%	5.2%	0.0%	3.5%	0.3%	8.4%	1.4%
	Thursday	6.6%	5.0%	2.8%	5.9%	7.5%	1.3%	1.2%	2.2%	6.7%	3.4%	0.8%	5.9%	3.5%	2.7%	0.1%	0.3%	2.1%	5.7%	4.3%	4.6%	0.0%	1.9%	0.0%	6.2%	1.9%
	Friday	6.9%	4.4%	4.0%	5.1%	9.0%	1.2%	1.6%	2.1%	6.1%	4.4%	1.1%	8.0%	2.4%	2.7%	0.5%	0.1%	1.6%	5.7%	5.1%	5.4%	0.8%	2.7%	0.0%	8.6%	2.4%
	Saturday	6.3%	5.6%	3.3%	5.2%	8.1%	1.8%	0.9%	2.9%	6.3%	4.0%	1.1%	7.2%	3.0%	2.7%	0.4%	0.3%	1.6%	4.9%	5.7%	5.1%	0.0%	2.4%	0.0%	10.3%	2.2%
	Sunday	6.6%	4.8%	2.2%	5.2%	7.6%	0.8%	0.8%	2.8%	4.8%	4.4%	0.9%	5.9%	3.3%	1.8%	0.1%	0.1%	2.4%	4.8%	4.4%	3.8%	0.5%	2.2%	0.3%	8.4%	2.2%
Time of Day	12-3 AM	5.6%	4.4%	1.3%	3.8%	5.9%	1.4%	0.9%	2.0%	4.4%	3.4%	0.5%	4.7%	2.5%	2.4%	0.3%	0.0%	1.3%	4.4%	4.3%	2.8%	0.3%	1.6%	0.0%	8.6%	1.4%
	3-6 AM	3.8%	3.2%	1.6%	5.1%	3.5%	0.3%	0.8%	1.6%	3.2%	1.9%	1.2%	4.5%	1.2%	0.9%	0.3%	0.0%	2.1%	3.2%	2.8%	2.0%	0.0%	3.0%	0.0%	4.9%	0.8%
	6-9 AM	4.4%	2.1%	2.6%	2.9%	5.1%	1.0%	0.5%	1.2%	3.0%	3.3%	1.1%	4.7%	1.4%	1.7%	0.0%	0.3%	0.9%	3.1%	2.5%	3.8%	0.3%	2.2%	0.3%	4.9%	1.6%
	9-Noon	3.2%	2.8%	1.6%	2.5%	3.8%	1.2%	0.8%	0.8%	3.0%	2.2%	0.7%	4.3%	1.2%	0.9%	0.1%	0.0%	0.9%	2.6%	2.6%	2.5%	0.5%	2.2%	0.3%	4.9%	0.8%
	Noon-3 PM	6.6%	4.4%	2.9%	3.9%	9.0%	1.2%	1.1%	2.9%	6.6%	3.0%	0.3%	5.8%	3.3%	2.9%	0.1%	0.3%	1.8%	4.4%	4.8%	4.9%	0.3%	1.6%	0.0%	5.1%	1.9%
	3-6 PM	7.0%	4.5%	3.8%	5.9%	8.2%	1.0%	1.3%	2.2%	7.5%	3.2%	1.1%	7.6%	2.4%	1.8%	0.5%	0.5%	2.4%	5.1%	4.6%	5.1%	0.0%	2.2%	0.3%	8.9%	1.9%
	6-9 PM	8.2%	5.4%	3.4%	6.4%	8.9%	1.7%	0.9%	2.9%	7.8%	5.0%	0.4%	6.9%	4.3%	3.7%	0.0%	0.1%	2.0%	6.6%	5.4%	5.5%	0.8%	1.9%	0.3%	9.2%	3.2%
	9-Midnight	7.8%	6.1%	3.3%	6.0%	9.6%	1.6%	1.2%	3.2%	7.3%	4.1%	1.5%	8.0%	2.7%	3.3%	0.7%	0.3%	2.2%	6.1%	5.5%	5.5%	0.0%	2.7%	0.0%	11.4%	1.9%
Lighting Conditions	Dark - Lighted	9.7%	8.7%	6.9%	7.2%	15.6%	2.6%	2.2%	5.0%	12.2%	5.4%	0.4%	11.4%	5.5%	4.3%	0.8%	0.1%	3.3%	7.5%	8.0%	10.3%	0.0%	1.9%	0.3%	21.4%	3.2%
	Dark - Not Lighted	11.6%	8.2%	1.7%	10.6%	9.7%	1.2%	0.9%	3.4%	6.9%	7.4%	2.9%	10.3%	3.1%	4.7%	0.4%	0.3%	2.6%	10.3%	7.7%	3.8%	0.8%	6.8%	0.0%	8.9%	3.2%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.8%	0.1%	0.3%	0.5%	0.5%	0.1%	0.0%	0.1%	0.5%	0.3%	0.3%	0.5%	0.3%	0.4%	0.0%	0.0%	0.0%	0.5%	0.5%	0.5%	0.0%	0.5%	0.0%	0.5%	0.0%
	Daylight	22.9%	15.2%	11.2%	17.0%	27.1%	5.2%	4.1%	7.9%	22.0%	12.6%	2.8%	23.0%	9.7%	7.6%	0.8%	1.0%	7.2%	16.3%	15.8%	16.6%	1.1%	7.6%	0.8%	25.4%	7.0%
	Dusk	1.3%	0.5%	0.5%	0.9%	1.2%	0.3%	0.1%	0.3%	1.3%	0.5%	0.1%	1.0%	0.4%	0.5%	0.0%	0.0%	0.4%	0.9%	0.5%	0.9%	0.3%	0.3%	0.0%	1.6%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%

Attachment D-5
Osceola County
Percent of All KSI Crashes involving only Car Truck 2018-2022

Mode: All	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.5%	0.0%	0.0%	0.0%	6.3%	0.9%	2.2%	8.7%	0.8%	0.0%	2.2%	2.6%	4.6%	4.4%	2.9%	0.8%	1.5%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	3.8%	0.5%	4.2%	8.6%	0.0%	0.0%	4.8%	2.2%	1.6%	5.6%	1.9%	0.1%	1.1%	0.0%
	Left Turn	3.5%	0.0%	0.0%	0.0%	15.6%	3.6%	4.9%	22.0%	2.0%	0.1%	5.3%	6.6%	12.2%	9.9%	8.9%	1.6%	3.7%	0.0%
	Off Road	0.3%	0.3%	0.0%	0.0%	9.8%	0.9%	5.6%	15.5%	0.8%	0.0%	4.9%	2.9%	8.5%	5.8%	7.3%	1.2%	2.0%	0.0%
	Other	1.6%	0.0%	0.0%	0.0%	6.9%	1.7%	4.4%	11.9%	1.1%	0.0%	3.0%	3.3%	6.6%	4.9%	5.6%	0.3%	2.2%	0.0%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	1.4%	0.3%	0.0%	0.0%	10.3%	3.8%	6.9%	18.3%	2.2%	0.5%	5.6%	5.2%	10.3%	5.0%	9.0%	1.3%	5.7%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.4%	0.7%	0.0%	0.0%	0.3%	0.3%	0.1%	0.0%	0.4%	0.1%	0.1%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	1.6%	0.1%	1.2%	2.9%	0.0%	0.0%	2.1%	0.1%	0.7%	1.5%	1.1%	0.0%	0.4%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.8%	0.3%	1.3%	2.1%	0.3%	0.0%	1.1%	0.3%	1.1%	1.3%	0.8%	0.0%	0.3%	0.0%
	Unknown	0.0%	0.3%	0.0%	0.0%	0.8%	0.3%	0.4%	1.2%	0.3%	0.0%	0.7%	0.4%	0.4%	0.5%	0.7%	0.1%	0.1%	0.0%
Alcohol Related	Y	0.3%	0.0%	0.0%	0.0%	3.8%	0.9%	3.3%	7.7%	0.4%	0.0%	3.2%	2.1%	2.8%	3.4%	3.6%	0.3%	0.8%	0.0%
	N	7.0%	0.8%	0.0%	0.0%	52.4%	11.4%	28.2%	84.3%	7.0%	0.7%	26.7%	22.0%	43.3%	35.6%	34.8%	5.3%	16.3%	0.0%
Hit and Run	Y	0.5%	0.0%	0.0%	0.0%	2.2%	1.2%	1.2%	3.7%	0.3%	0.0%	1.1%	1.1%	1.9%	1.3%	1.7%	0.0%	0.9%	0.0%
	N	6.8%	0.8%	0.0%	0.0%	54.0%	30.3%	30.3%	88.2%	7.1%	0.7%	28.8%	23.0%	44.2%	37.7%	36.6%	5.6%	16.1%	0.0%
Aggressive Driving	Y	0.3%	0.0%	0.0%	0.0%	2.2%	1.9%	1.9%	4.4%	0.8%	0.0%	1.5%	1.5%	2.2%	2.2%	2.5%	0.3%	0.1%	0.0%
	N	7.0%	0.8%	0.0%	0.0%	54.0%	29.6%	29.6%	87.6%	6.6%	0.7%	28.4%	22.6%	43.8%	36.8%	35.8%	5.3%	16.9%	0.0%
Distracted Driving	Y	1.6%	0.3%	0.0%	0.0%	23.7%	14.2%	14.2%	39.9%	3.8%	0.4%	13.8%	9.9%	20.5%	17.1%	18.8%	2.6%	5.7%	0.0%
	N	5.7%	0.5%	0.0%	0.0%	32.5%	17.3%	17.3%	52.0%	3.6%	0.3%	16.1%	14.2%	25.5%	22.0%	19.6%	2.9%	11.4%	0.0%
Intersection Related	Y	3.0%	0.5%	0.0%	0.0%	20.1%	9.4%	9.4%	31.6%	3.4%	0.3%	8.5%	9.1%	17.7%	13.4%	14.0%	2.2%	5.7%	0.0%
	N	4.3%	0.3%	0.0%	0.0%	36.1%	22.1%	22.1%	60.3%	4.0%	0.4%	21.4%	14.9%	28.3%	25.7%	24.3%	3.3%	11.4%	0.0%
Drug Related	Y	0.3%	0.0%	0.0%	0.0%	2.4%	2.9%	2.9%	5.3%	0.0%	0.0%	2.4%	1.2%	1.7%	1.9%	3.0%	0.1%	0.3%	0.0%
	N	7.0%	0.8%	0.0%	0.0%	53.8%	28.6%	28.6%	86.6%	7.4%	0.7%	27.5%	22.9%	44.3%	37.2%	35.3%	5.4%	16.8%	0.0%
Aging Driver	Y	1.4%	0.3%	0.0%	0.0%	9.5%	6.3%	6.3%	16.1%	1.9%	0.0%	6.2%	4.4%	7.4%	6.9%	6.9%	1.5%	2.8%	0.0%
	N	5.9%	0.5%	0.0%	0.0%	46.7%	25.1%	25.1%	75.8%	5.6%	0.7%	23.7%	19.7%	38.6%	32.1%	31.5%	4.1%	14.3%	0.0%
Teenage Driver	Y	0.5%	0.0%	0.0%	0.0%	9.1%	4.5%	4.5%	13.9%	0.9%	0.0%	3.3%	3.7%	7.8%	6.0%	5.8%	0.8%	2.2%	0.0%
	N	6.8%	0.8%	0.0%	0.0%	47.1%	27.0%	27.0%	78.0%	6.5%	0.7%	26.6%	20.4%	38.2%	33.1%	32.5%	4.8%	14.8%	0.0%
Day of the Week	Monday	0.0%	0.3%	0.0%	0.0%	6.2%	4.1%	4.1%	13.0%	0.9%	0.1%	4.5%	3.4%	6.1%	5.8%	4.6%	1.2%	2.4%	0.0%
	Tuesday	0.0%	0.0%	0.0%	0.0%	4.7%	4.1%	4.1%	11.0%	0.8%	0.0%	3.7%	2.4%	5.7%	4.4%	4.6%	0.7%	2.1%	0.0%
	Wednesday	1.6%	0.3%	0.0%	0.0%	7.5%	4.2%	4.2%	14.9%	0.8%	0.0%	5.4%	3.0%	7.3%	6.3%	6.2%	0.9%	2.2%	0.0%
	Thursday	1.4%	0.0%	0.0%	0.0%	7.7%	3.4%	3.4%	13.2%	1.1%	0.1%	3.0%	3.4%	7.9%	5.3%	5.4%	0.8%	2.9%	0.0%
	Friday	1.6%	0.0%	0.0%	0.0%	6.7%	4.1%	4.1%	13.0%	2.1%	0.1%	4.4%	3.4%	7.4%	5.7%	5.8%	0.9%	2.8%	0.0%
	Saturday	1.1%	0.3%	0.0%	0.0%	7.4%	3.6%	3.6%	14.0%	1.1%	0.1%	4.2%	4.5%	6.5%	6.0%	6.3%	0.4%	2.5%	0.0%
	Sunday	1.6%	0.0%	0.0%	0.0%	7.0%	2.9%	2.9%	12.8%	0.7%	0.1%	4.6%	3.8%	5.2%	5.6%	5.3%	0.7%	2.1%	0.0%
Time of Day	12-3 AM	0.5%	0.0%	0.0%	0.0%	5.0%	2.8%	2.8%	10.3%	0.8%	0.1%	3.2%	3.2%	4.9%	4.5%	4.9%	0.5%	1.3%	0.0%
	3-6 AM	0.3%	0.3%	0.0%	0.0%	4.1%	2.4%	2.4%	8.1%	0.5%	0.0%	2.6%	1.9%	4.1%	2.6%	4.0%	0.5%	1.5%	0.0%
	6-9 AM	1.4%	0.0%	0.0%	0.0%	3.4%	3.3%	3.3%	7.9%	1.1%	0.1%	4.4%	1.3%	3.4%	3.6%	3.6%	0.4%	1.6%	0.0%
	9-Noon	0.0%	0.0%	0.0%	0.0%	3.7%	2.1%	2.1%	7.0%	0.5%	0.0%	2.4%	2.2%	2.9%	2.6%	3.0%	0.9%	0.9%	0.0%
	Noon-3 PM	2.4%	0.3%	0.0%	0.0%	7.8%	2.7%	2.7%	12.8%	0.9%	0.1%	2.5%	4.0%	7.4%	5.3%	3.7%	0.8%	4.1%	0.0%
	3-6 PM	1.4%	0.3%	0.0%	0.0%	7.0%	4.4%	4.4%	14.4%	0.9%	0.0%	4.1%	3.6%	7.7%	6.6%	6.6%	0.4%	1.7%	0.0%
	6-9 PM	0.8%	0.0%	0.0%	0.0%	8.2%	4.4%	4.4%	16.0%	1.1%	0.0%	5.0%	4.1%	7.9%	7.0%	6.2%	1.1%	2.8%	0.0%
	9-Midnight	0.5%	0.0%	0.0%	0.0%	8.0%	4.2%	4.2%	15.3%	1.6%	0.3%	5.7%	3.8%	7.7%	6.7%	6.3%	0.9%	3.2%	0.0%
Lighting Conditions	Dark - Lighted	1.6%	0.3%	0.0%	0.0%	12.2%	5.5%	5.5%	22.1%	2.8%	0.4%	4.4%	6.1%	14.8%	7.4%	11.6%	1.6%	4.6%	0.0%
	Dark - Not Lighted	0.3%	0.0%	0.0%	0.0%	8.5%	6.9%	6.9%	20.4%	1.2%	0.0%	9.8%	5.4%	6.3%	10.4%	7.1%	1.2%	2.8%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.0%	0.0%	0.0%	0.0%	0.3%	0.6%	0.6%	1.1%	0.1%	0.0%	0.7%	0.0%	0.5%	0.5%	0.3%	0.1%	0.3%	0.0%
	Daylight	5.1%	0.5%	0.0%	0.0%	24.6%	12.8%	12.8%	45.9%	3.2%	0.3%	14.3%	11.9%	23.1%	19.4%	18.7%	2.4%	8.9%	0.0%
	Dusk	0.3%	0.0%	0.0%	0.0%	1.3%	0.6%	0.6%	2.2%	0.1%	0.0%	0.5%	0.7%	1.2%	0.9%	0.7%	0.3%	0.5%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%

Attachment D-6
Osceola County
Percent of All KSI Crashes involving Motorcyclists 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	3.2%	2.7%	0.0%	2.7%	3.2%	0.0%	1.1%	1.6%	3.2%	0.0%	0.0%	1.6%	2.1%	1.1%	0.0%	0.5%	0.5%	1.8%	2.4%	1.8%	0.0%	1.1%	0.0%	2.2%	1.1%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	3.2%	0.0%	0.0%	3.2%	0.0%	0.0%	0.0%	0.0%	1.6%	1.1%	0.5%	1.1%	0.5%	0.5%	0.0%	0.0%	1.1%	1.2%	1.2%	0.0%	0.0%	1.1%	0.0%	0.0%	2.2%
	Left Turn	15.6%	11.3%	3.8%	7.5%	21.4%	1.6%	2.2%	8.1%	15.6%	4.8%	0.0%	10.2%	8.0%	9.1%	0.5%	0.0%	2.7%	15.2%	12.8%	3.7%	0.0%	1.1%	1.1%	15.6%	5.6%
	Off Road	2.7%	2.7%	1.1%	3.7%	3.2%	0.0%	1.1%	1.6%	2.2%	1.6%	0.0%	2.7%	1.1%	1.1%	0.0%	0.0%	2.1%	1.2%	3.7%	0.6%	0.0%	0.0%	0.0%	2.2%	1.1%
	Other	10.2%	7.0%	4.8%	8.0%	11.8%	2.1%	4.3%	3.8%	10.8%	3.2%	0.0%	8.0%	5.3%	3.2%	0.5%	0.0%	4.8%	5.5%	8.5%	6.1%	0.0%	0.0%	0.0%	12.2%	2.2%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	4.3%	5.4%	7.0%	3.2%	11.2%	2.1%	0.0%	1.1%	8.6%	5.4%	1.6%	11.2%	3.2%	2.1%	0.0%	0.0%	0.0%	4.3%	5.5%	9.1%	0.0%	2.2%	0.0%	15.6%	3.3%
	Right Turn	1.1%	0.5%	0.5%	0.0%	1.6%	0.5%	0.5%	0.0%	1.1%	0.5%	0.0%	1.1%	0.0%	0.5%	0.0%	0.0%	0.5%	0.0%	1.2%	0.6%	0.0%	0.0%	0.0%	2.2%	1.1%
	Rollover	3.8%	1.6%	0.5%	3.2%	2.7%	0.0%	0.0%	1.6%	2.2%	2.2%	0.0%	1.6%	1.1%	2.7%	0.0%	0.0%	0.5%	4.3%	1.2%	0.6%	0.0%	0.0%	0.0%	2.2%	1.1%
	Sideswipe	2.2%	1.1%	2.7%	1.6%	3.7%	0.5%	0.0%	0.0%	2.7%	2.2%	1.1%	3.7%	0.5%	1.1%	0.0%	0.0%	0.5%	2.4%	1.2%	2.4%	0.0%	1.1%	0.0%	4.4%	1.1%
	Unknown	0.0%	0.5%	0.5%	0.0%	1.1%	0.0%	0.0%	0.0%	0.5%	0.5%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.6%	0.0%	0.0%	0.0%	1.1%	0.0%
Alcohol Related	Y	4.8%	1.6%	2.7%	3.7%	4.8%	0.5%	1.6%	1.6%	4.3%	1.6%	0.0%	3.7%	0.5%	2.7%	0.5%	0.0%	1.6%	3.7%	2.4%	2.4%	0.0%	1.1%	0.0%	5.6%	0.0%
	N	41.4%	31.2%	18.3%	29.4%	55.1%	6.4%	7.5%	16.1%	44.1%	19.9%	3.2%	38.5%	21.4%	18.7%	0.5%	0.5%	11.2%	32.3%	36.0%	23.2%	0.0%	5.6%	1.1%	52.2%	18.9%
Hit and Run	Y	1.1%	1.6%	1.1%	0.0%	3.2%	0.5%	0.5%	0.0%	2.7%	0.5%	0.0%	2.7%	0.5%	0.0%	0.0%	0.0%	0.5%	0.0%	2.4%	1.2%	0.0%	0.0%	0.0%	3.3%	1.1%
	N	45.2%	31.2%	19.9%	33.2%	56.7%	6.4%	8.6%	17.7%	45.7%	21.0%	3.2%	39.6%	21.4%	21.4%	1.1%	0.5%	12.3%	36.0%	36.0%	24.4%	0.0%	6.7%	1.1%	54.4%	17.8%
Aggressive Driving	Y	3.2%	1.1%	1.6%	1.6%	3.7%	0.5%	1.1%	1.6%	2.2%	1.1%	0.0%	3.2%	0.0%	1.6%	0.0%	0.0%	1.1%	3.0%	0.6%	2.4%	0.0%	0.0%	0.0%	5.6%	0.0%
	N	43.0%	31.7%	19.4%	31.6%	56.1%	6.4%	8.1%	16.1%	46.2%	20.4%	3.2%	39.0%	21.9%	19.8%	1.1%	0.5%	11.8%	32.9%	37.8%	23.2%	0.0%	6.7%	1.1%	52.2%	18.9%
Distracted Driving	Y	14.0%	17.2%	7.5%	13.9%	21.9%	3.2%	2.7%	5.9%	19.4%	9.1%	1.6%	17.6%	8.6%	5.9%	1.1%	0.0%	5.9%	11.6%	16.5%	10.4%	0.0%	2.2%	0.0%	26.7%	10.0%
	N	32.3%	15.6%	13.4%	19.3%	38.0%	3.7%	6.5%	11.8%	29.0%	12.4%	1.6%	24.6%	13.4%	15.5%	0.0%	0.5%	7.0%	24.4%	22.0%	15.2%	0.0%	4.4%	1.1%	31.1%	8.9%
Intersection Related	Y	21.0%	10.2%	5.4%	10.2%	23.0%	3.2%	3.8%	7.0%	18.3%	6.5%	1.1%	12.3%	8.0%	11.2%	0.5%	0.0%	4.3%	16.5%	13.4%	7.3%	0.0%	2.2%	1.1%	16.7%	8.9%
	N	25.3%	22.6%	15.6%	23.0%	36.9%	3.7%	5.4%	10.8%	30.1%	15.1%	2.2%	29.9%	13.9%	10.2%	0.5%	0.5%	8.6%	19.5%	25.0%	18.3%	0.0%	4.4%	0.0%	41.1%	10.0%
Drug Related	Y	3.8%	0.0%	1.1%	2.1%	2.7%	0.0%	1.1%	0.0%	2.2%	1.1%	0.5%	2.1%	0.0%	1.6%	0.0%	0.0%	1.1%	2.4%	1.8%	0.0%	0.0%	1.1%	0.0%	2.2%	0.0%
	N	42.5%	32.8%	19.9%	31.0%	57.2%	7.0%	8.1%	17.7%	46.2%	20.4%	2.7%	40.1%	21.9%	19.8%	1.1%	0.5%	11.8%	33.5%	36.6%	25.6%	0.0%	5.6%	1.1%	55.6%	18.9%
Aging Driver	Y	4.3%	6.5%	4.8%	3.7%	11.2%	0.5%	0.5%	1.1%	8.1%	5.9%	0.0%	9.1%	3.2%	2.1%	0.0%	0.0%	1.1%	4.3%	3.7%	8.5%	0.0%	1.1%	0.0%	11.1%	3.3%
	N	41.9%	26.3%	16.1%	29.4%	48.7%	6.4%	8.6%	16.7%	40.3%	15.6%	3.2%	33.2%	18.7%	19.3%	1.1%	0.5%	11.8%	31.7%	34.8%	17.1%	0.0%	5.6%	1.1%	46.7%	15.6%
Teenage Driver	Y	4.3%	3.2%	2.7%	2.1%	6.4%	1.6%	0.5%	1.6%	3.8%	4.3%	0.0%	4.3%	2.7%	1.6%	0.5%	0.0%	1.1%	3.7%	4.9%	2.4%	0.0%	1.1%	1.1%	10.0%	3.3%
	N	41.9%	29.6%	18.3%	31.0%	53.5%	5.3%	8.6%	16.1%	44.6%	17.2%	3.2%	38.0%	19.3%	19.8%	0.5%	0.5%	11.8%	32.3%	33.5%	23.2%	0.0%	5.6%	0.0%	47.8%	15.6%
Day of the Week	Monday	8.6%	3.8%	2.2%	4.3%	9.1%	1.1%	1.1%	2.7%	6.5%	3.2%	1.1%	5.3%	4.8%	2.7%	0.0%	0.0%	1.6%	6.1%	5.5%	3.0%	0.0%	1.1%	0.0%	6.7%	4.4%
	Tuesday	3.8%	4.8%	2.7%	4.3%	6.4%	0.5%	0.5%	0.0%	6.5%	3.8%	0.5%	5.9%	2.7%	1.6%	0.0%	0.0%	1.1%	2.4%	7.3%	1.8%	0.0%	1.1%	1.1%	7.8%	3.3%
	Wednesday	4.8%	4.3%	2.7%	4.3%	7.0%	1.1%	0.5%	3.2%	7.0%	1.1%	0.0%	3.2%	3.7%	3.7%	0.5%	0.0%	1.1%	4.9%	3.0%	4.9%	0.0%	1.1%	0.0%	3.3%	5.6%
	Thursday	7.0%	3.2%	2.7%	4.8%	7.0%	1.1%	2.2%	2.2%	6.5%	2.2%	0.0%	5.3%	1.6%	2.7%	0.0%	0.0%	3.2%	3.0%	4.9%	3.0%	0.0%	1.1%	0.0%	7.8%	2.2%
	Friday	8.6%	3.2%	0.5%	6.4%	5.3%	0.5%	2.7%	3.8%	3.2%	2.2%	0.5%	2.1%	4.8%	2.7%	0.0%	0.5%	2.1%	7.3%	3.0%	1.2%	0.0%	0.0%	0.0%	3.3%	2.2%
	Saturday	5.4%	6.5%	5.9%	4.3%	11.8%	1.6%	1.1%	2.2%	9.7%	4.3%	0.5%	10.7%	1.1%	4.3%	0.5%	0.0%	1.1%	6.1%	6.7%	6.1%	0.0%	1.1%	0.0%	13.3%	0.0%
	Sunday	8.1%	7.0%	4.3%	4.8%	13.4%	1.1%	1.1%	3.8%	9.1%	4.8%	0.5%	9.6%	3.2%	3.7%	0.0%	0.0%	2.7%	6.1%	7.9%	5.5%	0.0%	1.1%	0.0%	15.6%	1.1%
Time of Day	12-3 AM	3.2%	3.2%	3.2%	3.2%	6.4%	0.0%	1.1%	1.1%	5.4%	2.2%	0.0%	5.3%	1.6%	1.6%	0.0%	0.0%	1.1%	1.8%	4.9%	3.0%	0.0%	0.0%	0.0%	5.6%	1.1%
	3-6 AM	1.1%	1.6%	0.5%	1.1%	2.1%	0.0%	0.0%	0.5%	1.6%	0.5%	0.5%	1.1%	1.6%	0.5%	0.0%	0.0%	0.0%	1.2%	1.8%	0.6%	0.0%	1.1%	0.0%	0.0%	2.2%
	6-9 AM	4.3%	2.7%	1.6%	3.7%	4.8%	0.0%	0.5%	1.6%	4.3%	1.6%	0.5%	2.7%	1.1%	2.7%	0.0%	0.0%	2.1%	3.7%	1.8%	1.8%	0.0%	1.1%	0.0%	6.7%	1.1%
	9-Noon	4.3%	4.3%	2.2%	2.1%	8.0%	0.5%	1.1%	3.2%	3.8%	1.6%	1.1%	3.7%	3.7%	2.7%	0.0%	0.0%	0.5%	4.9%	3.0%	3.7%	0.0%	0.0%	0.0%	3.3%	1.1%
	Noon-3 PM	4.3%	3.2%	3.8%	3.7%	7.5%	0.0%	1.6%	1.6%	5.4%	2.7%	0.0%	5.3%	2.1%	2.7%	0.0%	0.5%	0.5%	6.1%	2.4%	3.7%	0.0%	1.1%	0.0%	8.9%	1.1%
	3-6 PM	11.3%	4.3%	3.8%	5.9%	11.8%	1.6%	1.1%	3.2%	10.8%	4.3%	0.0%	8.0%	4.3%	5.3%	0.0%	0.0%	1.6%	6.1%	8.5%	5.5%	0.0%	0.0%	0.0%	13.3%	5.6%
	6-9 PM	9.7%	8.6%	3.2%	8.6%	11.2%	2.1%	3.2%	3.2%	9.1%	4.8%	1.1%	10.2%	3.2%	2.1%	1.1%	0.0%	5.3%	6.1%	7.9%	4.9%	0.0%	2.2%	0.0%	10.0%	1.1%
	9-Midnight	8.1%	4.8%	2.7%	4.8%	8.0%	2.7%	0.5%	3.2%	8.1%	3.8%	0.0%	5.9%	4.3%	3.7%	0.0%	0.0%	1.6%	6.1%	7.9%	2.4%	0.0%	1.1%	1.1%	10.0%	5.6%
Lighting Conditions	Dark - Lighted	6.5%	7.5%	5.9%	4.3%	13.4%	2.1%	1.1%	4.3%	11.8%	2.7%	0.0%	9.1%	4.3%	4.3%	0.0%	0.0%	2.1%	6.1%	10.4%	4.3%	0.0%	1.1%	0.0%	14.4%	3.3%
	Dark - Not Lighted	11.3%	9.7%	1.6%	9.1%	12.3%	1.1%	1.6%	2.7%	9.7%	6.5%	2.2%	11.2%	4.3%	3.7%	1.1%	0.0%	2.1%	9.1%	11.0%	3.0%	0.0%	4.4%	1.1%	7.8%	6.7%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.0%	0.0%	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	1.1%	0.0%
	Daylight	25.8%	14.0%	12.9%	17.6%	31.6%	3.7%	5.4%	10.2%	24.2%	11.8%	1.1%	21.4%	11.2%	12.8%	0.0%	0.5%	7.0%	18.9%	16.5%	17.1%	0.0%	1.1%	0.0%	34.4%	8.9%
	Dusk	2.7%	1.6%	0.0%	2.1%	2.1%	0.0%	1.1%	0.5%	2.7%	0.0%	0.0%	0.0%	2.1%	0.5%	0.0%	0.0%	1.6%	1.8%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment D-6
Osceola County
Percent of All KSI Crashes involving Motorcyclists 2018-2022

Mode:	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	1.1%	0.0%	0.0%	0.0%	3.2%	1.6%	1.1%	5.4%	0.5%	0.0%	2.2%	2.2%	1.6%	4.3%	0.5%	0.0%	1.1%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	1.1%	3.2%	0.0%	0.0%	2.7%	0.5%	0.0%	3.2%	0.0%	0.0%	0.0%	0.0%
	Left Turn	3.3%	1.1%	0.0%	0.0%	20.4%	5.4%	4.8%	28.5%	2.2%	0.0%	7.0%	7.0%	16.7%	14.5%	7.0%	1.6%	7.5%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	5.4%	0.0%	1.1%	6.5%	0.0%	0.0%	3.2%	0.5%	2.7%	2.2%	3.2%	1.1%	0.0%	0.0%
	Other	3.3%	2.2%	0.0%	0.0%	12.4%	2.2%	7.5%	21.5%	0.5%	0.0%	4.3%	3.8%	14.0%	9.7%	5.9%	2.7%	3.8%	0.0%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	3.3%	0.0%	0.0%	0.0%	5.9%	5.4%	5.4%	14.5%	2.2%	0.0%	4.3%	3.8%	8.6%	4.3%	5.9%	0.5%	5.9%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	1.1%	0.5%	0.5%	2.2%	0.0%	0.0%	0.0%	1.1%	1.1%	0.0%	1.6%	0.0%	0.5%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	3.2%	0.0%	2.7%	5.9%	0.0%	0.0%	2.2%	1.6%	2.2%	3.2%	1.1%	0.0%	1.6%	0.0%
	Sideswipe	1.1%	0.0%	0.0%	0.0%	2.7%	1.6%	1.6%	4.3%	1.6%	0.0%	2.7%	0.0%	3.2%	1.6%	2.2%	1.1%	1.1%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	1.1%	0.0%	0.0%	0.5%	0.0%	0.5%	0.0%	0.0%	0.5%	0.5%	0.0%
Alcohol Related	Y	0.0%	0.0%	0.0%	0.0%	4.8%	1.6%	2.7%	8.6%	0.5%	0.0%	3.2%	0.5%	5.4%	4.3%	1.1%	1.6%	2.2%	0.0%
	N	12.2%	3.3%	0.0%	0.0%	51.6%	15.1%	24.2%	84.4%	6.5%	0.0%	25.8%	19.9%	45.2%	38.7%	26.3%	5.9%	19.9%	0.0%
Hit and Run	Y	1.1%	0.0%	0.0%	0.0%	3.2%	0.5%	0.5%	3.2%	0.5%	0.0%	0.0%	0.5%	3.2%	0.5%	1.1%	1.1%	1.1%	0.0%
	N	11.1%	3.3%	0.0%	0.0%	53.2%	26.3%	26.3%	89.8%	6.5%	0.0%	29.0%	19.9%	47.3%	42.5%	26.3%	6.5%	21.0%	0.0%
Aggressive Driving	Y	2.2%	0.0%	0.0%	0.0%	4.3%	0.5%	0.5%	5.4%	0.5%	0.0%	1.6%	1.1%	3.2%	2.2%	2.2%	0.0%	1.6%	0.0%
	N	10.0%	3.3%	0.0%	0.0%	52.2%	26.3%	26.3%	87.6%	6.5%	0.0%	27.4%	19.4%	47.3%	40.9%	25.3%	7.5%	20.4%	0.0%
Distracted Driving	Y	3.3%	1.1%	0.0%	0.0%	19.9%	11.3%	11.3%	34.9%	3.8%	0.0%	10.8%	10.2%	17.7%	15.6%	14.0%	3.2%	5.9%	0.0%
	N	8.9%	2.2%	0.0%	0.0%	36.6%	15.6%	15.6%	58.1%	3.2%	0.0%	18.3%	10.2%	32.8%	27.4%	13.4%	4.3%	16.1%	0.0%
Intersection Related	Y	4.4%	3.3%	0.0%	0.0%	22.0%	7.5%	7.5%	33.9%	2.7%	0.0%	11.8%	8.1%	16.7%	21.0%	5.9%	2.2%	7.5%	0.0%
	N	7.8%	0.0%	0.0%	0.0%	34.4%	19.4%	19.4%	59.1%	4.3%	0.0%	17.2%	12.4%	33.9%	22.0%	21.5%	5.4%	14.5%	0.0%
Drug Related	Y	0.0%	0.0%	0.0%	0.0%	2.2%	2.2%	2.2%	4.8%	0.0%	0.0%	2.7%	0.5%	1.6%	3.2%	0.0%	1.1%	0.5%	0.0%
	N	12.2%	3.3%	0.0%	0.0%	54.3%	24.7%	24.7%	88.2%	7.0%	0.0%	26.3%	19.9%	48.9%	39.8%	27.4%	6.5%	21.5%	0.0%
Aging Driver	Y	3.3%	1.1%	0.0%	0.0%	8.1%	4.8%	4.8%	15.1%	0.5%	0.0%	4.3%	3.2%	8.1%	5.4%	6.5%	0.5%	3.2%	0.0%
	N	8.9%	2.2%	0.0%	0.0%	48.4%	22.0%	22.0%	78.0%	6.5%	0.0%	24.7%	17.2%	42.5%	37.6%	21.0%	7.0%	18.8%	0.0%
Teenage Driver	Y	1.1%	1.1%	0.0%	0.0%	4.3%	3.2%	3.2%	8.6%	1.6%	0.0%	2.2%	3.2%	4.8%	3.8%	2.7%	0.5%	3.2%	0.0%
	N	11.1%	2.2%	0.0%	0.0%	52.2%	23.7%	23.7%	84.4%	5.4%	0.0%	26.9%	17.2%	45.7%	39.2%	24.7%	7.0%	18.8%	0.0%
Day of the Week	Monday	1.1%	0.0%	0.0%	0.0%	8.8%	3.4%	3.4%	14.5%	0.0%	0.0%	6.5%	2.7%	5.4%	5.9%	4.8%	1.1%	2.7%	0.0%
	Tuesday	0.0%	0.0%	0.0%	0.0%	2.9%	5.4%	5.4%	10.2%	1.1%	0.0%	2.7%	2.2%	6.5%	4.3%	3.2%	1.6%	2.2%	0.0%
	Wednesday	1.1%	1.1%	0.0%	0.0%	7.3%	1.0%	1.0%	10.2%	1.6%	0.0%	2.2%	3.2%	6.5%	5.9%	2.7%	0.0%	3.2%	0.0%
	Thursday	2.2%	0.0%	0.0%	0.0%	5.9%	3.9%	3.9%	11.3%	1.6%	0.0%	2.7%	2.2%	8.1%	5.9%	3.8%	1.6%	1.6%	0.0%
	Friday	1.1%	1.1%	0.0%	0.0%	7.3%	2.9%	2.9%	11.8%	0.5%	0.0%	4.8%	2.7%	4.8%	7.5%	2.2%	1.1%	1.6%	0.0%
	Saturday	5.6%	0.0%	0.0%	0.0%	8.8%	4.9%	4.9%	17.2%	0.5%	0.0%	3.2%	4.3%	10.2%	7.0%	3.8%	1.6%	5.4%	0.0%
	Sunday	1.1%	1.1%	0.0%	0.0%	10.2%	2.9%	2.9%	17.7%	1.6%	0.0%	7.0%	3.2%	9.1%	6.5%	7.0%	0.5%	5.4%	0.0%
Time of Day	12-3 AM	2.2%	0.0%	0.0%	0.0%	4.4%	3.9%	3.9%	9.1%	0.5%	0.0%	2.7%	1.1%	5.9%	3.2%	2.2%	2.2%	2.2%	0.0%
	3-6 AM	1.1%	0.0%	0.0%	0.0%	1.5%	0.5%	0.5%	2.7%	0.5%	0.0%	1.6%	0.0%	1.6%	1.1%	1.6%	0.0%	0.5%	0.0%
	6-9 AM	0.0%	0.0%	0.0%	0.0%	3.9%	3.9%	3.9%	8.6%	0.0%	0.0%	3.2%	2.2%	3.2%	5.4%	1.6%	0.5%	1.1%	0.0%
	9-Noon	1.1%	2.2%	0.0%	0.0%	6.8%	2.4%	2.4%	10.2%	0.5%	0.0%	3.2%	1.6%	5.9%	4.3%	4.3%	0.0%	2.2%	0.0%
	Noon-3 PM	3.3%	1.1%	0.0%	0.0%	6.3%	2.4%	2.4%	11.3%	0.0%	0.0%	2.7%	2.2%	6.5%	4.3%	3.8%	0.5%	2.7%	0.0%
	3-6 PM	0.0%	0.0%	0.0%	0.0%	9.3%	5.9%	5.9%	17.2%	2.2%	0.0%	6.5%	4.8%	8.1%	8.6%	4.3%	2.2%	4.3%	0.0%
	6-9 PM	4.4%	0.0%	0.0%	0.0%	11.2%	2.9%	2.9%	19.9%	1.6%	0.0%	5.4%	5.4%	10.8%	10.2%	5.9%	1.1%	4.3%	0.0%
	9-Midnight	0.0%	0.0%	0.0%	0.0%	7.8%	2.4%	2.4%	14.0%	1.6%	0.0%	3.8%	3.2%	8.6%	5.9%	3.8%	1.1%	4.8%	0.0%
Lighting Conditions	Dark - Lighted	4.4%	0.0%	0.0%	0.0%	10.2%	3.9%	3.9%	18.3%	1.6%	0.0%	2.2%	2.7%	15.1%	6.5%	7.5%	1.6%	4.3%	0.0%
	Dark - Not Lighted	1.1%	0.0%	0.0%	0.0%	10.2%	6.3%	6.3%	21.5%	1.1%	0.0%	10.2%	4.8%	7.5%	10.2%	4.8%	2.2%	5.4%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.5%	0.0%	0.0%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%
	Daylight	6.7%	2.2%	0.0%	0.0%	27.3%	13.2%	13.2%	48.4%	4.3%	0.0%	15.1%	12.4%	25.3%	23.7%	14.5%	3.2%	11.3%	0.0%
	Dusk	0.0%	1.1%	0.0%	0.0%	3.4%	0.5%	0.5%	4.3%	0.0%	0.0%	1.1%	0.5%	2.7%	2.7%	0.5%	0.5%	0.5%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment D-7
Osceola County
Percent of All KSI Crashes involving Bicyclist 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	42.6%	36.2%	21.3%	29.8%	59.6%	10.6%	4.3%	19.1%	57.4%	17.0%	2.1%	40.4%	23.4%	23.4%	2.1%	0.0%	10.6%	33.3%	35.7%	31.0%	0.0%	4.2%	4.2%	62.5%	16.7%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	4.2%	0.0%
	N	42.6%	34.0%	21.3%	29.8%	57.4%	10.6%	4.3%	19.1%	55.3%	17.0%	2.1%	38.3%	23.4%	23.4%	2.1%	0.0%	10.6%	33.3%	35.7%	28.6%	0.0%	4.2%	4.2%	58.3%	16.7%
Hit and Run	Y	10.6%	2.1%	4.3%	8.5%	6.4%	2.1%	0.0%	6.4%	6.4%	4.3%	0.0%	6.4%	0.0%	6.4%	0.0%	0.0%	4.3%	7.1%	2.4%	4.8%	0.0%	0.0%	0.0%	8.3%	0.0%
	N	31.9%	34.0%	17.0%	21.3%	53.2%	8.5%	4.3%	12.8%	51.1%	12.8%	2.1%	34.0%	23.4%	17.0%	2.1%	0.0%	6.4%	26.2%	33.3%	26.2%	0.0%	4.2%	4.2%	54.2%	16.7%
Aggressive Driving	Y	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	42.6%	36.2%	21.3%	29.8%	59.6%	10.6%	4.3%	19.1%	57.4%	17.0%	2.1%	40.4%	23.4%	23.4%	2.1%	0.0%	10.6%	33.3%	35.7%	31.0%	0.0%	4.2%	4.2%	62.5%	16.7%
Distracted Driving	Y	10.6%	6.4%	2.1%	6.4%	8.5%	4.3%	2.1%	4.3%	8.5%	4.3%	0.0%	6.4%	2.1%	4.3%	2.1%	0.0%	4.3%	7.1%	4.8%	4.8%	0.0%	4.2%	0.0%	16.7%	0.0%
	N	31.9%	29.8%	19.1%	23.4%	51.1%	6.4%	2.1%	14.9%	48.9%	12.8%	2.1%	34.0%	21.3%	19.1%	0.0%	0.0%	6.4%	26.2%	31.0%	26.2%	0.0%	0.0%	4.2%	45.8%	16.7%
Intersection Related	Y	14.9%	6.4%	8.5%	8.5%	14.9%	6.4%	2.1%	8.5%	12.8%	6.4%	0.0%	10.6%	6.4%	6.4%	0.0%	0.0%	6.4%	7.1%	11.9%	7.1%	0.0%	0.0%	0.0%	20.8%	8.3%
	N	27.7%	29.8%	12.8%	21.3%	44.7%	4.3%	2.1%	10.6%	44.7%	10.6%	2.1%	29.8%	17.0%	17.0%	2.1%	0.0%	4.3%	26.2%	23.8%	23.8%	0.0%	4.2%	4.2%	41.7%	8.3%
Drug Related	Y	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	4.2%	0.0%
	N	42.6%	34.0%	21.3%	29.8%	57.4%	10.6%	4.3%	19.1%	55.3%	17.0%	2.1%	38.3%	23.4%	23.4%	2.1%	0.0%	10.6%	33.3%	35.7%	28.6%	0.0%	4.2%	4.2%	58.3%	16.7%
Aging Driver	Y	2.1%	0.0%	2.1%	2.1%	2.1%	0.0%	0.0%	2.1%	2.1%	0.0%	0.0%	2.1%	0.0%	2.1%	0.0%	0.0%	0.0%	2.4%	2.4%	0.0%	0.0%	0.0%	0.0%	4.2%	0.0%
	N	40.4%	36.2%	19.1%	27.7%	57.4%	10.6%	4.3%	17.0%	55.3%	17.0%	2.1%	38.3%	23.4%	21.3%	2.1%	0.0%	10.6%	31.0%	33.3%	31.0%	0.0%	4.2%	4.2%	58.3%	16.7%
Teenage Driver	Y	0.0%	4.3%	4.3%	0.0%	6.4%	2.1%	0.0%	0.0%	4.3%	4.3%	0.0%	6.4%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	4.8%	4.8%	0.0%	0.0%	0.0%	8.3%	8.3%
	N	42.6%	31.9%	17.0%	29.8%	53.2%	8.5%	4.3%	19.1%	53.2%	12.8%	2.1%	34.0%	21.3%	23.4%	2.1%	0.0%	10.6%	33.3%	31.0%	26.2%	0.0%	4.2%	4.2%	54.2%	8.3%
Day of the Week	Monday	8.5%	6.4%	6.4%	4.3%	14.9%	2.1%	2.1%	4.3%	10.6%	4.3%	0.0%	10.6%	2.1%	4.3%	0.0%	0.0%	4.3%	4.8%	7.1%	7.1%	0.0%	0.0%	0.0%	12.5%	4.2%
	Tuesday	8.5%	2.1%	2.1%	6.4%	6.4%	0.0%	2.1%	0.0%	6.4%	2.1%	2.1%	4.3%	4.3%	2.1%	2.1%	0.0%	0.0%	9.5%	2.4%	2.4%	0.0%	4.2%	0.0%	4.2%	0.0%
	Wednesday	8.5%	6.4%	0.0%	4.3%	8.5%	2.1%	0.0%	4.3%	8.5%	2.1%	0.0%	2.1%	2.1%	6.4%	0.0%	0.0%	4.3%	7.1%	2.4%	2.4%	0.0%	0.0%	0.0%	12.5%	4.2%
	Thursday	4.3%	10.6%	10.6%	2.1%	21.3%	2.1%	0.0%	2.1%	14.9%	8.5%	0.0%	12.8%	10.6%	2.1%	0.0%	0.0%	0.0%	2.4%	11.9%	14.3%	0.0%	0.0%	0.0%	20.8%	4.2%
	Friday	8.5%	4.3%	0.0%	8.5%	4.3%	0.0%	0.0%	4.3%	8.5%	0.0%	0.0%	4.3%	2.1%	4.3%	0.0%	0.0%	2.1%	4.8%	4.8%	2.4%	0.0%	0.0%	4.2%	4.2%	4.2%
	Saturday	4.3%	4.3%	2.1%	4.3%	2.1%	4.3%	0.0%	4.3%	6.4%	0.0%	0.0%	6.4%	0.0%	4.3%	0.0%	0.0%	0.0%	4.8%	4.8%	2.4%	0.0%	0.0%	0.0%	8.3%	0.0%
	Sunday	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Time of Day	12-3 AM	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%
	3-6 AM	0.0%	0.0%	6.4%	0.0%	4.3%	2.1%	0.0%	0.0%	4.3%	2.1%	0.0%	6.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%	0.0%	0.0%	0.0%	8.3%	0.0%
	6-9 AM	4.3%	8.5%	2.1%	4.3%	10.6%	0.0%	0.0%	2.1%	8.5%	2.1%	2.1%	4.3%	8.5%	0.0%	2.1%	0.0%	0.0%	4.8%	9.5%	2.4%	0.0%	4.2%	0.0%	8.3%	4.2%
	9-Noon	2.1%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%
	Noon-3 PM	4.3%	2.1%	4.3%	2.1%	8.5%	0.0%	0.0%	4.3%	4.3%	2.1%	0.0%	4.3%	2.1%	2.1%	0.0%	0.0%	2.1%	2.4%	0.0%	7.1%	0.0%	0.0%	0.0%	4.2%	0.0%
	3-6 PM	8.5%	4.3%	4.3%	4.3%	12.8%	0.0%	4.3%	2.1%	8.5%	2.1%	0.0%	6.4%	2.1%	4.3%	0.0%	0.0%	4.3%	7.1%	4.8%	2.4%	0.0%	0.0%	0.0%	12.5%	4.2%
	6-9 PM	12.8%	4.3%	2.1%	8.5%	6.4%	4.3%	0.0%	6.4%	10.6%	2.1%	0.0%	4.3%	2.1%	8.5%	0.0%	0.0%	4.3%	9.5%	4.8%	2.4%	0.0%	0.0%	0.0%	12.5%	0.0%
	9-Midnight	10.6%	14.9%	2.1%	10.6%	14.9%	2.1%	0.0%	4.3%	17.0%	6.4%	0.0%	14.9%	4.3%	8.5%	0.0%	0.0%	0.0%	9.5%	16.7%	4.8%	0.0%	0.0%	4.2%	16.7%	8.3%
Lighting Conditions	Dark - Lighted	6.4%	10.6%	2.1%	4.3%	14.9%	0.0%	0.0%	2.1%	12.8%	4.3%	0.0%	10.6%	4.3%	2.1%	0.0%	0.0%	2.1%	2.4%	11.9%	4.8%	0.0%	0.0%	4.2%	8.3%	8.3%
	Dark - Not Lighted	12.8%	6.4%	6.4%	12.8%	8.5%	4.3%	0.0%	4.3%	12.8%	6.4%	2.1%	10.6%	4.3%	10.6%	0.0%	0.0%	0.0%	14.3%	4.8%	9.5%	0.0%	0.0%	0.0%	16.7%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	2.1%	2.1%	0.0%	2.1%	2.1%	0.0%	0.0%	2.1%	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	2.1%	0.0%	0.0%	2.4%	2.4%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%
	Daylight	21.3%	12.8%	12.8%	10.6%	29.8%	6.4%	4.3%	10.6%	27.7%	4.3%	0.0%	17.0%	10.6%	10.6%	0.0%	0.0%	8.5%	14.3%	14.3%	14.3%	0.0%	0.0%	0.0%	33.3%	8.3%
	Dusk	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	4.2%	0.0%

Attachment D-7
Osceola County
Percent of All KSI Crashes involving Bicyclist 2018-2022

Mode: All	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	12.5%	0.0%	0.0%	0.0%	61.7%	14.9%	23.4%	85.1%	10.6%	4.3%	19.1%	23.4%	57.4%	48.9%	25.5%	4.3%	21.3%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%
	N	12.5%	0.0%	0.0%	0.0%	61.7%	14.9%	21.3%	83.0%	10.6%	4.3%	17.0%	23.4%	57.4%	46.8%	25.5%	4.3%	21.3%	0.0%
Hit and Run	Y	4.2%	0.0%	0.0%	0.0%	14.9%	2.1%	2.1%	17.0%	0.0%	0.0%	4.3%	6.4%	6.4%	10.6%	4.3%	0.0%	2.1%	0.0%
	N	8.3%	0.0%	0.0%	0.0%	46.8%	21.3%	21.3%	68.1%	10.6%	4.3%	14.9%	17.0%	51.1%	38.3%	21.3%	4.3%	19.1%	0.0%
Aggressive Driving	Y	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	12.5%	0.0%	0.0%	0.0%	61.7%	23.4%	23.4%	85.1%	10.6%	4.3%	19.1%	23.4%	57.4%	48.9%	25.5%	4.3%	21.3%	0.0%
Distracted Driving	Y	4.2%	0.0%	0.0%	0.0%	12.8%	4.3%	4.3%	17.0%	0.0%	2.1%	6.4%	0.0%	12.8%	14.9%	2.1%	2.1%	0.0%	0.0%
	N	8.3%	0.0%	0.0%	0.0%	48.9%	19.1%	19.1%	68.1%	10.6%	2.1%	12.8%	23.4%	44.7%	34.0%	23.4%	2.1%	21.3%	0.0%
Intersection Related	Y	0.0%	0.0%	0.0%	0.0%	17.0%	6.4%	6.4%	21.3%	6.4%	2.1%	4.3%	6.4%	19.1%	12.8%	6.4%	4.3%	6.4%	0.0%
	N	12.5%	0.0%	0.0%	0.0%	44.7%	17.0%	17.0%	63.8%	4.3%	2.1%	14.9%	17.0%	38.3%	36.2%	19.1%	0.0%	14.9%	0.0%
Drug Related	Y	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%	2.1%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%
	N	12.5%	0.0%	0.0%	0.0%	61.7%	21.3%	21.3%	83.0%	10.6%	4.3%	17.0%	23.4%	57.4%	46.8%	25.5%	4.3%	21.3%	0.0%
Aging Driver	Y	0.0%	0.0%	0.0%	0.0%	2.1%	2.1%	2.1%	4.3%	0.0%	0.0%	0.0%	2.1%	2.1%	0.0%	0.0%	2.1%	2.1%	0.0%
	N	12.5%	0.0%	0.0%	0.0%	59.6%	21.3%	21.3%	80.9%	10.6%	4.3%	19.1%	21.3%	55.3%	48.9%	25.5%	2.1%	19.1%	0.0%
Teenage Driver	Y	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%	4.3%	4.3%	4.3%	0.0%	0.0%	0.0%	8.5%	0.0%	4.3%	2.1%	2.1%	0.0%
	N	12.5%	0.0%	0.0%	0.0%	61.7%	19.1%	19.1%	80.9%	6.4%	4.3%	19.1%	23.4%	48.9%	48.9%	21.3%	2.1%	19.1%	0.0%
Day of the Week	Monday	4.2%	0.0%	0.0%	0.0%	9.8%	5.9%	5.9%	17.0%	2.1%	2.1%	2.1%	4.3%	14.9%	10.6%	6.4%	0.0%	4.3%	0.0%
	Tuesday	0.0%	0.0%	0.0%	0.0%	9.8%	2.0%	2.0%	12.8%	0.0%	0.0%	4.3%	6.4%	2.1%	8.5%	4.3%	0.0%	0.0%	0.0%
	Wednesday	0.0%	0.0%	0.0%	0.0%	9.8%	3.9%	3.9%	12.8%	0.0%	2.1%	4.3%	2.1%	8.5%	10.6%	2.1%	0.0%	2.1%	0.0%
	Thursday	4.2%	0.0%	0.0%	0.0%	11.8%	5.9%	5.9%	21.3%	4.3%	0.0%	4.3%	4.3%	17.0%	4.3%	8.5%	2.1%	10.6%	0.0%
	Friday	0.0%	0.0%	0.0%	0.0%	7.8%	3.9%	3.9%	12.8%	0.0%	0.0%	4.3%	4.3%	4.3%	6.4%	4.3%	0.0%	2.1%	0.0%
	Saturday	4.2%	0.0%	0.0%	0.0%	5.9%	0.0%	0.0%	6.4%	4.3%	0.0%	0.0%	2.1%	8.5%	6.4%	0.0%	2.1%	2.1%	0.0%
	Sunday	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	2.1%	2.1%	0.0%	0.0%	0.0%	0.0%
Time of Day	12-3 AM	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%
	3-6 AM	0.0%	0.0%	0.0%	0.0%	2.0%	2.0%	2.0%	4.3%	2.1%	0.0%	0.0%	2.1%	4.3%	0.0%	4.3%	2.1%	0.0%	0.0%
	6-9 AM	0.0%	0.0%	0.0%	0.0%	9.8%	2.0%	2.0%	12.8%	2.1%	0.0%	4.3%	2.1%	8.5%	6.4%	6.4%	0.0%	2.1%	0.0%
	9-Noon	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%
	Noon-3 PM	4.2%	0.0%	0.0%	0.0%	7.8%	0.0%	0.0%	10.6%	0.0%	0.0%	0.0%	2.1%	8.5%	2.1%	4.3%	0.0%	4.3%	0.0%
	3-6 PM	0.0%	0.0%	0.0%	0.0%	9.8%	5.9%	5.9%	14.9%	0.0%	2.1%	0.0%	2.1%	14.9%	8.5%	4.3%	2.1%	2.1%	0.0%
	6-9 PM	0.0%	0.0%	0.0%	0.0%	11.8%	3.9%	3.9%	14.9%	2.1%	2.1%	6.4%	2.1%	10.6%	17.0%	0.0%	0.0%	2.1%	0.0%
	9-Midnight	8.3%	0.0%	0.0%	0.0%	11.8%	7.8%	7.8%	23.4%	4.3%	0.0%	8.5%	8.5%	10.6%	14.9%	6.4%	0.0%	6.4%	0.0%
Lighting Conditions	Dark - Lighted	4.2%	0.0%	0.0%	0.0%	3.9%	11.8%	11.8%	19.1%	0.0%	0.0%	4.3%	6.4%	8.5%	10.6%	8.5%	0.0%	0.0%	0.0%
	Dark - Not Lighted	4.2%	0.0%	0.0%	0.0%	17.6%	0.0%	0.0%	19.1%	6.4%	0.0%	8.5%	8.5%	8.5%	12.8%	2.1%	2.1%	8.5%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.0%	0.0%	0.0%	0.0%	3.9%	0.0%	0.0%	4.3%	0.0%	0.0%	2.1%	2.1%	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%
	Daylight	4.2%	0.0%	0.0%	0.0%	29.4%	7.8%	7.8%	38.3%	4.3%	4.3%	2.1%	6.4%	38.3%	19.1%	14.9%	2.1%	10.6%	0.0%
	Dusk	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%	2.1%	2.1%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	2.0%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.0%

Attachment D-8
Osceola County
Percent of All KSI Crashes involving Pedestrians 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All	Lanes:	3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	35.0%	28.3%	36.7%	24.0%	63.6%	12.4%	7.5%	10.0%	58.3%	23.3%	0.8%	53.7%	14.9%	17.4%	2.5%	0.0%	11.6%	25.2%	27.1%	47.7%	0.0%	2.7%	0.0%	78.7%	4.0%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	1.7%	1.7%	0.0%	2.5%	0.8%	0.0%	0.8%	0.0%	1.7%	0.8%	0.0%	0.8%	0.8%	0.0%	0.8%	0.0%	0.8%	1.9%	0.0%	0.9%	0.0%	0.0%	0.0%	1.3%	0.0%
	N	33.3%	26.7%	36.7%	21.5%	62.8%	12.4%	6.7%	10.0%	56.7%	22.5%	0.8%	52.9%	14.0%	17.4%	1.7%	0.0%	10.7%	23.4%	27.1%	46.7%	0.0%	2.7%	0.0%	77.3%	4.0%
Hit and Run	Y	4.2%	7.5%	8.3%	6.6%	9.9%	3.3%	0.0%	1.7%	11.7%	6.7%	0.0%	12.4%	5.0%	0.8%	0.0%	0.0%	1.7%	1.9%	5.6%	13.1%	0.0%	1.3%	0.0%	14.7%	0.0%
	N	30.8%	20.8%	28.3%	17.4%	53.7%	9.1%	7.5%	8.3%	46.7%	16.7%	0.8%	41.3%	9.9%	16.5%	2.5%	0.0%	9.9%	23.4%	21.5%	34.6%	0.0%	1.3%	0.0%	64.0%	4.0%
Aggressive Driving	Y	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	35.0%	28.3%	36.7%	24.0%	63.6%	12.4%	7.5%	10.0%	58.3%	23.3%	0.8%	53.7%	14.9%	17.4%	2.5%	0.0%	11.6%	25.2%	27.1%	47.7%	0.0%	2.7%	0.0%	78.7%	4.0%
Distracted Driving	Y	5.0%	2.5%	0.8%	3.3%	4.1%	0.8%	0.8%	0.0%	6.7%	0.8%	0.0%	2.5%	0.8%	2.5%	0.8%	0.0%	1.7%	3.7%	2.8%	0.9%	0.0%	0.0%	0.0%	4.0%	0.0%
	N	30.0%	25.8%	35.8%	20.7%	59.5%	11.6%	6.7%	10.0%	51.7%	22.5%	0.8%	51.2%	14.0%	14.9%	1.7%	0.0%	9.9%	21.5%	24.3%	46.7%	0.0%	2.7%	0.0%	74.7%	4.0%
Intersection Related	Y	10.8%	6.7%	5.0%	4.1%	14.9%	3.3%	1.7%	3.3%	10.0%	7.5%	0.0%	6.6%	5.8%	5.8%	0.0%	0.0%	4.1%	7.5%	2.8%	10.3%	0.0%	0.0%	0.0%	14.7%	2.7%
	N	24.2%	21.7%	31.7%	19.8%	48.8%	9.1%	5.8%	6.7%	48.3%	15.8%	0.8%	47.1%	9.1%	11.6%	2.5%	0.0%	7.4%	17.8%	24.3%	37.4%	0.0%	2.7%	0.0%	64.0%	1.3%
Drug Related	Y	0.8%	0.8%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	0.8%	0.8%	0.0%	0.8%	0.0%	0.0%	0.8%	0.0%	0.0%	0.9%	0.0%	0.9%	0.0%	0.0%	0.0%	1.3%	0.0%
	N	34.2%	27.5%	36.7%	22.3%	63.6%	12.4%	7.5%	10.0%	57.5%	22.5%	0.8%	52.9%	14.9%	17.4%	1.7%	0.0%	11.6%	24.3%	27.1%	46.7%	0.0%	2.7%	0.0%	77.3%	4.0%
Aging Driver	Y	2.5%	6.7%	3.3%	1.7%	7.4%	3.3%	0.8%	0.8%	8.3%	2.5%	0.0%	6.6%	4.1%	0.8%	0.0%	0.0%	0.8%	1.9%	4.7%	6.5%	0.0%	0.0%	0.0%	9.3%	0.0%
	N	32.5%	21.7%	33.3%	22.3%	56.2%	9.1%	6.7%	9.2%	50.0%	20.8%	0.8%	47.1%	10.7%	16.5%	2.5%	0.0%	10.7%	23.4%	22.4%	41.1%	0.0%	2.7%	0.0%	69.3%	4.0%
Teenage Driver	Y	0.0%	0.8%	1.7%	0.0%	2.5%	0.0%	0.0%	0.0%	0.8%	1.7%	0.0%	1.7%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	0.0%	0.0%	2.7%	0.0%
	N	35.0%	27.5%	35.0%	24.0%	61.2%	12.4%	7.5%	10.0%	57.5%	21.7%	0.8%	52.1%	14.0%	17.4%	2.5%	0.0%	11.6%	25.2%	27.1%	44.9%	0.0%	2.7%	0.0%	76.0%	4.0%
Day of the Week	Monday	3.3%	2.5%	0.8%	2.5%	4.1%	0.0%	0.8%	0.8%	3.3%	1.7%	0.0%	2.5%	1.7%	0.8%	0.0%	0.0%	1.7%	1.9%	1.9%	1.9%	0.0%	0.0%	0.0%	4.0%	0.0%
	Tuesday	5.8%	4.2%	4.2%	3.3%	9.1%	1.7%	0.8%	0.8%	9.2%	2.5%	0.8%	8.3%	0.0%	4.1%	0.8%	0.0%	0.8%	5.6%	3.7%	5.6%	0.0%	0.0%	0.0%	10.7%	1.3%
	Wednesday	6.7%	1.7%	7.5%	4.1%	9.1%	2.5%	1.7%	0.8%	7.5%	5.8%	0.0%	8.3%	0.8%	4.1%	0.8%	0.0%	1.7%	5.6%	0.9%	9.3%	0.0%	0.0%	0.0%	13.3%	2.7%
	Thursday	5.0%	2.5%	8.3%	1.7%	14.0%	0.8%	0.0%	4.2%	8.3%	3.3%	0.0%	9.9%	0.8%	4.1%	0.0%	0.0%	1.7%	4.7%	3.7%	8.4%	0.0%	0.0%	0.0%	17.3%	0.0%
	Friday	2.5%	5.8%	3.3%	4.1%	5.0%	2.5%	0.8%	0.0%	7.5%	3.3%	0.0%	6.6%	3.3%	0.8%	0.0%	0.0%	0.8%	1.9%	5.6%	4.7%	0.0%	0.0%	0.0%	5.3%	0.0%
	Saturday	6.7%	5.0%	6.7%	5.8%	10.7%	1.7%	3.3%	0.8%	10.8%	3.3%	0.0%	9.1%	3.3%	0.8%	0.0%	0.0%	5.0%	1.9%	3.7%	9.3%	0.0%	0.0%	0.0%	13.3%	0.0%
	Sunday	5.0%	6.7%	5.8%	2.5%	11.6%	3.3%	0.0%	2.5%	11.7%	3.3%	0.0%	9.1%	5.0%	2.5%	0.8%	0.0%	0.0%	3.7%	7.5%	8.4%	0.0%	2.7%	0.0%	14.7%	0.0%
Time of Day	12-3 AM	7.5%	1.7%	3.3%	5.0%	5.8%	1.7%	0.8%	0.8%	10.0%	0.8%	0.0%	5.0%	0.0%	5.0%	0.8%	0.0%	1.7%	6.5%	2.8%	2.8%	0.0%	0.0%	0.0%	10.7%	1.3%
	3-6 AM	1.7%	3.3%	3.3%	2.5%	3.3%	2.5%	0.8%	0.0%	5.8%	1.7%	0.0%	5.0%	1.7%	0.0%	0.0%	0.0%	1.7%	0.0%	2.8%	4.7%	0.0%	0.0%	0.0%	6.7%	0.0%
	6-9 AM	5.0%	2.5%	5.0%	1.7%	9.9%	0.8%	0.8%	2.5%	3.3%	5.8%	0.0%	6.6%	1.7%	2.5%	0.0%	0.0%	1.7%	3.7%	2.8%	5.6%	0.0%	0.0%	0.0%	8.0%	1.3%
	9-Noon	1.7%	1.7%	1.7%	0.8%	4.1%	0.0%	1.7%	0.8%	1.7%	0.8%	0.0%	2.5%	0.0%	0.8%	0.0%	0.0%	1.7%	0.9%	0.9%	1.9%	0.0%	0.0%	0.0%	2.7%	0.0%
	Noon-3 PM	1.7%	0.0%	1.7%	0.8%	2.5%	0.0%	0.0%	0.8%	2.5%	0.0%	0.0%	2.5%	0.0%	0.8%	0.0%	0.0%	0.0%	0.9%	0.9%	1.9%	0.0%	0.0%	0.0%	5.3%	0.0%
	3-6 PM	5.0%	0.8%	2.5%	3.3%	5.8%	0.0%	0.8%	1.7%	5.8%	0.0%	0.0%	3.3%	0.0%	3.3%	0.8%	0.0%	1.7%	4.7%	0.9%	2.8%	0.0%	0.0%	0.0%	5.3%	0.0%
	6-9 PM	7.5%	7.5%	10.8%	3.3%	19.0%	3.3%	0.8%	2.5%	15.8%	6.7%	0.0%	14.9%	5.0%	3.3%	0.8%	0.0%	1.7%	3.7%	9.3%	14.0%	0.0%	2.7%	0.0%	16.0%	0.0%
	9-Midnight	5.0%	10.8%	8.3%	6.6%	13.2%	4.1%	1.7%	0.8%	13.3%	7.5%	0.8%	14.0%	6.6%	1.7%	0.0%	0.0%	1.7%	4.7%	6.5%	14.0%	0.0%	0.0%	0.0%	24.0%	1.3%
Lighting Conditions	Dark - Lighted	10.0%	12.5%	20.0%	5.8%	29.8%	6.6%	3.3%	4.2%	23.3%	11.7%	0.0%	25.6%	8.3%	4.1%	0.0%	0.0%	4.1%	6.5%	11.2%	25.2%	0.0%	1.3%	0.0%	41.3%	0.0%
	Dark - Not Lighted	10.0%	11.7%	5.0%	8.3%	14.9%	3.3%	0.0%	0.8%	17.5%	7.5%	0.8%	14.0%	3.3%	6.6%	1.7%	0.0%	0.8%	9.3%	9.3%	10.3%	0.0%	1.3%	0.0%	16.0%	1.3%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	1.7%	1.7%	0.8%	0.8%	1.7%	1.7%	0.8%	0.0%	2.5%	0.8%	0.0%	1.7%	1.7%	0.0%	0.0%	0.0%	0.8%	0.9%	2.8%	0.0%	0.0%	0.0%	0.0%	2.7%	1.3%
	Daylight	10.0%	2.5%	9.2%	6.6%	14.9%	0.8%	2.5%	4.2%	11.7%	3.3%	0.0%	10.7%	0.8%	5.0%	0.8%	0.0%	5.0%	6.5%	1.9%	11.2%	0.0%	0.0%	0.0%	17.3%	1.3%
	Dusk	3.3%	0.0%	1.7%	2.5%	2.5%	0.0%	0.8%	0.8%	3.3%	0.0%	0.0%	1.7%	0.8%	1.7%	0.0%	0.0%	0.8%	1.9%	1.9%	0.9%	0.0%	0.0%	0.0%	1.3%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment D-8
Osceola County
Percent of All KSI Crashes involving Pedestrians 2018-2022

Mode:	All Collisions	ext Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All	Lanes:	C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	13.3%	1.3%	0.0%	0.0%	50.0%	16.7%	33.3%	91.7%	6.7%	1.7%	13.3%	23.3%	63.3%	35.0%	34.2%	10.0%	20.8%	0.0%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.0%	0.0%	0.0%	0.0%	1.7%	0.8%	0.8%	2.5%	0.8%	0.0%	0.8%	0.8%	1.7%	1.7%	1.7%	0.0%	0.0%	0.0%
	N	13.3%	1.3%	0.0%	0.0%	48.3%	15.8%	32.5%	89.2%	5.8%	1.7%	12.5%	22.5%	61.7%	33.3%	32.5%	10.0%	20.8%	0.0%
Hit and Run	Y	2.7%	1.3%	0.0%	0.0%	10.0%	7.5%	7.5%	19.2%	0.8%	0.0%	1.7%	5.0%	13.3%	5.0%	7.5%	1.7%	5.8%	0.0%
	N	10.7%	0.0%	0.0%	0.0%	40.0%	25.8%	25.8%	72.5%	5.8%	1.7%	11.7%	18.3%	50.0%	30.0%	26.7%	8.3%	15.0%	0.0%
Aggressive Driving	Y	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	13.3%	1.3%	0.0%	0.0%	50.0%	33.3%	33.3%	91.7%	6.7%	1.7%	13.3%	23.3%	63.3%	35.0%	34.2%	10.0%	20.8%	0.0%
Distracted Driving	Y	1.3%	0.0%	0.0%	0.0%	5.8%	1.7%	1.7%	8.3%	0.0%	0.0%	1.7%	3.3%	3.3%	6.7%	1.7%	0.0%	0.0%	0.0%
	N	12.0%	1.3%	0.0%	0.0%	44.2%	31.7%	31.7%	83.3%	6.7%	1.7%	11.7%	20.0%	60.0%	28.3%	32.5%	10.0%	20.8%	0.0%
Intersection Related	Y	0.0%	0.0%	0.0%	0.0%	12.5%	5.0%	5.0%	20.8%	1.7%	0.0%	2.5%	8.3%	11.7%	9.2%	8.3%	0.8%	4.2%	0.0%
	N	13.3%	1.3%	0.0%	0.0%	37.5%	28.3%	28.3%	70.8%	5.0%	1.7%	10.8%	15.0%	51.7%	25.8%	25.8%	9.2%	16.7%	0.0%
Drug Related	Y	0.0%	0.0%	0.0%	0.0%	0.8%	0.8%	0.8%	1.7%	0.0%	0.0%	0.8%	0.8%	0.0%	0.8%	0.8%	0.0%	0.0%	0.0%
	N	13.3%	1.3%	0.0%	0.0%	49.2%	32.5%	32.5%	90.0%	6.7%	1.7%	12.5%	22.5%	63.3%	34.2%	33.3%	10.0%	20.8%	0.0%
Aging Driver	Y	1.3%	0.0%	0.0%	0.0%	6.7%	1.7%	1.7%	10.0%	1.7%	0.8%	0.8%	3.3%	8.3%	3.3%	4.2%	0.8%	4.2%	0.0%
	N	12.0%	1.3%	0.0%	0.0%	43.3%	31.7%	31.7%	81.7%	5.0%	0.8%	12.5%	20.0%	55.0%	31.7%	30.0%	9.2%	16.7%	0.0%
Teenage Driver	Y	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%	0.8%	1.7%	0.0%	0.8%	0.8%	0.8%	0.0%
	N	13.3%	1.3%	0.0%	0.0%	49.2%	33.3%	33.3%	89.2%	6.7%	1.7%	13.3%	22.5%	61.7%	35.0%	33.3%	9.2%	20.0%	0.0%
Day of the Week	Monday	0.0%	0.0%	0.0%	0.0%	2.1%	0.7%	0.7%	5.0%	1.7%	0.0%	0.0%	4.2%	2.5%	4.2%	2.5%	0.0%	0.0%	0.0%
	Tuesday	1.3%	0.0%	0.0%	0.0%	5.0%	5.7%	5.7%	13.3%	0.0%	0.8%	2.5%	4.2%	7.5%	7.5%	3.3%	1.7%	1.7%	0.0%
	Wednesday	1.3%	0.0%	0.0%	0.0%	7.9%	3.6%	3.6%	14.2%	1.7%	0.0%	3.3%	2.5%	10.0%	5.8%	4.2%	1.7%	4.2%	0.0%
	Thursday	1.3%	0.0%	0.0%	0.0%	5.0%	6.4%	6.4%	14.2%	0.8%	0.8%	0.8%	1.7%	13.3%	3.3%	5.0%	4.2%	3.3%	0.0%
	Friday	4.0%	0.0%	0.0%	0.0%	5.7%	2.9%	2.9%	10.8%	0.8%	0.0%	1.7%	4.2%	5.8%	4.2%	6.7%	0.0%	0.8%	0.0%
	Saturday	2.7%	0.0%	0.0%	0.0%	8.6%	5.7%	5.7%	17.5%	0.8%	0.0%	2.5%	3.3%	12.5%	5.0%	7.5%	0.8%	5.0%	0.0%
	Sunday	2.7%	1.3%	0.0%	0.0%	8.6%	3.6%	3.6%	16.7%	0.8%	0.0%	2.5%	3.3%	11.7%	5.0%	5.0%	1.7%	5.8%	0.0%
Time of Day	12-3 AM	2.7%	0.0%	0.0%	0.0%	7.9%	1.4%	1.4%	11.7%	0.0%	0.8%	4.2%	3.3%	5.0%	7.5%	3.3%	0.0%	1.7%	0.0%
	3-6 AM	1.3%	0.0%	0.0%	0.0%	5.7%	1.4%	1.4%	7.5%	0.8%	0.0%	0.8%	1.7%	5.8%	1.7%	4.2%	0.0%	2.5%	0.0%
	6-9 AM	4.0%	0.0%	0.0%	0.0%	5.7%	1.4%	1.4%	10.8%	1.7%	0.0%	0.8%	2.5%	9.2%	3.3%	4.2%	0.8%	4.2%	0.0%
	9-Noon	0.0%	0.0%	0.0%	0.0%	2.1%	2.1%	2.1%	5.0%	0.0%	0.0%	0.0%	0.0%	5.0%	1.7%	1.7%	0.8%	0.8%	0.0%
	Noon-3 PM	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	2.5%	0.0%	0.8%	0.8%	0.8%	1.7%	0.8%	0.8%	0.0%	1.7%	0.0%
	3-6 PM	0.0%	0.0%	0.0%	0.0%	5.0%	2.1%	2.1%	8.3%	0.0%	0.0%	1.7%	1.7%	5.0%	5.0%	1.7%	0.8%	0.8%	0.0%
	6-9 PM	5.3%	1.3%	0.0%	0.0%	7.1%	9.3%	9.3%	24.2%	1.7%	0.0%	0.8%	5.8%	19.2%	9.2%	5.8%	4.2%	6.7%	0.0%
	9-Midnight	0.0%	0.0%	0.0%	0.0%	6.4%	10.7%	10.7%	21.7%	2.5%	0.0%	4.2%	7.5%	12.5%	5.8%	12.5%	3.3%	2.5%	0.0%
Lighting Conditions	Dark - Lighted	5.3%	1.3%	0.0%	0.0%	15.0%	13.6%	13.6%	39.2%	3.3%	0.0%	5.0%	7.5%	30.0%	10.0%	15.8%	7.5%	9.2%	0.0%
	Dark - Not Lighted	2.7%	0.0%	0.0%	0.0%	10.0%	9.3%	9.3%	25.0%	0.8%	0.8%	5.0%	7.5%	14.2%	12.5%	10.0%	0.8%	3.3%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%	0.0%	1.7%	2.5%	0.0%	0.8%	1.7%	1.7%	0.8%	2.5%	0.0%	0.8%	0.0%
	Daylight	2.7%	0.0%	0.0%	0.0%	12.9%	4.3%	4.3%	20.8%	0.0%	0.8%	2.5%	4.2%	15.0%	8.3%	5.8%	1.7%	5.8%	0.0%
	Dusk	2.7%	0.0%	0.0%	0.0%	2.9%	1.4%	1.4%	5.0%	0.0%	0.0%	0.0%	2.5%	2.5%	3.3%	0.0%	0.0%	1.7%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment E-1
Seminole County
All Crash Matrix
2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification			
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+													
Type	Angle	1346	1010	493	1122	1622	283	724	712	1320	93	0	847	525	515	237	25	878	667	770	691	2	7	0	1062
	Animal	139	35	9	114	68	3	20	24	105	34	0	43	33	77	8	0	24	101	48	12	0	21	0	22
	Bicycle	142	185	85	126	259	32	76	77	239	20	0	158	87	72	28	3	69	89	110	147	0	0	1	187
	Head On	293	231	113	318	338	54	142	132	319	44	0	236	100	120	37	2	215	163	167	163	5	12	0	242
	Left Turn	1847	1895	928	979	3303	471	658	1222	2584	206	0	1564	1086	948	371	11	773	1153	1378	1434	1	30	0	2071
	Off Road	2169	1169	457	2581	1507	163	1448	677	1465	205	0	999	591	543	226	29	1863	788	816	764	13	35	0	1014
	Other	4186	1739	968	7151	2606	582	3396	888	2417	192	0	1689	837	710	301	71	6731	978	1175	1392	4	30	0	1906
	Pedestrian	278	260	138	250	369	74	144	146	359	27	0	275	98	128	37	5	150	153	187	200	0	1	0	308
	Rear End	4899	9172	7512	3762	14118	4016	905	3704	15611	1363	0	11467	5075	3392	572	35	1355	3487	6260	10721	57	138	2	13357
	Right Turn	269	281	210	153	480	154	111	155	461	33	0	285	172	146	51	1	132	160	204	291	0	3	0	365
	Rollover	75	54	24	76	65	14	29	20	87	17	0	62	30	23	10	1	29	37	53	35	3	3	0	60
	Sideswipe	1417	2812	2624	1330	4258	1426	485	1026	4980	362	0	3696	1495	903	176	41	703	878	1886	3510	21	23	0	4269
	Unknown	350	370	307	348	600	189	192	179	597	59	0	440	204	150	45	4	294	169	236	434	1	6	0	521
Alcohol Related	Y	411	344	238	436	484	130	239	147	542	65	0	392	182	140	52	4	280	185	228	353	3	14	0	425
	N	16999	18869	13630	17874	29109	7331	8091	8815	30002	2590	0	21369	10151	7587	2047	224	12936	8638	13062	19441	104	295	3	24959
Hit and Run	Y	2417	1737	1349	3155	2663	733	1652	789	2780	282	0	2141	866	669	235	44	2596	879	1159	1877	13	21	0	2424
	N	14993	17476	12519	15155	26930	6728	6678	8173	27764	2373	0	19620	9467	7058	1864	184	10620	7944	12131	17917	94	288	3	22960
Aggressive Driving	Y	690	730	400	703	991	203	349	295	1066	110	0	700	404	284	83	10	416	336	540	598	6	14	0	796
	N	16720	18483	13468	17607	28602	7258	7981	8667	29478	2545	0	21061	9929	7443	2016	218	12800	8487	12750	19196	101	295	3	24588
Distracted Driving	Y	2462	3242	2111	2453	4721	1161	1077	1556	4828	354	0	3595	1575	1274	280	18	1593	1370	2348	3003	23	44	0	4309
	N	14948	15971	11757	15857	24872	6300	7253	7406	25716	2301	0	18166	8758	6453	1819	210	11623	7453	10942	16791	84	265	3	21075
Intersection Related	Y	6112	7240	3887	3327	11122	2875	2187	3809	10371	872	0	6675	3876	3244	1010	76	2443	3667	5370	5774	24	129	0	8750
	N	11298	11973	9981	14983	18471	4586	6143	5153	20173	1783	0	15086	6457	4483	1089	152	10773	5156	7920	14020	83	180	3	16634
Drug Related	Y	113	70	70	116	119	33	65	41	136	11	0	95	42	38	19	2	72	52	50	92	1	1	0	115
	N	17297	19143	13798	18194	29474	7428	8265	8921	30408	2644	0	21666	10291	7689	2080	226	13144	8771	13240	19702	106	308	3	25269
Aging Driver	Y	3068	3852	2841	3194	6022	1559	1310	1831	6157	463	0	4326	2017	1600	422	51	2359	1701	2622	4046	19	49	1	5094
	N	14342	15361	11027	15116	23571	5902	7020	7131	24387	2192	0	17435	8316	6127	1677	177	10857	7122	10668	15748	88	260	2	20290
Teenage Driver	Y	2735	3201	1915	2480	4880	1065	1108	1533	4782	428	0	3090	1891	1352	363	20	1709	1503	2227	2974	13	56	1	3698
	N	14675	16012	11953	15830	24713	6396	7222	7429	25762	2227	0	18671	8442	6375	1736	208	11507	7320	11063	16820	94	253	2	21686
Day of the Week	Monday	2548	2972	2179	2686	4567	1160	1189	1364	4729	417	0	3440	1572	1159	294	30	1918	1335	2031	3096	17	49	0	3989
	Tuesday	2675	3176	2184	2794	4748	1190	1225	1414	4951	445	0	3452	1751	1250	339	29	1911	1425	2197	3166	19	39	0	4094
	Wednesday	2680	3154	2201	2806	4778	1198	1235	1467	4947	386	0	3468	1688	1267	326	26	2007	1415	2124	3204	16	45	0	4090
	Thursday	2742	3027	2200	2823	4765	1112	1262	1400	4890	417	0	3428	1663	1223	373	35	1978	1422	2099	3162	19	48	0	4072
	Friday	2905	3441	2415	3041	5261	1287	1316	1609	5408	428	0	3841	1778	1396	341	40	2193	1534	2392	3427	21	50	2	4461
	Saturday	2123	1911	1563	2322	3071	854	1152	974	3184	287	0	2354	1024	813	233	36	1787	928	1367	2136	13	36	0	2652
	Sunday	1737	1532	1126	1838	2403	660	951	734	2435	275	0	1778	857	619	193	32	1422	764	1080	1603	2	42	1	2026
Time of Day	12-3 AM	732	383	292	774	583	161	500	199	632	76	0	500	196	166	68	8	580	247	278	407	2	5	0	544
	3-6 AM	443	309	238	480	442	133	246	158	506	80	0	395	173	130	42	8	307	180	245	316	0	15	0	429
	6-9 AM	2294	2617	1723	2041	4015	892	956	1197	4111	370	0	2789	1524	1093	268	22	1252	1268	1883	2522	14	40	0	3366
	9-Noon	2353	2602	1905	2679	3964	1108	1145	1271	4115	329	0	2977	1380	981	303	37	2073	1133	1796	2719	19	42	0	3527
	Noon-3 PM	3432	3999	2997	4072	6245	1623	1692	1863	6429	444	0	4577	2022	1630	414	45	3252	1714	2771	4156	28	52	2	5313
	3-6 PM	4209	5259	3660	4467	7988	1831	1802	2406	8205	715	0	5813	2817	2084	565	50	2957	2369	3509	5376	32	80	0	6804
	6-9 PM	2590	2928	2178	2517	4607	1177	1222	1323	4714	437	0	3322	1634	1162	292	40	1851	1314	2010	3089	7	42	1	3836
	9-Midnight	1357	1116	875	1280	1749	536	767	545	1832	204	0	1388	587	481	147	18	944	598	798	1209	5	33	0	1565
Lighting Conditions	Dark - Lighted	2813	2828	2514	2711	4614	1433	1595	1386	4748	426	0	3666	1484	1097	311	50	2150	1290	1905	3371	9	13	0	4212
	Dark - Not Lighted	1154	785	257	1135	1008	119	503	304	1155	234	0	686	471	402	122	12	569	535	649	499	4	67	0	695
	Dark - Unknown Lighting	93	49	27	106	71	8	67	20	76	6	0	44	32	20	6	0	83	25	36	41	0	1	0	51
	Dawn	316	337	181	283	496	104	121	155	518	40	0	334	168	162	39	5	175	183	244	276	4	7	0	395
	Daylight	12377	14553	10472	13381	22453	5560	5679	6808	23058	1857	0	16374	7798	5780	1559	153	9730	6495	10005	14992	87	211	3	19250
	Dusk	520	630	402	518	902	233	241	277	950	84	0	630	357	258	59	7	342	276	429	596	3	10	0	754
	Other	14	13	7	19	20	2	9	3	19	3	0	10	11	4	0	0	16	4	11	9	0	0	0	11
	Unknown	123	18	8	157	29	2	115	9	20	5	0	17	12	4	3	1	151	15	11	10	0	0	0	16

Note: Limited access facilites, parking lots and roadways for which contextual data was not available were not included in this analysis.

Attachment E-1
Seminole County
All Crash Matrix
2018-2022

Context Classification					Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
C3R	C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
124	184	0	0	0	2069	239	541	2626	199	24	190	508	2151	1392	730	52	603	72
26	0	0	0	0	84	15	84	176	7	0	68	38	77	118	32	3	29	1
22	20	0	0	0	280	34	98	385	27	0	16	49	347	146	129	17	110	10
34	46	0	0	0	456	36	145	598	31	8	76	89	472	315	152	10	147	12
337	228	0	0	0	3160	425	1085	4309	310	51	215	620	3835	1769	1347	147	1300	107
246	122	0	0	0	2703	189	903	3624	139	32	593	784	2418	1969	1131	71	566	58
204	245	0	0	0	5565	376	952	6542	296	55	913	1253	4727	4125	1315	101	1208	142
23	36	0	0	0	453	73	150	612	57	7	51	97	528	295	194	22	146	19
1259	726	0	0	0	12070	3123	6390	18515	2602	466	831	2125	18627	4248	8240	779	7475	841
49	21	0	0	0	506	80	174	678	74	8	44	96	620	241	222	37	237	23
18	2	0	0	0	91	10	52	143	9	1	27	31	95	67	53	6	25	2
295	223	0	0	0	4117	917	1819	5895	786	172	355	754	5744	1326	2479	247	2450	351
40	41	0	0	0	715	101	211	919	91	17	79	125	823	347	308	46	288	38
66	29	0	0	0	638	100	255	890	83	20	119	125	749	385	322	22	241	23
2611	1865	0	0	0	31631	5518	12349	44132	4545	821	3339	6444	39715	15973	16010	1516	14343	1653
232	227	0	0	0	3856	1128	1128	5004	417	82	528	831	4144	2359	1451	146	1374	171
2445	1667	0	0	0	28413	11476	11476	40018	4211	759	2930	5738	36320	13999	14881	1392	13210	1505
123	55	0	0	0	1114	551	551	1668	121	31	167	298	1355	648	674	42	421	35
2554	1839	0	0	0	31155	12053	12053	43354	4507	810	3291	6271	39109	15710	15658	1496	14163	1641
397	194	0	0	0	4760	2151	2151	6951	759	105	427	860	6528	2191	2792	221	2258	353
2280	1700	0	0	0	27509	10453	10453	38071	3869	736	3031	5709	33936	14167	13540	1317	12326	1323
1147	839	0	0	0	11323	4006	4006	15514	1514	211	923	2257	14059	5616	5313	519	5157	632
1530	1055	0	0	0	20946	8598	8598	29508	3114	630	2535	4312	26405	10742	11019	1019	9427	1044
8	3	0	0	0	165	63	63	230	20	3	28	34	191	99	83	9	59	3
2669	1891	0	0	0	32104	12541	12541	44792	4608	838	3430	6535	40273	16259	16249	1529	14525	1673
494	374	0	0	0	6238	2393	2393	8648	928	185	531	1139	8091	2866	3263	275	3025	332
2183	1520	0	0	0	26031	10211	10211	36374	3700	656	2927	5430	32373	13492	13069	1263	11559	1344
420	248	0	0	0	4844	2131	2131	7007	727	117	438	1029	6384	2513	2662	226	2209	240
2257	1646	0	0	0	27425	10473	10473	38015	3901	724	3020	5540	34080	13845	13670	1312	12375	1436
406	284	0	0	0	4886	1961	1961	6875	693	131	501	985	6213	2423	2513	231	2288	244
424	307	0	0	0	5035	2085	2085	7131	768	136	526	1039	6470	2501	2619	274	2367	274
421	313	0	0	0	5197	1998	1998	7203	687	145	499	1008	6528	2531	2690	243	2312	259
445	283	0	0	0	5040	2058	2058	7130	723	116	519	1034	6416	2555	2563	261	2314	276
429	322	0	0	0	5627	2134	2134	7784	824	153	585	1147	7029	2760	2956	257	2489	297
296	239	0	0	0	3635	1312	1312	4970	534	93	434	748	4415	1984	1653	170	1593	196
256	146	0	0	0	2849	1056	1056	3929	399	67	394	608	3393	1604	1338	102	1221	130
85	42	0	0	0	988	302	302	1301	90	16	176	238	993	704	362	34	283	24
64	31	0	0	0	632	244	244	888	89	13	124	163	703	395	294	29	247	25
401	213	0	0	0	4045	1851	1851	5935	588	111	448	948	5238	2170	2178	208	1844	233
331	274	0	0	0	4422	1686	1686	6118	615	127	482	888	5490	2189	2185	204	2035	246
493	389	0	0	0	6803	2494	2494	9283	965	180	656	1289	8483	3161	3407	299	3224	336
714	516	0	0	0	8253	3395	3395	11725	1206	197	779	1640	10709	4012	4478	438	3766	434
411	303	0	0	0	4901	1883	1883	6806	767	123	483	962	6251	2443	2489	235	2276	253
178	126	0	0	0	2225	749	749	2966	308	74	310	441	2597	1284	939	91	909	125
352	357	0	0	0	5454	1761	1761	7198	799	158	430	1005	6720	2706	2471	259	2444	275
232	29	0	0	0	1267	704	704	2016	165	15	459	375	1362	1072	664	44	387	29
13	3	0	0	0	123	33	33	155	12	2	27	24	118	95	34	4	35	1
55	22	0	0	0	491	249	249	743	80	11	71	136	627	297	283	21	198	35
1933	1417	0	0	0	23774	9474	9474	33353	3424	625	2328	4780	30294	11567	12335	1155	11074	1268
83	61	0	0	0	1006	357	357	1377	145	30	110	206	1236	492	513	55	427	65
5	0	0	0	0	22	9	9	31	3	0	1	6	27	12	13	0	8	1
4	5	0	0	0	132	17	17	149	0	0	32	37	80	117	19	0	11	2

Note: Limited access facilites, parking lots and roadways for which contextual data was not available were not included in this analysis.

Attachment E-2
Seminole County
All KSI Crash Matrix 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification						
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R	C4	C5
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+																
Type	Angle	22	18	10	17	28	6	11	6	33	0	0	20	5	10	6	1	9	12	15	14	0	0	0	23	4	3	0
	Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Bicycle	14	14	5	9	24	0	8	4	18	3	0	10	8	6	1	0	8	5	9	11	0	0	0	13	0	2	0
	Head On	21	7	8	25	12	0	2	5	21	8	0	22	2	7	3	0	3	15	9	10	2	4	0	13	7	1	0
	Left Turn	53	60	31	27	108	9	10	27	96	11	0	53	41	31	8	0	11	38	45	49	0	2	0	68	17	9	0
	Off Road	53	65	13	77	52	7	26	22	72	11	0	35	43	24	3	1	30	32	46	28	0	2	0	38	14	3	0
	Other	30	16	7	21	32	3	14	10	23	6	0	20	8	8	3	0	17	16	17	6	0	2	0	19	3	3	0
	Pedestrian	42	51	31	43	70	12	19	23	71	11	0	62	17	21	7	0	18	27	39	41	0	0	0	66	7	9	0
	Rear End	22	46	30	19	63	16	2	10	79	7	0	58	18	19	0	0	3	17	34	44	0	2	0	58	10	4	0
	Right Turn	1	5	0	1	5	0	1	2	3	0	0	1	1	2	1	0	1	3	2	0	0	0	0	3	0	0	0
	Rollover	9	4	4	9	8	1	2	1	12	2	0	6	3	3	3	1	2	8	4	4	1	1	0	5	3	0	0
	Sideswipe	3	16	8	8	17	2	2	1	21	3	0	13	11	1	0	0	2	4	9	12	0	0	0	15	4	0	0
	Unknown	2	5	1	1	6	1	1	1	5	1	0	4	2	1	0	0	1	2	1	4	0	0	0	4	1	0	0
Alcohol Related	Y	17	20	11	23	21	5	6	5	32	5	0	18	14	7	4	0	6	13	11	19	1	1	0	16	6	2	0
	N	255	287	137	234	404	52	92	107	422	58	0	286	145	126	31	3	99	166	219	204	2	12	0	309	64	32	0
Hit and Run	Y	14	17	11	16	25	2	8	5	23	6	0	25	5	3	2	0	8	6	14	15	0	0	0	23	2	5	0
	N	258	290	137	241	400	55	90	107	431	57	0	279	154	130	33	3	97	173	216	208	3	13	0	302	68	29	0
Aggressive Driving	Y	35	21	11	41	27	1	14	12	34	7	0	25	12	10	4	0	18	18	18	15	2	0	0	25	6	1	0
	N	237	286	137	216	398	56	84	100	420	56	0	279	147	123	31	3	87	161	212	208	1	13	0	300	64	33	0
Distracted Driving	Y	30	36	19	22	57	6	5	13	63	4	0	37	19	18	4	0	7	21	31	26	0	3	0	43	7	5	0
	N	242	271	129	235	368	51	93	99	391	59	0	267	140	115	31	3	98	158	199	197	3	10	0	282	63	29	0
Intersection Related	Y	127	132	68	76	226	25	39	61	205	22	0	126	72	65	22	1	41	85	96	104	0	8	0	154	34	15	0
	N	145	175	80	181	199	32	59	51	249	41	0	178	87	68	13	2	64	94	134	119	3	5	0	171	36	19	0
Drug Related	Y	9	11	8	12	15	2	3	3	22	0	0	9	10	4	2	0	4	7	6	12	1	1	0	12	1	1	0
	N	263	296	140	245	410	55	95	109	432	63	0	295	149	129	33	3	101	172	224	211	2	12	0	313	69	33	0
Aging Driver	Y	54	58	24	35	92	11	14	24	87	11	0	54	31	31	5	0	17	43	32	46	0	3	0	61	16	7	0
	N	218	249	124	222	333	46	84	88	367	52	0	250	128	102	30	3	88	136	198	177	3	10	0	264	54	27	0
Teenage Driver	Y	33	31	10	28	42	4	11	13	45	5	0	21	17	17	4	1	14	19	23	17	0	0	0	28	8	1	0
	N	239	276	138	229	383	53	87	99	409	58	0	283	142	116	31	2	91	160	207	206	3	13	0	297	62	33	0
Day of the Week	Monday	37	42	12	34	54	6	13	15	54	9	0	33	24	18	1	0	18	23	28	24	0	4	0	40	8	3	0
	Tuesday	41	40	25	33	62	11	17	17	62	10	0	46	22	17	4	1	16	21	30	38	0	0	0	49	13	5	0
	Wednesday	32	41	20	30	58	7	16	11	59	7	0	43	14	17	5	0	16	21	25	33	1	0	0	46	7	7	0
	Thursday	35	43	25	38	56	10	13	12	73	5	0	46	24	16	6	0	12	26	31	35	1	3	0	49	6	10	0
	Friday	45	41	22	39	61	12	12	16	74	6	0	41	22	28	6	1	14	34	35	29	1	2	0	50	10	2	0
	Saturday	46	57	22	42	80	4	12	24	78	11	0	52	30	20	8	0	16	28	49	33	0	2	0	53	17	4	0
	Sunday	36	43	22	41	54	7	15	17	54	15	0	43	23	17	5	1	13	26	32	31	0	2	0	38	9	3	0
Time of Day	12-3 AM	17	21	8	18	25	3	6	4	32	4	0	17	15	9	2	0	3	13	17	13	0	0	0	20	6	1	0
	3-6 AM	13	10	11	17	12	5	5	3	24	2	0	19	6	2	1	1	5	5	11	13	0	1	0	15	3	2	0
	6-9 AM	30	22	10	17	43	4	10	9	40	3	0	16	16	13	4	0	15	14	22	13	1	2	0	29	4	1	0
	9-Noon	33	35	13	37	41	5	15	14	44	8	0	37	9	16	5	0	16	21	19	26	1	4	0	36	3	4	0
	Noon-3 PM	38	45	14	34	63	3	17	16	56	8	0	37	19	20	4	1	19	23	31	26	0	1	0	43	8	5	0
	3-6 PM	58	64	34	52	95	11	16	29	104	7	0	58	41	32	10	0	17	44	52	45	1	1	0	62	17	9	0
	6-9 PM	46	59	31	47	77	13	18	21	82	15	0	66	25	21	8	0	17	34	42	44	0	2	0	64	12	7	0
	9-Midnight	37	51	27	35	69	13	11	16	72	16	0	54	28	20	1	1	13	25	36	43	0	2	0	56	17	5	0
Lighting Conditions	Dark - Lighted	53	70	58	49	113	20	25	28	117	11	0	92	30	31	5	2	22	34	52	74	0	0	0	94	11	12	0
	Dark - Not Lighted	51	63	16	64	58	9	9	13	83	25	0	49	44	22	7	0	9	40	49	33	0	7	0	49	25	1	0
	Dark - Unknown Lighting	1	1	0	2	0	0	1	0	1	0	0	1	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0
	Dawn	3	4	1	1	5	2	0	2	6	0	0	3	1	3	0	0	1	1	5	1	0	1	0	5	0	0	0
	Daylight	155	156	72	134	233	24	61	66	230	26	0	151	76	72	23	1	68	98	109	114	3	5	0	167	31	17	0
	Dusk	9	13	1	7	16	2	2	3	17	1	0	8	8	4	0	0	5	5	14	1	0	0	0	9	3	4	0
	Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: Limited access facilites, parking lots and roadways for which contextual data was not available were not included in this analysis.

Attachment E-2
Seminole County
All KSI Crash Matrix 2018-2022

Mode:	All Collisions	Context Classification		Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0	0	33	7	10	43	6	1	1	8	41	17	18	0	12	3
	Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Bicycle	0	0	21	3	9	31	2	0	2	2	29	16	9	0	8	0
	Head On	0	0	17	0	19	36	0	0	14	6	16	19	10	2	5	0
	Left Turn	0	0	84	7	53	137	3	4	11	13	120	52	38	3	49	2
	Off Road	0	0	74	7	50	124	6	1	20	24	87	48	61	2	20	0
	Other	0	0	37	2	14	52	1	0	4	10	39	31	10	0	12	0
	Pedestrian	0	0	81	11	32	112	9	3	8	15	101	46	36	5	33	4
	Rear End	0	0	48	14	36	89	8	1	7	14	77	21	40	4	29	4
	Right Turn	0	0	3	0	3	6	0	0	0	1	5	2	2	0	2	0
	Rollover	0	0	8	0	9	16	0	1	5	4	8	8	7	0	2	0
	Sideswipe	0	0	14	3	10	23	3	1	1	3	23	5	14	0	5	3
	Unknown	0	0	7	0	1	8	0	0	1	1	6	3	2	1	2	0
Alcohol Related	Y	0	0	28	3	17	45	2	1	9	8	31	18	19	2	8	1
	N	0	0	399	51	229	632	36	11	65	93	521	250	228	15	171	15
Hit and Run	Y	0	0	26	12	12	39	3	0	5	3	34	20	6	1	14	1
	N	0	0	401	234	234	638	35	12	69	98	518	248	241	16	165	15
Aggressive Driving	Y	0	0	33	26	26	63	4	0	13	13	41	29	25	1	12	0
	N	0	0	394	220	220	614	34	12	61	88	511	239	222	16	167	16
Distracted Driving	Y	0	0	50	30	30	79	4	2	7	5	73	31	25	3	23	3
	N	0	0	377	216	216	598	34	10	67	96	479	237	222	14	156	13
Intersection Related	Y	0	0	195	109	109	309	13	5	25	41	261	121	101	5	93	7
	N	0	0	232	137	137	368	25	7	49	60	291	147	146	12	86	9
Drug Related	Y	0	0	14	10	10	26	2	0	3	3	22	9	14	1	4	0
	N	0	0	413	236	236	651	36	12	71	98	530	259	233	16	175	16
Aging Driver	Y	0	0	75	49	49	126	8	2	15	16	105	52	42	1	35	6
	N	0	0	352	197	197	551	30	10	59	85	447	216	205	16	144	10
Teenage Driver	Y	0	0	47	21	21	69	4	1	8	18	48	27	21	1	20	5
	N	0	0	380	225	225	608	34	11	66	83	504	241	226	16	159	11
Day of the Week	Monday	0	0	52	32	32	88	2	1	7	19	65	32	31	1	25	2
	Tuesday	0	0	71	29	29	99	3	4	15	9	82	41	32	3	28	2
	Wednesday	0	0	54	30	30	85	7	1	8	7	78	40	29	1	22	1
	Thursday	0	0	60	33	33	95	7	1	10	16	77	31	31	2	36	3
	Friday	0	0	63	36	36	99	7	2	9	16	83	38	39	3	24	4
	Saturday	0	0	69	49	49	117	7	1	13	20	92	48	43	4	29	1
	Sunday	0	0	58	37	37	94	5	2	12	14	75	38	42	3	15	3
Time of Day	12-3 AM	0	0	26	18	18	45	1	0	8	9	29	18	15	0	12	1
	3-6 AM	0	0	15	16	16	31	2	1	1	9	24	11	14	0	9	0
	6-9 AM	0	0	34	21	21	55	5	2	8	9	45	25	20	1	15	1
	9-Noon	0	0	53	23	23	74	4	3	10	13	58	29	26	1	23	2
	Noon-3 PM	0	0	60	30	30	93	4	0	9	14	74	40	33	0	24	0
	3-6 PM	0	0	98	43	43	145	9	2	13	14	129	52	54	7	38	5
	6-9 PM	0	0	75	53	53	128	8	0	12	17	107	49	45	3	37	2
	9-Midnight	0	0	66	42	42	106	5	4	13	16	86	44	40	5	21	5
Lighting Conditions	Dark - Lighted	0	0	119	49	49	164	12	5	7	28	146	67	61	5	42	6
	Dark - Not Lighted	0	0	53	71	71	124	4	2	25	19	86	44	52	2	31	1
	Dark - Unknown Lighting	0	0	2	0	0	2	0	0	0	0	2	1	1	0	0	0
	Dawn	0	0	4	3	3	7	1	0	2	0	6	2	3	0	3	0
	Daylight	0	0	234	116	116	357	21	5	35	52	296	142	128	9	96	8
	Dusk	0	0	15	7	7	23	0	0	5	2	16	12	2	1	7	1
	Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: Limited access facilites, parking lots and roadways for which contextual data was not available were not included in this analysis.

Attachment E-3
Seminole County
Percent of All Crashes that Result in a KSI - 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	1.6%	1.8%	2.0%	1.5%	1.7%	2.1%	1.5%	0.8%	2.5%	0.0%	-	2.4%	1.0%	1.9%	2.5%	4.0%	1.0%	1.8%	1.9%	2.0%	0.0%	0.0%	-	2.2%	3.2%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	0.0%	#DIV/0!	0.0%	0.0%	0.0%	0.0%	-	0.0%	-	0.0%	0.0%
	Bicycle	9.9%	7.6%	5.9%	7.1%	9.3%	0.0%	10.5%	5.2%	7.5%	15.0%	-	6.3%	9.2%	8.3%	3.6%	0.0%	11.6%	5.6%	8.2%	7.5%	-	-	0.0%	7.0%	0.0%
	Head On	7.2%	3.0%	7.1%	7.9%	3.6%	0.0%	1.4%	3.8%	6.6%	18.2%	-	9.3%	2.0%	5.8%	8.1%	0.0%	1.4%	9.2%	5.4%	6.1%	40.0%	33.3%	-	5.4%	20.6%
	Left Turn	2.9%	3.2%	3.3%	2.8%	3.3%	1.9%	1.5%	2.2%	3.7%	5.3%	-	3.4%	3.8%	3.3%	2.2%	0.0%	1.4%	3.3%	3.3%	3.4%	0.0%	6.7%	-	3.3%	5.0%
	Off Road	2.4%	5.6%	2.8%	3.0%	3.5%	4.3%	1.8%	3.2%	4.9%	5.4%	-	3.5%	7.3%	4.4%	1.3%	3.4%	1.6%	4.1%	5.6%	3.7%	0.0%	5.7%	-	3.7%	5.7%
	Other	0.7%	0.9%	0.7%	0.3%	1.2%	0.5%	0.4%	1.1%	1.0%	3.1%	-	1.2%	1.0%	1.1%	1.0%	0.0%	0.3%	1.6%	1.4%	0.4%	0.0%	6.7%	-	1.0%	1.5%
	Pedestrian	15.1%	19.6%	22.5%	17.2%	19.0%	16.2%	13.2%	15.8%	19.8%	40.7%	-	22.5%	17.3%	16.4%	18.9%	0.0%	12.0%	17.6%	20.9%	20.5%	-	0.0%	-	21.4%	30.4%
	Rear End	0.4%	0.5%	0.4%	0.5%	0.4%	0.4%	0.2%	0.3%	0.5%	0.5%	-	0.5%	0.4%	0.6%	0.0%	0.0%	0.2%	0.5%	0.5%	0.4%	0.0%	1.4%	0.0%	0.4%	0.8%
	Right Turn	0.4%	1.8%	0.0%	0.7%	1.0%	0.0%	0.9%	1.3%	0.7%	0.0%	-	0.4%	0.6%	1.4%	2.0%	0.0%	0.8%	1.9%	1.0%	0.0%	-	0.0%	-	0.8%	0.0%
	Rollover	12.0%	7.4%	16.7%	11.8%	12.3%	7.1%	6.9%	5.0%	13.8%	11.8%	-	9.7%	10.0%	13.0%	30.0%	100.0%	6.9%	21.6%	7.5%	11.4%	-	33.3%	-	8.3%	16.7%
	Sideswipe	0.2%	0.6%	0.3%	0.6%	0.4%	0.1%	0.4%	0.1%	0.4%	0.8%	-	0.4%	0.7%	0.1%	0.0%	0.0%	0.3%	0.5%	0.5%	0.3%	0.0%	0.0%	-	0.4%	1.4%
	Unknown	0.6%	1.4%	0.3%	0.3%	1.0%	0.5%	0.5%	0.6%	0.8%	1.7%	-	0.9%	1.0%	0.7%	0.0%	0.0%	0.3%	1.2%	0.4%	0.9%	-	0.0%	-	0.8%	2.5%
Alcohol Related	Y	4.1%	5.8%	4.6%	5.3%	4.3%	3.8%	2.5%	3.4%	5.9%	7.7%	-	4.6%	7.7%	5.0%	7.7%	0.0%	2.1%	7.0%	4.8%	5.4%	-	7.1%	-	3.8%	9.1%
	N	1.5%	1.5%	1.0%	1.3%	1.4%	0.7%	1.1%	1.2%	1.4%	2.2%	-	1.3%	1.4%	1.7%	1.5%	1.3%	0.8%	1.9%	1.7%	1.0%	1.9%	4.1%	0.0%	1.2%	2.5%
Hit and Run	Y	0.6%	1.0%	0.8%	0.5%	0.9%	0.3%	0.5%	0.6%	0.8%	2.1%	-	1.2%	0.6%	0.4%	0.9%	0.0%	0.3%	0.7%	1.2%	0.8%	0.0%	0.0%	#DIV/0!	0.9%	0.9%
	N	1.7%	1.7%	1.1%	1.6%	1.5%	0.8%	1.3%	1.3%	1.6%	2.4%	-	1.4%	1.6%	1.8%	1.8%	1.6%	0.9%	2.2%	1.8%	1.2%	3.2%	4.5%	0.0%	1.3%	2.8%
Aggressive Driving	Y	5.1%	2.9%	2.8%	5.8%	2.7%	0.5%	4.0%	4.1%	3.2%	6.4%	-	3.6%	3.0%	3.5%	4.8%	0.0%	4.3%	5.4%	3.3%	2.5%	-	0.0%	-	3.1%	4.9%
	N	1.4%	1.5%	1.0%	1.2%	1.4%	0.8%	1.1%	1.2%	1.4%	2.2%	-	1.3%	1.5%	1.7%	1.5%	1.4%	0.7%	1.9%	1.7%	1.1%	1.0%	4.4%	0.0%	1.2%	2.5%
Distracted Driving	Y	1.2%	1.1%	0.9%	0.9%	1.2%	0.5%	0.5%	0.8%	1.3%	1.1%	-	1.0%	1.2%	1.4%	1.4%	0.0%	0.4%	1.5%	1.3%	0.9%	0.0%	6.8%	-	1.0%	1.8%
	N	1.6%	1.7%	1.1%	1.5%	1.5%	0.8%	1.3%	1.3%	1.5%	2.6%	-	1.5%	1.6%	1.8%	1.7%	1.4%	0.8%	2.1%	1.8%	1.2%	3.6%	3.8%	0.0%	1.3%	2.8%
Intersection Related	Y	2.1%	1.8%	1.7%	2.3%	2.0%	0.9%	1.8%	1.6%	2.0%	2.5%	-	1.9%	1.9%	2.0%	2.2%	1.3%	1.7%	2.3%	1.8%	1.8%	0.0%	6.2%	-	1.8%	3.0%
	N	1.3%	1.5%	0.8%	1.2%	1.1%	0.7%	1.0%	1.0%	1.2%	2.3%	-	1.2%	1.3%	1.5%	1.2%	1.3%	0.6%	1.8%	1.7%	0.8%	3.6%	2.8%	0.0%	1.0%	2.4%
Drug Related	Y	8.0%	15.7%	11.4%	10.3%	12.6%	6.1%	4.6%	7.3%	16.2%	0.0%	-	9.5%	23.8%	10.5%	10.5%	0.0%	5.6%	13.5%	12.0%	13.0%	-	100.0%	-	10.4%	12.5%
	N	1.5%	1.5%	1.0%	1.3%	1.4%	0.7%	1.1%	1.2%	1.4%	2.4%	-	1.4%	1.4%	1.7%	1.6%	1.3%	0.8%	2.0%	1.7%	1.1%	1.9%	3.9%	0.0%	1.2%	2.6%
Aging Driver	Y	1.8%	1.5%	0.8%	1.1%	1.5%	0.7%	1.1%	1.3%	1.4%	2.4%	-	1.2%	1.5%	1.9%	1.2%	0.0%	0.7%	2.5%	1.2%	1.1%	0.0%	6.1%	0.0%	1.2%	3.2%
	N	1.5%	1.6%	1.1%	1.5%	1.4%	0.8%	1.2%	1.2%	1.5%	2.4%	-	1.4%	1.5%	1.7%	1.8%	1.7%	0.8%	1.9%	1.9%	1.1%	3.4%	3.8%	0.0%	1.3%	2.5%
Teenage Driver	Y	1.2%	1.0%	0.5%	1.1%	0.9%	0.4%	1.0%	0.8%	0.9%	1.2%	-	0.7%	0.9%	1.3%	1.1%	5.0%	0.8%	1.3%	1.0%	0.6%	0.0%	0.0%	0.0%	0.8%	1.9%
	N	1.6%	1.7%	1.2%	1.4%	1.5%	0.8%	1.2%	1.3%	1.6%	2.6%	-	1.5%	1.7%	1.8%	1.8%	1.0%	0.8%	2.2%	1.9%	1.2%	3.2%	5.1%	0.0%	1.4%	2.7%
Day of the Week	Monday	1.5%	1.4%	0.6%	1.3%	1.2%	0.5%	1.1%	1.1%	1.1%	2.2%	-	1.0%	1.5%	1.6%	0.3%	0.0%	0.9%	1.7%	1.4%	0.8%	0.0%	8.2%	-	1.0%	2.0%
	Tuesday	1.5%	1.3%	1.1%	1.2%	1.3%	0.9%	1.4%	1.2%	1.3%	2.2%	-	1.3%	1.3%	1.4%	1.2%	3.4%	0.8%	1.5%	1.4%	1.2%	0.0%	0.0%	-	1.2%	3.1%
	Wednesday	1.2%	1.3%	0.9%	1.1%	1.2%	0.6%	1.3%	0.7%	1.2%	1.8%	-	1.2%	0.8%	1.3%	1.5%	0.0%	0.8%	1.5%	1.2%	1.0%	6.3%	0.0%	-	1.1%	1.7%
	Thursday	1.3%	1.4%	1.1%	1.3%	1.2%	0.9%	1.0%	0.9%	1.5%	1.2%	-	1.3%	1.4%	1.3%	1.6%	0.0%	0.6%	1.8%	1.5%	1.1%	5.3%	6.3%	-	1.2%	1.3%
	Friday	1.5%	1.2%	0.9%	1.3%	1.2%	0.9%	0.9%	1.0%	1.4%	1.4%	-	1.1%	1.2%	2.0%	1.8%	2.5%	0.6%	2.2%	1.5%	0.8%	4.8%	4.0%	0.0%	1.1%	2.3%
	Saturday	2.2%	3.0%	1.4%	1.8%	2.6%	0.5%	1.0%	2.5%	2.4%	3.8%	-	2.2%	2.9%	2.5%	3.4%	0.0%	0.9%	3.0%	3.6%	1.5%	0.0%	5.6%	-	2.0%	5.7%
	Sunday	2.1%	2.8%	2.0%	2.2%	2.2%	1.1%	1.6%	2.3%	2.2%	5.5%	-	2.4%	2.7%	2.7%	2.6%	3.1%	0.9%	3.4%	3.0%	1.9%	0.0%	4.8%	0.0%	1.9%	3.5%
Time of Day	12-3 AM	2.3%	5.5%	2.7%	2.3%	4.3%	1.9%	1.2%	2.0%	5.1%	5.3%	-	3.4%	7.7%	5.4%	2.9%	0.0%	0.5%	5.3%	6.1%	3.2%	0.0%	0.0%	-	3.7%	7.1%
	3-6 AM	2.9%	3.2%	4.6%	3.5%	2.7%	3.8%	2.0%	1.9%	4.7%	2.5%	-	4.8%	3.5%	1.5%	2.4%	12.5%	1.6%	2.8%	4.5%	4.1%	-	6.7%	-	3.5%	4.7%
	6-9 AM	1.3%	0.8%	0.6%	0.8%	1.1%	0.4%	1.0%	0.8%	1.0%	0.8%	-	0.6%	1.0%	1.2%	1.5%	0.0%	1.2%	1.1%	1.2%	0.5%	7.1%	5.0%	-	0.9%	1.0%
	9-Noon	1.4%	1.3%	0.7%	1.4%	1.0%	0.5%	1.3%	1.1%	1.1%	2.4%	-	1.2%	0.7%	1.6%	1.7%	0.0%	0.8%	1.9%	1.1%	1.0%	5.3%	9.5%	-	1.0%	0.9%
	Noon-3 PM	1.1%	1.1%	0.5%	0.8%	1.0%	0.2%	1.0%	0.9%	0.9%	1.8%	-	0.8%	0.9%	1.2%	1.0%	2.2%	0.6%	1.3%	1.1%	0.6%	0.0%	1.9%	0.0%	0.8%	1.6%
	3-6 PM	1.4%	1.2%	0.9%	1.2%	1.2%	0.6%	0.9%	1.2%	1.3%	1.0%	-	1.0%	1.5%	1.5%	1.8%	0.0%	0.6%	1.9%	1.5%	0.8%	3.1%	1.3%	-	0.9%	2.4%
	6-9 PM	1.8%	2.0%	1.4%	1.9%	1.7%	1.1%	1.5%	1.6%	1.7%	3.4%	-	2.0%	1.5%	1.8%	2.7%	0.0%	0.9%	2.6%	2.1%	1.4%	0.0%	4.8%	0.0%	1.7%	2.9%
	9-Midnight	2.7%	4.6%	3.1%	2.7%	3.9%	2.4%	1.4%	2.9%	3.9%	7.8%	-	3.9%	4.8%	4.2%	0.7%	5.6%	1.4%	4.2%	4.5%	3.6%	-	6.1%	#DIV/0!	3.6%	9.6%
Lighting Conditions	Dark - Lighted	1.9%	2.5%	2.3%	1.8%	2.4%	1.4%	1.6%	2.0%	2.5%	2.6%	-	2.5%	2.0%	2.8%	1.6%	4.0%	1.0%	2.6%	2.7%	2.2%	0.0%	0.0%	-	2.2%	3.1%
	Dark - Not Lighted	4.4%	8.0%	6.2%	5.6%	5.8%	7.6%	1.8%	4.3%	7.2%	10.7%	-	7.1%	9.3%	5.5%	5.7%	0.0%	1.6%	7.5%	7.6%	6.6%	0.0%	10.4%	-	7.1%	10.8%
	Dark - Unknown Lighting	1.1%	2.0%	0.0%	1.9%	0.0%	0.0%	1.5%	0.0%	1.3%	0.0%	-	2.3%	0.0%	5.0%	-	-	0.0%	4.0%	2.8%	0.0%	-	-	-	2.0%	0.0%
	Dawn	0.9%	1.2%	0.6%	0.4%	1.0%	1.9%	0.0%	1.3%	1.2%	0.0%	-	0.9%	0.6%	1.9%	0.0%	0.0%	0.6%	0.5%	2.0%	0.4%	0.0%	14.3%	-	1.3%	0.0%
	Daylight	1.3%	1.1%	0.7%	1.0%	1.0%	0.4%	1.1%	1.0%	1.0%	1.4%	-	0.9%	1.0%	1.2%	1.5%	0.7%	0.7%	1.5%	1.1%	0.8%	3.4%	2.4%	0.0%	0.9%	1.6%
	Dusk	1.7%	2.1%	0.2%	1.4%	1.8%	0.9%	0.8%	1.1%	1.8%	1.2%	-	1.3%	2.2%	1.6%	0.0%	0.0%	1.5%	1.8%	3.3%	0.2%	0.0%	0.0%	-	1.2%	3.6%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	-	-	0.0%	0.0%	0.0%	0.0%	-	-	-	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	0.0%	0.0%	-	-	-	0.0%	0.0%

Attachment E-3
Seminole County
Percent of All Crashes that Result in a KSI - 2018-2022

Mode: All	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	1.6%	-	-	-	1.6%	2.9%	1.8%	1.6%	3.0%	4.2%	0.5%	1.6%	1.9%	1.2%	2.5%	0.0%	2.0%	4.2%
	Animal	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-
	Bicycle	10.0%	-	-	-	7.5%	8.8%	9.2%	8.1%	7.4%	-	12.5%	4.1%	8.4%	11.0%	7.0%	0.0%	7.3%	-
	Head On	2.2%	-	-	-	3.7%	0.0%	13.1%	6.0%	0.0%	0.0%	18.4%	6.7%	3.4%	6.0%	6.6%	20.0%	3.4%	-
	Left Turn	3.9%	-	-	-	2.7%	1.6%	4.9%	3.2%	1.0%	7.8%	5.1%	2.1%	3.1%	2.9%	2.8%	2.0%	3.8%	1.9%
	Off Road	2.5%	-	-	-	2.7%	3.7%	5.5%	3.4%	4.3%	3.1%	3.4%	3.1%	3.6%	2.4%	5.4%	2.8%	3.5%	0.0%
	Other	1.2%	-	-	-	0.7%	0.5%	1.5%	0.8%	0.3%	0.0%	0.4%	0.8%	0.8%	0.8%	0.8%	0.0%	1.0%	0.0%
	Pedestrian	25.0%	-	-	-	17.9%	15.1%	21.3%	18.3%	15.8%	42.9%	15.7%	15.5%	19.1%	15.6%	18.6%	22.7%	22.6%	-
	Rear End	0.6%	-	-	-	0.4%	0.4%	0.6%	0.5%	0.3%	0.2%	0.8%	0.7%	0.4%	0.5%	0.5%	0.5%	0.4%	0.5%
	Right Turn	0.0%	-	-	-	0.6%	0.0%	1.7%	0.9%	0.0%	0.0%	0.0%	1.0%	0.8%	0.8%	0.9%	0.0%	0.8%	-
	Rollover	0.0%	-	-	-	8.8%	0.0%	17.3%	11.2%	0.0%	-	18.5%	12.9%	8.4%	11.9%	13.2%	0.0%	8.0%	0.0%
	Sideswipe	0.0%	-	-	-	0.3%	0.3%	0.5%	0.4%	0.4%	0.6%	0.3%	0.4%	0.4%	0.4%	0.6%	0.0%	0.2%	0.9%
	Unknown	0.0%	-	-	-	1.0%	0.0%	0.5%	0.9%	0.0%	0.0%	1.3%	0.8%	0.7%	0.9%	0.6%	2.2%	0.7%	-
Alcohol Related	Y	6.9%	-	-	-	4.4%	3.0%	6.7%	5.1%	2.4%	5.0%	7.6%	6.4%	4.1%	4.7%	5.9%	9.1%	3.3%	4.3%
	N	1.7%	-	-	-	1.3%	0.9%	1.9%	1.4%	0.8%	1.3%	1.9%	1.4%	1.3%	1.6%	1.4%	1.0%	1.2%	0.9%
Hit and Run	Y	2.2%	-	-	-	0.7%	1.1%	1.1%	0.8%	0.7%	0.0%	0.9%	0.4%	0.8%	0.8%	0.4%	0.7%	1.0%	0.6%
	N	1.7%	-	-	-	1.4%	2.0%	2.0%	1.6%	0.8%	1.6%	2.4%	1.7%	1.4%	1.8%	1.6%	1.1%	1.2%	1.0%
Aggressive Driving	Y	1.8%	-	-	-	3.0%	4.7%	4.7%	3.8%	3.3%	0.0%	7.8%	4.4%	3.0%	4.5%	3.7%	2.4%	2.9%	0.0%
	N	1.8%	-	-	-	1.3%	1.8%	1.8%	1.4%	0.8%	1.5%	1.9%	1.4%	1.3%	1.5%	1.4%	1.1%	1.2%	1.0%
Distracted Driving	Y	2.6%	-	-	-	1.1%	1.4%	1.4%	1.1%	0.5%	1.9%	1.6%	0.6%	1.1%	1.4%	0.9%	1.4%	1.0%	0.8%
	N	1.7%	-	-	-	1.4%	2.1%	2.1%	1.6%	0.9%	1.4%	2.2%	1.7%	1.4%	1.7%	1.6%	1.1%	1.3%	1.0%
Intersection Related	Y	1.8%	-	-	-	1.7%	2.7%	2.7%	2.0%	0.9%	2.4%	2.7%	1.8%	1.9%	2.2%	1.9%	1.0%	1.8%	1.1%
	N	1.8%	-	-	-	1.1%	1.6%	1.6%	1.2%	0.8%	1.1%	1.9%	1.4%	1.1%	1.4%	1.3%	1.2%	0.9%	0.9%
Drug Related	Y	33.3%	-	-	-	8.5%	15.9%	15.9%	11.3%	10.0%	0.0%	10.7%	8.8%	11.5%	9.1%	16.9%	11.1%	6.8%	-
	N	1.7%	-	-	-	1.3%	1.9%	1.9%	1.5%	0.8%	1.4%	2.1%	1.5%	1.3%	1.6%	1.4%	1.0%	1.2%	1.0%
Aging Driver	Y	1.9%	-	-	-	1.2%	2.0%	2.0%	1.5%	0.9%	1.1%	2.8%	1.4%	1.3%	1.8%	1.3%	0.4%	1.2%	1.8%
	N	1.8%	-	-	-	1.4%	1.9%	1.9%	1.5%	0.8%	1.5%	2.0%	1.6%	1.4%	1.6%	1.6%	1.3%	1.2%	0.7%
Teenage Driver	Y	0.4%	-	-	-	1.0%	1.0%	1.0%	1.0%	0.6%	0.9%	1.8%	1.7%	0.8%	1.1%	0.8%	0.4%	0.9%	2.1%
	N	2.0%	-	-	-	1.4%	2.1%	2.1%	1.6%	0.9%	1.5%	2.2%	1.5%	1.5%	1.7%	1.7%	1.2%	1.3%	0.8%
Day of the Week	Monday	1.1%	-	-	-	1.1%	1.6%	1.6%	1.3%	0.3%	0.8%	1.4%	1.9%	1.0%	1.3%	1.2%	0.4%	1.1%	0.8%
	Tuesday	1.6%	-	-	-	1.4%	1.4%	1.4%	1.4%	0.4%	2.9%	2.9%	0.9%	1.3%	1.6%	1.2%	1.1%	1.2%	0.7%
	Wednesday	2.2%	-	-	-	1.0%	1.5%	1.5%	1.2%	1.0%	0.7%	1.6%	0.7%	1.2%	1.6%	1.1%	0.4%	1.0%	0.4%
	Thursday	3.5%	-	-	-	1.2%	1.6%	1.6%	1.3%	1.0%	0.9%	1.9%	1.5%	1.2%	1.2%	1.2%	0.8%	1.6%	1.1%
	Friday	0.6%	-	-	-	1.1%	1.7%	1.7%	1.3%	0.8%	1.3%	1.5%	1.4%	1.2%	1.4%	1.3%	1.2%	1.0%	1.3%
	Saturday	1.7%	-	-	-	1.9%	3.7%	3.7%	2.4%	1.3%	1.1%	3.0%	2.7%	2.1%	2.4%	2.6%	2.4%	1.8%	0.5%
	Sunday	2.1%	-	-	-	2.0%	3.5%	3.5%	2.4%	1.3%	3.0%	3.0%	2.3%	2.2%	2.4%	3.1%	2.9%	1.2%	2.3%
Time of Day	12-3 AM	2.4%	-	-	-	2.6%	6.0%	6.0%	3.5%	1.1%	0.0%	4.5%	3.8%	2.9%	2.6%	4.1%	0.0%	4.2%	4.2%
	3-6 AM	6.5%	-	-	-	2.4%	6.6%	6.6%	3.5%	2.2%	7.7%	0.8%	5.5%	3.4%	2.8%	4.8%	0.0%	3.6%	0.0%
	6-9 AM	0.5%	-	-	-	0.8%	1.1%	1.1%	0.9%	0.9%	1.8%	1.8%	0.9%	0.9%	1.2%	0.9%	0.5%	0.8%	0.4%
	9-Noon	1.5%	-	-	-	1.2%	1.4%	1.4%	1.2%	0.7%	2.4%	2.1%	1.5%	1.1%	1.3%	1.2%	0.5%	1.1%	0.8%
	Noon-3 PM	1.3%	-	-	-	0.9%	1.2%	1.2%	1.0%	0.4%	0.0%	1.4%	1.1%	0.9%	1.3%	1.0%	0.0%	0.7%	0.0%
	3-6 PM	1.7%	-	-	-	1.2%	1.3%	1.3%	1.2%	0.7%	1.0%	1.7%	0.9%	1.2%	1.3%	1.2%	1.6%	1.0%	1.2%
	6-9 PM	2.3%	-	-	-	1.5%	2.8%	2.8%	1.9%	1.0%	0.0%	2.5%	1.8%	1.7%	2.0%	1.8%	1.3%	1.6%	0.8%
	9-Midnight	4.0%	-	-	-	3.0%	5.6%	5.6%	3.6%	1.6%	5.4%	4.2%	3.6%	3.3%	3.4%	4.3%	5.5%	2.3%	4.0%
Lighting Conditions	Dark - Lighted	3.4%	-	-	-	2.2%	2.8%	2.8%	2.3%	1.5%	3.2%	1.6%	2.8%	2.2%	2.5%	2.5%	1.9%	1.7%	2.2%
	Dark - Not Lighted	3.4%	-	-	-	4.2%	10.1%	10.1%	6.2%	2.4%	13.3%	5.4%	5.1%	6.3%	4.1%	7.8%	4.5%	8.0%	3.4%
	Dark - Unknown Lighting	0.0%	-	-	-	1.6%	0.0%	0.0%	1.3%	0.0%	-	0.0%	0.0%	1.7%	1.1%	2.9%	0.0%	0.0%	-
	Dawn	0.0%	-	-	-	0.8%	1.2%	1.2%	0.9%	1.3%	0.0%	2.8%	0.0%	1.0%	0.7%	1.1%	0.0%	1.5%	0.0%
	Daylight	1.2%	-	-	-	1.0%	1.2%	1.2%	1.1%	0.6%	0.8%	1.5%	1.1%	1.0%	1.2%	1.0%	0.8%	0.9%	0.6%
	Dusk	6.6%	-	-	-	1.5%	2.0%	2.0%	1.7%	0.0%	0.0%	4.5%	1.0%	1.3%	2.4%	0.4%	1.8%	1.6%	-
	Other	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%
	Unknown	0.0%	-	-	-	0.0%	0.0%	0.0%	0.0%	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	-	0.0%	-

Attachment E-4
Seminole County
Percent of All KSI Crashes 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	3.0%	2.5%	1.4%	2.3%	3.8%	0.8%	1.5%	0.8%	4.5%	0.0%	0.0%	2.7%	0.7%	1.4%	0.8%	0.1%	1.2%	1.9%	2.4%	2.2%	0.0%	0.0%	0.0%	5.2%	0.9%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	1.9%	1.9%	0.7%	1.2%	3.2%	0.0%	1.1%	0.6%	2.5%	0.4%	0.0%	1.4%	1.1%	0.8%	0.1%	0.0%	1.1%	0.8%	1.4%	1.7%	0.0%	0.0%	0.0%	2.9%	0.0%
	Head On	2.9%	1.0%	1.1%	3.4%	1.6%	0.0%	0.3%	0.7%	2.9%	1.1%	0.0%	3.0%	0.3%	0.9%	0.4%	0.0%	0.4%	2.4%	1.4%	1.6%	0.4%	0.9%	0.0%	2.9%	1.6%
	Left Turn	7.3%	8.3%	4.3%	3.7%	14.6%	1.2%	1.4%	3.7%	13.2%	1.5%	0.0%	7.2%	5.5%	4.2%	1.1%	0.0%	1.5%	6.0%	7.1%	7.8%	0.0%	0.4%	0.0%	15.3%	3.8%
	Off Road	7.3%	8.9%	1.8%	10.4%	7.0%	0.9%	3.6%	3.0%	9.9%	1.5%	0.0%	4.7%	5.8%	3.2%	0.4%	0.1%	4.1%	5.1%	7.3%	4.4%	0.0%	0.4%	0.0%	8.5%	3.1%
	Other	4.1%	2.2%	1.0%	2.8%	4.3%	0.4%	1.9%	1.4%	3.2%	0.8%	0.0%	2.7%	1.1%	1.1%	0.4%	0.0%	2.3%	2.5%	2.7%	0.9%	0.0%	0.4%	0.0%	4.3%	0.7%
	Pedestrian	5.8%	7.0%	4.3%	5.8%	9.5%	1.6%	2.6%	3.2%	9.8%	1.5%	0.0%	8.4%	2.3%	2.8%	0.9%	0.0%	2.4%	4.3%	6.2%	6.5%	0.0%	0.0%	0.0%	14.8%	1.6%
	Rear End	3.0%	6.3%	4.1%	2.6%	8.5%	2.2%	0.3%	1.4%	10.9%	1.0%	0.0%	7.8%	2.4%	2.6%	0.0%	0.0%	0.4%	2.7%	5.4%	7.0%	0.0%	0.4%	0.0%	13.0%	2.2%
	Right Turn	0.1%	0.7%	0.0%	0.1%	0.7%	0.0%	0.1%	0.3%	0.4%	0.0%	0.0%	0.1%	0.1%	0.3%	0.1%	0.0%	0.1%	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%
	Rollover	1.2%	0.6%	0.6%	1.2%	1.1%	0.1%	0.3%	0.1%	1.7%	0.3%	0.0%	0.8%	0.4%	0.4%	0.4%	0.1%	0.3%	1.3%	0.6%	0.6%	0.2%	0.2%	0.0%	1.1%	0.7%
	Sideswipe	0.4%	2.2%	1.1%	1.1%	2.3%	0.3%	0.3%	0.1%	2.9%	0.4%	0.0%	1.8%	1.5%	0.1%	0.0%	0.0%	0.3%	0.6%	1.4%	1.9%	0.0%	0.0%	0.0%	3.4%	0.9%
	Unknown	0.3%	0.7%	0.1%	0.1%	0.8%	0.1%	0.1%	0.1%	0.7%	0.1%	0.0%	0.5%	0.3%	0.1%	0.0%	0.0%	0.1%	0.3%	0.2%	0.6%	0.0%	0.0%	0.0%	0.9%	0.2%
Alcohol Related	Y	2.3%	2.8%	1.5%	3.1%	2.8%	0.7%	0.8%	0.7%	4.4%	0.7%	0.0%	2.4%	1.9%	0.9%	0.5%	0.0%	0.8%	2.1%	1.7%	3.0%	0.2%	0.2%	0.0%	3.6%	1.3%
	N	35.1%	39.5%	18.8%	31.7%	54.7%	7.0%	12.7%	14.7%	58.0%	8.0%	0.0%	38.7%	19.6%	17.1%	4.2%	0.4%	13.4%	26.3%	34.7%	32.3%	0.4%	2.7%	0.0%	69.4%	14.4%
Hit and Run	Y	1.9%	2.3%	1.5%	2.2%	3.4%	0.3%	1.1%	0.7%	3.2%	0.8%	0.0%	3.4%	0.7%	0.4%	0.3%	0.0%	1.1%	0.9%	2.2%	2.4%	0.0%	0.0%	0.0%	5.2%	0.4%
	N	35.5%	39.9%	18.8%	32.6%	54.1%	7.4%	12.4%	14.7%	59.3%	7.8%	0.0%	37.8%	20.8%	17.6%	4.5%	0.4%	13.1%	27.4%	34.2%	32.9%	0.7%	2.9%	0.0%	67.9%	15.3%
Aggressive Driving	Y	4.8%	2.9%	1.5%	5.5%	3.7%	0.1%	1.9%	1.7%	4.7%	1.0%	0.0%	3.4%	1.6%	1.4%	0.5%	0.0%	2.4%	2.8%	2.8%	2.4%	0.4%	0.0%	0.0%	5.6%	1.3%
	N	32.6%	39.3%	18.8%	29.2%	53.9%	7.6%	11.6%	13.8%	57.8%	7.7%	0.0%	37.8%	19.9%	16.6%	4.2%	0.4%	11.8%	25.5%	33.5%	32.9%	0.2%	2.9%	0.0%	67.4%	14.4%
Distracted Driving	Y	4.1%	5.0%	2.6%	3.0%	7.7%	0.8%	0.7%	1.8%	8.7%	0.6%	0.0%	5.0%	2.6%	2.4%	0.5%	0.0%	0.9%	3.3%	4.9%	4.1%	0.0%	0.7%	0.0%	9.7%	1.6%
	N	33.3%	37.3%	17.7%	31.8%	49.8%	6.9%	12.8%	13.6%	53.8%	8.1%	0.0%	36.1%	18.9%	15.6%	4.2%	0.4%	13.3%	25.0%	31.5%	31.2%	0.7%	2.2%	0.0%	63.4%	14.2%
Intersection Related	Y	17.5%	18.2%	9.4%	10.3%	30.6%	3.4%	5.4%	8.4%	28.2%	3.0%	0.0%	17.1%	9.7%	8.8%	3.0%	0.1%	5.5%	13.4%	15.2%	16.5%	0.0%	1.8%	0.0%	34.6%	7.6%
	N	19.9%	24.1%	11.0%	24.5%	26.9%	4.3%	8.1%	7.0%	34.3%	5.6%	0.0%	24.1%	11.8%	9.2%	1.8%	0.3%	8.7%	14.9%	21.2%	18.8%	0.7%	1.1%	0.0%	38.4%	8.1%
Drug Related	Y	1.2%	1.5%	1.1%	1.6%	2.0%	0.3%	0.4%	0.4%	3.0%	0.0%	0.0%	1.2%	1.4%	0.5%	0.3%	0.0%	0.5%	1.1%	0.9%	1.9%	0.2%	0.2%	0.0%	2.7%	0.2%
	N	36.2%	40.7%	19.3%	33.2%	55.5%	7.4%	13.1%	15.0%	59.4%	8.7%	0.0%	39.9%	20.2%	17.5%	4.5%	0.4%	13.7%	27.2%	35.4%	33.4%	0.4%	2.7%	0.0%	70.3%	15.5%
Aging Driver	Y	7.4%	8.0%	3.3%	4.7%	12.4%	1.5%	1.9%	3.3%	12.0%	1.5%	0.0%	7.3%	4.2%	4.2%	0.7%	0.0%	2.3%	6.8%	5.1%	7.3%	0.0%	0.7%	0.0%	13.7%	3.6%
	N	30.0%	34.3%	17.1%	30.0%	45.1%	6.2%	11.6%	12.1%	50.5%	7.2%	0.0%	33.8%	17.3%	13.8%	4.1%	0.4%	11.9%	21.5%	31.3%	28.0%	0.7%	2.2%	0.0%	59.3%	12.1%
Teenage Driver	Y	4.5%	4.3%	1.4%	3.8%	5.7%	0.5%	1.5%	1.8%	6.2%	0.7%	0.0%	2.8%	2.3%	2.3%	0.5%	0.1%	1.9%	3.0%	3.6%	2.7%	0.0%	0.0%	0.0%	6.3%	1.8%
	N	32.9%	38.0%	19.0%	31.0%	51.8%	7.2%	12.0%	13.6%	56.3%	8.0%	0.0%	38.3%	19.2%	15.7%	4.2%	0.3%	12.3%	25.3%	32.8%	32.6%	0.7%	2.9%	0.0%	66.7%	13.9%
Day of the Week	Monday	5.1%	5.8%	1.7%	4.6%	7.3%	0.8%	1.8%	2.1%	7.4%	1.2%	0.0%	4.5%	3.2%	2.4%	0.1%	0.0%	2.4%	3.6%	4.4%	3.8%	0.0%	0.9%	0.0%	9.0%	1.8%
	Tuesday	5.6%	5.5%	3.4%	4.5%	8.4%	1.5%	2.3%	2.3%	8.5%	1.4%	0.0%	6.2%	3.0%	2.3%	0.5%	0.1%	2.2%	3.3%	4.7%	6.0%	0.0%	0.0%	0.0%	11.0%	2.9%
	Wednesday	4.4%	5.6%	2.8%	4.1%	7.8%	0.9%	2.2%	1.5%	8.1%	1.0%	0.0%	5.8%	1.9%	2.3%	0.7%	0.0%	2.2%	3.3%	4.0%	5.2%	0.2%	0.0%	0.0%	10.3%	1.6%
	Thursday	4.8%	5.9%	3.4%	5.1%	7.6%	1.4%	1.8%	1.7%	10.0%	0.7%	0.0%	6.2%	3.2%	2.2%	0.8%	0.0%	1.6%	4.1%	4.9%	5.5%	0.2%	0.7%	0.0%	11.0%	1.3%
	Friday	6.2%	5.6%	3.0%	5.3%	8.3%	1.6%	1.7%	2.2%	10.2%	0.8%	0.0%	5.5%	3.0%	3.8%	0.8%	0.1%	1.9%	5.4%	5.5%	4.6%	0.2%	0.4%	0.0%	11.2%	2.2%
	Saturday	6.3%	7.8%	3.0%	5.7%	10.8%	0.5%	1.7%	3.3%	10.7%	1.5%	0.0%	7.0%	4.1%	2.7%	1.1%	0.0%	2.2%	4.4%	7.8%	5.2%	0.0%	0.4%	0.0%	11.9%	3.8%
	Sunday	5.0%	5.9%	3.0%	5.5%	7.3%	0.9%	2.1%	2.3%	7.4%	2.1%	0.0%	5.8%	3.1%	2.3%	0.7%	0.1%	1.8%	4.1%	5.1%	4.9%	0.0%	0.4%	0.0%	8.5%	2.0%
Time of Day	12-3 AM	2.3%	2.9%	1.1%	2.4%	3.4%	0.4%	0.8%	0.6%	4.4%	0.6%	0.0%	2.3%	2.0%	1.2%	0.3%	0.0%	0.4%	2.1%	2.7%	2.1%	0.0%	0.0%	0.0%	4.5%	1.3%
	3-6 AM	1.8%	1.4%	1.5%	2.3%	1.6%	0.7%	0.7%	0.4%	3.3%	0.3%	0.0%	2.6%	0.8%	0.3%	0.1%	0.1%	0.7%	0.8%	1.7%	2.1%	0.0%	0.2%	0.0%	3.4%	0.7%
	6-9 AM	4.1%	3.0%	1.4%	2.3%	5.8%	0.5%	1.4%	1.2%	5.5%	0.4%	0.0%	2.2%	2.2%	1.8%	0.5%	0.0%	2.0%	2.2%	3.5%	2.1%	0.2%	0.4%	0.0%	6.5%	0.9%
	9-Noon	4.5%	4.8%	1.8%	5.0%	5.5%	0.7%	2.1%	1.9%	6.1%	1.1%	0.0%	5.0%	1.2%	2.2%	0.7%	0.0%	2.2%	3.3%	3.0%	4.1%	0.2%	0.9%	0.0%	8.1%	0.7%
	Noon-3 PM	5.2%	6.2%	1.9%	4.6%	8.5%	0.4%	2.3%	2.2%	7.7%	1.1%	0.0%	5.0%	2.6%	2.7%	0.5%	0.1%	2.6%	3.6%	4.9%	4.1%	0.0%	0.2%	0.0%	9.7%	1.8%
	3-6 PM	8.0%	8.8%	4.7%	7.0%	12.9%	1.5%	2.2%	4.0%	14.3%	1.0%	0.0%	7.8%	5.5%	4.3%	1.4%	0.0%	2.3%	7.0%	8.2%	7.1%	0.2%	0.2%	0.0%	13.9%	3.8%
	6-9 PM	6.3%	8.1%	4.3%	6.4%	10.4%	1.8%	2.5%	2.9%	11.3%	2.1%	0.0%	8.9%	3.4%	2.8%	1.1%	0.0%	2.3%	5.4%	6.6%	7.0%	0.0%	0.4%	0.0%	14.4%	2.7%
	9-Midnight	5.1%	7.0%	3.7%	4.7%	9.3%	1.8%	1.5%	2.2%	9.9%	2.2%	0.0%	7.3%	3.8%	2.7%	0.1%	0.1%	1.8%	4.0%	5.7%	6.8%	0.0%	0.4%	0.0%	12.6%	3.8%
Lighting Conditions	Dark - Lighted	7.3%	9.6%	8.0%	6.6%	15.3%	2.7%	3.4%	3.9%	16.1%	1.5%	0.0%	12.4%	4.1%	4.2%	0.7%	0.3%	3.0%	5.4%	8.2%	11.7%	0.0%	0.0%	0.0%	21.1%	2.5%
	Dark - Not Lighted	7.0%	8.7%	2.2%	8.7%	7.8%	1.2%	1.2%	1.8%	11.4%	3.4%	0.0%	6.6%	6.0%	3.0%	0.9%	0.0%	1.2%	6.3%	7.8%	5.2%	0.0%	1.6%	0.0%	11.0%	5.6%
	Dark - Unknown Lighting	0.1%	0.1%	0.0%	0.3%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%
	Dawn	0.4%	0.6%	0.1%	0.1%	0.7%	0.3%	0.0%	0.3%	0.8%	0.0%	0.0%	0.4%	0.1%	0.4%	0.0%	0.0%	0.1%	0.2%	0.8%	0.2%	0.0%	0.2%	0.0%	1.1%	0.0%
	Daylight	21.3%	21.5%	9.9%	18.1%	31.5%	3.2%	8.4%	9.1%	31.6%	3.6%	0.0%	20.4%	10.3%	9.7%	3.1%	0.1%	9.2%	15.5%	17.2%	18.0%	0.7%	1.1%	0.0%	37.5%	7.0%
	Dusk	1.2%	1.8%	0.1%	0.9%	2.2%	0.3%	0.3%	0.4%	2.3%	0.1%	0.0%	1.1%	1.1%	0.5%	0.0%	0.0%	0.7%	0.8%	2.2%	0.2%	0.0%	0.0%	0.0%	2.0%	0.7%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment E-4
Seminole County
Percent of All KSI Crashes 2018-2022

Mode:	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.7%	0.0%	0.0%	0.0%	4.5%	1.0%	1.4%	5.9%	0.8%	0.1%	0.1%	1.1%	5.6%	2.3%	2.5%	0.0%	1.7%	0.4%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.4%	0.0%	0.0%	0.0%	2.9%	0.4%	1.2%	4.3%	0.3%	0.0%	0.3%	0.3%	4.0%	2.2%	1.2%	0.0%	1.1%	0.0%
	Head On	0.2%	0.0%	0.0%	0.0%	2.3%	0.0%	2.6%	5.0%	0.0%	0.0%	1.9%	0.8%	2.2%	2.6%	1.4%	0.3%	0.7%	0.0%
	Left Turn	2.0%	0.0%	0.0%	0.0%	11.6%	1.0%	7.3%	18.8%	0.4%	0.6%	1.5%	1.8%	16.5%	7.2%	5.2%	0.4%	6.7%	0.3%
	Off Road	0.7%	0.0%	0.0%	0.0%	10.2%	1.0%	6.9%	17.1%	0.8%	0.1%	2.8%	3.3%	12.0%	6.6%	8.4%	0.3%	2.8%	0.0%
	Other	0.7%	0.0%	0.0%	0.0%	5.1%	0.3%	1.9%	7.2%	0.1%	0.0%	0.6%	1.4%	5.4%	4.3%	1.4%	0.0%	1.7%	0.0%
	Pedestrian	2.0%	0.0%	0.0%	0.0%	11.1%	1.5%	4.4%	15.4%	1.2%	0.4%	1.1%	2.1%	13.9%	6.3%	5.0%	0.7%	4.5%	0.6%
	Rear End	0.9%	0.0%	0.0%	0.0%	6.6%	1.9%	5.0%	12.2%	1.1%	0.1%	1.0%	1.9%	10.6%	2.9%	5.5%	0.6%	4.0%	0.6%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.4%	0.8%	0.0%	0.0%	0.0%	0.1%	0.7%	0.3%	0.3%	0.0%	0.3%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	1.2%	2.2%	0.0%	0.1%	0.7%	0.6%	1.1%	1.1%	1.0%	0.0%	0.3%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	1.9%	0.4%	1.4%	3.2%	0.4%	0.1%	0.1%	0.4%	3.2%	0.7%	1.9%	0.0%	0.7%	0.4%
	Unknown	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.1%	1.1%	0.0%	0.0%	0.1%	0.1%	0.8%	0.4%	0.3%	0.1%	0.3%	0.0%
Alcohol Related	Y	0.4%	0.0%	0.0%	0.0%	3.9%	0.4%	2.3%	6.2%	0.3%	0.1%	1.2%	1.1%	4.3%	2.5%	2.6%	0.3%	1.1%	0.1%
	N	7.2%	0.0%	0.0%	0.0%	54.9%	7.0%	31.5%	86.9%	5.0%	1.5%	8.9%	12.8%	71.7%	34.4%	31.4%	2.1%	23.5%	2.1%
Hit and Run	Y	1.1%	0.0%	0.0%	0.0%	3.6%	1.7%	1.7%	5.4%	0.4%	0.0%	0.7%	0.4%	4.7%	2.8%	0.8%	0.1%	1.9%	0.1%
	N	6.5%	0.0%	0.0%	0.0%	55.2%	32.2%	32.2%	87.8%	4.8%	1.7%	9.5%	13.5%	71.3%	34.1%	33.1%	2.2%	22.7%	2.1%
Aggressive Driving	Y	0.2%	0.0%	0.0%	0.0%	4.5%	3.6%	3.6%	8.7%	0.6%	0.0%	1.8%	1.8%	5.6%	4.0%	3.4%	0.1%	1.7%	0.0%
	N	7.4%	0.0%	0.0%	0.0%	54.2%	30.3%	30.3%	84.5%	4.7%	1.7%	8.4%	12.1%	70.3%	32.9%	30.5%	2.2%	23.0%	2.2%
Distracted Driving	Y	1.1%	0.0%	0.0%	0.0%	6.9%	4.1%	4.1%	10.9%	0.6%	0.3%	1.0%	0.7%	10.0%	4.3%	3.4%	0.4%	3.2%	0.4%
	N	6.5%	0.0%	0.0%	0.0%	51.9%	29.7%	29.7%	82.3%	4.7%	1.4%	9.2%	13.2%	65.9%	32.6%	30.5%	1.9%	21.5%	1.8%
Intersection Related	Y	3.4%	0.0%	0.0%	0.0%	26.8%	15.0%	15.0%	42.5%	1.8%	0.7%	3.4%	5.6%	35.9%	16.6%	13.9%	0.7%	12.8%	1.0%
	N	4.3%	0.0%	0.0%	0.0%	31.9%	18.8%	18.8%	50.6%	3.4%	1.0%	6.7%	8.3%	40.0%	20.2%	20.1%	1.7%	11.8%	1.2%
Drug Related	Y	0.2%	0.0%	0.0%	0.0%	1.9%	1.4%	1.4%	3.6%	0.3%	0.0%	0.4%	0.4%	3.0%	1.2%	1.9%	0.1%	0.6%	0.0%
	N	7.4%	0.0%	0.0%	0.0%	56.8%	32.5%	32.5%	89.5%	5.0%	1.7%	9.8%	13.5%	72.9%	35.6%	32.0%	2.2%	24.1%	2.2%
Aging Driver	Y	1.6%	0.0%	0.0%	0.0%	10.3%	6.7%	6.7%	17.3%	1.1%	0.3%	2.1%	2.2%	14.4%	7.2%	5.8%	0.1%	4.8%	0.8%
	N	6.1%	0.0%	0.0%	0.0%	48.4%	27.1%	27.1%	75.8%	4.1%	1.4%	8.1%	11.7%	61.5%	29.7%	28.2%	2.2%	19.8%	1.4%
Teenage Driver	Y	0.2%	0.0%	0.0%	0.0%	6.5%	2.9%	2.9%	9.5%	0.6%	0.1%	1.1%	2.5%	6.6%	3.7%	2.9%	0.1%	2.8%	0.7%
	N	7.4%	0.0%	0.0%	0.0%	52.3%	30.9%	30.9%	83.6%	4.7%	1.5%	9.1%	11.4%	69.3%	33.1%	31.1%	2.2%	21.9%	1.5%
Day of the Week	Monday	0.7%	0.0%	0.0%	0.0%	5.7%	3.5%	3.5%	12.1%	0.3%	0.1%	1.0%	2.6%	8.9%	4.4%	4.3%	0.1%	3.4%	0.3%
	Tuesday	1.1%	0.0%	0.0%	0.0%	7.7%	3.2%	3.2%	13.6%	0.4%	0.6%	2.1%	1.2%	11.3%	5.6%	4.4%	0.4%	3.9%	0.3%
	Wednesday	1.6%	0.0%	0.0%	0.0%	5.9%	3.3%	3.3%	11.7%	1.0%	0.1%	1.1%	1.0%	10.7%	5.5%	4.0%	0.1%	3.0%	0.1%
	Thursday	2.2%	0.0%	0.0%	0.0%	6.5%	3.6%	3.6%	13.1%	1.0%	0.1%	1.4%	2.2%	10.6%	4.3%	4.3%	0.3%	5.0%	0.4%
	Friday	0.4%	0.0%	0.0%	0.0%	6.9%	3.9%	3.9%	13.6%	1.0%	0.3%	1.2%	2.2%	11.4%	5.2%	5.4%	0.4%	3.3%	0.6%
	Saturday	0.9%	0.0%	0.0%	0.0%	7.5%	5.3%	5.3%	16.1%	1.0%	0.1%	1.8%	2.8%	12.7%	6.6%	5.9%	0.6%	4.0%	0.1%
	Sunday	0.7%	0.0%	0.0%	0.0%	6.3%	4.0%	4.0%	12.9%	0.7%	0.3%	1.7%	1.9%	10.3%	5.2%	5.8%	0.4%	2.1%	0.4%
Time of Day	12-3 AM	0.2%	0.0%	0.0%	0.0%	2.8%	2.0%	2.0%	6.2%	0.1%	0.0%	1.1%	1.2%	4.0%	2.5%	2.1%	0.0%	1.7%	0.1%
	3-6 AM	0.4%	0.0%	0.0%	0.0%	1.6%	1.7%	1.7%	4.3%	0.3%	0.1%	0.1%	1.2%	3.3%	1.5%	1.9%	0.0%	1.2%	0.0%
	6-9 AM	0.2%	0.0%	0.0%	0.0%	3.7%	2.3%	2.3%	7.6%	0.7%	0.3%	1.1%	1.2%	6.2%	3.4%	2.8%	0.1%	2.1%	0.1%
	9-Noon	0.9%	0.0%	0.0%	0.0%	5.8%	2.5%	2.5%	10.2%	0.6%	0.4%	1.4%	1.8%	8.0%	4.0%	3.6%	0.1%	3.2%	0.3%
	Noon-3 PM	1.1%	0.0%	0.0%	0.0%	6.5%	3.3%	3.3%	12.8%	0.6%	0.0%	1.2%	1.9%	10.2%	5.5%	4.5%	0.0%	3.3%	0.0%
	3-6 PM	2.0%	0.0%	0.0%	0.0%	10.7%	4.7%	4.7%	19.9%	1.2%	0.3%	1.8%	1.9%	17.7%	7.2%	7.4%	1.0%	5.2%	0.7%
	6-9 PM	1.6%	0.0%	0.0%	0.0%	8.2%	5.8%	5.8%	17.6%	1.1%	0.0%	1.7%	2.3%	14.7%	6.7%	6.2%	0.4%	5.1%	0.3%
	9-Midnight	1.1%	0.0%	0.0%	0.0%	7.2%	4.6%	4.6%	14.6%	0.7%	0.6%	1.8%	2.2%	11.8%	6.1%	5.5%	0.7%	2.9%	0.7%
Lighting Conditions	Dark - Lighted	2.7%	0.0%	0.0%	0.0%	12.9%	5.3%	5.3%	22.6%	1.7%	0.7%	1.0%	3.9%	20.1%	9.2%	8.4%	0.7%	5.8%	0.8%
	Dark - Not Lighted	0.2%	0.0%	0.0%	0.0%	5.8%	7.7%	7.7%	17.1%	0.6%	0.3%	3.4%	2.6%	11.8%	6.1%	7.2%	0.3%	4.3%	0.1%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.1%	0.1%	0.0%	0.0%	0.0%
	Dawn	0.0%	0.0%	0.0%	0.0%	0.4%	0.3%	0.3%	1.0%	0.1%	0.0%	0.3%	0.0%	0.8%	0.3%	0.4%	0.0%	0.4%	0.0%
	Daylight	3.8%	0.0%	0.0%	0.0%	25.5%	12.6%	12.6%	49.1%	2.9%	0.7%	4.8%	7.2%	40.7%	19.5%	17.6%	1.2%	13.2%	1.1%
	Dusk	0.9%	0.0%	0.0%	0.0%	1.6%	0.8%	0.8%	3.2%	0.0%	0.0%	0.7%	0.3%	2.2%	1.7%	0.3%	0.1%	1.0%	0.1%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment E-5
Seminole County
Percent of All KSI Crashes involving only Car Truck 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	4.2%	3.5%	2.3%	3.2%	5.4%	1.4%	1.8%	1.4%	6.7%	0.0%	0.0%	4.1%	0.9%	2.0%	1.1%	0.2%	1.6%	2.7%	3.2%	3.7%	0.0%	0.0%	0.0%	8.6%	0.8%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	4.6%	1.6%	1.8%	5.4%	2.7%	0.0%	0.5%	0.9%	4.8%	1.8%	0.0%	4.7%	0.5%	1.6%	0.7%	0.0%	0.7%	3.7%	2.4%	2.7%	0.8%	1.6%	0.0%	5.1%	2.3%
	Left Turn	8.3%	9.0%	5.3%	3.6%	17.2%	1.4%	1.8%	4.6%	14.8%	1.4%	0.0%	8.8%	5.6%	4.7%	0.9%	0.0%	2.0%	7.2%	6.9%	9.3%	0.0%	0.4%	0.0%	19.9%	3.5%
	Off Road	10.6%	12.5%	2.3%	14.4%	10.4%	0.9%	5.5%	4.4%	13.4%	2.1%	0.0%	6.3%	7.4%	5.0%	0.7%	0.2%	6.1%	7.2%	9.8%	6.1%	0.0%	0.8%	0.0%	11.3%	4.3%
	Other	5.3%	2.5%	0.7%	3.8%	4.7%	0.5%	2.3%	2.1%	3.5%	0.7%	0.0%	2.5%	1.4%	1.8%	0.5%	0.0%	2.9%	3.5%	3.2%	0.5%	0.0%	0.4%	0.0%	5.1%	0.4%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	3.7%	7.6%	5.8%	2.9%	11.1%	2.7%	0.2%	1.4%	14.1%	1.4%	0.0%	10.2%	2.9%	3.4%	0.0%	0.0%	0.2%	3.5%	6.1%	9.8%	0.0%	0.4%	0.0%	17.2%	3.1%
	Right Turn	0.2%	1.2%	0.0%	0.2%	1.1%	0.0%	0.2%	0.5%	0.7%	0.0%	0.0%	0.2%	0.2%	0.5%	0.2%	0.0%	0.2%	0.8%	0.5%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%
	Rollover	0.7%	0.2%	0.5%	0.9%	0.7%	0.0%	0.2%	0.0%	0.9%	0.2%	0.0%	0.7%	0.0%	0.5%	0.0%	0.0%	0.5%	0.5%	0.3%	0.5%	0.0%	0.0%	0.0%	1.2%	0.0%
	Sideswipe	0.5%	2.3%	1.6%	1.4%	2.7%	0.2%	0.2%	0.2%	3.2%	0.7%	0.0%	2.0%	1.8%	0.2%	0.0%	0.0%	0.2%	0.8%	1.3%	2.7%	0.0%	0.0%	0.0%	3.1%	1.6%
	Unknown	0.5%	0.7%	0.0%	0.2%	0.9%	0.0%	0.2%	0.0%	0.9%	0.0%	0.0%	0.2%	0.5%	0.2%	0.0%	0.0%	0.2%	0.5%	0.3%	0.3%	0.0%	0.0%	0.0%	0.4%	0.4%
Alcohol Related	Y	3.0%	3.2%	1.8%	3.8%	3.8%	0.5%	1.2%	0.9%	5.1%	0.9%	0.0%	2.9%	2.0%	1.4%	0.5%	0.0%	1.4%	2.4%	1.6%	4.0%	0.4%	0.4%	0.0%	4.3%	0.8%
	N	35.6%	37.9%	18.5%	32.3%	53.0%	6.5%	12.0%	14.5%	58.0%	7.4%	0.0%	36.8%	19.2%	18.5%	3.6%	0.5%	13.3%	27.9%	32.4%	31.6%	0.4%	3.1%	0.0%	68.8%	15.6%
Hit and Run	Y	1.8%	1.4%	1.2%	2.3%	2.0%	0.2%	0.9%	0.5%	2.3%	0.7%	0.0%	2.7%	0.2%	0.5%	0.2%	0.0%	0.9%	1.1%	1.6%	1.6%	0.0%	0.0%	0.0%	3.9%	0.8%
	N	36.7%	39.7%	19.2%	33.9%	54.9%	6.8%	12.2%	15.0%	60.7%	7.6%	0.0%	37.0%	21.0%	19.4%	3.8%	0.5%	13.8%	29.3%	32.4%	34.0%	0.8%	3.5%	0.0%	69.1%	15.6%
Aggressive Driving	Y	7.2%	3.5%	2.1%	7.7%	5.0%	0.2%	2.8%	2.5%	6.0%	1.4%	0.0%	4.3%	2.0%	2.3%	0.7%	0.0%	3.6%	4.3%	3.2%	3.5%	0.8%	0.0%	0.0%	7.0%	1.6%
	N	31.4%	37.6%	18.2%	28.4%	51.9%	6.8%	10.4%	12.9%	57.0%	6.9%	0.0%	35.4%	19.2%	17.6%	3.4%	0.5%	11.1%	26.1%	30.9%	32.2%	0.0%	3.5%	0.0%	66.0%	14.8%
Distracted Driving	Y	4.8%	5.8%	3.5%	3.8%	8.6%	1.4%	0.7%	1.8%	11.1%	0.5%	0.0%	6.5%	3.2%	2.9%	0.5%	0.0%	0.7%	4.5%	5.3%	5.6%	0.0%	1.2%	0.0%	12.9%	2.3%
	N	33.7%	35.3%	16.9%	32.3%	48.3%	5.6%	12.5%	13.6%	52.0%	7.9%	0.0%	33.2%	18.1%	16.9%	3.6%	0.5%	14.0%	25.8%	28.7%	30.1%	0.8%	2.3%	0.0%	60.2%	14.1%
Intersection Related	Y	18.7%	18.2%	11.1%	10.4%	32.3%	4.3%	5.8%	9.2%	30.3%	2.8%	0.0%	19.0%	8.8%	10.6%	2.9%	0.2%	5.4%	15.4%	15.2%	18.1%	0.0%	2.3%	0.0%	41.0%	7.4%
	N	19.9%	22.9%	9.2%	25.7%	24.6%	2.7%	7.4%	6.2%	32.8%	5.5%	0.0%	20.8%	12.4%	9.3%	1.1%	0.2%	9.3%	14.9%	18.9%	17.6%	0.8%	1.2%	0.0%	32.0%	9.0%
Drug Related	Y	2.1%	1.6%	1.8%	2.5%	2.9%	0.2%	0.7%	0.7%	4.2%	0.0%	0.0%	1.8%	1.6%	0.9%	0.5%	0.0%	0.9%	1.9%	0.8%	2.9%	0.4%	0.4%	0.0%	4.3%	0.4%
	N	36.5%	39.5%	18.5%	33.6%	54.0%	6.8%	12.5%	14.8%	58.9%	8.3%	0.0%	37.9%	19.6%	19.0%	3.6%	0.5%	13.8%	28.5%	33.2%	32.7%	0.4%	3.1%	0.0%	68.8%	16.0%
Aging Driver	Y	8.8%	9.2%	3.7%	5.4%	14.4%	1.8%	2.5%	3.7%	14.3%	1.2%	0.0%	8.1%	5.0%	5.2%	0.7%	0.0%	2.7%	8.0%	6.1%	8.2%	0.0%	0.8%	0.0%	16.0%	3.5%
	N	29.8%	31.9%	16.6%	30.7%	42.4%	5.2%	10.6%	11.8%	48.7%	7.2%	0.0%	31.6%	16.3%	14.7%	3.4%	0.5%	12.0%	22.3%	27.9%	27.4%	0.8%	2.7%	0.0%	57.0%	12.9%
Teenage Driver	Y	5.5%	5.8%	1.6%	4.7%	7.0%	0.9%	1.8%	2.3%	8.1%	0.7%	0.0%	3.4%	2.9%	3.2%	0.5%	0.2%	2.5%	3.7%	4.8%	3.2%	0.0%	0.0%	0.0%	8.2%	2.7%
	N	33.0%	35.3%	18.7%	31.4%	49.9%	6.1%	11.3%	13.2%	55.0%	7.6%	0.0%	36.3%	18.3%	16.7%	3.6%	0.2%	12.2%	26.6%	29.3%	32.4%	0.8%	3.5%	0.0%	64.8%	13.7%
Day of the Week	Monday	4.6%	6.5%	1.4%	4.7%	7.7%	0.5%	2.1%	1.8%	7.6%	0.9%	0.0%	3.8%	3.6%	2.3%	0.2%	0.0%	2.9%	3.5%	3.7%	4.3%	0.0%	0.4%	0.0%	9.0%	2.0%
	Tuesday	5.3%	6.0%	2.5%	5.2%	7.4%	0.9%	2.3%	2.1%	8.3%	1.2%	0.0%	5.4%	3.2%	2.5%	0.5%	0.2%	1.8%	3.2%	5.9%	4.5%	0.0%	0.0%	0.0%	9.0%	3.1%
	Wednesday	4.4%	4.8%	3.2%	3.4%	8.4%	0.9%	1.8%	1.4%	8.5%	0.7%	0.0%	5.9%	1.4%	2.7%	0.5%	0.0%	2.3%	2.9%	3.5%	5.9%	0.0%	0.0%	0.0%	11.3%	2.0%
	Thursday	5.3%	6.0%	3.7%	5.2%	7.9%	1.8%	1.6%	2.1%	10.2%	1.2%	0.0%	5.9%	3.6%	2.9%	0.7%	0.0%	1.8%	5.1%	4.3%	6.1%	0.4%	1.2%	0.0%	12.5%	0.8%
	Friday	6.5%	4.8%	3.0%	5.6%	7.4%	1.6%	1.6%	1.8%	10.4%	0.5%	0.0%	5.9%	2.7%	3.4%	0.7%	0.0%	2.0%	5.1%	5.9%	4.0%	0.4%	0.8%	0.0%	11.3%	2.3%
	Saturday	6.5%	6.9%	3.7%	5.9%	10.6%	0.5%	1.6%	3.7%	10.2%	1.6%	0.0%	6.8%	3.4%	3.4%	1.1%	0.0%	2.3%	5.3%	5.9%	6.1%	0.0%	0.4%	0.0%	11.3%	3.9%
	Sunday	6.0%	6.0%	2.8%	6.1%	7.4%	0.9%	2.1%	2.5%	7.9%	2.3%	0.0%	6.1%	3.4%	2.7%	0.5%	0.2%	1.6%	5.3%	5.1%	4.8%	0.0%	0.8%	0.0%	8.6%	2.3%
Time of Day	12-3 AM	2.3%	3.0%	1.2%	2.5%	3.6%	0.2%	0.9%	0.5%	4.4%	0.7%	0.0%	2.3%	2.0%	1.4%	0.2%	0.0%	0.5%	2.4%	2.1%	2.4%	0.0%	0.0%	0.0%	4.7%	1.2%
	3-6 AM	2.5%	1.8%	0.9%	3.4%	1.6%	0.2%	1.2%	0.5%	3.7%	0.0%	0.0%	2.7%	0.7%	0.2%	0.2%	0.2%	1.1%	0.8%	2.4%	1.6%	0.0%	0.0%	0.0%	3.5%	0.8%
	6-9 AM	4.2%	3.9%	1.2%	2.5%	6.3%	0.7%	1.4%	1.4%	6.0%	0.5%	0.0%	1.8%	2.5%	2.5%	0.5%	0.0%	2.3%	2.9%	3.7%	1.9%	0.0%	0.8%	0.0%	7.0%	1.6%
	9-Noon	4.8%	5.3%	2.3%	5.2%	6.3%	1.1%	2.3%	2.1%	6.9%	1.2%	0.0%	5.9%	1.6%	1.8%	0.7%	0.0%	2.7%	2.9%	2.7%	5.9%	0.4%	0.8%	0.0%	9.4%	0.4%
	Noon-3 PM	4.8%	6.5%	1.8%	3.8%	8.8%	0.5%	1.4%	2.8%	8.3%	0.7%	0.0%	4.3%	2.7%	3.6%	0.7%	0.2%	1.6%	4.8%	4.3%	4.3%	0.0%	0.4%	0.0%	9.4%	2.3%
	3-6 PM	8.1%	8.5%	6.2%	7.7%	13.5%	1.6%	2.3%	3.7%	15.9%	0.9%	0.0%	9.3%	5.4%	4.7%	0.9%	0.0%	2.5%	6.9%	8.0%	9.0%	0.4%	0.4%	0.0%	16.0%	3.5%
	6-9 PM	5.3%	7.2%	2.8%	5.4%	8.4%	1.4%	1.8%	2.3%	9.0%	2.1%	0.0%	7.0%	3.4%	2.3%	0.7%	0.0%	1.8%	5.1%	5.9%	4.8%	0.0%	0.4%	0.0%	12.1%	2.7%
	9-Midnight	6.5%	4.8%	3.9%	5.6%	8.4%	1.4%	1.8%	2.3%	8.8%	2.3%	0.0%	6.5%	2.9%	3.4%	0.2%	0.0%	2.3%	4.5%	5.1%	5.9%	0.0%	0.8%	0.0%	10.9%	3.9%
Lighting Conditions	Dark - Lighted	6.7%	6.9%	6.9%	6.8%	11.7%	1.8%	4.2%	2.8%	12.7%	0.9%	0.0%	8.8%	3.4%	4.1%	0.5%	0.2%	3.4%	4.8%	5.9%	9.3%	0.0%	0.0%	0.0%	15.2%	2.3%
	Dark - Not Lighted	8.5%	7.9%	1.2%	9.0%	7.9%	0.5%	1.4%	2.3%	10.2%	3.7%	0.0%	6.5%	5.2%	3.2%	0.9%	0.0%	1.6%	7.4%	7.4%	3.7%	0.0%	2.0%	0.0%	10.2%	5.5%
	Dark - Unknown Lighting	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%
	Dawn	0.5%	0.9%	0.0%	0.2%	0.9%	0.2%	0.0%	0.5%	0.9%	0.0%	0.0%	0.5%	0.0%	0.7%	0.0%	0.0%	0.2%	0.3%	1.1%	0.0%	0.0%	0.4%	0.0%	1.2%	0.0%
	Daylight	21.5%	23.3%	12.0%	18.5%	34.1%	4.3%	7.4%	9.7%	36.3%	3.5%	0.0%	22.8%	11.3%	11.3%	2.7%	0.2%	8.6%	16.8%	17.3%	22.3%	0.8%	1.2%	0.0%	43.4%	7.4%
	Dusk	1.4%	1.8%	0.2%	1.4%	2.3%	0.2%	0.2%	0.2%	2.8%	0.2%	0.0%	0.9%	1.4%	0.7%	0.0%	0.0%	0.9%	1.1%	2.1%	0.3%	0.0%	0.0%	0.0%	2.7%	1.2%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment E-5
Seminole County
Percent of All KSI Crashes involving only Car Truck 2018-2022

Mode: All	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.8%	0.0%	0.0%	0.0%	6.2%	1.4%	2.3%	8.5%	1.2%	0.2%	0.2%	1.2%	8.5%	2.8%	3.7%	0.0%	2.8%	0.7%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.4%	0.0%	0.0%	0.0%	3.7%	0.0%	4.4%	8.1%	0.0%	0.0%	3.2%	1.4%	3.5%	4.4%	2.1%	0.5%	1.2%	0.0%
	Left Turn	2.7%	0.0%	0.0%	0.0%	12.7%	1.4%	8.5%	21.5%	0.7%	0.5%	1.6%	2.5%	18.5%	8.5%	5.1%	0.5%	8.1%	0.5%
	Off Road	0.8%	0.0%	0.0%	0.0%	14.1%	1.6%	9.7%	24.0%	1.4%	0.0%	4.2%	4.2%	17.1%	9.9%	11.5%	0.5%	3.5%	0.0%
	Other	0.8%	0.0%	0.0%	0.0%	6.0%	0.2%	2.3%	8.5%	0.0%	0.0%	0.5%	2.1%	6.0%	4.8%	1.6%	0.0%	2.1%	0.0%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	0.8%	0.0%	0.0%	0.0%	8.1%	2.8%	6.2%	15.5%	1.4%	0.2%	0.7%	2.5%	13.9%	2.8%	7.6%	0.9%	5.1%	0.7%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.7%	1.4%	0.0%	0.0%	0.0%	0.2%	1.2%	0.5%	0.5%	0.0%	0.5%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.5%	1.4%	0.0%	0.0%	0.7%	0.0%	0.7%	0.7%	0.7%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	2.1%	0.7%	1.6%	3.5%	0.7%	0.2%	0.2%	0.7%	3.5%	0.9%	2.5%	0.0%	0.7%	0.2%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.2%	1.2%	0.0%	0.0%	0.2%	0.2%	0.7%	0.7%	0.2%	0.0%	0.2%	0.0%
Alcohol Related	Y	0.4%	0.0%	0.0%	0.0%	4.8%	0.5%	2.8%	7.9%	0.2%	0.0%	1.8%	1.2%	5.1%	3.0%	3.0%	0.5%	1.4%	0.2%
	N	5.9%	0.0%	0.0%	0.0%	50.6%	7.6%	33.7%	85.7%	5.1%	1.2%	9.7%	13.9%	68.4%	33.0%	32.6%	1.8%	22.6%	1.8%
Hit and Run	Y	0.4%	0.0%	0.0%	0.0%	3.0%	0.9%	0.9%	4.2%	0.2%	0.0%	1.2%	0.5%	2.8%	2.1%	0.7%	0.0%	1.6%	0.0%
	N	5.9%	0.0%	0.0%	0.0%	52.4%	35.6%	35.6%	89.4%	5.1%	1.2%	10.4%	14.5%	70.7%	33.9%	34.9%	2.3%	22.4%	2.1%
Aggressive Driving	Y	0.4%	0.0%	0.0%	0.0%	6.7%	4.2%	4.2%	11.8%	0.9%	0.0%	2.8%	2.5%	7.4%	5.5%	4.6%	0.2%	2.3%	0.0%
	N	5.9%	0.0%	0.0%	0.0%	48.7%	32.3%	32.3%	81.8%	4.4%	1.2%	8.8%	12.5%	66.1%	30.5%	30.9%	2.1%	21.7%	2.1%
Distracted Driving	Y	1.2%	0.0%	0.0%	0.0%	8.3%	5.1%	5.1%	13.2%	0.5%	0.5%	1.4%	0.9%	11.8%	5.3%	3.9%	0.5%	3.7%	0.7%
	N	5.1%	0.0%	0.0%	0.0%	47.1%	31.4%	31.4%	80.4%	4.8%	0.7%	10.2%	14.1%	61.7%	30.7%	31.6%	1.8%	20.3%	1.4%
Intersection Related	Y	3.5%	0.0%	0.0%	0.0%	28.6%	15.7%	15.7%	45.3%	1.8%	0.9%	3.7%	6.7%	37.6%	16.4%	14.8%	0.5%	15.0%	1.4%
	N	2.7%	0.0%	0.0%	0.0%	26.8%	20.8%	20.8%	48.3%	3.5%	0.2%	7.9%	8.3%	35.8%	19.6%	20.8%	1.8%	9.0%	0.7%
Drug Related	Y	0.0%	0.0%	0.0%	0.0%	2.5%	2.1%	2.1%	5.1%	0.5%	0.0%	0.7%	0.7%	4.2%	1.8%	2.5%	0.2%	0.9%	0.0%
	N	6.3%	0.0%	0.0%	0.0%	52.9%	34.4%	34.4%	88.5%	4.8%	1.2%	10.9%	14.3%	69.3%	34.2%	33.0%	2.1%	23.1%	2.1%
Aging Driver	Y	2.3%	0.0%	0.0%	0.0%	12.2%	7.4%	7.4%	20.3%	1.2%	0.2%	2.3%	2.8%	16.6%	9.0%	6.7%	0.2%	5.1%	0.7%
	N	3.9%	0.0%	0.0%	0.0%	43.2%	29.1%	29.1%	73.2%	4.2%	0.9%	9.2%	12.2%	56.8%	27.0%	28.9%	2.1%	18.9%	1.4%
Teenage Driver	Y	0.0%	0.0%	0.0%	0.0%	8.1%	3.5%	3.5%	12.0%	0.9%	0.0%	0.9%	3.5%	8.5%	4.2%	3.7%	0.2%	3.9%	0.9%
	N	6.3%	0.0%	0.0%	0.0%	47.3%	33.0%	33.0%	81.5%	4.4%	1.2%	10.6%	11.5%	64.9%	31.9%	31.9%	2.1%	20.1%	1.2%
Day of the Week	Monday	0.8%	0.0%	0.0%	0.0%	5.2%	4.0%	4.0%	12.2%	0.2%	0.0%	0.9%	2.5%	9.0%	4.4%	4.6%	0.0%	3.0%	0.5%
	Tuesday	1.2%	0.0%	0.0%	0.0%	6.8%	3.1%	3.1%	13.2%	0.5%	0.2%	2.5%	1.8%	9.5%	5.1%	3.9%	0.7%	4.2%	0.0%
	Wednesday	1.2%	0.0%	0.0%	0.0%	5.9%	2.5%	2.5%	11.1%	1.2%	0.2%	1.4%	1.2%	9.9%	5.5%	3.7%	0.2%	3.0%	0.0%
	Thursday	2.0%	0.0%	0.0%	0.0%	6.7%	4.1%	4.1%	14.3%	0.7%	0.0%	1.4%	1.8%	11.8%	3.7%	4.8%	0.0%	5.8%	0.7%
	Friday	0.0%	0.0%	0.0%	0.0%	5.6%	4.9%	4.9%	13.6%	0.5%	0.2%	1.2%	2.5%	10.6%	5.8%	5.8%	0.2%	2.1%	0.5%
	Saturday	0.4%	0.0%	0.0%	0.0%	6.7%	5.4%	5.4%	15.2%	1.6%	0.2%	2.3%	2.3%	12.5%	5.8%	6.7%	0.7%	3.9%	0.0%
	Sunday	0.8%	0.0%	0.0%	0.0%	6.3%	4.5%	4.5%	13.9%	0.7%	0.2%	1.8%	2.8%	10.2%	5.8%	6.0%	0.5%	2.1%	0.5%
Time of Day	12-3 AM	0.0%	0.0%	0.0%	0.0%	2.7%	2.0%	2.0%	6.2%	0.2%	0.0%	1.4%	0.9%	4.2%	1.8%	2.8%	0.0%	1.8%	0.0%
	3-6 AM	0.8%	0.0%	0.0%	0.0%	1.4%	2.5%	2.5%	5.3%	0.0%	0.0%	0.0%	1.6%	3.7%	2.1%	2.5%	0.0%	0.7%	0.0%
	6-9 AM	0.0%	0.0%	0.0%	0.0%	3.2%	3.1%	3.1%	8.5%	0.7%	0.0%	1.6%	1.4%	6.2%	3.0%	3.5%	0.2%	2.3%	0.2%
	9-Noon	1.2%	0.0%	0.0%	0.0%	6.5%	2.7%	2.7%	11.3%	0.5%	0.7%	1.4%	2.5%	8.5%	4.4%	3.7%	0.0%	3.9%	0.5%
	Noon-3 PM	0.8%	0.0%	0.0%	0.0%	6.5%	3.1%	3.1%	12.5%	0.7%	0.0%	1.4%	1.6%	10.2%	5.5%	4.8%	0.0%	2.8%	0.0%
	3-6 PM	2.7%	0.0%	0.0%	0.0%	10.8%	5.2%	5.2%	21.2%	1.4%	0.2%	2.3%	2.5%	18.0%	7.4%	6.7%	1.2%	6.9%	0.7%
	6-9 PM	0.4%	0.0%	0.0%	0.0%	6.1%	5.2%	5.2%	14.5%	0.7%	0.0%	1.2%	2.1%	12.0%	4.8%	6.5%	0.5%	3.2%	0.2%
	9-Midnight	0.4%	0.0%	0.0%	0.0%	5.9%	4.7%	4.7%	13.9%	1.2%	0.2%	2.3%	2.3%	10.6%	6.9%	5.1%	0.5%	2.3%	0.5%
Lighting Conditions	Dark - Lighted	1.6%	0.0%	0.0%	0.0%	9.2%	5.2%	5.2%	18.7%	1.6%	0.2%	0.5%	3.7%	16.4%	7.4%	8.5%	0.7%	3.5%	0.5%
	Dark - Not Lighted	0.0%	0.0%	0.0%	0.0%	5.0%	7.9%	7.9%	17.1%	0.5%	0.0%	3.9%	2.5%	11.1%	6.7%	7.4%	0.0%	3.5%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.2%	0.0%	0.0%	0.0%
	Dawn	0.0%	0.0%	0.0%	0.0%	0.4%	0.5%	0.5%	1.2%	0.2%	0.0%	0.2%	0.0%	1.2%	0.2%	0.7%	0.0%	0.5%	0.0%
	Daylight	4.3%	0.0%	0.0%	0.0%	26.4%	14.0%	14.0%	52.9%	3.0%	0.9%	6.0%	8.5%	42.3%	20.1%	18.2%	1.4%	15.7%	1.4%
	Dusk	0.4%	0.0%	0.0%	0.0%	2.0%	0.7%	0.7%	3.5%	0.0%	0.0%	0.9%	0.2%	2.3%	1.6%	0.5%	0.2%	0.9%	0.2%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment E-6
Seminole County
Percent of All KSI Crashes involving Motorcyclists 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	2.9%	2.2%	0.0%	2.2%	2.9%	0.0%	2.2%	0.0%	2.9%	0.0%	0.0%	1.4%	0.7%	0.7%	0.7%	0.0%	1.4%	1.6%	2.4%	0.0%	0.0%	0.0%	0.0%	1.1%	2.2%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.7%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%
	Left Turn	12.4%	15.3%	5.8%	8.0%	23.2%	2.2%	1.5%	5.1%	23.4%	3.6%	0.0%	10.1%	11.6%	7.2%	2.9%	0.0%	1.4%	8.9%	15.3%	11.3%	0.0%	1.1%	0.0%	18.5%	8.7%
	Off Road	5.1%	8.0%	2.2%	9.4%	4.3%	2.2%	1.5%	2.2%	10.2%	1.5%	0.0%	5.1%	7.2%	1.4%	0.0%	0.0%	2.2%	4.0%	7.3%	4.0%	0.0%	0.0%	0.0%	9.8%	3.3%
	Other	5.1%	3.6%	2.9%	2.9%	8.0%	0.7%	2.9%	0.7%	5.8%	2.2%	0.0%	6.5%	1.4%	0.0%	0.7%	0.0%	2.9%	2.4%	4.0%	3.2%	0.0%	1.1%	0.0%	6.5%	2.2%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	4.4%	9.5%	3.6%	4.3%	10.1%	2.9%	0.7%	2.9%	13.1%	0.7%	0.0%	9.4%	3.6%	2.9%	0.0%	0.0%	1.4%	3.2%	8.9%	5.6%	0.0%	1.1%	0.0%	15.2%	2.2%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	4.4%	2.2%	1.5%	3.6%	3.6%	0.7%	0.7%	0.7%	5.8%	0.7%	0.0%	2.2%	2.2%	0.7%	2.2%	0.7%	0.0%	4.8%	2.4%	1.6%	1.1%	1.1%	0.0%	2.2%	3.3%
	Sideswipe	0.7%	4.4%	0.7%	1.4%	3.6%	0.7%	0.7%	0.0%	5.1%	0.0%	0.0%	2.9%	2.2%	0.0%	0.0%	0.0%	0.7%	0.8%	3.2%	1.6%	0.0%	0.0%	0.0%	7.6%	0.0%
	Unknown	0.0%	1.5%	0.7%	0.0%	1.4%	0.7%	0.0%	0.7%	0.7%	0.7%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	3.3%	0.0%
Alcohol Related	Y	2.2%	3.6%	2.2%	2.9%	2.9%	2.2%	0.0%	0.7%	6.6%	0.7%	0.0%	3.6%	2.9%	0.7%	0.7%	0.0%	0.0%	2.4%	3.2%	3.2%	0.0%	0.0%	0.0%	5.4%	4.3%
	N	33.6%	43.1%	15.3%	29.7%	54.3%	8.0%	10.2%	12.4%	60.6%	8.8%	0.0%	37.0%	26.1%	12.3%	5.8%	0.7%	10.1%	24.2%	40.3%	26.6%	1.1%	4.3%	0.0%	58.7%	18.5%
Hit and Run	Y	0.7%	2.2%	0.7%	0.0%	3.6%	0.0%	0.0%	1.5%	1.5%	0.7%	0.0%	2.2%	0.7%	0.7%	0.0%	0.0%	0.0%	0.8%	2.4%	0.8%	0.0%	0.0%	0.0%	3.3%	0.0%
	N	35.0%	44.5%	16.8%	32.6%	53.6%	10.1%	10.2%	11.7%	65.7%	8.8%	0.0%	38.4%	28.3%	12.3%	6.5%	0.7%	10.1%	25.8%	41.1%	29.0%	1.1%	4.3%	0.0%	60.9%	22.8%
Aggressive Driving	Y	1.5%	3.6%	1.5%	2.9%	3.6%	0.0%	0.0%	0.7%	5.1%	0.7%	0.0%	4.3%	1.4%	0.0%	0.7%	0.0%	0.0%	1.6%	4.0%	1.6%	0.0%	0.0%	0.0%	6.5%	2.2%
	N	34.3%	43.1%	16.1%	29.7%	53.6%	10.1%	10.2%	12.4%	62.0%	8.8%	0.0%	36.2%	27.5%	13.0%	5.8%	0.7%	10.1%	25.0%	39.5%	28.2%	1.1%	4.3%	0.0%	57.6%	20.7%
Distracted Driving	Y	4.4%	5.8%	0.7%	2.2%	8.7%	0.0%	0.7%	2.2%	7.3%	0.7%	0.0%	3.6%	2.9%	1.4%	0.7%	0.0%	2.2%	0.8%	7.3%	1.6%	0.0%	0.0%	0.0%	6.5%	1.1%
	N	31.4%	40.9%	16.8%	30.4%	48.6%	10.1%	9.5%	10.9%	59.9%	8.8%	0.0%	37.0%	26.1%	11.6%	5.8%	0.7%	8.0%	25.8%	36.3%	28.2%	1.1%	4.3%	0.0%	57.6%	21.7%
Intersection Related	Y	20.4%	23.4%	5.8%	12.3%	34.8%	2.2%	4.4%	7.3%	32.8%	5.1%	0.0%	15.9%	16.7%	7.2%	4.3%	0.0%	5.1%	12.9%	23.4%	12.9%	0.0%	2.2%	0.0%	26.1%	13.0%
	N	15.3%	23.4%	11.7%	20.3%	22.5%	8.0%	5.8%	5.8%	34.3%	4.4%	0.0%	24.6%	12.3%	5.8%	2.2%	0.7%	5.1%	13.7%	20.2%	16.9%	1.1%	2.2%	0.0%	38.0%	9.8%
Drug Related	Y	0.0%	2.9%	0.0%	0.7%	1.4%	0.7%	0.0%	0.0%	2.9%	0.0%	0.0%	0.7%	2.2%	0.0%	0.0%	0.0%	0.0%	0.0%	2.4%	0.8%	0.0%	0.0%	0.0%	1.1%	0.0%
	N	35.8%	43.8%	17.5%	31.9%	55.8%	9.4%	10.2%	13.1%	64.2%	9.5%	0.0%	39.9%	26.8%	13.0%	6.5%	0.7%	10.1%	26.6%	41.1%	29.0%	1.1%	4.3%	0.0%	63.0%	22.8%
Aging Driver	Y	7.3%	10.9%	3.6%	5.1%	14.5%	2.2%	0.7%	3.6%	15.3%	2.2%	0.0%	8.7%	5.8%	4.3%	1.4%	0.0%	1.4%	8.1%	7.3%	7.3%	0.0%	1.1%	0.0%	15.2%	6.5%
	N	28.5%	35.8%	13.9%	27.5%	42.8%	8.0%	9.5%	9.5%	51.8%	7.3%	0.0%	31.9%	23.2%	8.7%	5.1%	0.7%	8.7%	18.5%	36.3%	22.6%	1.1%	3.3%	0.0%	48.9%	16.3%
Teenage Driver	Y	4.4%	2.9%	0.0%	3.6%	3.6%	0.0%	1.5%	0.7%	3.6%	1.5%	0.0%	1.4%	1.4%	2.2%	0.7%	0.0%	1.4%	3.2%	2.4%	0.8%	0.0%	0.0%	0.0%	2.2%	1.1%
	N	31.4%	43.8%	17.5%	29.0%	53.6%	10.1%	8.8%	12.4%	63.5%	8.0%	0.0%	39.1%	27.5%	10.9%	5.8%	0.7%	8.7%	23.4%	41.1%	29.0%	1.1%	4.3%	0.0%	62.0%	21.7%
Day of the Week	Monday	5.1%	4.4%	2.9%	4.3%	6.5%	1.4%	0.0%	2.2%	7.3%	2.9%	0.0%	6.5%	2.9%	2.9%	0.0%	0.0%	0.0%	4.8%	4.8%	4.0%	0.0%	3.3%	0.0%	7.6%	2.2%
	Tuesday	4.4%	5.8%	5.1%	2.2%	10.1%	2.9%	1.5%	2.2%	8.8%	2.9%	0.0%	8.0%	3.6%	0.7%	0.7%	0.0%	2.2%	2.4%	4.0%	8.1%	0.0%	0.0%	0.0%	10.9%	4.3%
	Wednesday	0.7%	6.6%	2.2%	2.9%	4.3%	2.2%	0.7%	0.0%	8.8%	0.0%	0.0%	5.1%	2.9%	0.7%	0.0%	0.0%	0.7%	2.4%	3.2%	4.0%	1.1%	0.0%	0.0%	9.8%	0.0%
	Thursday	5.1%	5.8%	0.0%	5.8%	5.1%	0.0%	2.9%	0.7%	7.3%	0.0%	0.0%	2.9%	4.3%	0.7%	1.4%	0.0%	1.4%	3.2%	6.5%	0.8%	0.0%	0.0%	0.0%	3.3%	3.3%
	Friday	7.3%	7.3%	3.6%	5.1%	10.1%	2.9%	1.5%	2.9%	13.1%	0.7%	0.0%	5.1%	5.1%	5.1%	0.7%	0.7%	1.4%	6.5%	6.5%	5.6%	0.0%	0.0%	0.0%	10.9%	4.3%
	Saturday	8.8%	10.9%	1.5%	7.2%	13.0%	0.7%	1.5%	4.4%	13.1%	2.2%	0.0%	7.2%	7.2%	2.9%	2.2%	0.0%	1.4%	5.6%	12.9%	3.2%	0.0%	1.1%	0.0%	14.1%	6.5%
	Sunday	4.4%	5.8%	2.2%	5.1%	8.0%	0.0%	2.2%	0.7%	8.8%	0.7%	0.0%	5.8%	2.9%	0.0%	1.4%	0.0%	2.9%	1.6%	5.6%	4.0%	0.0%	0.0%	0.0%	7.6%	2.2%
Time of Day	12-3 AM	2.9%	3.6%	0.7%	2.9%	3.6%	0.7%	0.0%	0.7%	6.6%	0.0%	0.0%	2.2%	3.6%	1.4%	0.0%	0.0%	0.0%	1.6%	4.8%	1.6%	0.0%	0.0%	0.0%	3.3%	3.3%
	3-6 AM	1.5%	1.5%	1.5%	1.4%	1.4%	1.4%	0.0%	0.7%	2.9%	0.7%	0.0%	2.2%	1.4%	0.7%	0.0%	0.0%	0.0%	1.6%	1.6%	1.6%	0.0%	1.1%	0.0%	2.2%	1.1%
	6-9 AM	3.6%	1.5%	1.5%	1.4%	4.3%	0.7%	0.7%	2.2%	3.6%	0.0%	0.0%	1.4%	2.2%	0.7%	0.7%	0.0%	1.4%	0.8%	3.2%	1.6%	1.1%	0.0%	0.0%	4.3%	0.0%
	9-Noon	5.1%	5.8%	0.7%	6.5%	5.1%	0.0%	1.5%	0.7%	8.0%	1.5%	0.0%	5.1%	1.4%	2.2%	1.4%	0.0%	1.4%	4.8%	4.8%	1.6%	0.0%	2.2%	0.0%	8.7%	2.2%
	Noon-3 PM	5.1%	8.0%	2.9%	5.1%	10.9%	0.7%	2.9%	0.7%	9.5%	2.9%	0.0%	8.0%	4.3%	0.7%	0.7%	0.0%	2.9%	2.4%	6.5%	6.5%	0.0%	0.0%	0.0%	10.9%	2.2%
	3-6 PM	6.6%	12.4%	2.9%	4.3%	15.9%	1.4%	1.5%	3.6%	15.3%	1.5%	0.0%	8.7%	7.2%	2.9%	1.4%	0.0%	1.4%	6.5%	11.3%	4.8%	0.0%	0.0%	0.0%	12.0%	5.4%
	6-9 PM	8.8%	3.6%	4.4%	7.2%	8.0%	1.4%	3.6%	2.9%	9.5%	0.7%	0.0%	6.5%	2.2%	2.9%	2.2%	0.0%	2.9%	6.5%	4.0%	4.8%	0.0%	1.1%	0.0%	8.7%	3.3%
	9-Midnight	2.2%	10.2%	2.9%	3.6%	8.0%	3.6%	0.0%	1.5%	11.7%	2.2%	0.0%	6.5%	6.5%	1.4%	0.0%	0.7%	0.0%	2.4%	7.3%	7.3%	0.0%	0.0%	0.0%	14.1%	5.4%
Lighting Conditions	Dark - Lighted	10.2%	10.9%	7.3%	7.2%	16.7%	4.3%	2.9%	5.8%	17.5%	2.2%	0.0%	12.3%	6.5%	5.1%	1.4%	0.7%	2.2%	8.1%	8.9%	12.1%	0.0%	0.0%	0.0%	20.7%	5.4%
	Dark - Not Lighted	5.1%	6.6%	1.5%	8.0%	2.2%	2.9%	0.0%	0.0%	11.7%	1.5%	0.0%	2.2%	8.0%	2.2%	0.7%	0.0%	0.0%	4.0%	8.1%	2.4%	0.0%	2.2%	0.0%	6.5%	7.6%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Daylight	19.7%	26.3%	8.8%	17.4%	35.5%	2.2%	7.3%	6.6%	35.0%	5.8%	0.0%	23.2%	14.5%	5.1%	4.3%	0.0%	8.0%	14.5%	22.6%	15.3%	1.1%	2.2%	0.0%	34.8%	9.8%
	Dusk	0.7%	2.9%	0.0%	0.0%	2.9%	0.7%	0.0%	0.7%	2.9%	0.0%	0.0%	2.9%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment E-6
Seminole County
Percent of All KSI Crashes involving Motorcyclists 2018-2022

Mode:	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	1.1%	0.0%	0.0%	0.0%	4.4%	0.7%	0.0%	4.4%	0.7%	0.0%	0.0%	2.2%	2.9%	3.6%	1.5%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.7%	0.0%	0.0%	0.0%
	Left Turn	2.2%	0.0%	0.0%	0.0%	21.2%	0.7%	11.7%	32.1%	0.0%	1.5%	2.9%	1.5%	29.2%	10.9%	11.7%	0.7%	10.2%	0.0%
	Off Road	1.1%	0.0%	0.0%	0.0%	9.5%	0.0%	5.8%	14.6%	0.0%	0.7%	1.5%	4.4%	9.5%	3.6%	8.0%	0.0%	3.6%	0.0%
	Other	1.1%	0.0%	0.0%	0.0%	8.0%	0.7%	2.9%	10.9%	0.7%	0.0%	1.5%	0.7%	9.5%	7.3%	2.2%	0.0%	2.2%	0.0%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	2.2%	0.0%	0.0%	0.0%	9.5%	1.5%	6.6%	16.1%	1.5%	0.0%	2.9%	2.2%	12.4%	6.6%	5.1%	0.0%	5.1%	0.7%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	2.9%	0.0%	5.1%	7.3%	0.0%	0.7%	1.5%	2.9%	3.6%	3.6%	2.9%	0.0%	1.5%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	3.6%	0.0%	2.2%	5.8%	0.0%	0.0%	0.0%	0.0%	5.8%	0.7%	2.2%	0.0%	1.5%	1.5%
	Unknown	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.7%	0.7%	0.7%	0.0%
Alcohol Related	Y	1.1%	0.0%	0.0%	0.0%	3.6%	0.7%	3.6%	6.6%	0.7%	0.7%	0.7%	2.2%	5.1%	2.9%	3.6%	0.0%	1.5%	0.0%
	N	6.5%	0.0%	0.0%	0.0%	58.4%	2.9%	30.7%	87.6%	2.2%	2.2%	9.5%	11.7%	70.8%	33.6%	31.4%	1.5%	23.4%	2.2%
Hit and Run	Y	1.1%	0.0%	0.0%	0.0%	2.9%	0.7%	0.7%	3.6%	0.0%	0.0%	0.0%	0.7%	2.9%	1.5%	0.7%	0.7%	0.7%	0.0%
	N	6.5%	0.0%	0.0%	0.0%	59.1%	33.6%	33.6%	90.5%	2.9%	2.9%	10.2%	13.1%	73.0%	35.0%	34.3%	0.7%	24.1%	2.2%
Aggressive Driving	Y	0.0%	0.0%	0.0%	0.0%	1.5%	5.1%	5.1%	6.6%	0.0%	0.0%	0.7%	1.5%	4.4%	2.2%	2.9%	0.0%	1.5%	0.0%
	N	7.6%	0.0%	0.0%	0.0%	60.6%	29.2%	29.2%	87.6%	2.9%	2.9%	9.5%	12.4%	71.5%	34.3%	32.1%	1.5%	23.4%	2.2%
Distracted Driving	Y	1.1%	0.0%	0.0%	0.0%	6.6%	3.6%	3.6%	10.2%	0.7%	0.0%	0.7%	0.0%	10.2%	5.1%	2.9%	0.7%	2.2%	0.0%
	N	6.5%	0.0%	0.0%	0.0%	55.5%	30.7%	30.7%	83.9%	2.2%	2.9%	9.5%	13.9%	65.7%	31.4%	32.1%	0.7%	22.6%	2.2%
Intersection Related	Y	3.3%	0.0%	0.0%	0.0%	29.2%	18.2%	18.2%	47.4%	1.5%	0.7%	5.1%	5.1%	39.4%	22.6%	14.6%	0.7%	11.7%	0.0%
	N	4.3%	0.0%	0.0%	0.0%	32.8%	16.1%	16.1%	46.7%	1.5%	2.2%	5.1%	8.8%	36.5%	13.9%	20.4%	0.7%	13.1%	2.2%
Drug Related	Y	1.1%	0.0%	0.0%	0.0%	2.2%	0.7%	0.7%	2.9%	0.0%	0.0%	0.0%	0.0%	2.9%	0.7%	2.2%	0.0%	0.0%	0.0%
	N	6.5%	0.0%	0.0%	0.0%	59.9%	33.6%	33.6%	91.2%	2.9%	2.9%	10.2%	13.9%	73.0%	35.8%	32.8%	1.5%	24.8%	2.2%
Aging Driver	Y	0.0%	0.0%	0.0%	0.0%	11.7%	9.5%	9.5%	20.4%	0.7%	0.7%	2.9%	1.5%	17.5%	5.1%	8.0%	0.0%	7.3%	1.5%
	N	7.6%	0.0%	0.0%	0.0%	50.4%	24.8%	24.8%	73.7%	2.2%	2.2%	7.3%	12.4%	58.4%	31.4%	27.0%	1.5%	17.5%	0.7%
Teenage Driver	Y	1.1%	0.0%	0.0%	0.0%	4.4%	2.9%	2.9%	7.3%	0.0%	0.0%	1.5%	2.2%	3.6%	4.4%	2.2%	0.0%	0.7%	0.0%
	N	6.5%	0.0%	0.0%	0.0%	57.7%	31.4%	31.4%	86.9%	2.9%	2.9%	8.8%	11.7%	72.3%	32.1%	32.8%	1.5%	24.1%	2.2%
Day of the Week	Monday	0.0%	0.0%	0.0%	0.0%	5.6%	3.4%	3.4%	12.4%	0.0%	0.0%	2.2%	0.7%	9.5%	3.6%	4.4%	0.7%	3.6%	0.0%
	Tuesday	1.1%	0.0%	0.0%	0.0%	8.4%	2.8%	2.8%	12.4%	0.7%	2.2%	0.7%	0.0%	14.6%	5.1%	7.3%	0.0%	2.2%	0.7%
	Wednesday	1.1%	0.0%	0.0%	0.0%	3.9%	3.4%	3.4%	9.5%	0.0%	0.0%	0.0%	0.7%	8.8%	2.2%	4.4%	0.0%	2.9%	0.0%
	Thursday	2.2%	0.0%	0.0%	0.0%	6.7%	1.7%	1.7%	10.9%	0.0%	0.0%	1.5%	2.9%	6.6%	4.4%	3.6%	0.0%	2.9%	0.0%
	Friday	1.1%	0.0%	0.0%	0.0%	8.9%	3.9%	3.9%	16.1%	1.5%	0.7%	2.9%	1.5%	13.9%	6.6%	4.4%	0.7%	5.1%	1.5%
	Saturday	1.1%	0.0%	0.0%	0.0%	8.9%	7.3%	7.3%	21.2%	0.0%	0.0%	1.5%	6.6%	13.1%	8.0%	6.6%	0.0%	6.6%	0.0%
	Sunday	1.1%	0.0%	0.0%	0.0%	5.0%	3.9%	3.9%	11.7%	0.7%	0.0%	1.5%	1.5%	9.5%	6.6%	4.4%	0.0%	1.5%	0.0%
Time of Day	12-3 AM	1.1%	0.0%	0.0%	0.0%	2.8%	2.8%	2.8%	7.3%	0.0%	0.0%	0.7%	2.9%	3.6%	4.4%	1.5%	0.0%	1.5%	0.0%
	3-6 AM	0.0%	0.0%	0.0%	0.0%	1.1%	1.1%	1.1%	2.9%	1.5%	0.0%	0.7%	1.5%	2.2%	1.5%	1.5%	0.0%	1.5%	0.0%
	6-9 AM	0.0%	0.0%	0.0%	0.0%	4.5%	0.6%	0.6%	5.8%	0.0%	0.7%	0.0%	0.7%	5.8%	3.6%	1.5%	0.0%	1.5%	0.0%
	9-Noon	0.0%	0.0%	0.0%	0.0%	4.5%	3.9%	3.9%	10.9%	0.7%	0.0%	2.2%	0.7%	8.8%	4.4%	4.4%	0.0%	2.9%	0.0%
	Noon-3 PM	1.1%	0.0%	0.0%	0.0%	7.3%	5.0%	5.0%	16.1%	0.0%	0.0%	1.5%	2.2%	12.4%	5.1%	4.4%	0.0%	6.6%	0.0%
	3-6 PM	2.2%	0.0%	0.0%	0.0%	11.2%	5.0%	5.0%	21.2%	0.0%	0.7%	0.7%	0.7%	20.4%	5.8%	10.2%	0.7%	3.6%	1.5%
	6-9 PM	2.2%	0.0%	0.0%	0.0%	8.4%	3.9%	3.9%	16.1%	0.7%	0.0%	2.9%	2.2%	11.7%	9.5%	3.6%	0.0%	3.6%	0.0%
	9-Midnight	1.1%	0.0%	0.0%	0.0%	7.8%	3.9%	3.9%	13.9%	0.0%	1.5%	1.5%	2.9%	10.9%	2.2%	8.0%	0.7%	3.6%	0.7%
Lighting Conditions	Dark - Lighted	2.2%	0.0%	0.0%	0.0%	15.6%	5.6%	5.6%	27.0%	0.7%	0.7%	2.2%	5.1%	21.2%	11.7%	8.0%	0.7%	7.3%	0.7%
	Dark - Not Lighted	0.0%	0.0%	0.0%	0.0%	4.5%	5.0%	5.0%	10.9%	0.7%	1.5%	3.6%	3.6%	5.8%	4.4%	5.8%	0.0%	2.9%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Daylight	2.2%	0.0%	0.0%	0.0%	25.1%	15.1%	15.1%	52.6%	1.5%	0.7%	3.6%	5.1%	46.0%	18.2%	21.2%	0.7%	13.1%	1.5%
	Dusk	3.3%	0.0%	0.0%	0.0%	2.2%	0.6%	0.6%	3.6%	0.0%	0.0%	0.7%	0.0%	2.9%	2.2%	0.0%	0.0%	1.5%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment E-7
Seminole County
Percent of All KSI Crashes involving Bicyclist 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	42.4%	42.4%	15.2%	27.3%	72.7%	0.0%	24.2%	12.1%	54.5%	9.1%	0.0%	30.3%	24.2%	18.2%	3.0%	0.0%	24.2%	20.0%	36.0%	44.0%	0.0%	0.0%	0.0%	86.7%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	42.4%	42.4%	15.2%	27.3%	72.7%	0.0%	24.2%	12.1%	54.5%	9.1%	0.0%	30.3%	24.2%	18.2%	3.0%	0.0%	24.2%	20.0%	36.0%	44.0%	0.0%	0.0%	0.0%	86.7%	0.0%
Hit and Run	Y	3.0%	6.1%	0.0%	3.0%	6.1%	0.0%	3.0%	0.0%	6.1%	0.0%	0.0%	3.0%	3.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	8.0%	0.0%	0.0%	0.0%	13.3%	0.0%
	N	39.4%	36.4%	15.2%	24.2%	66.7%	0.0%	21.2%	12.1%	48.5%	9.1%	0.0%	27.3%	21.2%	18.2%	3.0%	0.0%	21.2%	20.0%	36.0%	36.0%	0.0%	0.0%	0.0%	73.3%	0.0%
Aggressive Driving	Y	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	42.4%	42.4%	15.2%	27.3%	72.7%	0.0%	24.2%	12.1%	54.5%	9.1%	0.0%	30.3%	24.2%	18.2%	3.0%	0.0%	24.2%	20.0%	36.0%	44.0%	0.0%	0.0%	0.0%	86.7%	0.0%
Distracted Driving	Y	0.0%	6.1%	0.0%	0.0%	6.1%	0.0%	0.0%	0.0%	6.1%	0.0%	0.0%	0.0%	3.0%	3.0%	0.0%	0.0%	0.0%	0.0%	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	42.4%	36.4%	15.2%	27.3%	66.7%	0.0%	24.2%	12.1%	48.5%	9.1%	0.0%	30.3%	21.2%	15.2%	3.0%	0.0%	24.2%	20.0%	28.0%	44.0%	0.0%	0.0%	0.0%	86.7%	0.0%
Intersection Related	Y	21.2%	15.2%	3.0%	12.1%	27.3%	0.0%	9.1%	9.1%	18.2%	3.0%	0.0%	9.1%	12.1%	6.1%	0.0%	0.0%	12.1%	8.0%	12.0%	16.0%	0.0%	0.0%	0.0%	33.3%	0.0%
	N	21.2%	27.3%	12.1%	15.2%	45.5%	0.0%	15.2%	3.0%	36.4%	6.1%	0.0%	21.2%	12.1%	12.1%	3.0%	0.0%	12.1%	12.0%	24.0%	28.0%	0.0%	0.0%	0.0%	53.3%	0.0%
Drug Related	Y	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	42.4%	42.4%	15.2%	27.3%	72.7%	0.0%	24.2%	12.1%	54.5%	9.1%	0.0%	30.3%	24.2%	18.2%	3.0%	0.0%	24.2%	20.0%	36.0%	44.0%	0.0%	0.0%	0.0%	86.7%	0.0%
Aging Driver	Y	3.0%	3.0%	3.0%	0.0%	9.1%	0.0%	3.0%	0.0%	0.0%	6.1%	0.0%	6.1%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	8.0%	0.0%	0.0%	0.0%	13.3%	0.0%
	N	39.4%	39.4%	12.1%	27.3%	63.6%	0.0%	21.2%	12.1%	54.5%	3.0%	0.0%	24.2%	24.2%	18.2%	3.0%	0.0%	21.2%	20.0%	36.0%	36.0%	0.0%	0.0%	0.0%	73.3%	0.0%
Teenage Driver	Y	3.0%	3.0%	0.0%	0.0%	6.1%	0.0%	0.0%	0.0%	6.1%	0.0%	0.0%	0.0%	6.1%	0.0%	0.0%	0.0%	0.0%	0.0%	8.0%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%
	N	39.4%	39.4%	15.2%	27.3%	66.7%	0.0%	24.2%	12.1%	48.5%	9.1%	0.0%	30.3%	18.2%	18.2%	3.0%	0.0%	24.2%	20.0%	28.0%	44.0%	0.0%	0.0%	0.0%	80.0%	0.0%
Day of the Week	Monday	3.0%	3.0%	0.0%	0.0%	6.1%	0.0%	3.0%	0.0%	3.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	3.0%	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Tuesday	9.1%	3.0%	0.0%	6.1%	6.1%	0.0%	6.1%	0.0%	6.1%	0.0%	0.0%	0.0%	6.1%	0.0%	0.0%	0.0%	6.1%	0.0%	4.0%	4.0%	0.0%	0.0%	0.0%	13.3%	0.0%
	Wednesday	12.1%	6.1%	0.0%	0.0%	18.2%	0.0%	3.0%	6.1%	9.1%	0.0%	0.0%	0.0%	9.1%	6.1%	3.0%	0.0%	0.0%	12.0%	4.0%	8.0%	0.0%	0.0%	0.0%	13.3%	0.0%
	Thursday	6.1%	3.0%	3.0%	6.1%	6.1%	0.0%	3.0%	0.0%	9.1%	0.0%	0.0%	6.1%	0.0%	3.0%	0.0%	0.0%	3.0%	4.0%	4.0%	4.0%	0.0%	0.0%	0.0%	13.3%	0.0%
	Friday	0.0%	9.1%	0.0%	0.0%	9.1%	0.0%	0.0%	0.0%	6.1%	3.0%	0.0%	3.0%	0.0%	6.1%	0.0%	0.0%	0.0%	0.0%	8.0%	4.0%	0.0%	0.0%	0.0%	6.7%	0.0%
	Saturday	6.1%	15.2%	6.1%	6.1%	21.2%	0.0%	3.0%	3.0%	18.2%	3.0%	0.0%	18.2%	3.0%	0.0%	0.0%	0.0%	6.1%	0.0%	12.0%	16.0%	0.0%	0.0%	0.0%	33.3%	0.0%
	Sunday	6.1%	3.0%	6.1%	9.1%	6.1%	0.0%	6.1%	3.0%	3.0%	3.0%	0.0%	3.0%	3.0%	3.0%	0.0%	0.0%	6.1%	4.0%	0.0%	8.0%	0.0%	0.0%	0.0%	6.7%	0.0%
Time of Day	12-3 AM	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	3-6 AM	0.0%	0.0%	3.0%	0.0%	3.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	6-9 AM	12.1%	0.0%	0.0%	3.0%	9.1%	0.0%	6.1%	0.0%	6.1%	0.0%	0.0%	0.0%	3.0%	0.0%	3.0%	0.0%	6.1%	4.0%	4.0%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%
	9-Noon	9.1%	3.0%	6.1%	6.1%	12.1%	0.0%	3.0%	9.1%	6.1%	0.0%	0.0%	6.1%	0.0%	9.1%	0.0%	0.0%	3.0%	12.0%	0.0%	8.0%	0.0%	0.0%	0.0%	13.3%	0.0%
	Noon-3 PM	9.1%	9.1%	3.0%	9.1%	12.1%	0.0%	9.1%	0.0%	9.1%	3.0%	0.0%	9.1%	0.0%	3.0%	0.0%	0.0%	9.1%	0.0%	12.0%	4.0%	0.0%	0.0%	0.0%	20.0%	0.0%
	3-6 PM	12.1%	6.1%	0.0%	6.1%	12.1%	0.0%	6.1%	3.0%	6.1%	3.0%	0.0%	3.0%	6.1%	3.0%	0.0%	0.0%	6.1%	4.0%	4.0%	8.0%	0.0%	0.0%	0.0%	13.3%	0.0%
	6-9 PM	0.0%	18.2%	0.0%	0.0%	18.2%	0.0%	0.0%	0.0%	18.2%	0.0%	0.0%	6.1%	9.1%	3.0%	0.0%	0.0%	0.0%	0.0%	16.0%	8.0%	0.0%	0.0%	0.0%	13.3%	0.0%
	9-Midnight	0.0%	6.1%	3.0%	3.0%	6.1%	0.0%	0.0%	0.0%	6.1%	3.0%	0.0%	6.1%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.0%	0.0%	0.0%	0.0%	20.0%	0.0%
Lighting Conditions	Dark - Lighted	0.0%	9.1%	0.0%	0.0%	9.1%	0.0%	0.0%	0.0%	9.1%	0.0%	0.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%	0.0%	8.0%	4.0%	0.0%	0.0%	0.0%	6.7%	0.0%
	Dark - Not Lighted	0.0%	6.1%	6.1%	3.0%	9.1%	0.0%	0.0%	0.0%	9.1%	3.0%	0.0%	6.1%	6.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	16.0%	0.0%	0.0%	0.0%	20.0%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	3.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	6.7%	0.0%
	Daylight	39.4%	24.2%	9.1%	24.2%	48.5%	0.0%	24.2%	12.1%	30.3%	6.1%	0.0%	21.2%	9.1%	15.2%	3.0%	0.0%	24.2%	20.0%	20.0%	24.0%	0.0%	0.0%	0.0%	53.3%	0.0%
	Dusk	0.0%	3.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment E-7
Seminole County
Percent of All KSI Crashes involving Bicyclist 2018-2022

Mode:	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	13.3%	0.0%	0.0%	0.0%	63.6%	9.1%	27.3%	93.9%	6.1%	0.0%	6.1%	6.1%	87.9%	48.5%	27.3%	0.0%	24.2%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	13.3%	0.0%	0.0%	0.0%	63.6%	9.1%	27.3%	93.9%	6.1%	0.0%	6.1%	6.1%	87.9%	48.5%	27.3%	0.0%	24.2%	0.0%
Hit and Run	Y	0.0%	0.0%	0.0%	0.0%	3.0%	6.1%	6.1%	9.1%	0.0%	0.0%	0.0%	0.0%	9.1%	3.0%	3.0%	0.0%	3.0%	0.0%
	N	13.3%	0.0%	0.0%	0.0%	60.6%	21.2%	21.2%	84.8%	6.1%	0.0%	6.1%	6.1%	78.8%	45.5%	24.2%	0.0%	21.2%	0.0%
Aggressive Driving	Y	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	13.3%	0.0%	0.0%	0.0%	63.6%	27.3%	27.3%	93.9%	6.1%	0.0%	6.1%	6.1%	87.9%	48.5%	27.3%	0.0%	24.2%	0.0%
Distracted Driving	Y	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	3.0%	0.0%	0.0%	0.0%	6.1%	0.0%	3.0%	0.0%	3.0%	0.0%
	N	13.3%	0.0%	0.0%	0.0%	63.6%	24.2%	24.2%	90.9%	3.0%	0.0%	6.1%	6.1%	81.8%	48.5%	24.2%	0.0%	21.2%	0.0%
Intersection Related	Y	6.7%	0.0%	0.0%	0.0%	24.2%	12.1%	12.1%	39.4%	0.0%	0.0%	3.0%	3.0%	33.3%	24.2%	6.1%	0.0%	9.1%	0.0%
	N	6.7%	0.0%	0.0%	0.0%	39.4%	15.2%	15.2%	54.5%	6.1%	0.0%	3.0%	3.0%	54.5%	24.2%	21.2%	0.0%	15.2%	0.0%
Drug Related	Y	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	13.3%	0.0%	0.0%	0.0%	63.6%	27.3%	27.3%	93.9%	6.1%	0.0%	6.1%	6.1%	87.9%	48.5%	27.3%	0.0%	24.2%	0.0%
Aging Driver	Y	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	6.1%	3.0%	0.0%	0.0%	0.0%	9.1%	3.0%	3.0%	0.0%	3.0%	0.0%
	N	13.3%	0.0%	0.0%	0.0%	60.6%	24.2%	24.2%	87.9%	3.0%	0.0%	6.1%	6.1%	78.8%	45.5%	24.2%	0.0%	21.2%	0.0%
Teenage Driver	Y	0.0%	0.0%	0.0%	0.0%	3.0%	3.0%	3.0%	6.1%	0.0%	0.0%	3.0%	0.0%	3.0%	3.0%	0.0%	0.0%	3.0%	0.0%
	N	13.3%	0.0%	0.0%	0.0%	60.6%	24.2%	24.2%	87.9%	6.1%	0.0%	3.0%	6.1%	84.8%	45.5%	27.3%	0.0%	21.2%	0.0%
Day of the Week	Monday	0.0%	0.0%	0.0%	0.0%	2.6%	2.6%	2.6%	6.1%	0.0%	0.0%	0.0%	0.0%	6.1%	3.0%	0.0%	0.0%	3.0%	0.0%
	Tuesday	0.0%	0.0%	0.0%	0.0%	7.7%	2.6%	2.6%	12.1%	0.0%	0.0%	3.0%	0.0%	9.1%	9.1%	3.0%	0.0%	0.0%	0.0%
	Wednesday	0.0%	0.0%	0.0%	0.0%	7.7%	7.7%	7.7%	18.2%	0.0%	0.0%	0.0%	0.0%	18.2%	9.1%	3.0%	0.0%	6.1%	0.0%
	Thursday	0.0%	0.0%	0.0%	0.0%	2.6%	5.1%	5.1%	12.1%	0.0%	0.0%	0.0%	3.0%	9.1%	6.1%	3.0%	0.0%	3.0%	0.0%
	Friday	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	3.0%	6.1%	0.0%	0.0%	3.0%	6.1%	0.0%	6.1%	0.0%	3.0%	0.0%
	Saturday	13.3%	0.0%	0.0%	0.0%	17.9%	5.1%	5.1%	27.3%	0.0%	0.0%	3.0%	0.0%	24.2%	15.2%	6.1%	0.0%	6.1%	0.0%
	Sunday	0.0%	0.0%	0.0%	0.0%	12.8%	0.0%	0.0%	15.2%	0.0%	0.0%	0.0%	0.0%	15.2%	6.1%	6.1%	0.0%	3.0%	0.0%
Time of Day	12-3 AM	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	3-6 AM	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	3.0%	0.0%	0.0%	0.0%
	6-9 AM	0.0%	0.0%	0.0%	0.0%	5.1%	5.1%	5.1%	12.1%	0.0%	0.0%	3.0%	0.0%	9.1%	12.1%	0.0%	0.0%	0.0%	0.0%
	9-Noon	0.0%	0.0%	0.0%	0.0%	15.4%	0.0%	0.0%	18.2%	0.0%	0.0%	0.0%	0.0%	18.2%	9.1%	6.1%	0.0%	3.0%	0.0%
	Noon-3 PM	0.0%	0.0%	0.0%	0.0%	12.8%	5.1%	5.1%	21.2%	0.0%	0.0%	0.0%	3.0%	18.2%	12.1%	3.0%	0.0%	6.1%	0.0%
	3-6 PM	0.0%	0.0%	0.0%	0.0%	7.7%	2.6%	2.6%	15.2%	3.0%	0.0%	3.0%	3.0%	12.1%	9.1%	6.1%	0.0%	3.0%	0.0%
	6-9 PM	13.3%	0.0%	0.0%	0.0%	5.1%	7.7%	7.7%	15.2%	3.0%	0.0%	0.0%	0.0%	18.2%	6.1%	3.0%	0.0%	9.1%	0.0%
	9-Midnight	0.0%	0.0%	0.0%	0.0%	5.1%	2.6%	2.6%	9.1%	0.0%	0.0%	0.0%	0.0%	9.1%	0.0%	6.1%	0.0%	3.0%	0.0%
Lighting Conditions	Dark - Lighted	6.7%	0.0%	0.0%	0.0%	2.6%	2.6%	2.6%	6.1%	3.0%	0.0%	0.0%	0.0%	9.1%	3.0%	3.0%	0.0%	3.0%	0.0%
	Dark - Not Lighted	0.0%	0.0%	0.0%	0.0%	7.7%	2.6%	2.6%	12.1%	0.0%	0.0%	0.0%	0.0%	12.1%	0.0%	9.1%	0.0%	3.0%	0.0%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.0%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	3.0%	0.0%	0.0%	3.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	0.0%
	Daylight	6.7%	0.0%	0.0%	0.0%	41.0%	15.4%	15.4%	69.7%	3.0%	0.0%	3.0%	6.1%	63.6%	42.4%	15.2%	0.0%	15.2%	0.0%
	Dusk	0.0%	0.0%	0.0%	0.0%	0.0%	2.6%	2.6%	3.0%	0.0%	0.0%	0.0%	0.0%	3.0%	0.0%	0.0%	0.0%	3.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment E-8
Seminole County
Percent of All KSI Crashes involving Pedestrians 2018-2022

Mode:	All Collisions	Number of Lanes			Turn Lanes			Posted Speed					Roadway Classification						AADT (2022)			Context Classification				
All		3 Lanes or Less	4-5 Lanes	6+ Lanes	None	1 to 2	3+	25 or less	30-35	40-45	50-55	60+	Principal Arterial	Minor Arterial	Major Collector	Minor Collector	Local	None	< 15000	15,000-30,000	30,000+	C1	C2	C2T	C3C	C3R
		2-3	4-5	6-8				0-25	30-35	40-45	50-55	60+														
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	33.9%	41.1%	25.0%	34.4%	56.0%	9.6%	15.3%	18.5%	57.3%	8.9%	0.0%	49.6%	13.6%	16.8%	5.6%	0.0%	14.4%	25.2%	36.4%	38.3%	0.0%	0.0%	0.0%	80.5%	8.5%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.8%	0.8%	0.0%	1.6%	0.0%	0.0%	0.8%	0.0%	0.8%	0.0%	0.0%	0.0%	0.8%	0.0%	0.8%	0.0%	0.0%	0.9%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	33.1%	40.3%	25.0%	32.8%	56.0%	9.6%	14.5%	18.5%	56.5%	8.9%	0.0%	49.6%	12.8%	16.8%	4.8%	0.0%	14.4%	24.3%	35.5%	38.3%	0.0%	0.0%	0.0%	80.5%	8.5%
Hit and Run	Y	3.2%	4.8%	4.0%	4.0%	7.2%	0.8%	2.4%	0.8%	7.3%	1.6%	0.0%	7.2%	1.6%	0.0%	0.8%	0.0%	2.4%	0.9%	4.7%	5.6%	0.0%	0.0%	0.0%	9.8%	0.0%
	N	30.6%	36.3%	21.0%	30.4%	48.8%	8.8%	12.9%	17.7%	50.0%	7.3%	0.0%	42.4%	12.0%	16.8%	4.8%	0.0%	12.0%	24.3%	31.8%	32.7%	0.0%	0.0%	0.0%	70.7%	8.5%
Aggressive Driving	Y	1.6%	0.8%	0.0%	2.4%	0.0%	0.0%	1.6%	0.0%	0.8%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	1.6%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%
	N	32.3%	40.3%	25.0%	32.0%	56.0%	9.6%	13.7%	18.5%	56.5%	8.9%	0.0%	49.6%	12.8%	16.8%	5.6%	0.0%	12.8%	25.2%	35.5%	38.3%	0.0%	0.0%	0.0%	79.3%	8.5%
Distracted Driving	Y	2.4%	0.8%	2.4%	1.6%	4.0%	0.0%	0.8%	1.6%	2.4%	0.8%	0.0%	2.4%	0.0%	1.6%	0.8%	0.0%	0.8%	2.8%	0.0%	2.8%	0.0%	0.0%	0.0%	4.9%	0.0%
	N	31.5%	40.3%	22.6%	32.8%	52.0%	9.6%	14.5%	16.9%	54.8%	8.1%	0.0%	47.2%	13.6%	15.2%	4.8%	0.0%	13.6%	22.4%	36.4%	35.5%	0.0%	0.0%	0.0%	75.6%	8.5%
Intersection Related	Y	8.9%	12.9%	8.9%	7.2%	20.8%	2.4%	4.0%	6.5%	18.5%	1.6%	0.0%	13.6%	4.8%	4.8%	2.4%	0.0%	4.8%	8.4%	6.5%	15.0%	0.0%	0.0%	0.0%	24.4%	3.7%
	N	25.0%	28.2%	16.1%	27.2%	35.2%	7.2%	11.3%	12.1%	38.7%	7.3%	0.0%	36.0%	8.8%	12.0%	3.2%	0.0%	9.6%	16.8%	29.9%	23.4%	0.0%	0.0%	0.0%	56.1%	4.9%
Drug Related	Y	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	33.9%	41.1%	25.0%	34.4%	56.0%	9.6%	15.3%	18.5%	57.3%	8.9%	0.0%	49.6%	13.6%	16.8%	5.6%	0.0%	14.4%	25.2%	36.4%	38.3%	0.0%	0.0%	0.0%	80.5%	8.5%
Aging Driver	Y	4.0%	1.6%	1.6%	3.2%	4.0%	0.0%	0.8%	2.4%	3.2%	0.8%	0.0%	3.2%	0.8%	1.6%	0.0%	0.0%	1.6%	2.8%	0.0%	3.7%	0.0%	0.0%	0.0%	4.9%	1.2%
	N	29.8%	39.5%	23.4%	31.2%	52.0%	9.6%	14.5%	16.1%	54.0%	8.1%	0.0%	46.4%	12.8%	15.2%	5.6%	0.0%	12.8%	22.4%	36.4%	34.6%	0.0%	0.0%	0.0%	75.6%	7.3%
Teenage Driver	Y	1.6%	0.8%	2.4%	1.6%	3.2%	0.0%	0.8%	1.6%	2.4%	0.0%	0.0%	3.2%	0.0%	0.0%	0.8%	0.0%	0.8%	0.9%	0.0%	3.7%	0.0%	0.0%	0.0%	4.9%	0.0%
	N	32.3%	40.3%	22.6%	32.8%	52.8%	9.6%	14.5%	16.9%	54.8%	8.9%	0.0%	46.4%	13.6%	16.8%	4.8%	0.0%	13.6%	24.3%	36.4%	34.6%	0.0%	0.0%	0.0%	75.6%	8.5%
Day of the Week	Monday	7.3%	5.6%	1.6%	5.6%	7.2%	1.6%	2.4%	3.2%	8.1%	0.8%	0.0%	5.6%	2.4%	3.2%	0.0%	0.0%	3.2%	3.7%	6.5%	2.8%	0.0%	0.0%	0.0%	12.2%	1.2%
	Tuesday	7.3%	4.0%	5.6%	4.0%	10.4%	2.4%	2.4%	4.0%	9.7%	0.8%	0.0%	8.8%	0.8%	4.0%	0.8%	0.0%	2.4%	5.6%	1.9%	9.3%	0.0%	0.0%	0.0%	17.1%	1.2%
	Wednesday	6.5%	7.3%	2.4%	8.8%	7.2%	0.0%	4.8%	2.4%	5.6%	3.2%	0.0%	8.0%	0.8%	1.6%	1.6%	0.0%	4.0%	3.7%	6.5%	3.7%	0.0%	0.0%	0.0%	7.3%	2.4%
	Thursday	2.4%	6.5%	6.5%	4.0%	9.6%	1.6%	0.8%	1.6%	12.9%	0.0%	0.0%	11.2%	1.6%	0.8%	0.8%	0.0%	0.8%	1.9%	5.6%	9.3%	0.0%	0.0%	0.0%	14.6%	1.2%
	Friday	5.6%	5.6%	3.2%	5.6%	8.8%	0.8%	2.4%	3.2%	7.3%	1.6%	0.0%	5.6%	2.4%	3.2%	1.6%	0.0%	2.4%	6.5%	2.8%	5.6%	0.0%	0.0%	0.0%	12.2%	0.0%
	Saturday	3.2%	5.6%	1.6%	3.2%	6.4%	0.8%	1.6%	0.8%	8.1%	0.0%	0.0%	4.8%	3.2%	0.8%	0.0%	0.0%	1.6%	0.9%	7.5%	1.9%	0.0%	0.0%	0.0%	7.3%	1.2%
	Sunday	1.6%	6.5%	4.0%	3.2%	6.4%	2.4%	0.8%	3.2%	5.6%	2.4%	0.0%	5.6%	2.4%	3.2%	0.8%	0.0%	0.0%	2.8%	5.6%	5.6%	0.0%	0.0%	0.0%	9.8%	1.2%
Time of Day	12-3 AM	2.4%	2.4%	1.6%	2.4%	3.2%	0.8%	1.6%	0.8%	3.2%	0.8%	0.0%	3.2%	0.8%	0.8%	0.8%	0.0%	0.8%	1.9%	2.8%	1.9%	0.0%	0.0%	0.0%	6.1%	0.0%
	3-6 AM	0.0%	0.0%	3.2%	0.0%	1.6%	1.6%	0.0%	0.0%	2.4%	0.8%	0.0%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	0.0%	0.0%	0.0%	4.9%	0.0%
	6-9 AM	2.4%	2.4%	2.4%	2.4%	4.8%	0.0%	0.8%	0.0%	5.6%	0.8%	0.0%	4.8%	0.8%	0.8%	0.0%	0.0%	0.8%	0.9%	2.8%	3.7%	0.0%	0.0%	0.0%	7.3%	0.0%
	9-Noon	1.6%	2.4%	0.0%	2.4%	1.6%	0.0%	1.6%	0.8%	0.8%	0.8%	0.0%	1.6%	0.0%	1.6%	0.0%	0.0%	0.8%	0.9%	2.8%	0.0%	0.0%	0.0%	0.0%	2.4%	0.0%
	Noon-3 PM	5.6%	2.4%	0.8%	5.6%	4.0%	0.0%	3.2%	2.4%	3.2%	0.0%	0.0%	3.2%	0.8%	1.6%	0.0%	0.0%	4.0%	1.9%	3.7%	0.9%	0.0%	0.0%	0.0%	7.3%	0.0%
	3-6 PM	8.1%	6.5%	2.4%	8.0%	7.2%	1.6%	1.6%	5.6%	9.7%	0.0%	0.0%	3.2%	4.0%	4.8%	3.2%	0.0%	1.6%	8.4%	6.5%	2.8%	0.0%	0.0%	0.0%	9.8%	3.7%
	6-9 PM	8.9%	13.7%	10.5%	10.4%	18.4%	4.0%	4.0%	5.6%	19.4%	4.0%	0.0%	19.2%	3.2%	4.8%	1.6%	0.0%	4.0%	6.5%	10.3%	16.8%	0.0%	0.0%	0.0%	28.0%	2.4%
	9-Midnight	4.8%	11.3%	4.0%	3.2%	15.2%	1.6%	2.4%	3.2%	12.9%	1.6%	0.0%	11.2%	4.0%	2.4%	0.0%	0.0%	2.4%	4.7%	7.5%	8.4%	0.0%	0.0%	0.0%	14.6%	2.4%
Lighting Conditions	Dark - Lighted	8.1%	17.7%	14.5%	7.2%	28.0%	4.8%	2.4%	6.5%	28.2%	3.2%	0.0%	28.0%	4.0%	4.0%	0.8%	0.0%	3.2%	5.6%	15.9%	21.5%	0.0%	0.0%	0.0%	42.7%	0.0%
	Dark - Not Lighted	5.6%	14.5%	5.6%	9.6%	13.6%	2.4%	2.4%	2.4%	16.1%	4.8%	0.0%	12.0%	6.4%	4.0%	1.6%	0.0%	1.6%	6.5%	10.3%	11.2%	0.0%	0.0%	0.0%	17.1%	4.9%
	Dark - Unknown Lighting	0.8%	0.0%	0.0%	0.8%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.0%	0.0%	0.8%	0.0%	0.0%	0.8%	0.0%	0.0%	0.8%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	1.2%	0.0%
	Daylight	17.7%	8.9%	4.0%	16.0%	13.6%	1.6%	8.9%	8.9%	12.1%	0.8%	0.0%	8.8%	2.4%	8.0%	3.2%	0.0%	8.8%	11.2%	10.3%	4.7%	0.0%	0.0%	0.0%	19.5%	3.7%
	Dusk	1.6%	0.0%	0.0%	0.8%	0.8%	0.0%	0.8%	0.8%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.8%	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment E-8
Seminole County
Percent of All KSI Crashes involving Pedestrians 2018-2022

Mode:	All Collisions	Context Classification				Bike Lane/Paved Shoulder > 4 ft			Bike Slots			Sidewalks			Median Presence				
All		C4	C5	C6	None	None	One Side	Both Sides	None	One Side	Both Sides	None	One Side	Both Sides	None	Grass	Multiple	Paved	Other
Type	Angle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Animal	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Bicycle	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Head On	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Left Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Off Road	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Pedestrian	11.0%	0.0%	0.0%	0.0%	65.3%	8.9%	25.8%	90.3%	7.3%	2.4%	6.5%	12.1%	81.5%	37.1%	29.0%	4.0%	26.6%	3.2%
	Rear End	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Right Turn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Rollover	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Sideswipe	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Alcohol Related	Y	0.0%	0.0%	0.0%	0.0%	1.6%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	1.6%	0.8%	0.8%	0.0%	0.0%	0.0%
	N	11.0%	0.0%	0.0%	0.0%	63.7%	8.9%	25.8%	88.7%	7.3%	2.4%	6.5%	12.1%	79.8%	36.3%	28.2%	4.0%	26.6%	3.2%
Hit and Run	Y	3.7%	0.0%	0.0%	0.0%	6.5%	4.0%	4.0%	10.5%	1.6%	0.0%	0.0%	0.0%	12.1%	6.5%	0.8%	0.0%	4.0%	0.8%
	N	7.3%	0.0%	0.0%	0.0%	58.9%	21.8%	21.8%	79.8%	5.6%	2.4%	6.5%	12.1%	69.4%	30.6%	28.2%	4.0%	22.6%	2.4%
Aggressive Driving	Y	0.0%	0.0%	0.0%	0.0%	1.6%	0.8%	0.8%	2.4%	0.0%	0.0%	0.0%	0.0%	2.4%	1.6%	0.8%	0.0%	0.0%	0.0%
	N	11.0%	0.0%	0.0%	0.0%	63.7%	25.0%	25.0%	87.9%	7.3%	2.4%	6.5%	12.1%	79.0%	35.5%	28.2%	4.0%	26.6%	3.2%
Distracted Driving	Y	1.2%	0.0%	0.0%	0.0%	4.0%	1.6%	1.6%	5.6%	0.0%	0.0%	0.0%	0.8%	4.8%	0.8%	2.4%	0.0%	2.4%	0.0%
	N	9.8%	0.0%	0.0%	0.0%	61.3%	24.2%	24.2%	84.7%	7.3%	2.4%	6.5%	11.3%	76.6%	36.3%	26.6%	4.0%	24.2%	3.2%
Intersection Related	Y	2.4%	0.0%	0.0%	0.0%	18.5%	9.7%	9.7%	28.2%	2.4%	0.0%	0.8%	3.2%	26.6%	8.9%	12.1%	1.6%	7.3%	0.8%
	N	8.5%	0.0%	0.0%	0.0%	46.8%	16.1%	16.1%	62.1%	4.8%	2.4%	5.6%	8.9%	54.8%	28.2%	16.9%	2.4%	19.4%	2.4%
Drug Related	Y	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	N	11.0%	0.0%	0.0%	0.0%	65.3%	25.8%	25.8%	90.3%	7.3%	2.4%	6.5%	12.1%	81.5%	37.1%	29.0%	4.0%	26.6%	3.2%
Aging Driver	Y	1.2%	0.0%	0.0%	0.0%	4.0%	2.4%	2.4%	6.5%	0.8%	0.0%	0.8%	1.6%	4.8%	4.0%	0.8%	0.0%	1.6%	0.8%
	N	9.8%	0.0%	0.0%	0.0%	61.3%	23.4%	23.4%	83.9%	6.5%	2.4%	5.6%	10.5%	76.6%	33.1%	28.2%	4.0%	25.0%	2.4%
Teenage Driver	Y	0.0%	0.0%	0.0%	0.0%	4.0%	0.8%	0.8%	4.0%	0.0%	0.8%	0.8%	0.0%	4.0%	1.6%	1.6%	0.0%	0.8%	0.8%
	N	11.0%	0.0%	0.0%	0.0%	61.3%	25.0%	25.0%	86.3%	7.3%	1.6%	5.6%	12.1%	77.4%	35.5%	27.4%	4.0%	25.8%	2.4%
Day of the Week	Monday	1.2%	0.0%	0.0%	0.0%	8.3%	2.1%	2.1%	12.9%	0.8%	0.8%	0.0%	5.6%	8.9%	5.6%	4.0%	0.0%	4.8%	0.0%
	Tuesday	1.2%	0.0%	0.0%	0.0%	10.3%	4.1%	4.1%	16.9%	0.0%	0.0%	1.6%	0.8%	14.5%	7.3%	3.2%	0.0%	5.6%	0.8%
	Wednesday	3.7%	0.0%	0.0%	0.0%	7.6%	4.8%	4.8%	14.5%	1.6%	0.0%	1.6%	0.8%	13.7%	8.1%	4.8%	0.0%	2.4%	0.8%
	Thursday	3.7%	0.0%	0.0%	0.0%	6.9%	3.4%	3.4%	11.3%	3.2%	0.8%	1.6%	2.4%	11.3%	5.6%	3.2%	1.6%	4.8%	0.0%
	Friday	1.2%	0.0%	0.0%	0.0%	10.3%	1.4%	1.4%	13.7%	0.8%	0.0%	0.0%	1.6%	12.9%	3.2%	4.8%	0.8%	5.6%	0.0%
	Saturday	0.0%	0.0%	0.0%	0.0%	6.2%	2.8%	2.8%	10.5%	0.0%	0.0%	0.0%	0.8%	9.7%	5.6%	2.4%	0.8%	0.8%	0.8%
	Sunday	0.0%	0.0%	0.0%	0.0%	6.2%	3.4%	3.4%	10.5%	0.8%	0.8%	1.6%	0.0%	10.5%	1.6%	6.5%	0.8%	2.4%	0.8%
Time of Day	12-3 AM	0.0%	0.0%	0.0%	0.0%	4.1%	1.4%	1.4%	6.5%	0.0%	0.0%	0.8%	0.8%	4.8%	3.2%	0.8%	0.0%	1.6%	0.8%
	3-6 AM	0.0%	0.0%	0.0%	0.0%	2.8%	0.0%	0.0%	2.4%	0.0%	0.8%	0.0%	0.0%	3.2%	0.0%	0.0%	0.0%	3.2%	0.0%
	6-9 AM	1.2%	0.0%	0.0%	0.0%	4.1%	0.7%	0.7%	4.8%	1.6%	0.8%	0.0%	1.6%	5.6%	2.4%	2.4%	0.0%	2.4%	0.0%
	9-Noon	1.2%	0.0%	0.0%	0.0%	2.1%	0.7%	0.7%	3.2%	0.8%	0.0%	0.8%	0.8%	2.4%	0.8%	1.6%	0.8%	0.8%	0.0%
	Noon-3 PM	2.4%	0.0%	0.0%	0.0%	4.1%	1.4%	1.4%	8.1%	0.8%	0.0%	0.8%	2.4%	5.6%	4.0%	4.0%	0.0%	0.8%	0.0%
	3-6 PM	0.0%	0.0%	0.0%	0.0%	10.3%	2.8%	2.8%	15.3%	1.6%	0.0%	0.8%	0.8%	15.3%	7.3%	7.3%	0.8%	1.6%	0.0%
	6-9 PM	2.4%	0.0%	0.0%	0.0%	16.6%	9.7%	9.7%	30.6%	2.4%	0.0%	2.4%	4.0%	26.6%	10.5%	8.9%	0.8%	12.1%	0.8%
	9-Midnight	3.7%	0.0%	0.0%	0.0%	11.7%	5.5%	5.5%	19.4%	0.0%	0.8%	0.8%	1.6%	17.7%	8.9%	4.0%	1.6%	4.0%	1.6%
Lighting Conditions	Dark - Lighted	6.1%	0.0%	0.0%	0.0%	26.9%	6.2%	6.2%	35.5%	2.4%	2.4%	1.6%	4.0%	34.7%	14.5%	9.7%	0.8%	12.9%	2.4%
	Dark - Not Lighted	1.2%	0.0%	0.0%	0.0%	9.7%	11.7%	11.7%	25.0%	0.8%	0.0%	2.4%	2.4%	21.0%	7.3%	7.3%	1.6%	8.9%	0.8%
	Dark - Unknown Lighting	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.8%	0.8%	0.0%	0.0%	0.0%	0.0%
	Dawn	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.8%	0.0%
	Daylight	3.7%	0.0%	0.0%	0.0%	17.9%	3.4%	3.4%	26.6%	4.0%	0.0%	2.4%	4.8%	23.4%	12.9%	12.1%	1.6%	4.0%	0.0%
	Dusk	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.7%	1.6%	0.0%	0.0%	0.0%	0.8%	0.8%	1.6%	0.0%	0.0%	0.0%	0.0%
	Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

APPENDICES PART 2

Appendix Part 2D: MetroPlan Orlando Policy Benchmarking

Draft Memorandum

Date: April 3, 2024

To: Vision Zero Central Florida Partners

From: Mighk Wilson, MetroPlan Orlando
Kathrin Tellez, Fehr & Peers

Subject: Vision Zero Central Florida – Policy Review and Benchmarking

Overview

This memorandum summarizes the results of a policy review and benchmarking assessment of regional transportation policies, plans, and programs against a framework of Vision Zero and Safe System elements for the MetroPlan Orlando Regional Vision Zero Action Plan. The review sought to identify potential policy barriers to reaching zero serious injuries and fatalities on roads throughout the MetroPlan Orlando region and identify specific actions and policy changes to integrate into other planning documents as a part of the Action Plan.

As a part of the Regional Vision Zero Action Plan, Policy Benchmarking Guidance was developed, which is provided as **Attachment A**. This policy review and benchmarking follows the guidance outlined in that document, which consists of the following steps:

1. Identify relevant documents and establish framework for policy review and benchmarking.
2. Review documents and conduct policy review.
3. Apply benchmarking tool.
4. Incorporate findings into Action Plan.

The outcomes of the first three steps are documented in this technical memorandum along with preliminary Action Plan strategies; these strategies are based on discussions with MetroPlan Orlando staff, a subgroup of the regional Task Force, as well as feedback from the regional Task Force. Each potential action is organized around the Core Elements of Vision Zero, with the Safe System strategy that the action is aligned with identified. Implementation timing and resource needs are also noted.

Policy Review and Benchmarking

The following presents the results of the policy review and benchmarking as applied to the plans, policies and programs developed by MetroPlan Orlando.

Identify and Review Relevant Documents and Establish Review Framework

The following documents were identified in consultation with MetroPlan Orlando staff and the regional Task Force to be included in the policy review:

- Metropolitan Transportation Plan (MTP)
- Transportation Improvement Program (TIP)
- Prioritized Project List (PPL)
- Unified Planning Work Program (UPWP)
- Transportation Systems Management and Operations (TSM&O) Master Plan
- Complete Streets Policy
- LYNX Transit Development Plan (TDP) 2022 Annual Update
- Speed Management Network Screening (December 2022)
- Title VI Program: Nondiscrimination & Language Plan
- Public Participation Plan (2019)
- Central Florida Regional Freight Mobility Study (2013)
- Pedestrian Safety Action Plan (2019)
- Bicycle Safety Action Plan (2019)

The documents listed above were then reviewed and relevant pieces of information from the review framework were documented.

Policy Review

Each document noted above was reviewed and information from the review framework categories was documented. The framework tool was used to collect information, by category, from each document. This review was documented in a table summarizing the key content from each document by category, as summarized in **Table 1**.

Benchmarking

Based on the policy review summary, the benchmarking tool was used to provide a high-level assessment of the overall status of how safety is incorporated and prioritized within existing policies and processes. The assessment aims to identify strengths of the existing safety program, and opportunities for enhancements aligned with Vision Zero and Safe System Approach best practices. If a practice exists within the region, by default it will be listed as an "Occasional Practice." Where the project team was not aware of the current practice, the cell was initially left blank, and separate conversations were facilitated with MetroPlan Orlando staff and a small subgroup of the regional Task Force to further refine the benchmarks and identify if any benchmarks should be shifted from "Not a Current Practice" to "Occasional Practice" or "Institutional Practice." The resulting actions were then shared with the regional Task Force and their feedback incorporated into the actions presented in this document.

The policy review and benchmarking assessment are summarized in **Table 2.** Some notable successes from the benchmarking and policy review include:

- The MetroPlan Orlando Metropolitan Transportation Plan (MTP) has multiple policies that align with Vision Zero best practices and prioritize safety, multimodal enhancements, and vulnerable road users.
- A data driven approach is used to incorporate safety into various plans and policies.

- MetroPlan Orlando has adopted a Complete Streets policy.
- MetroPlan Orlando tracks funding by specific project categories, including transportation safety. Equity is a component of project prioritization.
- Adoption and implementation of the Regional Vision Zero Action Plan will fulfill most of the benchmarks that are not currently in the Institutional Practice column and amplify others that are already incorporated.

The policy scan and benchmarking assessment also identified opportunities for enhanced alignment with Vision Zero and Safe System Approach best practices. The key opportunities MetroPlan Orlando and the Comprehensive Safety Action Plan could consider are:

- Incorporate target speed as an evaluation/prioritization criteria.
- Establish purpose and goals for continuation of the Vision Zero Task Force.
- Develop Transportation Impact Study best practices strategies for local agencies that include guidelines for how to address safety and multimodal travel as part of the development review process.
- Develop a pilot project process to test new safety strategies in the region.
- MetroPlan Orlando staff attend relevant Florida Department of Transportation (FDOT) safety coalition meetings (https://www. fdot. gov/Safety/safety-coalitions/coalitonsresources. shtm) to provide feedback and ideas for improvement.
- MetroPlan Orlando hosts a safety summit for all jurisdictions in the region to share successes and progress towards zero on an annual basis.

Vision Zero Action Items

Based on the policy benchmarking and subsequent discussions, potential actions to incorporate in the Action Plan were developed, as summarized on the following pages by the core elements of Vision Zero. Also noted with each potential action is which Safe System strategy it aligns with. The actions presented below may be refined and modified as they are incorporated into the Action Plan document; should there be differences between this document and the Action Plan, the Action Plan action items should take precedence.

The initial time frame for implementation was identified for three time periods, assuming actions in the plan would be implemented over a 5-year period:

1. **Immediate** (within one year) – Action is expected to be implemented within one year.
2. **Near-term** (within two to three years) – Action is expected to be implemented within two to three years. These are actions that may require additional resources and collaboration with other agencies.
3. **Longer-Term** (within four to five years) – These longer-term actions may be contingent on the completion of prior actions, require additional staffing and other resources, and require significant collaboration with other agencies. Depending on the progress of immediate and near-term actions, some longer-term actions could be accomplished earlier or could be moved beyond five years.

The expected level of staff time/resources was also identified for each action with the following assumptions:

- **Low** – Estimated to be less than 40 hours total time that could be incorporated into existing processes with currently available resources. No additional staffing/funding resources are expected to be required for low effort strategies.
- **Medium** – Estimated to be between 40 and 120 hours of effort. While an individual medium-effort strategy could likely be accomplished with existing resources, it may be difficult to accomplish multiple concurrent medium-effort actions.
- **High** – Estimated to be over 120 hours of effort and additional outside resources, such as data, IT infrastructure, and/or collaboration with outside agencies. While an individual high-effort strategy could be accomplished with existing resources, it may be difficult to accomplish multiple concurrent medium and high-effort actions. Additional staff or consultant support may be needed to accomplish these items within the 5-year time, which could require additional funding resources.

For some actions, it may be a one-time occurrence, and for other activities it may be recurring action that is incorporated into an existing or new process. This is noted as **one-time or on-going**.

It is expected that the Safety Action Plan would be updated at least every five years and the effectiveness of various strategies assessed, with new actions developed, actions that are successful retained, and actions that did not yield the expected results discontinued. Actions that are deemed not to be feasible for implementation in this plan may be considered for subsequent plan updates.

For each potential action item, the time frame, level of effort, and if it is a one-time occurrence or an on-going program are noted in the following format.

Summary of Action (Safe System Element) [Time Frame/Staff time and Resources/Duration]

As the following actions are further refined to inclusion in the Action Plan, performance measures will also be developed.

Public, High-Level Commitment

1. Adopt a Vision Zero Resolution that specifies a target date to reach zero with interim goals that are aligned with goals of other jurisdictions in the region (All Safe System Elements). **[Immediate/Low/One-Time]**
2. Coordinate with regional Traffic Incident Management (TIM) staff to provide training and resources to local first responders (EMS, Fire and Police) related to Vision Zero and Safe System, to incorporate their concerns into strategies that both maintain adequate response times and reduce their calls for service to traffic crashes (Post-crash Care). **[Longer-term/High/On-going]**
3. Collaborate with other MPOs and the legislature to promote potential legislative changes that have a safety benefit, such as greater funding for driver's education in high schools, stricter licensing standards, removal of barriers to automated speed enforcement and motorcycle helmet laws. This action will require collaboration with the board to identify legislative priorities (All Safe System Elements). **[Near-term/Medium/On-going]**
4. Establish purpose, goals and vision for Vision Zero Task force, including schedule of meetings beyond Plan Adoption. Some responsibilities could include:

- Assembling transportation and safety agencies on a regular basis to discuss safety priorities and progress.
- Identifying opportunities to host or participate in multiagency safety-related events, campaigns, and activities.
- Establishing common safety performance metrics across agencies and report out/share the information annually.
- Designating a champion at each agency to stay in the loop on safety initiatives, report back, and sustain momentum.
- Hosting an annual safety summit for the region or co-host with adjacent MPOs
- Continue Safety Speaker series.
- Share best practices on how to incorporate safety into all departments within an agency, including Planning, Engineering, Construction, Maintenance and Operations.

(All Safe System Elements) **[Immediate/Medium/On-going]**

Authentic Engagement

1. As a part of the MetroPlan Orlando All for Transportation Plan, establish a local partner agency network to help streamline the efforts of identifying various Community Based Organizations (CBOs) that are aligned with Vision Zero. Evaluate opportunities and barriers to provide support to CBOs (Safe Road Users). **[Near-term/Medium/On-going]**
2. Periodically review committee structures and waitlists to provide increased opportunities for people around the region to meaningfully participate in MetroPlan Orlando's processes (All Safe System Elements). **[Immediate/Low/On-going]**

Strategic Planning

1. Investigate the process to establish a regional clearinghouse for citizen requests related to transportation (Safe Roads, Safe Speeds, Safe Road Users and Post-Crash Care). **[Longer-term/High/On-going]**
2. Join Vision Zero Network (All Safe System Elements). **[Immediate/Low/One-Time]**
3. Update the Regional Vision Zero Action Plan at least every 5 years (All Safe System Elements). **[Longer-term/High/On-going]**
4. Develop Transportation Impact Study best practices strategies for local agencies that include guidelines for how to address safety and multimodal travel as part of the development review process (Safe Roads, Safe Speeds, Safe Road Users and Post-Crash Care). **[Near-term/High/One-Time]**
5. Implement transportation system performance metrics that better align with goals of vision zero, including quality of service, accessibility, person seat capacity, transit accessibility, vehicle miles of travel per person, and other potential metrics (Safe Roads, Safe Speeds, Safe Road Users and Post-Crash Care). **[Near-term/Medium/One-Time** (it is assumed once the metrics have been developed, they would become standard practice and not require additional resources beyond existing)]
6. Develop a regional Safe Routes to School program that funds assessments for schools with a high injury network segment within their enrollment boundaries that can create a barrier to walking or biking to school (Safe Roads, Safe Speeds and Safe Road Users). **[Longer-Term/High/On-going]**

7. In collaboration with FDOT and Orange, Osceola and Seminole Counties, review Construction Management Plan templates used throughout the region and support applicable updates to align with the 2023 MUTCD that includes additional requirements and guidance to accommodate bicycle and pedestrian flows during construction projects (Safe Roads). **[Near-term/Medium/One-Time]**

Project Delivery

1. Align the Vision Zero Action Plan and 2050 MTP (All Safe System Elements). **[Immediate/Low/One-Time]**
2. Projects in the 2050 MTP provide more detailed descriptions related to safety components (Safe Roads and Safe Speeds). **[Immediate/High/One-Time]**
3. Research and explore incorporating Crash Modification Factors (CMF) into project prioritization process (Safe Roads and Safe Speeds). **[Near-term/High/One-Time]**
4. Document existing grant programs that are used and conduct informational interviews with other MPOs to see if there are grant opportunities that are being missed. Maintain a list with project requirements, application deadlines and application information (Safe Roads, Safe Speeds, Safe Road Users and Post-Crash Care). **[Immediate/Medium/On-going]**

Complete Streets for All

1. Develop sample compete streets policy language to support jurisdictions in region that do not yet have an adopted policy or are considering update to existing policy (Safe Roads and Safe Speeds); consider incorporating requirements that roundabouts be considered for all intersection improvements. **[Immediate/Medium/One-Time]**
2. Support Orange, Osceola, and Seminole Counties in updating Design Standards that incorporate safety and speed management features (Safe Roads and Safe Speeds), including the potential to identify best practice standards and participate in technical review committees. **[Near-term/High/One-Time]**

Context Appropriate Speeds

1. Evaluate potential to include target speed reductions as an evaluation/prioritization criterion (Safe Speed). **[Immediate/Low/One-time]**
2. Work with FDOT and other jurisdictions to formalize the process of target speed setting on all segments of the Federal Aid System; for Federal Aid roadways on the HIN, the target speed shall be set at the lowest allowable speed based on the context classification with detailed justification provided if that target speed cannot be met (Safe Speeds). **[Immediate/High/One-Time]**
3. Develop educational materials that can be provided to local agencies and their elected officials (All Safe System Elements). [**Near-term/Medium/On-going**]
4. Identify corridors where traffic signal timing strategies could be used to control speeds and conduct a pilot project in partnership with FDOT and local agencies (Safe Speeds). **[Near-term/High/One-Time]**

Equity Focused Analysis & Programs

1. Create educational materials on how to report a crash in different languages to share in communities (Safe Road Users) where crashes may be underreported. **[Near-term/Medium/One-Time]**
2. Research best practices related to graduated fines to determine if they are appropriate for our region (Safe Road Users). **[Near-term/Medium/One-Time]**
3. Track crash outcomes by disadvantaged community status (Safe Road Users). **[Near-term/Low/On-going]**

Proactive / Systemic

1. MetroPlan Orlando staff to attend Florida Department of Transportation (FDOT) safety coalition meetings that align with the most pressing safety issues in the region (https://www.fdot.gov/Safety/safety-coalitions/coalitonsresources.shtm) to gain insight on materials prepare at the Statewide level that could benefit the region as well as to identify resources that could benefit the region (All Safe System Elements). **[Immediate/Low/On-going]**
2. Serve as a clearing house for regional location-based data, such as connected vehicle speed data, roadway, demographic information, and other data that could inform crash patterns and project prioritization (All Safe System Elements). **[Near-term/Medium/On-going]**
3. Work with FDOT to provide local agency training on the FDOT project development process (Safe Roads and Safe Speeds). **[Immediate/Medium/One-Time]**
4. Work with FDOT and local agencies to develop a plan for installation of emergency vehicle preemption on all routes to level 1 trauma centers in the region (Post-Crash Care). **[Near-term/High/One-Time]**

Responsive / Hot Spot

1. With annual update of crash dashboard, report on progress, how it aligns with regions goals, and if new focus areas/crash trends are emerging (All Safe System Elements). **[Near-term/High/On-going]**

Evaluation and Adjustment

1. Research and develop a policy related to supporting pilot projects to test new safety strategies in the region (Safe Roads and Safe Speeds). [Immediate/Medium/One-Time]
2. Work with Community Health Partners and others to identify where in the region bicyclist, pedestrian, and hit & run crashes are likely underreported (Safe Road Users). **[Longer-term/High/On-going]**
3. Develop process to conduct before and after studies for projects that meet certain criteria to document safety benefits of different treatments in the regional context (Safe Roads). **[Immediate/Medium/One-Time]**

The final action plan items will be reflected in the Regional Vision Zero Action Plan.

Attachments: Benchmarking Guidance

Table 1 | Document Review Summary

Document Name	Description	Safety Visions, Goals, Policies	Safety Data and Analysis	Countermeasures	Vision Zero Core Element Link	Opportunities for Safety Program and Action Items
Metropolitan Transportation Plan (MTP)	The Metropolitan Transportation Plan (MTP) establishes the vision of Central Florida's entire transportation system for Orange, Osceola and Seminole Counties and identifies current and future transportation needs. Projects must be included in the plan to receive federal and state funding. The plan is updated every five years to reflect the changing dynamics of the region.	Goal 1: Provide a safe and secure transportation system for all users **Objectives** Eliminate the rate and occurrence of transportation system fatalities, injuries, and crashes with high emphasis on the most vulnerable users Provide infrastructure and services to help prepare for, respond to, and recover from emergencies Prevent and mitigate transportation-related security risks Improve emergency response and incident clearance times Increase the resiliency of infrastructure to risks, including extreme weather and environmental conditions	**Indicators** Number of fatalities, serious injuries and crashes by mode/user Rate of fatalities, serious injuries, crashes per 100 million vehicle miles traveled (VMT) for all modes/users Number of evacuation route lane miles per 1,000 households Average emergency response time by incident occurrence and notification time Average crash/incident clearance time (return to baseline operating capacity)	Complete Streets Operational Safety Improvements ITS /Technology	Complete Streets for All	There are policies related to the reliability of the system and goals related to reducing travel time per capita that may be contrary to safety if capacity enhancing projects result in roadways that are designed for high-speed travel. The MTP identifies some roadway widening projects to 6 lanes. As six lane roadways are more likely to have high rates of KSIs for all modes, consider adding policies that if six lane roadways are constructed that safety countermeasures, such as separated bicycle facilities, sidewalks and frequent crossing locations co-located with transit stops, are required as well as a safety analysis to estimate the number of KSI crashes that could occur under different design scenarios to help inform the selection of final design elements that would reduce the potential for KSI crashes.
		Goal #3: Access & Connectivity **Objectives** Increase transit system frequency Improve housing and employment access to high-frequency transit Improve access to essential services across all modes of transportation Reduce per capita vehicle miles traveled (VMT) Increase ridership on public transportation Reduce the reliance on single-occupant vehicle travel Plan and develop transportation systems that reflect regional and community values	**Indicators** (while these are not directly related to safety, safe access to transit is critical to improve ridership) Percent of population within ½ mile of 30-minute and 15-minute transit frequency Percent of jobs within 30-minute travel time (peak and off-peak; travel time thresholds may vary by mode) Vehicle miles traveled per capita Average fixed-route transit frequency Percent of fixed-route transit system frequency: <15-minutes, 16-30 minutes, 31-59 minutes , >60 minutes Average person trip distance Percent of non-auto mode share/split	Complete Streets Operational Safety Improvements ITS /Technology	Public, High-Level, and Ongoing Commitment	
		MetroPlan Orlando TMA policy allocates 32% of TMA Urbanized Area funds (SU & TALU) to off-State Highway System Complete Streets, context-sensitive, and safety improvements and 17% to Bike/Ped Projects.	MetroPlan Orlando tracks funding by specific categories of improvements.	Complete Streets Operational Safety Improvements ITS /Technology	Project Delivery	Opportunity to disaggregate safety and operations projects to better track funding for safety improvements.
		Key Strategy includes incorporating safety considerations into all roadway projects and adapting roads to accommodate all users.				
Transportation Improvement Plan (TIP)	The TIP is a five-year plan created for the Orlando Urban Area to identify and evaluate all federal and state funded transportation projects that have been scheduled. Projects in the TIP must also be consistent with the MTP's 20-year vision.	MetroPlan Orlando TMA policy allocates 32% of TMA Urbanized Area funds (SU & TALU) to off-State Highway System Complete Streets, context-sensitive, and safety improvements and 17% to Bike/Ped Projects.	Project Evaluation lists Safety and Security as a criterion including, Crash Rate, Fatal and Serious Injury Crash Rates, Number of Pedestrian and Bicycle Crashes	Complete Streets Operational Safety Improvements ITS /Technology	Project Delivery	Opportunity to disaggregate safety and operations projects to better track funding for safety improvements.

Document Name	Description	Safety Visions, Goals, Policies	Safety Data and Analysis	Countermeasures	Vision Zero Core Element Link	Opportunities for Safety Program and Action Items
Prioritized Project List (PPL)	The PPL is prepared in conjunction with the TIP and includes all the upcoming transportation-related projects in the region that have been deemed cost feasible in the near term (5-Years) but may still have unfunded phases.	The PPL is an implementation document of the MTP, and incorporates all the safety policies and goals articulated in the MTP.	Project Evaluation lists Safety and Security as a criterion including, Crash Rate, Fatal and Serious Injury Crash Rates, Number of Pedestrian and Bicycle Crashes, with 33% of the prioritization process considering safety and security, the highest of any category.	Complete Streets Operational Safety Improvements ITS /Technology	Project Delivery	None
Unified Planning Work Program (UPWP)	The UPWP is the instrument for coordinating transportation and comprehensive planning in the region and serves as a management tool for the participating entities.	The planning Emphasis Areas list Safety and Complete Streets as part of all 10 major activities for MetroPlan Orlando The priorities and challenges lists safety as the top priority for the MetroPlan Orlando Board. The Major Goals list the support by MetroPlan Orlando for Vision Zero safety performance targets. The Major Goals list equity as a continued goal for MetroPlan Orlando.	Data/Analysis is incorporated into projects and processes that are implemented as a part of the UPWP.	Complete Streets Operational Safety Improvements ITS /Technology	Complete Streets for All Project Delivery Equity-Focused Analysis and Program	Opportunity to develop staff position for regional traffic safety education.
Transportation Systems Management & Operations (TSM&O) Master Plan	The TSM&O Master Plan is being developed to promote the vision of a safe, regional, multimodal network that uses cost-effective technology to make the most of the transportation system.	The goal is to provide a safe and secure transportation system for all users. (same as MTP) Stated objective of Masterplan is to support of Vision Zero by eliminating the rate and occurrence of transportation system fatalities, injuries, and crashes with emphasis on the most vulnerable users.		Operational ITS /Technology	Complete Streets for All Public, High-Level, and Ongoing Commitment	Opportunities to use TSM&O strategies to improve safety outcomes, including emergency vehicle preemption, automated speed enforcement, red-light cameras, pedestrian detection, and traffic signal timing plans for desired travel speeds.
Complete Streets Policy	The Complete Streets Policy (adopted 3/11/2020) marks a commitment by MetroPlan Orlando to ensure that streets are planned, designed, constructed, operated, and maintained to safely and comfortably accommodate people of all ages and abilities. That includes, but is not limited to pedestrians, cyclists, scooter riders, transit users, rideshare users, motorists, and freight and service operators.	2045 Plan allocates 32% of MetroPlan Orlando's Transportation Management Area (TMA) funds to Complete Streets projects and 17% to Bike/Ped Projects.	The policy contains performance metrics related to safety, accessibility, and outreach in underserved communities, with those performance metrics being updated as new information/new policies are developed,	Complete Streets Safety Improvements	Public, High-Level, and Ongoing Commitment	Opportunity to incorporate guidance to help communities weigh competing interested in constrained corridors when there may be conflicts between accommodating active transportation modes and relieving congestion for those in vehicles. Similar to FDOT, consider a policy that requires roundabouts to be considered first for all intersection projects.

Document Name	Description	Safety Visions, Goals, Policies	Safety Data and Analysis	Countermeasures	Vision Zero Core Element Link	Opportunities for Safety Program and Action Items
LYNX Transit Development Plan (TDP) 2022 Annual Update	The TDP is a 10-year needs-based evaluation required by FDOT to qualify for state Public Transit Block Grant Program funding. This TDP update includes an assessment of existing services offered by LYNX, as well as anticipated demand for services based on social and economic trends, the political environment, and development patterns and trends	Safety is listed as a Core Value of the organization and an objective for their goal of maintaining the system in a state of good repair. There are several objectives that relate to transportation safety, including: 2. 1 (Increase connectivity for all customers and prioritize transit dependent populations (low-income, zero-auto households, elderly, youth, and persons with disabilities), 3. 1 (Maintain System in a State of Good Repair - Maintain an up to date Transit Asset Management Plan (TAMP) to ensure all capital assets remain within state of good repair to service LYNX customers with high quality services and facilities, Continue to improve the placement and maintenance of bus stops to maximize safety for passengers, and inventory of all existing bus stops, 3. 5 (Ensure continuous public input on all LYNX services (service, infrastructure and operators - Provide a permanent and easily accessible home on the website (or add to current feedback portal) an avenue to share facility related comments/concerns and identify responsible staff members to route/summarize/report input), and 4. 1 (Increase transit oriented development (TOD) and transit supportive development through partnerships and planning processes - Develop and implement a process for review and comment of city, county and FDOT plans (comprehensive, development and roadway) to improve and raise awareness of transit supportiveness), 4. 3 (increase eco-friendly business practices - Develop and implement a process for review and comment of city, county and FDOT plans (comprehensive, development and roadway) to improve and raise awareness of transit supportiveness(, and 4. 4 (Integrate and Promote Quality of Life Strategies - develop an active (transportation) mobility plan and incorporate health impact assessments as a part of transit initiatives).	The plan does not include a quantitative or qualitative assessment of transportation safety; LYNX service guidelines are referenced. These guidelines were created to guide the development of public transportation services in the region. Recommend reviewing guidelines to determine if there are strategies related to stop placement that maximize safety of riders getting to/from stop locations.		One of the primary goals is to increase connectivity for all, but with a priority for low-income, zero vehicle households, youth, elderly and people with disabilities - linking to the VZ core element of equity. There are also strategies related to public feedback.	Opportunity to connect transportation safety outcomes to bus stop locations/amenities and prioritize bus stop relocation/improvements based on safety.
Speed Management Network Screening (December 2022)	The Speed Management Network Screening is a planning level analysis to identify roadways of critical speeding concern in the MetroPlan Orlando planning area.	Establishes a goal to identify context appropriate speeds and identify roadway redesign elements to achieve desired target speeds.	Detailed regional analysis of posted speeds, observed speeds based on connected vehicle data, and crash data to identify roadways where design and other elements lead to speeds higher than the posted speeds and a high level of KSI crashes.	Speed Management Strategies Complete Streets ITS/Technology	Context-Appropriate Speeds	Incorporate ranking on the target speed network into project development and prioritization.
Title VI Program: Nondiscrimination & Language Plan	This Title VI Program: Nondiscrimination & Language Plan is MetroPlan Orlando's commitment to serving the public without discrimination and works in concert with the organization's Public Involvement Plan, which identifies specific tactics for outreach and involvement.	The plan does not include specific safety goals but does have goals related to providing meaningful access to MetroPlan Orlando materials and the planned process, including translating materials into other languages.	The plan provides detailed information related to the definition of underserved communities in the region		Equity-Focused Analysis and Program	Align definition of disadvantaged communities to align with the latest FHWA definitions. This update is underway with the update of the participation plan, expected to be completed in late 2023 (staff to confirm date).

Document Name	Description	Safety Visions, Goals, Policies	Safety Data and Analysis	Countermeasures	Vision Zero Core Element Link	Opportunities for Safety Program and Action Items
Public Participation Plan (2019)	The Public Participation Plan includes objectives, strategies and measurement tools for the MetroPlan Orlando's public participation program. By directing its efforts through this structure, MetroPlan Orlando provides a proactive approach to education and input in the planning process and uses visualization techniques to ensure content is clear, concise, and easy to understand.	The plan does not include specific safety goals, but does identify goals related to the public participation process, including (1) Encourage two-way communication with the community by informing members of the public about relevant transportation issues and ensuring they have a voice in the transportation planning process and (2) Continuously reach out to and get input from people in the region who are not easily engaged because of age, ability, language, lack of financial resources, lack of access to technology, or other reasons.	The plan provides information on the roles of the board and the various MetroPlan Orlando Committees, including the role of transportation safety.		Authentic Engagement	Align definition of disadvantaged communities to align with the latest FHWA definitions. This update is underway with the update of the participation plan, expected to be completed in late 2023 (staff to confirm date).
Central Florida Regional Freight Mobility Study (2013)	The regional freight and goods movement plan identifies the key elements of the region's freight transportation system, estimates the current and future level of freight flows, assesses existing and future conditions, and develops recommendations, including identification of specific transportation system improvements aimed at relieving freight bottlenecks or improving safety.	The document does not include specific policies, although it does identify recommendations for incorporation into planes by others, including infrastructure improvements aimed at reducing bottlenecks, increasing the velocity of truck travel and improving transportation safety but eliminating substandard design features on the transportation system. Plan also notes that disadvantaged persons such as low income, minority and zero vehicle households often are more adversely impacted by freight transportation activities because they are more likely to live in close proximity to freight intensive facilities and industries. Goods movement is essential to supporting the region's economy and quality of life; however, growth in goods movement activities (from manufacturing to truck traffic) also gives rise to negative community impacts. In addition to safety (discussed above), freight activities can contribute to poor air quality and excessive noise and vibration along significant goods movement corridors. As population continues to grow and expand outside the urban core so will commercial centers, leading to more widespread dispersion of freight-intensive impacts such as truck traffic.	Commercial vehicles are involved in 6. 2% of all crashes and 6% of KSI crashes in the region. Overall, the trucking community reports good operating conditions on the region's major highway facilities however, some operational constraints or bottlenecks were reported, including short-entrance ramps onto interstates which create merging hazards; excessive merging and weaving required along major freeways; insufficient turning radii on major arterials; numerous at-grade crossings on major freight corridors; and lack of sufficient staging areas in and around freight terminals. Safety concerns arise from several sources, including trucks and passenger vehicles sharing the same roadways, passenger and freight trains sharing same rail tracks, at-grade rail crossings and the transport of hazardous materials. Understanding the risks associated with goods movement is the first step in mitigating those risks. The plan identified the top corridors were truck involved crashes that occurred between 2006 and 2010, and improvements were identified for those corridors to improve safety and relieve congestion.	Complete Streets Highway Improvements ITS/Technology	Strategic Planning Proactive Systemic Planning	Plan identifies maintaining the velocity of freight movement as a key objective; however, given the connection between crash outcomes and speed, especially when coupled with the mass of commercial vehicles, a focus on the reliability of the freight system should be explored as an alternative metric for future updates to the freight plan. As a part of the Central Florida VZ Action Plan, conduct additional analysis to identify roadways where commercial vehicles are involved in more than 6% of KSI crashes for focused improvements. As road improvements are identified, the freight needs of corridors should be considered to provide the context-appropriate balance between freight and the desired intersection geometries for Complete Streets.
Pedestrian Safety Action Plan (2019)	MetroPlan Orlando developed a Pedestrian Safety Action Plan that identifies the most pressing pedestrian crash problems and solutions, sets a course to implement those solutions, and outlines how to monitor progress on the implementation and report on the effectiveness of the efforts.	Numerous strategies are identified, including locations for pedestrian safety audits, prioritized list of pedestrian safety improvements, and identification of Critical Safety Success Factors.	A detailed pedestrian crash analysis was conducted as a part of this study to identify the roadway characteristics of high-pedestrian involved crash locations. Field reviews were conduct on select roads to identify countermeasures.	Complete Streets and Speed Management	Strategic Planning Proactive Systemic Planning	Opportunity to update prioritized needs list - sidewalk bundle project and ATP update; Continue to support BFF and other pedestrian and bicyclist safety programs.

Document Name	Description	Safety Visions, Goals, Policies	Safety Data and Analysis	Countermeasures	Vision Zero Core Element Link	Opportunities for Safety Program and Action Items
Bicyclist Safety Action Plan (2019)	MetroPlan Orlando developed a Bicyclist Safety Action Plan that identifies the most pressing pedestrian crash problems and solutions, sets a course to implement those solutions, and outlines how to monitor progress on the implementation and report on the effectiveness of the efforts.	Numerous strategies are identified, including locations for bicyclist safety audits, prioritized list of bicyclist safety improvements, and identification of Critical Safety Success Factors.	A detailed bicyclist crash analysis was conducted as a part of this study to identify the roadway characteristics of high-bicyclist involved crash locations. Field reviews were conducted on select roads to identify countermeasures.	Complete Streets and Speed Management	Strategic Planning Proactive Systemic Planning	Opportunity to update prioritized needs list - sidewalk bundle project and ATP update; Continue to support BFF and other pedestrian and bicyclist safety programs.

Source: MetroPlan Orlando; Fehr & Peers, 2024.

Table 2 | Benchmarking Assessment Tool

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes	Challenges	Ideas	Opportunities for Policy/Process Refinement
Category: Leadership and Commitment								
Public, High-Level, and Ongoing Commitment	Agency leadership has made a public commitment to the goal of eliminating traffic fatalities and serious injuries within a specific timeframe.			X*		How do we maintain the evolution of safety into policies, programs and projects?	Define the next steps and identify timeframe goals as a part of this plan. Resolution is in progress and will be adopted concurrently with Action Plan completion, which will identify interim and long-term goals. Interim target years from other plans in the region will help frame regional goals	As local goals are developed, they will be rolled up into regional goals.
	Agency leadership is consistently engaged in prioritizing safety via collaborative efforts.			X	Safety is a prioritization criteria for all projects.	Emergency response needs can pose a barrier to the implementation of some strategies, such as traffic calming, lane narrowing, and others.		
	Key stakeholders have made a clear, public statement in support of Vision Zero efforts and timeline.			X*				Resolution is in progress and will be adopted concurrently with Action Plan completion, which will identify interim and long-term goals.
	An interdepartmental safety working group regularly coordinates with leadership to discuss progress.			X	All MetroPlan Orlando (MPO) staff are engaged in safety efforts, Vulnerable Users Safety Group has pivoted to become the Vision Zero Task Force, which will continue beyond Action Plan completion to implement strategies and hold the region accountable, including development of status updates.	In some agencies, there is a disconnect between planning, design, operations and maintenance staff.	Establish mechanism and purpose of the continuation of the Task Force. Host a safety summit (either for the region or with an adjacent MPO) to share and measure success. Continue safety speaker series on topics of interest to local agencies.	
Authentic Engagement	The agency conducts outreach to specific communities, interests, and populations.			X	The 2019 Public Participation Plan outlines process for outreach to different communities.		Align definition of disadvantaged communities with the latest FHWA definitions; this update is underway with the update of the participation plan, expected to be completed in early 2024.	VZ AP will align disadvantaged communities with the latest FHWA designations.

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes	Challenges	Ideas	Opportunities for Policy/Process Refinement
	Public meetings and workshops are hosted regularly and at times and locations convenient for the community.			X	The primary MPO stakeholders are other public agencies in the region and meetings are typically held during normal business hours to fit within work hours of members of most committees and boards. Meetings are also recorded and live streamed such that people who are not able to attend in person are able to participate. For large regional project, like the MTP adoption, public open houses are held outside of work hours. For location specific projects that receive MPO funding, events are held in those communities at times convenient for community members.		As a part of recurring surveys, ask participants if meeting times, information provided, and options for proving feedback are meeting their needs.	Provide more options for people to submit comments for TAC/CAC, Board Meetings and other committee meetings.
	The community, including historically disadvantaged communities, trust and feel engaged by the agency.			X	Sentiment is that this can be improved, but overall MPO has the trust of disadvantaged communities.		Updates to the Equity Plan will further articulate goals and best practices related to engaging with underserved communities, and provide guidance to local agencies.	As a part of surveys, ask representatives of historically disadvantaged communities how they feel towards MetroPlan Orlando and the level of engagement in their communities.
	The stakeholder groups are representative of the community at large.		X	X	The Community Advisory Committee currently has a waitlist of 30-40 people, which allows for the curation of the group that is representative of the larger community and provides a pool of interested candidates to serve on project specific committees.		Are there opportunities for the people currently on the waitlist to be involved in other processes or committees?	
	The agency engages regularly with community-based organizations and leaders.			X		There are a lot of CBOs, some with limited resources to be able to participate and advertise services they provide.	MPO is establishing a partnering agency network to help streamline the efforts of identifying various CBOs that are aligned with different planning efforts.	Should this be an action in the VZ Plan?
	The agency recognizes the value of community input by providing grant opportunities made in partnership with community-based organizations and nonprofits supporting Vision Zero work.		X		MPO supports the Best Foot Forward Program.	Is challenging to support additional programs based on the funding structure and limitations on how various funds can be spent.	Continue support of BFF and evaluate barriers to support of other CBOs and non-profits.	
Strategic Planning	Crash data is collected regularly and used to inform decisions before plan development.			X	This occurs on a regular basis.			
	The agency augments traditional crash data from police data with data from other sources, such as hospitals.			X	This occurs on a regular basis.			
	The agency has established an appropriate timeline to reach zero traffic fatalities.				Timelines are being established as a part of this Action Planning process; these will consider the timeline of other agencies, including FDOT and local agencies.	FDOT has a goal of Zero but has not established interim goals; as most of the HIN is on FDOT roadways, collaboration with FDOT will be key.	Work with FDOT to identify projects on the HIN that incorporate FHWAs proven countermeasures to reduce KSIs.	

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes	Challenges	Ideas	Opportunities for Policy/Process Refinement
	The agency has established near-term and interim goals for achieving zero traffic fatalities.				Near-term and long-term goals are being established as a part of this Action Planning process; these will consider goals of other agencies, including FDOT and local agencies.			
	The agency has delineated clear action items to achieve each goal.				Action Items are under development.			
	A lead department or position has been established for each action item.				Responsibilities will be established as a part of the Action Plan process.			Each Action Plan Item will include who is responsible, time frame for implementation, expected costs and funding mechanism, and mechanism to monitor outcomes.
	The lead agency for each action item identifies partners to help complete the action.				Responsibilities will be established as a part of the Action Plan process.			Each Action Plan Item will include who is responsible, including partner agencies, time frame for implementation, expected costs and funding mechanism, and mechanism to monitor outcomes.
	The agency has determined appropriate funding needs for each action item.				Funding needs and opportunities will be identified as a part of the Action Plan.	There is a lack of understanding about the FDOT Process of project implementation in some local agencies. Information on how to better leverage existing projects and enhance safety improvements could help maximize safety benefits.		Each Action Plan Item will include who is responsible, time frame for implementation, expected costs and funding mechanism, and mechanism to monitor outcomes.
	The agency has maintained a Vision Zero website to inform the public about the initiative's progress; this could include a link to regional resources from the agency's home page.			X	Crash data has routinely been published in an interactive dashboard linked to the MPO website. Comprehensive hub site incorporates that data along with other plan information.			Action item will include updates to the crash dashboard.
	A third-party audits Vision Zero progress and reports outcomes on the website.	X			This is not currently occurring	Cost, extent and outcomes of third party reviews.	Opportunity to join the Vision Zero Network for third party review.	Action item to join VZ Network.
	Departments and staff are provided resources for safety related training and staff development.			X	Staff at all levels are provided appropriate training and resources.			
	Staff at multiple levels and in multiple departments are safety champions to ensure continuity when a safety champion departs.			X	Safety is woven into most projects, providing a deep bench of safety expertise within the organization.		Update internal procedures incorporate safety analyses.	
	Adequate policies related to equitable transportation have been formulated.			X	Within the last 10 years, policies and processes to weave equity have been formulated and will continue to evolve.			

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes	Challenges	Ideas	Opportunities for Policy/Process Refinement
	The agency has determined suitable performance measures to assess equitable transportation.		X		MPO has been moving away from vehicle delay based criteria to include accessibility, level of comfort, access to places via transit and other multimodal transportation metrics.			
	Adequate policies related to multimodal transportation have been formulated.			X	Policies have been developed for all travel modes.	Often when there are competing interests between automobility and other modes, there is not clear guidance on what should be prioritized.		
	Suitable performance measures to assess multimodal transportation have been established.			X	Performance measures have been developed for all travel modes.	As computational processes have improved, methods to evaluate non-motorized travel modes have improved, but with shifting methodologies, it makes evaluating progress more challenging.	Could be an opportunity refine processes for ease of calculation as well as preparing comparable results to track trends.	The VZ Action Plan and 2050 MTP evaluation procedures should be aligned.
	The agency has developed policies to maintain bicycle and pedestrian facilities during construction projects that affect roadway operations.	X			Not applicable as MPO does not construct projects;		Potential opportunity to require preparation of MOT for Active Transportation as a condition of project funding.	
	The agency has established an efficient citizen request process and a methodology for evaluating requests.	X			Not applicable to MPO.	Cost to implement and maintain a system, as well as forward feedback to applicable agency.	MPO could serve as a clearinghouse to direct people to the most appropriate resource as most people in the region do not know precisely who to contract and where jurisdictional boundaries are located.	
Project Delivery	Adequate policies related to transportation safety have been formulated.			X				
	The agency has determined suitable performance measures to assess transportation safety.			X				
	Transportation safety is incorporated into every Capital Improvement Project to the extent applicable.			X	Some project descriptions are vague and it is difficult to know extent of safety elements incorporated into projects.	Sometimes the safety aspects of projects are diluted as they go through final design and value engineering.	Opportunity to incorporate before / after studies into safety projects to document outcome of specific improvements.	Projects in the MTP opportunity in next MTP to provide more detailed project descriptions that highlight safety improvements. Develop process for projects that meet certain criteria to conduct after studies.
	FHWA's proven countermeasures are implemented in projects.			X	Should projects that include proven countermeasures be given higher prioritization?			
	The agency implements NHTSA's Countermeasures that Work.			X				
	The agency shares project outcomes and effectiveness with the public.		X	X	Overall process outcomes are shared.	Projects are currently not budgeted to conduct formal after studies.	Opportunity to incorporate before / after studies into safety projects to document outcome of specific improvements.	Develop process for projects that meet certain criteria to conduct after studies.
	The agency provides funding for projects that reduce fatal and serious injury collisions.			X				

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes	Challenges	Ideas	Opportunities for Policy/Process Refinement
	There is sufficient funding allocated for future projects that may reduce fatal and serious injury collisions.			X		Overall project needs exceeds available funding resources and prioritization criteria factors safety.	Are there additional funding sources? Or ways to prioritize projects based on expected outcomes?	Incorporate CMFs into prioritization.
	The agency applies for grants to fund safety projects from traditional sources.			X			Are there other grant programs available?	Document existing grant programs that are used and conduct informational interviews with other MPOs to see if there are grant opportunities that are being missed.
	The agency applies for grants to fund safety projects from non-traditional sources.			X			Are there other grant programs available?	Document existing grant programs that are used and conduct informational interviews with other MPOs to see if there are grant opportunities that are being missed.
	Projects incentivizing transit, biking, walking, and carpooling over single-occupant vehicles are prioritized and implemented.			X	MPO primarily prioritizes funding for multimodal projects, with an emphasis on biking, waking and transit improvements. Very little funding is allocated to capacity enhancing projects.			
Public, High-Level, and Ongoing Commitment	Agency leadership has made a public commitment to the goal of eliminating traffic fatalities and serious injuries within a specific timeframe.			X		How do we maintain the evolution of safety into policies, programs and projects?	Define the next steps and identify timeframe goals as a part of this plan. Resolution is in progress and will be adopted concurrently with Action Plan completion, which will identify interim and long-term goals. Interim target years from other plans in the region will help frame regional goals	As local goals are developed, they will be rolled up into a regional goal.
	Agency leadership is consistently engaged in prioritizing safety via collaborative efforts.			X	Safety is a prioritization criteria for all projects.			
	Key stakeholders have made a clear, public statement in support of Vision Zero efforts and timeline.			X				Resolution is in progress and will be adopted concurrently with Action Plan completion, which will identify interim and long-term goals.
	An interdepartmental safety working group regularly coordinates with leadership to discuss progress.			X	All MetroPlan Orlando (MPO) staff are engaged in safety efforts, Vulnerable Users Safety Group has pivoted to become the Vision Zero Task Force, which will continue beyond Action Plan completion to implement strategies and hold the region accountable, including development of status updates.		Establish mechanism and purpose of the continuation of the Task Force.	
Category: Safe Roadways and Safe Speeds								
Complete Streets for All	The agency has allocated adequate funding for complete streets projects.			X	A significant proportion of MPO funding is allocated to complete streets projects.			
	The agency has a complete streets plan.			X	Complete Streets Policy	Not all agencies in region have a complete streets policy.	Provide sample language.	

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes	Challenges	Ideas	Opportunities for Policy/Process Refinement
	Complete Street elements have been incorporated into planning documents.			X				
	Vulnerable users are prioritized in project planning and implementation.			X				
	The agency actively coordinates with neighboring member agencies and neighboring municipalities to provide connections for people walking and biking.			X				
	Appropriate practices are followed to set speed limits based on context.			X	Speed management network has been identified	MPO does not operate roadways; should guidance on how to set target speed be developed?	Can reduction in target speed be used as an evaluation/ prioritization criteria?	
Context Appropriate Speed	The agency suggests specific rules to set speed limits near schools and areas with a high number of vulnerable road users.				Does not apply to MPO			
	Appropriate procedures are followed to enforce speed limits.				Does not apply to MPO			
	There are ongoing education programs/campaigns related to traffic speeds.				Through BFF; Can programs such as BFF be expanded to address speed?	Funding challenges		
	The agency follows proper methods to modify existing roadways to achieve safe speeds.		X	X	Speed management network has been identified	MPO does not operate roadways; should guidance on how to set target speed be developed?	Can reduction in target speed be used as an evaluation/ prioritization criteria?	
Category: Data Driven Approach, Transparency and Accountability								
Equity Focused Analysis and Programs	The agency has developed effective programs and strategies to help people without housing, and low-income individuals access jobs and services.				Role of MPO is indirect and reactionary in most cases.			
	Equity is a factor in project prioritization.			X				
	Equity is reflected in the agency's vision and goals for safety.			X				
	Geographic inequity is considered in the agency's data analysis.			X				
	The agency reports safety outcomes demographically.				Data is not readily available			Track crash outcomes by disadvantaged community status.
	Data on distribution of stops and ticketing is analyzed demographically.				Data is not readily available			

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes	Challenges	Ideas	Opportunities for Policy/Process Refinement
	The agency has formulated effective policies to mitigate the disproportionate impact of fines for minor violations on low-income individuals.	X			Individuals with suspended licenses were court ordered to attend Alternative Transportation course through the CTST to encourage them to use alternatives and improve their safety when using them. Program was very difficult to grow and sustain.	This does not apply to a regional MPO.	Is there a role for MPO to research best practices related to graduated fines? Is there an opportunity to bring back alternative safety courses?	
	Important information and education materials are provided in common languages spoken by residents whose first language is not English.			X	Title VI Program: Nondiscrimination & Language Plan and Public Participation Plan (2019) are important resources.		As these documents are updated, they should be incorporate into the Vision Zero Action Plan.	
	The agency uses data to identify and systematically address trends and risk factors to prevent severe collisions.			X				This is a key outcome of the plan.
Proactive / Systemic	Common collision patterns have been matched with adequate countermeasures.			X	Underway			This is a key outcome of the plan.
	The agency works to continuously improve the accuracy of crash reports.			X	Data management plan incorporates process to report back to the appropriate agency KSI crashes that are not mapped properly. This may also relate to agencies that have their own law enforcement.	Crash reports are missing standard data that could inform overall crash analysis, such as involvement of micromobility users.		MPO staff attend bicycle and pedestrian safety coalition meetings to provide feedback and ideas for improvement.
	The agency uses the High Injury Network (HIN) in project prioritization.			X	Crash data has been used in project prioritization.	Consistency of weighting of certain crash types. Some inconsistencies of data availability across the region to fully identify context characteristics, and other factors.		
Reactive / Hot Spot	A demographic analysis of the HIN has been conducted.				Underway			Outcome will help prioritize projects.
	The agency routinely monitors and reports collision data to the public.			X	Crash dashboards are updated annually.			Incorporate into annual update reporting of progress and how it aligns with regions goals.
Evaluation and Adjustment	Intersection design and control decisions are evaluated to reduce kinetic energy transfer to vulnerable users.	X					Work with FDOT to develop process to incorporate this analysis into the development of project alternatives.	Incorporate into standard scope elements for safety and corridor projects.
	Demonstration projects are used to test the strategies and get feedback from the public.	X				There are potential challenges of how funding demonstration projects would work within the current MPO funding structure.	Create a pilot process with supplemental Action Plan funds in the future.	Develop a policy related to supporting pilot projects to test new safety strategies in the region.
	The agency has a process to address underreporting of collisions, especially for vulnerable road users.				Incorporate hospital data; acknowledge the under reporting; contact FDOT Modal office for bike/ped crashes along Railroads.	Data on the extent of underreporting is not available for the region.	Work with Community Health Partners and others to identify where in region crashes are likely underreported.	Create educational materials on how to report a crash in different languages to share in disadvantaged communities.

Source: MetroPlan Orlando; Fehr & Peers, 2024
**Benchmark will be further solidified developed and met as part of Vision Zero Action Plan.*

Final Memorandum

Date: October 10, 2023

To: Vision Zero Central Florida Consultants

From: Mighk Wilson, MetroPlan Orlando
Nicole Waldheim and Kathrin Tellez, Fehr & Peers

Subject: **Vision Zero Central Florida – Policy Benchmarking Guidance**

Introduction

The MetroPlan Orlando region has an overall fatal crash rate 15 percent higher than the national average and 10 percent higher than the statewide average. MetroPlan Orlando is preparing a Regional Vision Zero Action Plan to understand where crashes are most likely to occur, why crashes result in fatalities and serious injuries, and how to reduce the severity and frequency of these crashes. This effort will be rooted in the core elements of Vision Zero and the Safe System approach. The purpose of the Action Plan is to identify projects, programs, and strategies to eliminate fatalities and serious injuries on the region's roadways.

Funding for this effort is provided by the U.S. Department of Transportation's Safe Streets for All (SS4A) grant program. The SS4A grant program is funding the preparation of regional, county, and local agency Vision Zero action plans in the MetroPlan Orlando region.

This memorandum outlines a process to benchmark existing policies and guidelines against the Vision Zero core elements to meet the Safe Street for All requirement to review existing regional policies and guidelines.

Core Elements of Vision Zero

The Vision Zero Network has established 10 core elements, as summarized in **Table 1**. They provide a framework for what an effective safety program encompasses. Evaluating existing policies, programs, and projects against these core elements will help local agencies understand what is working to reduce severe crashes and what the gaps are in their existing safety programs. This information can then be used to inform stronger safety-related policies and programs as part of each agency's Action Plan.

Table 1 | Core Elements of Vision Zero

General Strategy	Strategy Details
Category: Leadership and Commitment	
Public, High-Level, and Ongoing Commitment	Key elected officials and leaders within public agencies, including transportation, public health, and police, commit to the goal of eliminating traffic fatalities and serious injuries within a specific timeframe. Leadership across these agencies consistently engages in prioritizing safety via a collaborative working group and other resource sharing efforts.
Authentic Engagement	Meaningful and accessible community engagement toward Vision Zero strategy and implementation is employed, with a focus on equity.
Strategic Planning	A Vision Zero Action Plan is developed, approved, and used to guide work. The Plan includes explicit goals and measurable strategies with clear timelines, and it identifies responsible stakeholders.
Project Delivery	Decision-makers and system designers advance projects and policies for safe, equitable multimodal travel by securing funding and implementing projects, prioritizing roadways with the most pressing safety issues.
Category: Safe Roads and Safe Speeds	
Complete Streets for All	Complete Streets concepts are integrated into communitywide plans and implemented through projects to encourage a safe, well-connected transportation network for people using all modes of transportation. This prioritizes safe travel of people over expeditious travel of motor vehicles.
Context-Appropriate Speeds	Travel speeds are set and managed to achieve safe conditions for the specific roadway context and to protect all roadway users, particularly those most at risk in crashes. Proven speed management policies and practices are prioritized to reach this goal.
Category: Data-Driven Approach, Transparency, and Accountability	
Equity-Focused Analysis and Program	Commitment is made to an equitable approach and outcomes, including prioritizing engagement and investments in traditionally under-served communities and adopting equitable traffic enforcement practices.
Proactive, Systemic Planning	A proactive, systems-based approach to safety is used to identify and address top risk factors and mitigate potential crashes and crash severity.
Responsive, Hot Spot Planning	A map of the community's fatal and serious injury crash locations is developed, regularly updated, and used to guide priority actions and funding.
Comprehensive Evaluation and Adjustments	Routine evaluation of the performance of all safety interventions is made public and shared with decision makers to inform priorities, budgets, and updates to the Vision Zero Action Plan.

Source: Vision Zero Network, 2023

Table 2 | Example Plan Documentation

Name	Description	Safety Policies and Goals	Safety Data and Analysis	Countermeasures	VZ Core Element Link	Notes/ Opportunities for Policy/Process Refinement
CIP	Identifies 5-year list of multimodal improvements	Zero fatalities and serious injuries is stated as one of the primary goals for capital projects. Project prioritization approach includes safety criteria.	CIP projects are scored, in part, based on equity criterion. Regional High Injury Network is referenced in the document.	Separated bike lanes Speed studies Traffic calming Restriping	Project Delivery: Working to advance projects and policies for safe, equitable multimodal travel	Start tracking total funding spend on safety projects.

Step 2 – Review and Refine Benchmarks

The next step is to determine how your existing policies and program align with the Vision Zero core elements and where gaps may exist. Potential Vision Zero benchmarks, centered around the core elements of Vision Zero and the Safe System approach, have been developed as presented in **Table 3**, and provided as an excel spreadsheet, and are intended to help assess what agencies are currently doing well related to Vision Zero and where potential changes to policies, programs and practices could be considered as a part of the development of their Vision Zero Action Plan. Not all benchmarking criteria will apply to all agencies, and some agencies may wish to develop additional criteria.

A process to follow in conducting the benchmarking is provided in the next section.

Benchmarking Process

The benchmarking process is typically comprised of the following steps, each of which are described in more detail within this memorandum.

1. Identify and review relevant documents and procedures
2. Review and refine benchmarks
3. Conduct initial benchmarking by consultant team and agency staff project manager
4. Facilitate focused benchmarking discussion with stakeholders with knowledge of planning, engagement, project delivery and other elements contained within the benchmarking matrix
5. Identify opportunities for policy enhancements and barriers to change
6. Incorporate findings into Action Plan

Step 1 – Identify and Review Relevant Documents and Procedures

The first step of the benchmarking process is to **identify all relevant local policies, plans, programs, and projects that have a role in transportation safety** and conduct a review.

Documents to review may include, but are not limited to:

- Comprehensive Plan
- Transportation Plans, including active transportation plans
- Capital Improvement Program
- Design policies (multimodal, complete streets, speed, other), standards and guidelines, and land development code requirements
- Department Standard Operating Procedures

As a part of the benchmarking process, clear documentation of critical information from each plan is important. For each document reviewed, it is recommended that the following information, at a minimum, be documented. Each summary element is defined below, and an example summary is provided in **Table 2**.

Document Name: Name of document (and link to where the document can be found).

Document Description: One to three sentence description of the purpose of the document.

Goals and Policies: Documentation of what is intended to be achieved with transportation safety and supporting guidance, rules, procedures to achieve it.

Data and Analysis: Documentation of existing safety data/analysis or known challenges (if any).

Countermeasures: Documentation of proposed or programmed safety solutions to address key needs.

Vision Zero Link: How the document addresses one or more of the Vision Zero core elements (see Table 1).

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice
	The agency augments traditional crash data from police data with data from other sources, such as hospitals.			
	The agency has established an appropriate timeline to reach zero traffic fatalities.			
	The agency has established near-term and interim goals for achieving zero traffic fatalities.			
	The agency has delineated clear action items to achieve each goal.			
	A lead department or position has been established for each action item.			
	The lead agency for each action item identifies partners to help complete the action.			
	The agency has determined appropriate funding needs for each action item.			
	The agency has maintained a Vision Zero website to inform the public about the initiative's progress; this could include a link to regional resources from the agency's home page.			
	A third-party audits Vision Zero progress and reports outcomes on the website.			
Strategic Planning	Departments and staff are provided resources for safety related training and staff development.			
	Staff at multiple levels and in multiple departments are safety champions to ensure continuity when a safety champion departs.			
	Adequate policies related to equitable transportation have been formulated.			
	The agency has determined suitable performance measures to assess equitable transportation.			
	Adequate policies related to multimodal transportation have been formulated.			
	Suitable performance measures to assess multimodal transportation have been established.			
	Non-transportation policies support transportation safety, such as land use, open space, parks, etc.			
	The agency has developed policies to maintain bicycle and pedestrian facilities during construction projects that affect roadway operations.			
	The agency has developed policies to maintain bicycle and pedestrian facilities during construction projects that affect roadway operations.			
	The agency has established an efficient citizen request process and a methodology for evaluating requests.			

Table 3 | Vision Zero Benchmarks

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice
Category: Leadership and Commitment				
Public, High-Level, and Ongoing Commitment	Key elected officials and leaders have made a public commitment to the goal of eliminating traffic fatalities and serious injuries within a specific timeframe.			
	Key elected officials are consistently engaged in prioritizing safety via collaborative efforts.			
	Key stakeholders have made a clear, public statement in support of Vision Zero efforts and timeline.			
	An interdepartmental safety working group regularly coordinates with leadership to discuss progress.			
	Public meetings and workshops are hosted regularly and at times and locations convenient for the community.			
Authentic Engagement	The agency conducts outreach to specific communities, interests, and populations.			
	The community, including historically disadvantaged communities, trust and feel engaged by the agency.			
	The stakeholder group is representative of the community at large.			
	The agency engages regularly with community-based organizations and leaders.			
	The agency recognizes the value of community input by providing grant opportunities made in partnership with community-based organizations and nonprofits supporting Vision Zero work.			
	Crash data is collected regularly and used to inform decisions before plan development.			

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice
Context Appropriate Speed	The agency uses specific rules to set speed limits near schools and areas with a high number of vulnerable road users.			
	Appropriate procedures are followed to enforce speed limits.			
	There are ongoing education programs/campaigns related to traffic speeds.			
	The agency follows proper methods to modify existing roadways to achieve safe speeds.			
	The agency follows proper methods to modify existing roadways to achieve safe speeds.			
Category: Data Driven Approach, Transparency and Accountability				
Equity Focused Analysis and Programs	The agency has developed effective programs and strategies to help people without housing, and low-income individuals access jobs and services.			
	Equity is a factor in project prioritization.			
	Equity is reflected in the agency's vision and goals for safety.			
	Geographic inequity is considered in the agency's data analysis.			
	The agency reports safety outcomes demographically.			
	The police department policy for traffic stops consider equity			
	Data on distribution of stops and ticketing is analyzed demographically.			
	The agency has formulated effective policies to mitigate the disproportionate impact of fines for minor violations on low-income individuals.			
	Important information and education materials are provided in common languages spoken by residents whose first language is not English.			
	The agency uses data to identify and systematically address trends and risk factors to prevent severe collisions.			
Proactive / Systemic	Common collision patterns have been matched with adequate countermeasures.			
	The agency works to continuously improve the accuracy of crash reports.			
	The agency uses the High Injury Network (HIN) in project prioritization.			

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice
Project Delivery	Adequate policies related to transportation safety have been formulated.			
	The agency has determined suitable performance measures to assess transportation safety.			
	Transportation safety is incorporated into every Capital Improvement Project to the extent applicable.			
	FHWA's proven countermeasures are implemented in projects.			
	The agency implements NHTSA's Countermeasures that Work.			
	The agency shares project outcomes and effectiveness with the public.			
	The agency provides funding for projects that reduce fatal and serious injury collisions.			
	There is sufficient funding allocated for future projects that may reduce fatal and serious injury collisions.			
	The agency applies for grants to fund safety projects from traditional sources.			
	The agency applies for grants to fund safety projects from non-traditional sources.			
	Projects incentivizing transit, biking, walking, and carpooling over single-occupant vehicles are prioritized and implemented.			
Category: Safe Roadways and Safe Speeds				
Complete Streets for All	The agency has allocated adequate funding for complete streets projects.			
	The agency has a complete streets plan.			
	Complete Street elements have been incorporated into Comprehensive Plans and other planning documents.			
	Vulnerable users are prioritized in project planning and implementation.			
	The agency actively coordinates with neighboring municipalities to provide connections for people walking and biking.			
	Appropriate practices are followed to set speed limits based on context.			

Table 4 | Example of Populating the Benchmarks

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice	Notes
Project Delivery	The agency has determined suitable performance measures to assess transportation safety.		x		The Comprehensive Plan includes performance measures for severe crashes.
Project Delivery	FHWA's proven countermeasures are implemented in projects.		x		The CIP includes some of the FHWA proven countermeasures including bike lanes and road diets.
Proactive / Systemic	The agency uses the High Injury Network (HIN) in project prioritization.	x			A HIN will be developed as part of the Action Plan and incorporated into future project prioritization.

Stakeholder Workshop: To obtain feedback and input on the benchmarking assessment matrix, a virtual or in-person stakeholder workshop can be held. The goals for the workshop are to:

- Provide education on a Vision Zero safety program and benchmarks.
- Obtain feedback on the already populated benchmarks (based on the inputs from the plan review).
- Finalize the level of institutionalization for all the benchmarks.
- Identify gaps and the associated challenges in the current safety program.

The workshop can be an hour and a half in length and follow this format:

- Overview of safety planning with a focus on Vision Zero and the Safe System Approach. (5 minutes)
- Describe the 10 core Vision Zero elements. (5 minutes)
- Break into three groups – the groups are organized around the Vision Zero categories of 1) Leadership and Commitment 2) Safe Roads and Speeds 3) Data Driven Approach, Transparency and Accountability. Participants will rotate through three groups and spend 25 minutes in each one.

  Facilitators will capture the following information:

  - Confirm the x's are in the proper institutionalization categories for each benchmark (2) minutes)
  - For any benchmarks without an "x" obtain feedback from the group (5 minutes)
  - For the benchmarks marked as "occasional" or "not a current practice," discuss why. Obtain feedback on the challenges and solutions. These conversations will form the basis of policy recommendations to be included in the Action Plan (18 minutes)

Strategy	Benchmarks	Not a Current Practice	Occasional Practice	Institutional Practice
Reactive / Hot Spot	A demographic analysis of the HIN has been conducted.			
	The agency routinely monitors and reports collision data to the public.			
Evaluation and Adjustment	Intersection design and control decisions are evaluated to reduce kinetic energy transfer to vulnerable users.			
	Demonstration projects are used to test the strategies and get feedback from the public.			
	The agency has a process to address underreporting of collisions, especially for vulnerable road users.			

Steps 3 through 5 – Using the Benchmarks

The following describes how to use the Vision Zero benchmarks to assess your agency's safety program.

Identify Stakeholders: Determine who participates in the benchmarking assessment. This can be done with the Task Force, Steering Committee or Working Group assembled to develop the local agency safety plan, or with a subset of stakeholders who represent transportation and safety interests and have knowledge about the agency's practices. At a minimum, participants should include representatives from Engineering, Planning/Community Development, and Enforcement.

Review and Customize Benchmarks: The benchmarks listed for each of the Vision Zero core elements represent strategies to make improvements and adjustments to a safety program. It is recommended to consider all of these when assessing a safety program, but not required. In coordination with the review committee, review the benchmarks to determine which should be included in the benchmarking assessment, which should not, and any customizations to the language. The strategies provide a starting point but can be revised based on the goals of your safety program.

Populate the Benchmarks: Using the results of the plan review, the consultant team should complete an initial pass through the Table 3 matrices based on their review of various plans and documents, as well as initial discissions with agency staff, and populate and "x" in the appropriate column, denoting the level of institutionalization. A column documenting rationale or notes can be added. In addition to using the plan review to populate the matrix, a discussion with the local agency project manager can be another resource to populate the level of institutionalization columns. An example is summarized in **Table 4.**

Step 6 – Develop the Action Plan

Based on the benchmarking effort and findings, actions and next steps can be identified to enhance the local safety program.

Drawing from the challenges and ideas generated at the workshop (or interviews), the consultant team will develop a set of next steps to be completed as part of the safety planning process or be included in the plan for further consideration. **Table 6** summarizes how to develop the next steps (in matrix format) related to identified policy, programmatic, and policy changes.

Table 6 | Example Action Plan Template

Strategy	Actions	Near Term Action	Action to be Included in Plan	Longer-Term Consideration
Project Delivery	Make better use of FHWA countermeasure resources	x	x	
Project Delivery	Develop policy to consider FHWA proven countermeasures first in project prioritization		x	x
Project Delivery	Develop metrics to evaluate speed-related severe crashes	x	x	
Proactive / Systemic	Develop HIN and incorporate into project prioritization criteria.	x	x	

Have any questions?

If you have questions related to the policy review, or if you have an approach not included in the list, please contact Mighk Wilson at mwilson@metroplanorlando.org.

Table 5 summarizes how to obtain the information. In total this portion of the agenda will be 75 minutes.

- Wrap Up. (5 minutes)

Table 5 | Example of Capturing Feedback on Benchmarks

Strategy	Benchmarks	Status	Notes	Challenges	Ideas
Project Delivery	The agency has determined suitable performance measures to assess transportation safety.	Occasional Practice	The Comprehensive Plan includes performance measures for severe crashes.	Do not have staff resources to track performance measures beyond severe crashes.	Speed is an emphasis area so develop metrics to track this issue. Coordinate with FDOT and MetroPlan Orlando to track outcomes on regional roadways.
Project Delivery	FHWA's proven countermeasures are implemented in projects.	Occasional Practice	The CIP includes some of the FHWA proven countermeasures including bike lanes and road diets.	Not all of the proven countermeasures have political support.	Identify which of the other proven countermeasures could be implemented locally; consider educating elected officials and the public.
Proactive / Systemic	The agency uses the High Injury Network (HIN) in project prioritization.	Not a Current Practice	A HIN will be developed as part of the Action Plan and incorporated into future project prioritization.	May not have resources to periodically update HIN.	Incorporate HIN and safety analysis into Comprehensive Plan Updates and other planning processes.

Alternative: If a stakeholder workshop is not possible, focused interviews with key stakeholders can be held to obtain input on the benchmarks, areas of success, and gaps/challenges. Identify key stakeholders and set up individual interviews. Provide background on the benchmarks and walk through each one to obtain their input on level of institutionalization. Use the successes and challenges tabs, summarized in Table 5 to capture feedback.

APPENDICES PART 2

Appendix Part 2E: HIN Corridor Fact Sheets & Countermeasures

CORRIDOR 1

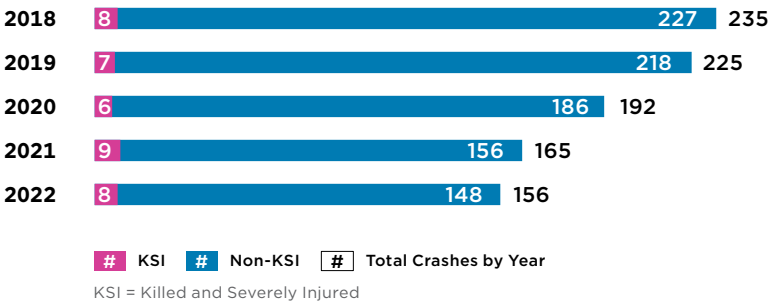
JOHN YOUNG PARKWAY

from E Colonial Drive (SR 50) to Orange Center Blvd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
973	9	29	299	636
933 *Vehicle*	**4**	**21**	**274**	**634**
6 *Bike*			5	1
24 *Pedestrian*	5	5	14	
10 *Motorcycle*		3	6	1

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	4	409	**413**
LEFT TURN	13	165	**178**
SIDESWIPE	-	166	**166**
OTHER	6	60	**66**
ANGLE	-	46	**46**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	3	243	246
FOLLOWED TOO CLOSELY	2	108	110
FAILED TO YIELD RIGHT-OF-WAY	7	145	152
FAILED TO KEEP IN PROPER LANE	-	57	57
OTHER CONTRIBUTING ACTION	7	69	76
HIT AND RUN	7	161	**168**
ALCOHOL INVOLVED	2	14	**16**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORLANDO

FUNCTIONAL FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

PRINCIPAL ARTERIAL (C3C)

CORRIDOR LENGTH

1.45 Miles

AVERAGE POSTED SPEED

42.5 mph

AVERAGE PREVAILING SPEED

50.5 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

89%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

LINK 20, 25, 303 / 21,100

TRAVEL LANES / MEDIAN TYPE

6 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	13	650	663
DUSK-DAWN	1	48	49
NIGHT	24	237	261
LIGHTING CONDITION			
LIGHTED	21	221	242
NOT LIGHTED	3	14	17
ROAD SURFACE CONDITION			
DRY	30	835	865
WET	8	100	108

KSI CRASHES BY LOCATION

CORRIDOR 1

JOHN YOUNG PARKWAY

from E Colonial Drive (SR 50) to Orange Center Blvd.

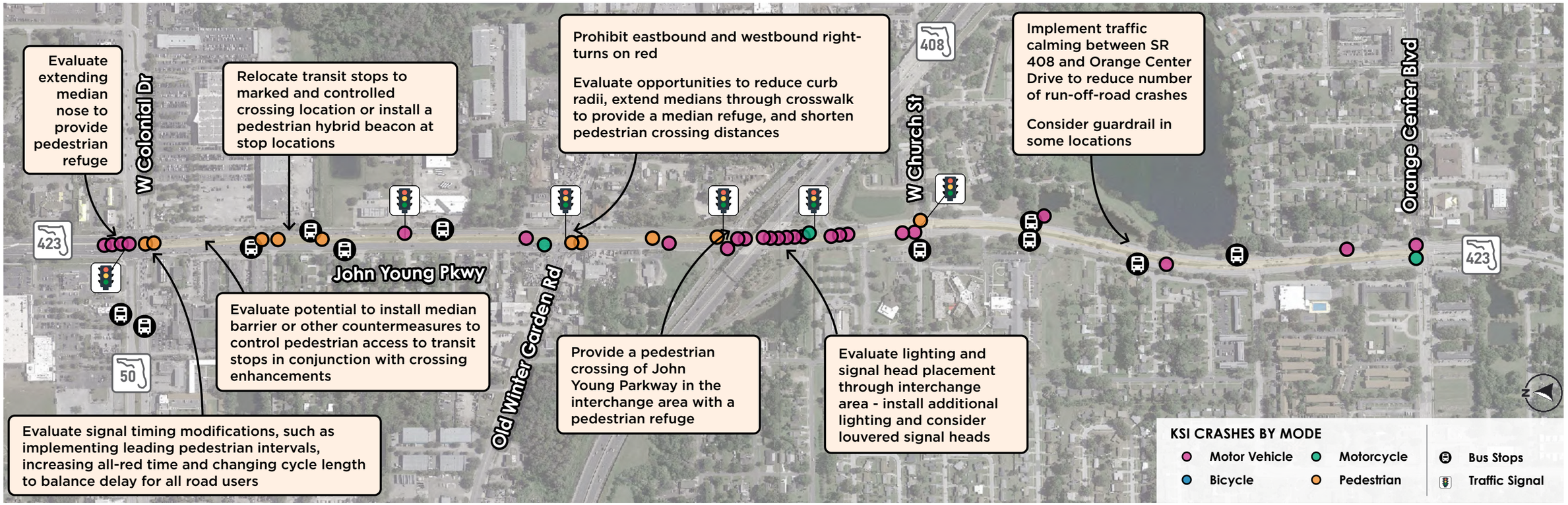
VISION ZERO

Planned Improvements: FDOT 449763 (from E W Expy to W Colonial Dr) - ITS communication system project currently under construction.

MTP Project 2160 (from W Church St to Orange Center Blvd) Complete Streets / Safety / Ops project from Orange Co. Transportation Initiative (2020) This is an unfunded need in the 2045 MTP.

TARGET SPEED

35 MPH



Prevailing travel speeds on corridor are significantly higher than posted speed limit and significant speed management, including retiming traffic signals target speed progress and potentially installing speed table, is needed to reduce travel speeds to align with current posted speed limit and desired target speed of 35 mph (lowest allowable for the context classification). Due to high number of night-time crashes as compared to the regional average, lighting along the corridor should be evaluated. Other specific improvements noted on map.

Project Prioritization Score: **78.75**

Planning Level Cost: **$659,000** (does not include cost of projects under construction or identified in the MTP).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 2

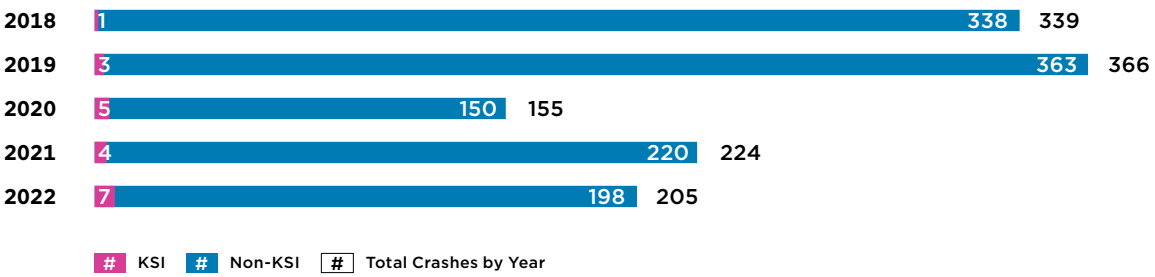
SAND LAKE ROAD

from Turkey Lake Rd. to Universal Blvd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

1,289	-	20	330	939
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
1,271 *Vehicle*		**18**	**318**	**935**
1 *Bike*			1	
11 *Pedestrian*		2	9	
6 *Motorcycle*			2	4

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	5	376	**381**
LEFT TURN	6	293	**299**
SIDESWIPE	2	283	**285**
OTHER	2	112	**114**
ANGLE	2	58	**60**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	7	376	383
FOLLOWED TOO CLOSELY	-	22	22
FAILED TO YIELD RIGHT-OF-WAY	3	266	269
FAILED TO KEEP IN PROPER LANE	2	94	96
OTHER CONTRIBUTING ACTION	-	118	118
HIT AND RUN	3	184	**187**
ALCOHOL INVOLVED	1	9	**10**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORLANDO / ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MAJOR COLLECTOR (C3C)

CORRIDOR LENGTH

0.74 Miles

AVERAGE POSTED SPEED

40.4 mph

AVERAGE PREVAILING SPEED

42.7 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

100%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **304** / **11,600**

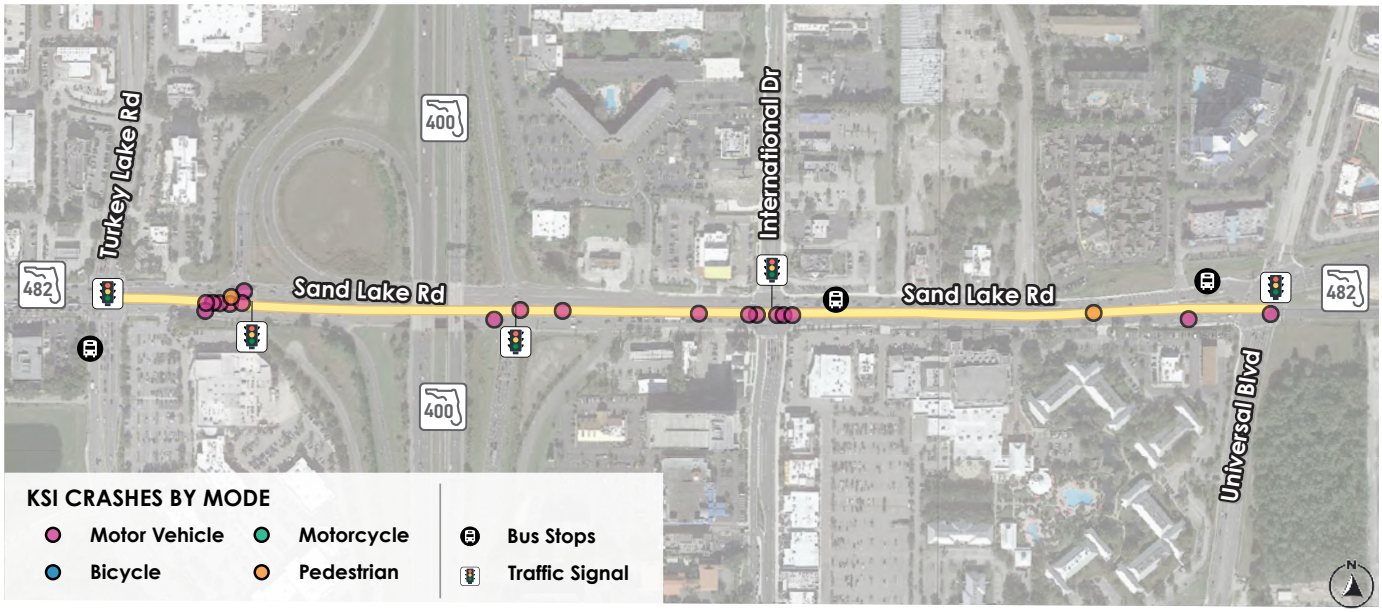
TRAVEL LANES / MEDIAN TYPE

6 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	9	661	670
DUSK-DAWN	1	74	75
NIGHT	10	534	544
LIGHTING CONDITION			
LIGHTED	8	502	510
NOT LIGHTED	2	31	33
ROAD SURFACE CONDITION			
DRY	20	1,158	1,178
WET	-	110	110

KSI CRASHES BY LOCATION



CORRIDOR 2

SAND LAKE ROAD

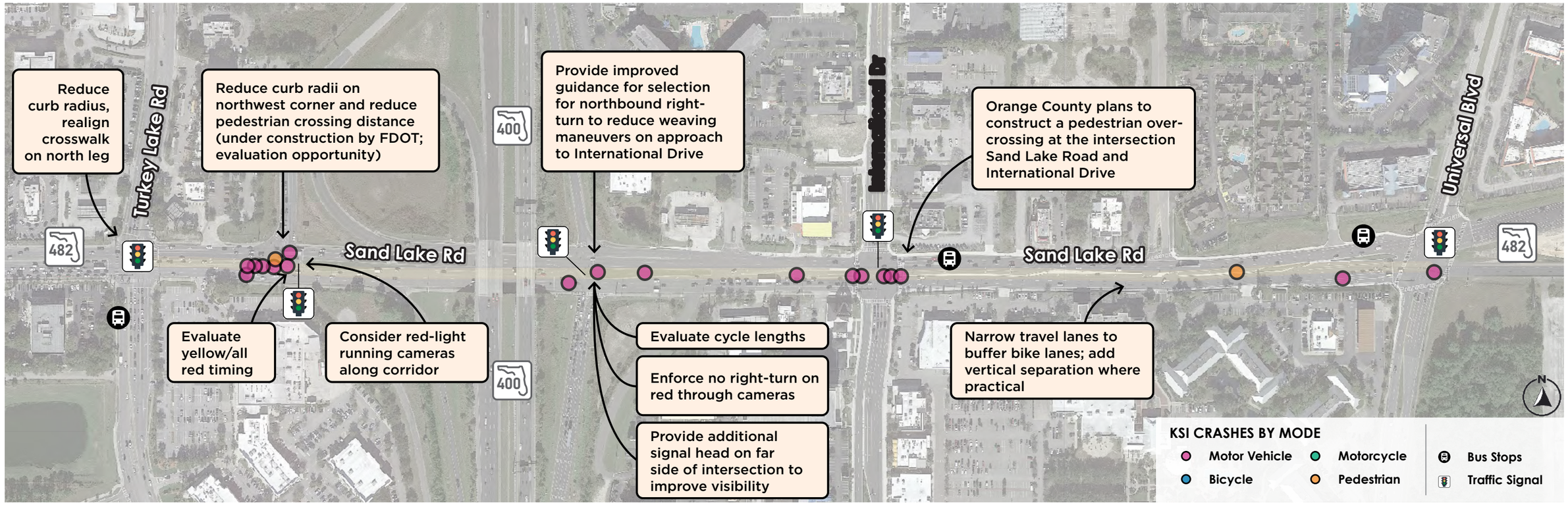
from Turkey Lake Rd. to Universal Blvd.

VISION ZERO

Planned Improvements: 407143 (from I-4 SB Ramps to Universal Blvd), 439880 (from I-4 SB Ramps to Universal Blvd) - Added lanes and reconstruction, ped lighting
MTP Project 2068 - Operational / Safety from Orange Co. Transportation Initiative (2020), Unfunded Need.
TIP Project: 444315 - Interchange improvement adopted (from Turkey Lake Rd to International Dr). Fully funded improvement to convert interchange to a diverging diamond configuration.

TARGET SPEED

35 MPH



There is a fully funded project to convert the interchange to a diverging diamond configuration. Low-cost quick build improvements that could be implemented to improve safety until that project can be completed include red light running cameras as intersections on corridor are regional hot spot for red light running, additional signage at the northbound off-ramp to direct drivers to appropriate lane, and retiming traffic signals for speed management. Interchange design should consider a long-term target speed of 35 mph. Spot improvements at Turkey Lake Road and on the corridor east of International Boulevard are noted on the map.

Project Prioritization Score: **92.5**

Planning Level Cost: **$350,000**
(does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 3

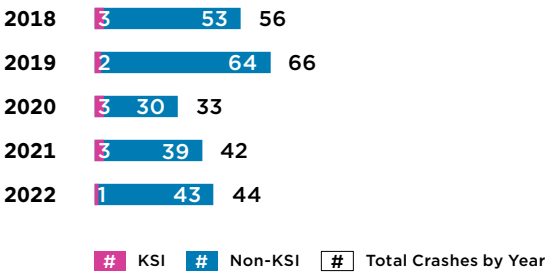
CHICKASAW TRAIL

from Frontage Rd. to Lake Underhill Rd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
241	3	9	85	144
236 *Vehicle*	**2**	**8**	**82**	**144**
2 *Bike*			2	
- *Pedestrian*				
3 *Motorcycle*	11	1	1	

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	4	70	**74**
LEFT TURN	5	77	**82**
SIDESWIPE	-	21	**21**
OTHER	-	20	**20**
ANGLE	3	11	**14**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	4	68	72
FOLLOWED TOO CLOSELY	-	2	2
FAILED TO YIELD RIGHT-OF-WAY	-	52	52
FAILED TO KEEP IN PROPER LANE	-	11	11
OTHER CONTRIBUTING ACTION	2	17	19
HIT AND RUN	1	37	**38**
ALCOHOL INVOLVED	1	4	**5**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MAJOR COLLECTOR

CORRIDOR LENGTH

0.46 Miles

AVERAGE POSTED SPEED

40 mph

AVERAGE PREVAILING SPEED

49.5 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

9%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **15** / **15,000**

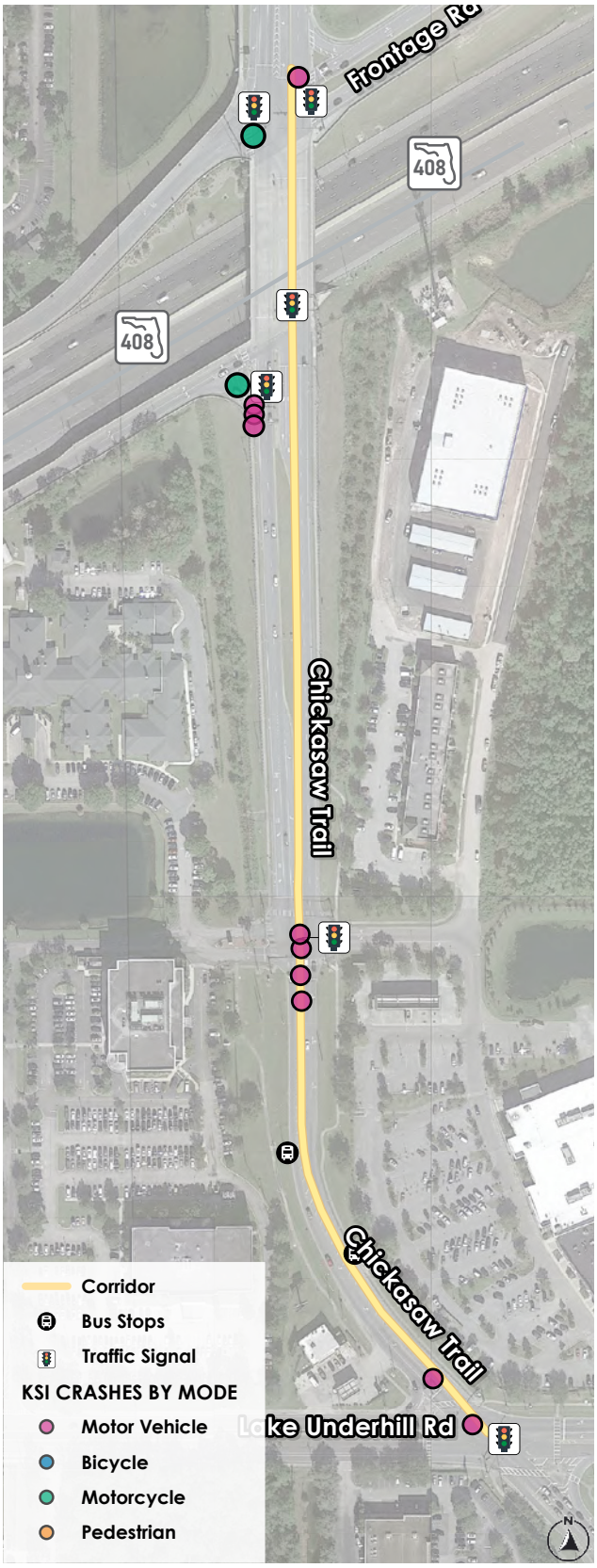
TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	9	145	154
DUSK-DAWN	1	9	10
NIGHT	2	75	77
LIGHTING CONDITION			
LIGHTED	2	69	71
NOT LIGHTED	-	6	6
ROAD SURFACE CONDITION			
DRY	12	198	210
WET	-	31	31

KSI CRASHES BY LOCATION



CORRIDOR 3

CHICKASAW TRAIL

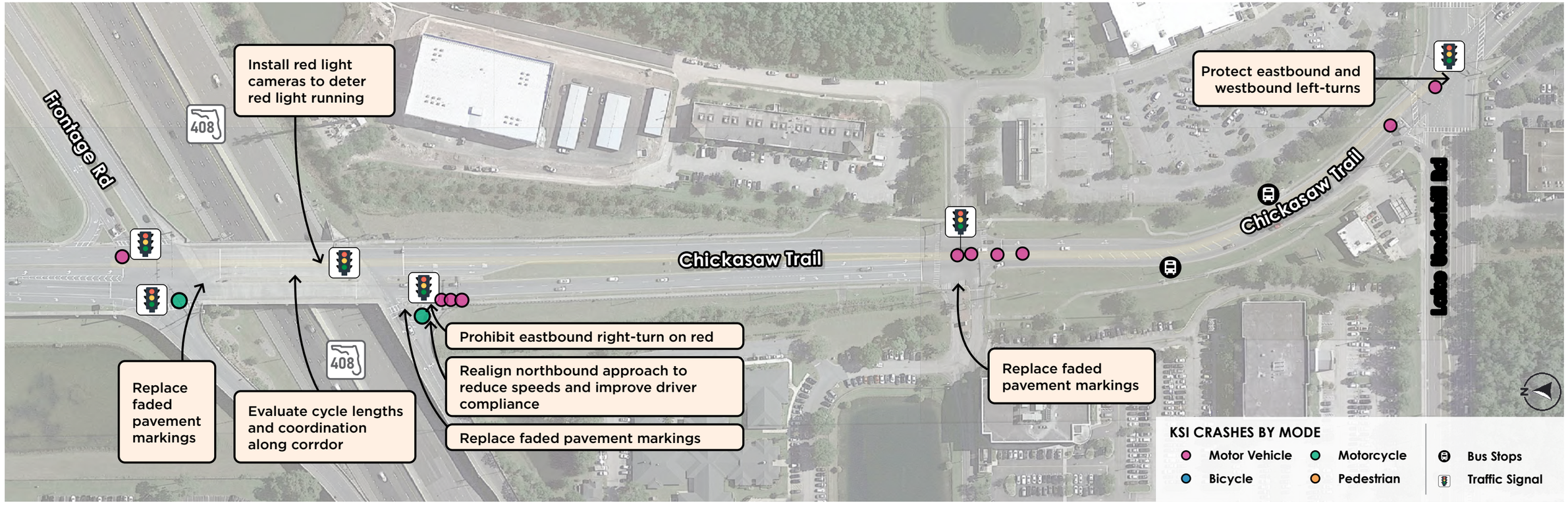
from Frontage Rd. to Lake Underhill Rd.

VISION ZERO

MTP Project 7025 (from William C Coleman Dr to Lake Underhill Road)- Operational project from Orange Co. Transportation Initiative (2020), Fully Funded.

TARGET SPEED

35 MPH



Prevailing travel speeds on corridor are significantly higher than posted speed limit and red light running is a contributing factor in numerous KSI crashes. As a part of the Fully Funded MTP project, evaluate speed management and traffic signal timing strategies in addition to other improvements noted on the map.

Project Prioritization Score: **92.5**

Planning Level Cost: **$236,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 4

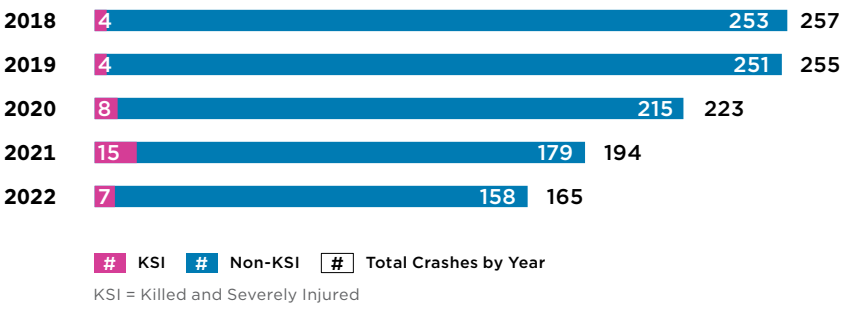
HIAWASSE ROAD

from Silver Star Rd. to Colonial Drive (SR 50)

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

1,094	4	34	385	671
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
1,060 *Vehicle*	**1**	**24**	**367**	**668**
5 *Bike*		1	4	
22 *Pedestrian*	2	9	11	
7 *Motorcycle*	1		3	3

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	10	489	**499**
LEFT TURN	7	149	**156**
SIDESWIPE	-	153	**153**
OTHER	2	71	**73**
ANGLE	4	57	**61**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	9	434	443
FOLLOWED TOO CLOSELY	-	3	3
FAILED TO YIELD RIGHT-OF-WAY	3	158	161
FAILED TO KEEP IN PROPER LANE	1	72	73
OTHER CONTRIBUTING ACTION	3	87	90
HIT AND RUN	8	221	**229**
ALCOHOL INVOLVED	1	9	**10**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MINOR ARTERIAL

CORRIDOR LENGTH

1.76 Miles

AVERAGE POSTED SPEED

45 mph

AVERAGE PREVAILING SPEED

56 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

100%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

LINK **37** / **482,700**

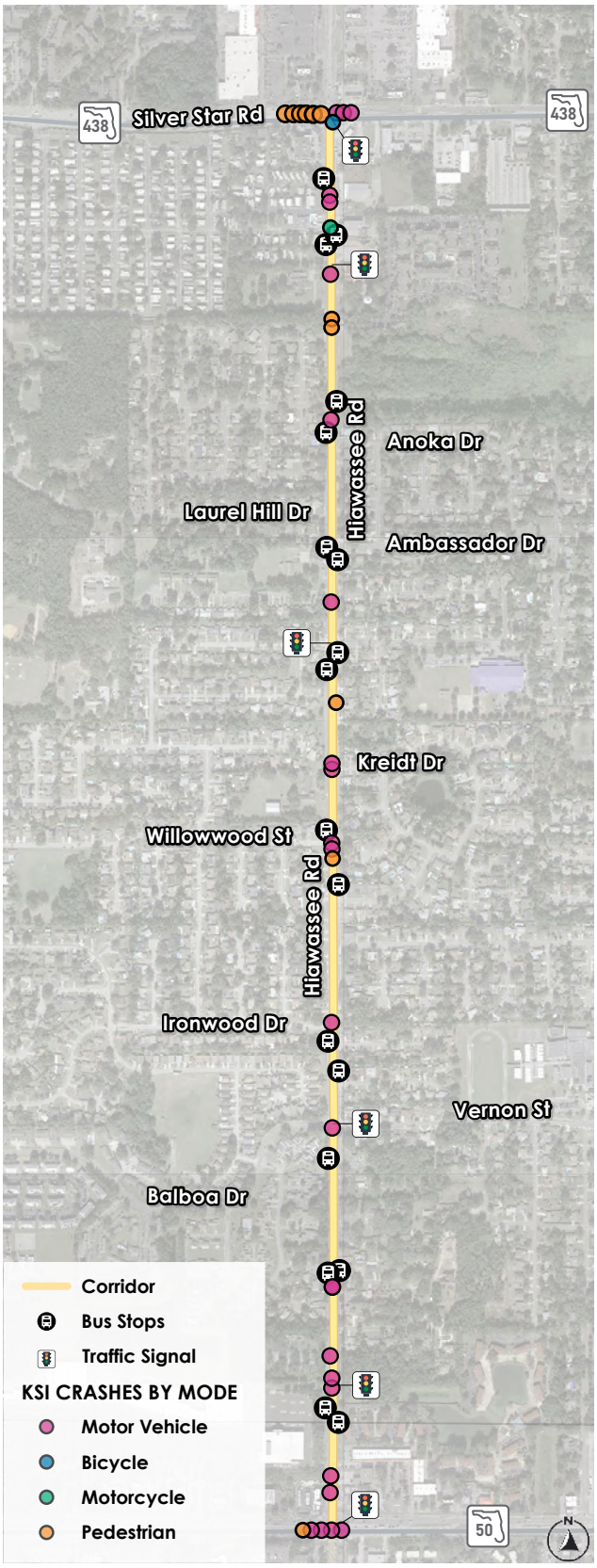
TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	24	754	778
DUSK-DAWN	-	50	50
NIGHT	14	252	266
LIGHTING CONDITION			
LIGHTED	13	242	255
NOT LIGHTED	1	9	10
ROAD SURFACE CONDITION			
DRY	32	896	928
WET	6	156	162

KSI CRASHES BY LOCATION



CORRIDOR 4

HIAWASSEE ROAD

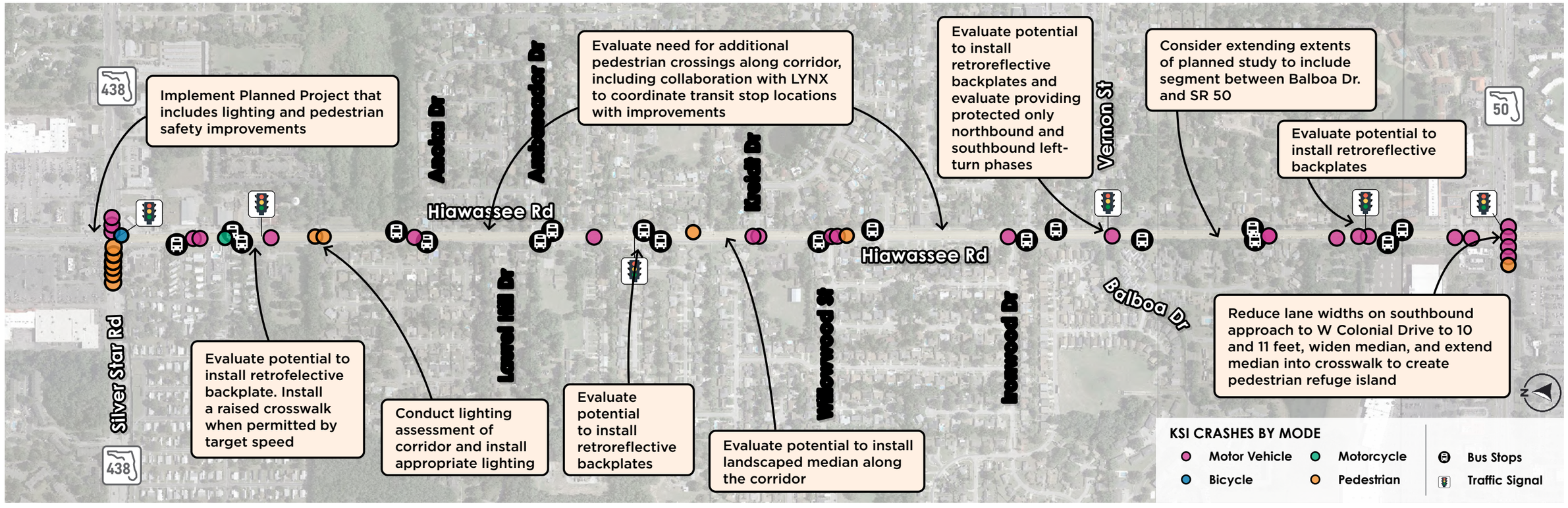
from Silver Star Rd. to Colonial Drive (SR 50)

VISION ZERO

Improvements identified on portion of corridor in 2045 MTP that are fully funded as of December 2022 including pedestrian lighting and safety project at Silver Star Road and a pedestrian lighting, lane addition and reconstruction at W Colonial Drive (MTP Projects 2020, 2132, and 7222) MTP project 7223 extends from SR 50 to Colonial Drive and is an unfunded operational need. A Pedestrian/Bicycle Safety Study for the segment between Silver Star Road and Balboa Drive is getting underway (as of July 2024) and will be completed in 2025. FDOT Project 442390-2 and FDOT Project 442390-3 will improve lighting at the intersections of SR 438 and SR 50.

TARGET SPEED

35 MPH



Safety improvements have recently been implemented along the corridor, including access management. Lighting does not appear to have been consistently upgraded along the corridor, especially on the north side of the street. After an evaluation of recently completed improvement, consider additional improvements such as raised crosswalks and RRFBs at marked crossings along the corridor and relocating select transit stops to be closer to marked and controlled crossings. This corridor experiences a high level of transit ridership, and improvements should prioritize safe access to transit stops. Significant speed management strategies are needed to lower prevailing speeds which are currently 10 mph over the posted speed limit of 40 mph. Not all traffic signals have retroreflective backplates and there are opportunities to time signals for speed progression along the corridor.

Project Prioritization Score: **96.25**

Planning Level Cost: **$348,000** (does not include the cost of planned improvements). Cost could increase by approximately **$2.4 million** if a landscaped median is provided along the corridor.

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 5

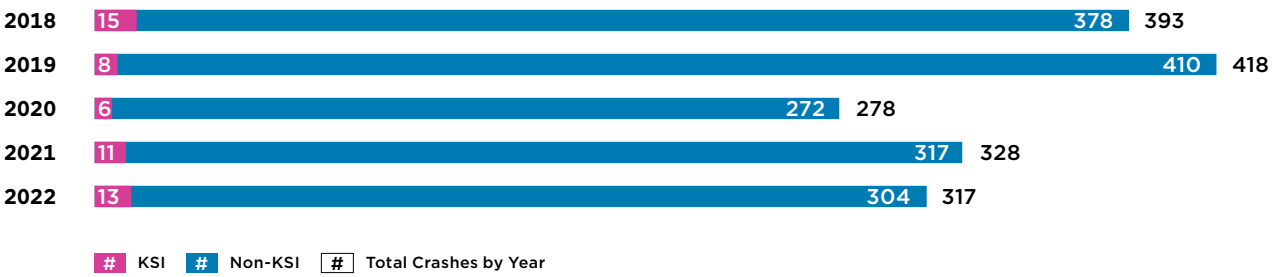
OAK RIDGE ROAD

from Millenia Blvd. to S. Orange Blossom Trail

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

1,734	9	44	572	1,109
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
1,655 *Vehicle*	**1**	**29**	**528**	**1,097**
17 *Bike*	2	3	9	3
46 *Pedestrian*	3	10	29	4
16 *Motorcycle*	3	2	6	5

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	9	634	**643**
LEFT TURN	17	409	**426**
SIDESWIPE	-	203	**203**
OTHER	3	128	**131**
ANGLE	3	94	**97**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	8	528	536
FOLLOWED TOO CLOSELY	-	28	28
FAILED TO YIELD RIGHT-OF-WAY	16	437	453
FAILED TO KEEP IN PROPER LANE	1	88	89
OTHER CONTRIBUTING ACTION	3	113	116
HIT AND RUN	10	370	**380**
ALCOHOL INVOLVED	1	22	**23**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORLANDO / ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MAJOR COLLECTOR

CORRIDOR LENGTH

2.78 Miles

AVERAGE POSTED SPEED

39.6 mph

AVERAGE PREVAILING SPEED

50.7 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

100%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **8, 42, 304** / **1,146,300**

TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved, Grass, Brick, and None**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	27	1,056	1,083
DUSK-DAWN	5	115	120
NIGHT	21	510	531
LIGHTING CONDITION			
LIGHTED	19	475	494
NOT LIGHTED	2	33	35
ROAD SURFACE CONDITION			
DRY	50	1,523	1,573
WET	3	158	161

KSI CRASHES BY LOCATION

KSI CRASHES BY MODE

- Motor Vehicle
- Motorcycle
- Bus Stops
- Bicycle
- Pedestrian
- Traffic Signal

CORRIDOR 5

OAK RIDGE ROAD

from Millenia Blvd. to S. Orange Blossom Trail

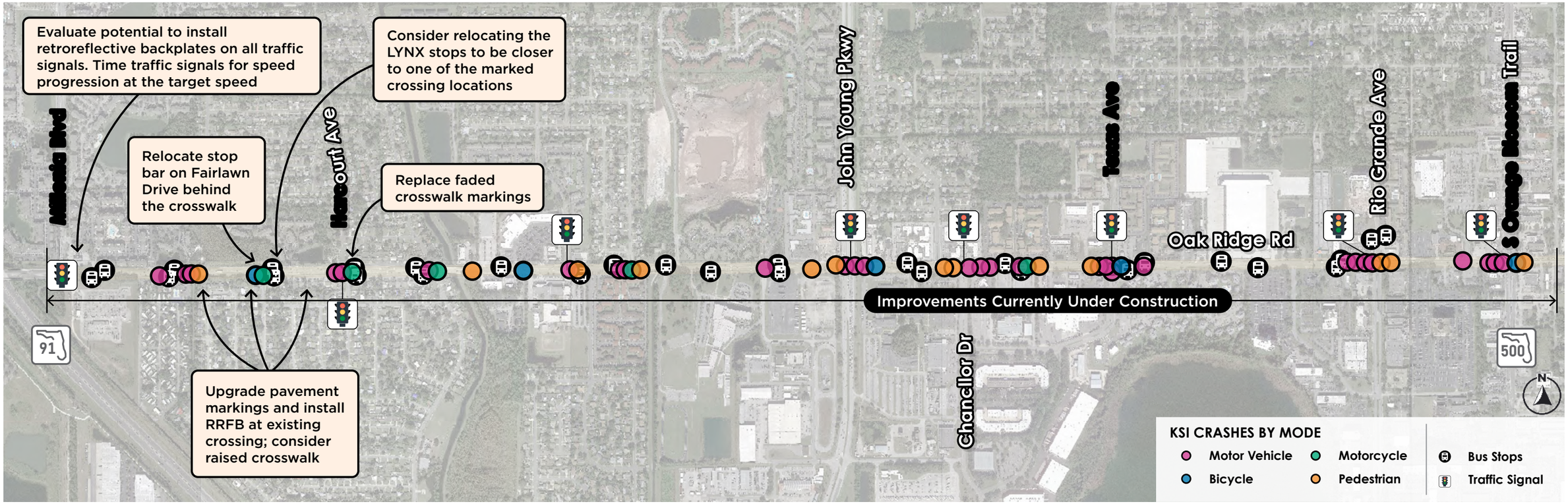
VISION ZERO

Improvements are currently under construction by Orange County. This corridor should be monitored to determine the effectiveness of the improvements, and additional improvements implemented as needed.

FDOT Project 449403-1 includes pedestrian safety improvements at John Young Parkway.

TARGET SPEED

35 MPH



A recent resurfacing project along the corridor installed high-visibility crosswalks, provided enhancements to improve ADA accessibility, and added other bicycle and pedestrian safety improvements. There are still opportunities to improve the bicycle and pedestrian experience by reducing speeds. Significant speed management strategies are needed to lower speeds to a target speed of 35 mph as prevailing speeds are around 53 mph. Not all traffic signals have retroreflective backplates and there are opportunities to time signals for speed progression along the corridor.

LYNX has also identified this corridor as a key transit corridor in their long range plans, and future improvements should incorporate transit enhancements.

Project Prioritization Score: **92.5**

Planning Level Cost: **$406,000** (does not include the cost of improvements under construction or additionally planned projects).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 6

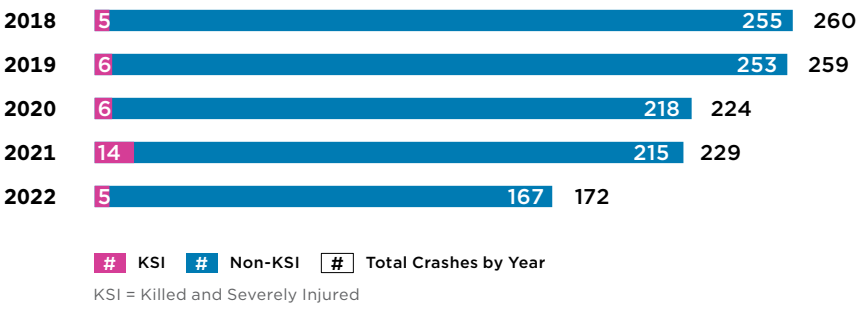
KIRKMAN ROAD (SR 435)

from Colonial Dr. (SR 50) to Raleigh St.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

1,144	5	31	343	765
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
1,112 *Vehicle*	**3**	**21**	**328**	**760**
4 *Bike*		3	1	
12 *Pedestrian*	2	3	6	1
16 *Motorcycle*		4	8	4

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	9	581	**590**
LEFT TURN	6	81	**87**
SIDESWIPE	1	182	**183**
OTHER	5	93	**98**
ANGLE	4	53	**57**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	12	426	438
FOLLOWED TOO CLOSELY	-	90	90
FAILED TO YIELD RIGHT-OF-WAY	5	99	104
FAILED TO KEEP IN PROPER LANE	-	69	69
OTHER CONTRIBUTING ACTION	3	72	75
HIT AND RUN	4	210	**214**
ALCOHOL INVOLVED	2	10	**12**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORLANDO / ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

PRINCIPAL ARTERIAL (C3C)

CORRIDOR LENGTH

1.7 Miles

AVERAGE POSTED SPEED

46.3 mph

AVERAGE PREVAILING SPEED

53.4 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

100%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **37, 301** / **84,500**

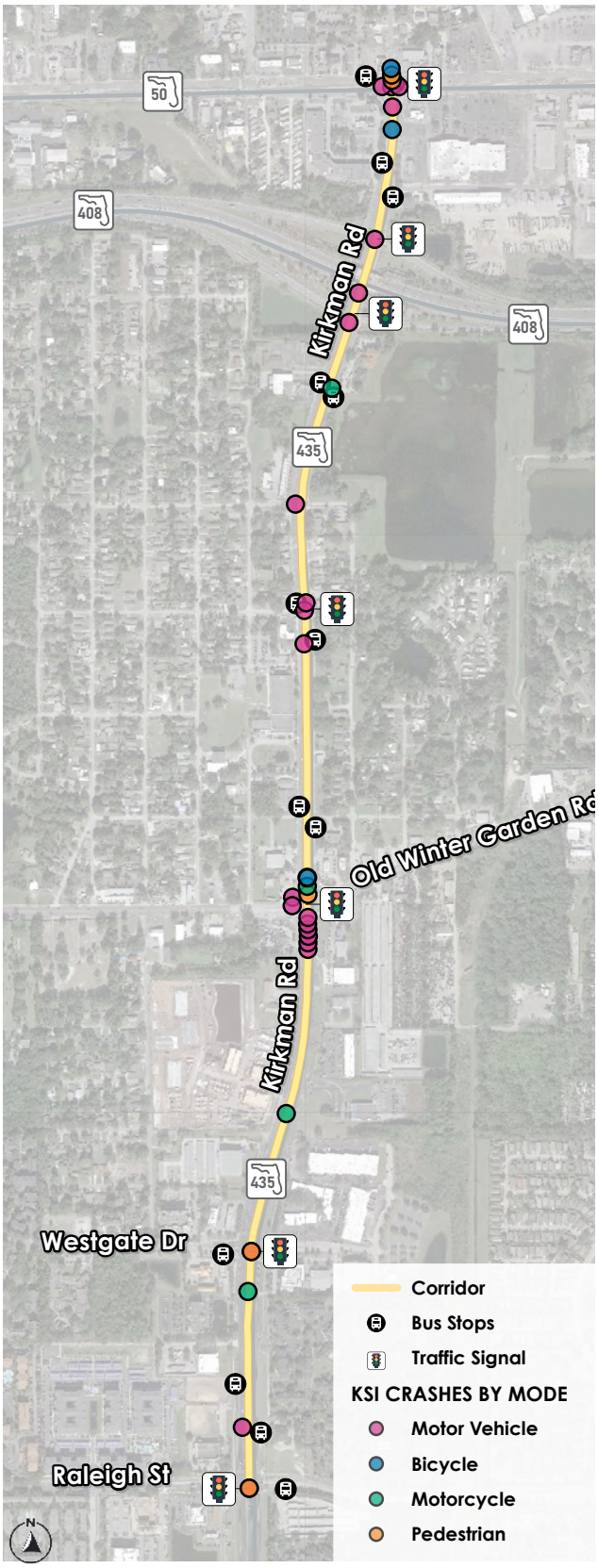
TRAVEL LANES / MEDIAN TYPE

6 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	15	769	784
DUSK-DAWN	3	50	53
NIGHT	18	289	307
LIGHTING CONDITION			
LIGHTED	17	272	289
NOT LIGHTED	1	15	16
ROAD SURFACE CONDITION			
DRY	32	972	1,004
WET	4	136	140

KSI CRASHES BY LOCATION



CORRIDOR 6

KIRKMAN ROAD (SR 435)

from Colonial Dr. (SR 50) to Raleigh St.

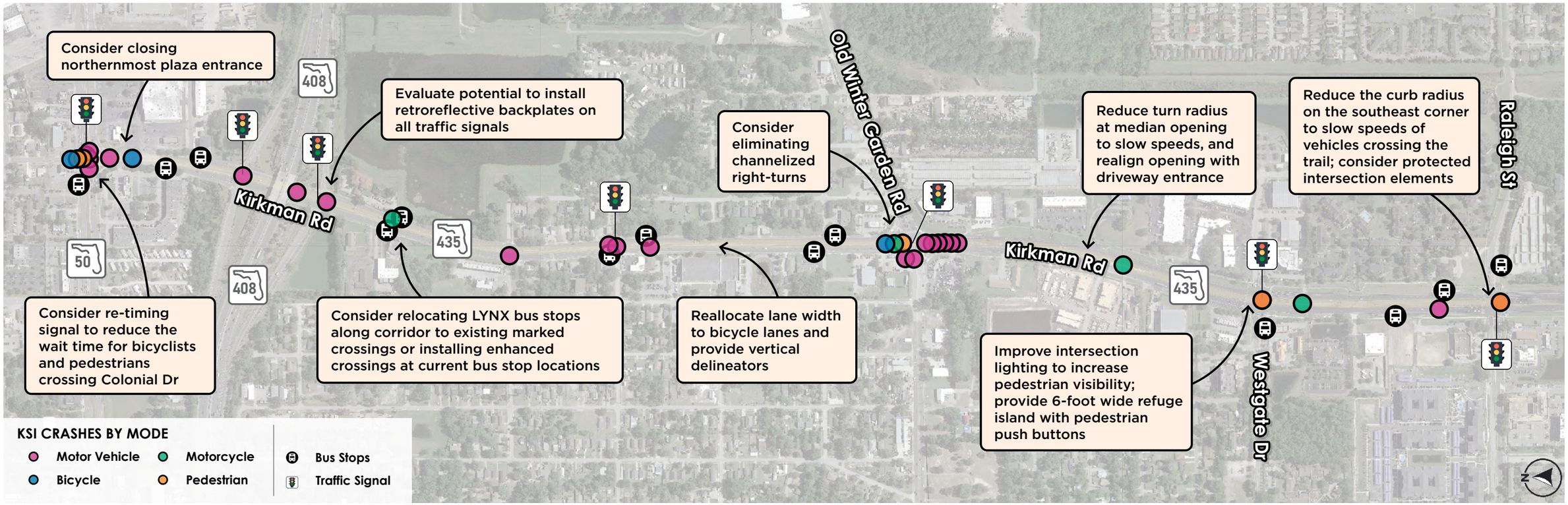
VISION ZERO

As of December of 2023, two safety projects (MTP project 2053 PPL project 451246) and an ITS project (MTP project 2159) are fully funded for portions of the corridor. There is also an unfunded plan to extend the Shingle Creek Trail from Raleigh Street to Old Winter Garden Road (MTP project 5076).

FDOT Projects include 448756-1 LAP: Shingle Creek Kirkman Trail from Old Winter Garden Rd to Raleigh St and 442390-3 Orange County Pedestrian Lighting Bundle.

TARGET SPEED

35 MPH



FDOT is currently implementing a resurfacing project on the corridor that includes bicycle and pedestrian safety improvements. The project is scheduled for completion in Fall 2024. The average prevailing speed on the corridor is almost 20 mph higher than the average posted speed and retiming traffic signals for speed management should also be considered.

LYNX has also identified this corridor as a key transit corridor in their long range plans, and future improvements should incorporate transit enhancements.

Project Prioritization Score: **87.5**

Planning Level Cost: **$1,200,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 7

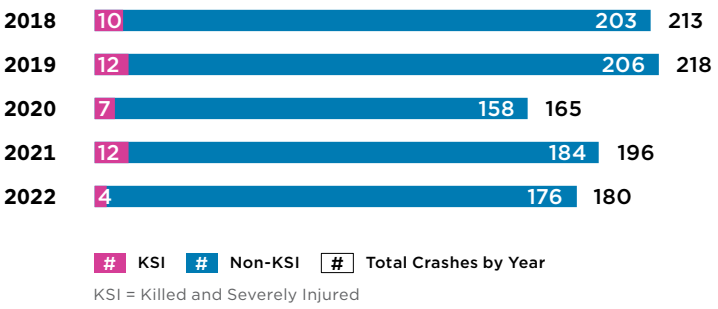
S GOLDENROD ROAD (SR 551)

from E Colonial Dr. (SR 50) to Lake Underhill Rd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

972	7	38	317	610
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
933 *Vehicle*	**2**	**29**	**293**	**609**
9 *Bike*	1	1	6	1
8 *Pedestrian*	2	1	5	
22 *Motorcycle*	2	7	13	

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	11	427	**438**
LEFT TURN	17	157	**174**
SIDESWIPE	1	128	**129**
OTHER	2	67	**69**
ANGLE	5	50	**55**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	13	400	413
FOLLOWED TOO CLOSELY	-	3	3
FAILED TO YIELD RIGHT-OF-WAY	14	151	165
FAILED TO KEEP IN PROPER LANE	3	53	56
OTHER CONTRIBUTING ACTION	1	83	84
HIT AND RUN	3	146	**149**
ALCOHOL INVOLVED	2	11	**13**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MINOR ARTERIAL (C3C)

CORRIDOR LENGTH

2.00 Miles

AVERAGE POSTED SPEED

36.5 mph

AVERAGE PREVAILING SPEED

55.9 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

0%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

N/A

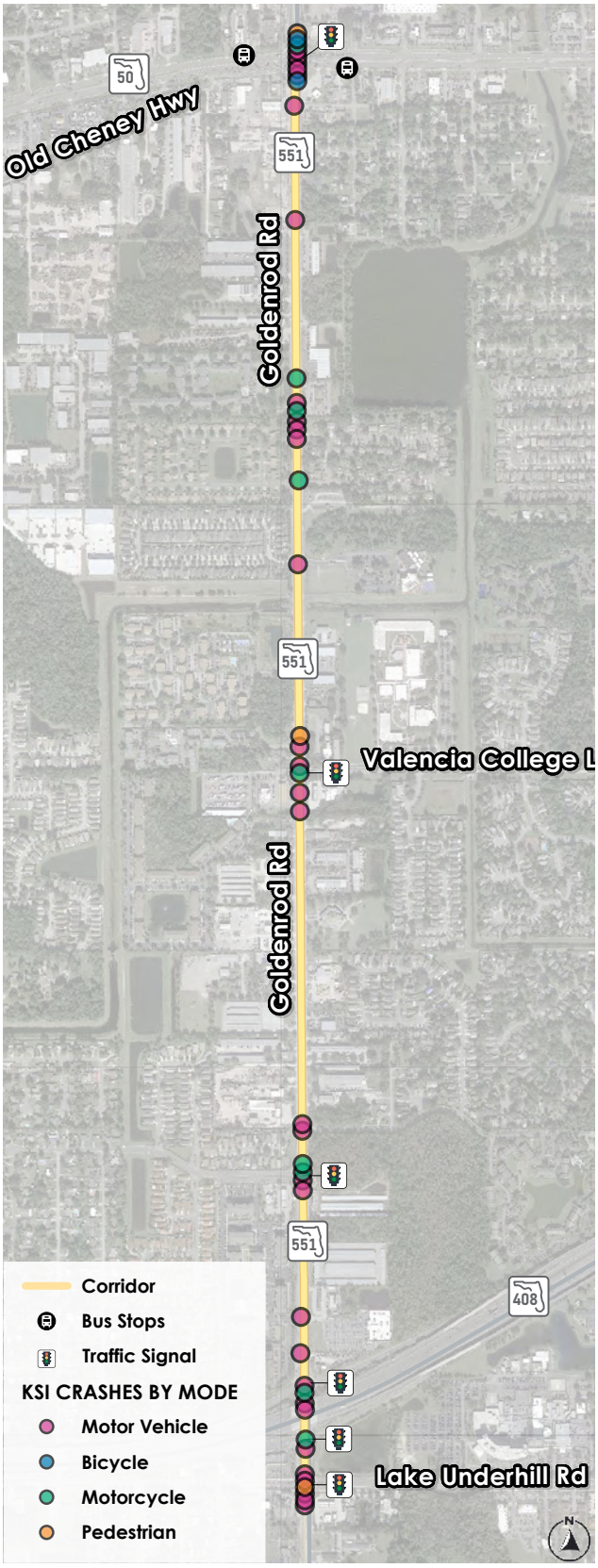
TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	27	659	686
DUSK-DAWN	5	53	58
NIGHT	13	215	228
LIGHTING CONDITION			
LIGHTED	12	201	213
NOT LIGHTED	1	14	15
ROAD SURFACE CONDITION			
DRY	42	838	880
WET	3	88	91

KSI CRASHES BY LOCATION



CORRIDOR 7

S GOLDENROD ROAD (SR 551)

from E Colonial Dr. (SR 50) to Lake Underhill Rd.

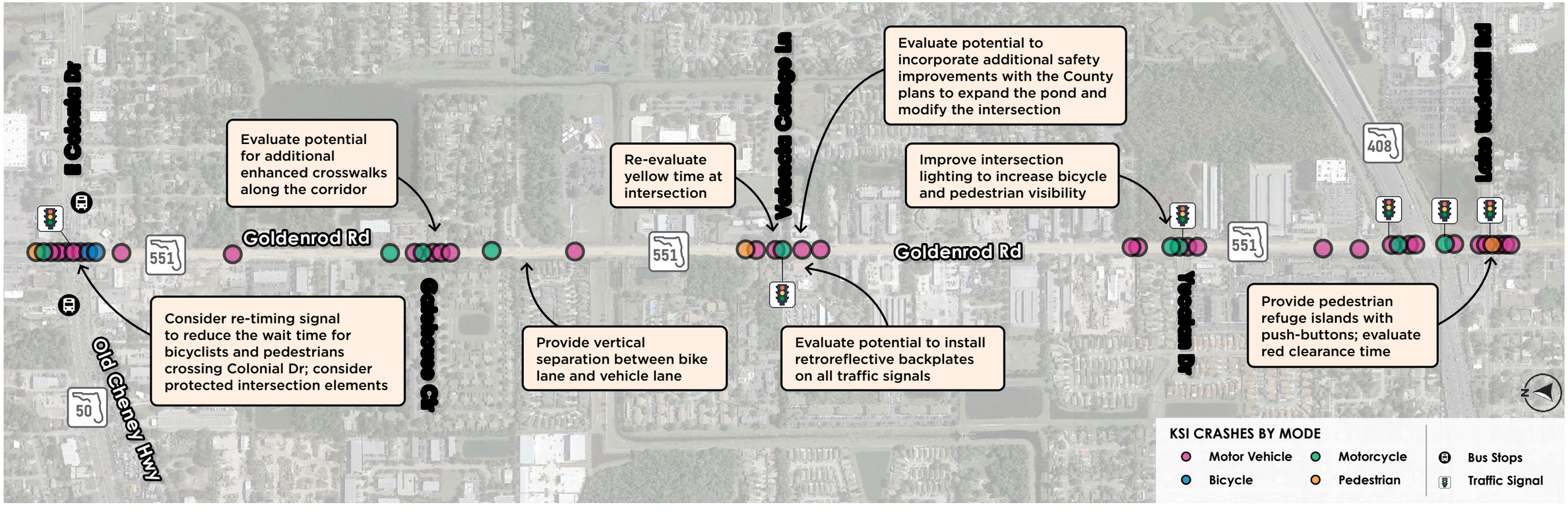
VISION ZERO

FDOT is currently implementing a resurfacing project on the corridor that includes bicycle and pedestrian safety improvements (FDOT project ID 437634-1). The project is scheduled for completion in Fall 2024.

Other Projects include FDOT 442390-3 - Orange County Lighting Pedestrian Bundle.

TARGET SPEED

35 MPH



FDOT is currently implementing a resurfacing project on the corridor that includes bicycle and pedestrian safety improvements. The project is scheduled for completion in Fall 2024. The average prevailing speed on the corridor is almost 20 mph higher than the average posted speed.

Project Prioritization Score: **83.75**

Planning Level Cost: **$245,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 8

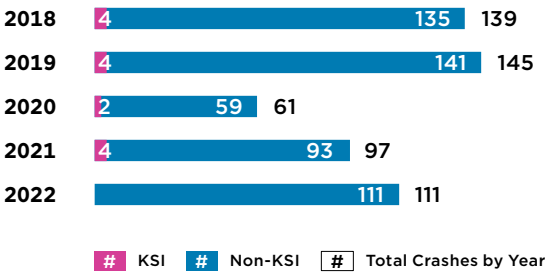
S SEMORAN BOULEVARD (SR 436)

from Lee Vista Rd. to TG Lee Blvd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

553	3	11	187	352
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
541 *Vehicle*	**1**	**9**	**180**	**351**
- *Bike*				
7 *Pedestrian*	2	1	4	
5 *Motorcycle*		1	3	1

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	5	359	**364**
LEFT TURN	-	28	**28**
SIDESWIPE	-	58	**58**
OTHER	3	39	**42**
ANGLE	-	17	**17**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	5	162	167
FOLLOWED TOO CLOSELY	-	149	149
FAILED TO YIELD RIGHT-OF-WAY	1	49	50
FAILED TO KEEP IN PROPER LANE	-	20	20
OTHER CONTRIBUTING ACTION	1	33	34
HIT AND RUN	3	61	**64**
ALCOHOL INVOLVED	1	8	**9**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORLANDO

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

PRINCIPAL ARTERIAL (C3C)

CORRIDOR LENGTH

0.69 Miles

AVERAGE POSTED SPEED

48 mph

AVERAGE PREVAILING SPEED

53.9 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

100%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **42, 51, 436S** / **145,000**

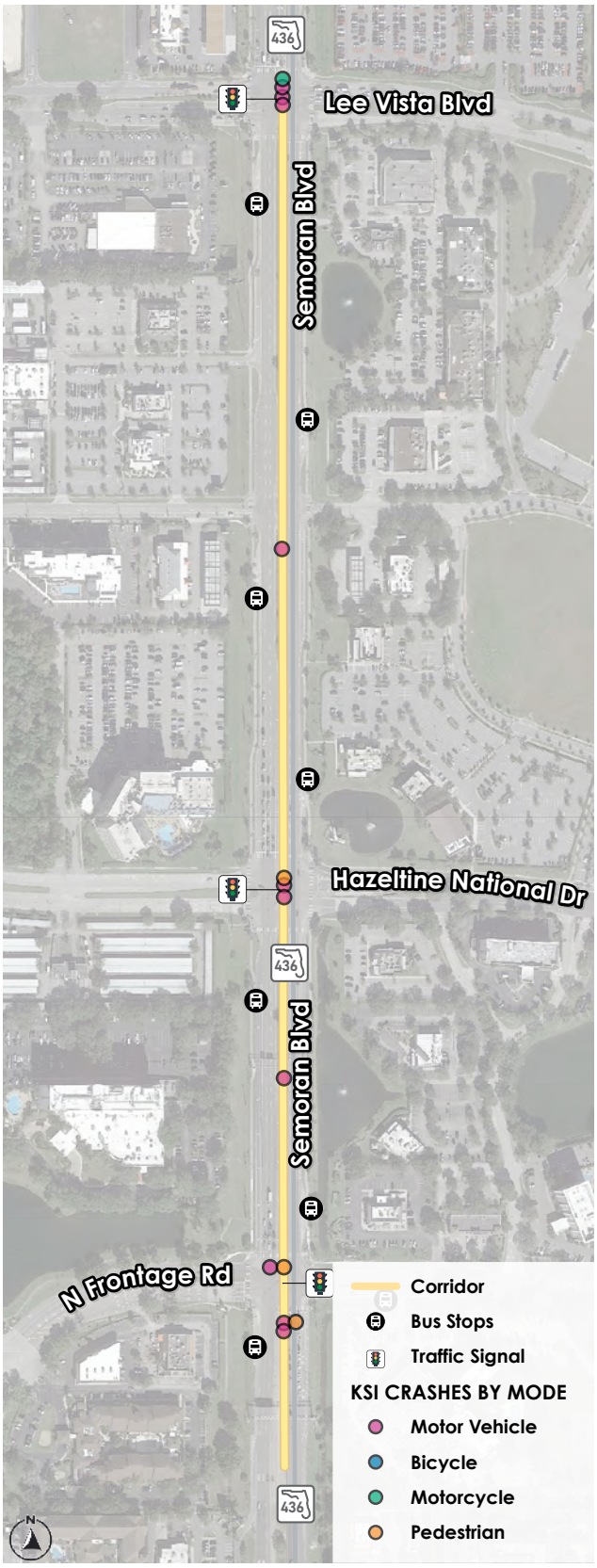
TRAVEL LANES / MEDIAN TYPE

6 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	7	343	350
DUSK-DAWN	1	25	26
NIGHT	6	171	177
LIGHTING CONDITION			
LIGHTED	6	168	174
NOT LIGHTED	-	3	3
ROAD SURFACE CONDITION			
DRY	12	461	473
WET	2	78	80

KSI CRASHES BY LOCATION



CORRIDOR 8

S SEMORAN BOULEVARD (SR 436)

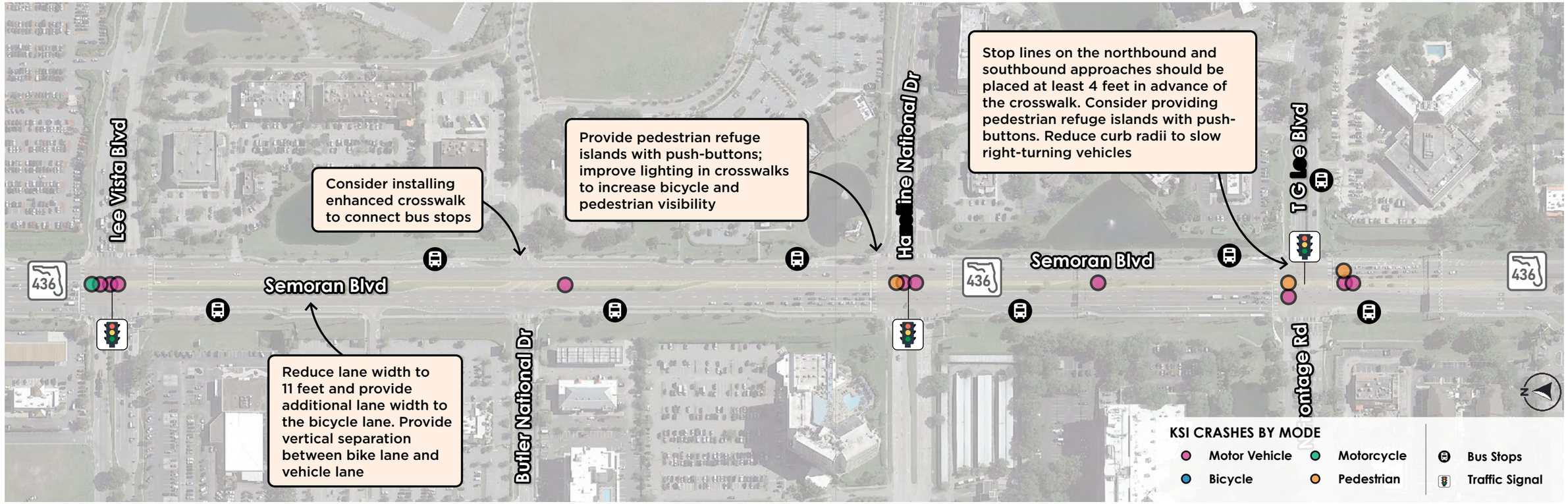
from Lee Vista Rd. to TG Lee Blvd.

VISION ZERO

There are two fully funded operational/safety projects on portions of the corridor in the 2045 MTP (MTP 2095 and MTP 2061). FDOT Projects include 442390-2, Orange County Lighting Pedestrian Bundle.

TARGET SPEED

40 MPH



This corridor is completely within a transportation disadvantaged community. There are two fully funded operational/safety projects planned on the corridor in the 2045 MTP. There are no details on what is included in the projects. The is an opportunity to reduce the vehicle lane width to 11 feet along the corridor and reallocate the width to the bicycle lane. Vertical separation between vehicle lanes and the bicycle lanes should also be provided. Evaluate retiming traffic signals for speed management.

Potential improvements along the corridor should consider plans by LYNX to add Bus Rapid Transit along the corridor along with station and crossing enhancements.

Project Prioritization Score: **83.75**

Planning Level Cost: **$770,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 9

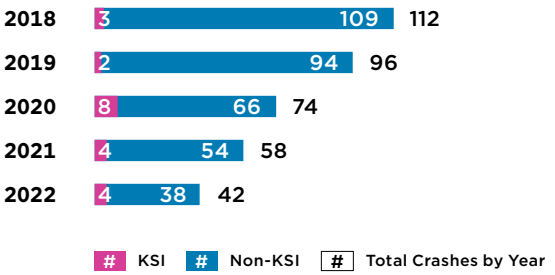
PINE HILLS ROAD

from Colonial Dr. (SR 50) to Old Winter Garden Rd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

381	2	19	124	236
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
368 *Vehicle*	**1**	**17**	**116**	**234**
6 *Bike*	1	1	3	1
5 *Pedestrian*		1	4	
2 *Motorcycle*			1	1

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	3	134	**137**
LEFT TURN	4	52	**56**
SIDESWIPE	1	56	**57**
OTHER	-	42	**42**
ANGLE	6	28	**34**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	3	119	122
FOLLOWED TOO CLOSELY	-	2	2
FAILED TO YIELD RIGHT-OF-WAY	7	59	66
FAILED TO KEEP IN PROPER LANE	1	31	32
OTHER CONTRIBUTING ACTION	3	31	34
HIT AND RUN	5	91	**96**
ALCOHOL INVOLVED	2	3	**5**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MINOR ARTERIAL

CORRIDOR LENGTH

0.73 Miles

AVERAGE POSTED SPEED

38.1 mph

AVERAGE PREVAILING SPEED

47.2 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

100%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

N/A

TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved, Grass, and None**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	12	256	268
DUSK-DAWN	-	13	13
NIGHT	9	92	101
LIGHTING CONDITION			
LIGHTED	8	83	91
NOT LIGHTED	1	8	9
ROAD SURFACE CONDITION			
DRY	21	322	343
WET	1	38	39

KSI CRASHES BY LOCATION

CORRIDOR 9

PINE HILLS ROAD

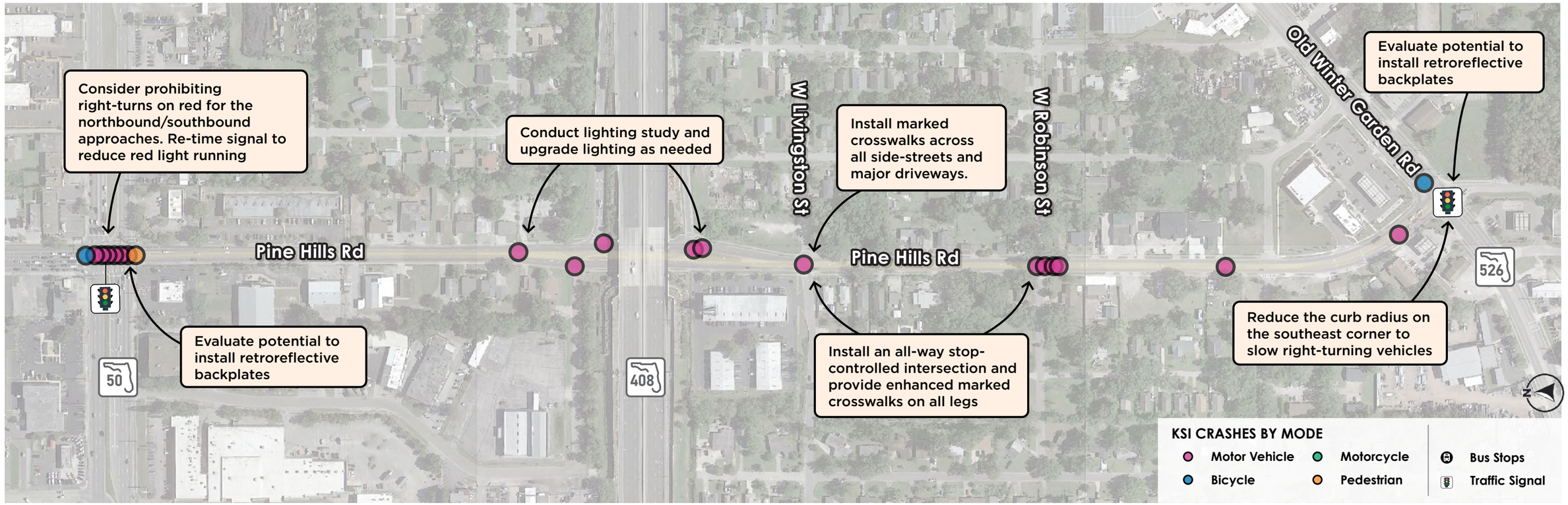
from Colonial Dr. (SR 50) to Old Winter Garden Rd.

VISION ZERO

There is a partially funded trail project included in the 2045 MTP along a portion of the project (MTP 5076).
FDOT Projects include: 442390-2 Orange County Lighting Pedestrian Bundle.

TARGET SPEED

30 MPH



To the north of SR 408 the surrounding land use is predominantly commercial and to the south it is primarily residential. It is recommended that the residential area have a target speed of 30 mph. The entire corridor is in a disadvantaged community. Red light running is a contributing factor in numerous KSI crashes. A trail project along a portion of the corridor is included in the 2045 ATP, but the project is only partially funded.

Project Prioritization Score: **95**

Planning Level Cost: **$94,000**
(does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 10

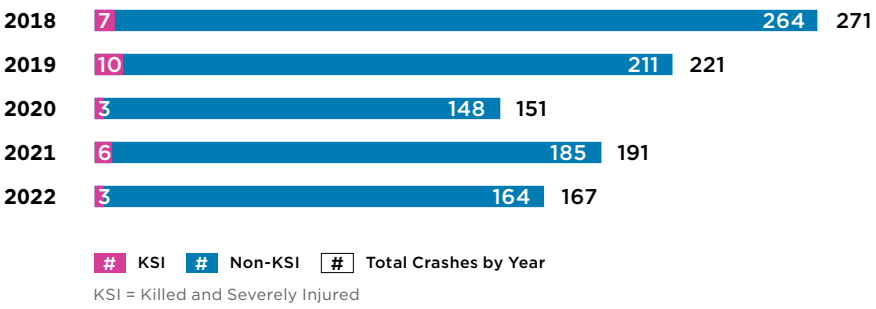
ALAFAYA TRAIL

from E Colonial Dr. (SR 50) to Lake Underhill Rd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

1,001	1	28	264	708
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
964 *Vehicle*		**20**	**242**	**702**
11 *Bike*			9	2
17 *Pedestrian*	1	7	8	1
9 *Motorcycle*		1	5	3

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	11	406	**417**
LEFT TURN	8	158	**166**
SIDESWIPE	-	123	**123**
OTHER	1	83	**84**
ANGLE	-	77	**77**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	10	399	409
FOLLOWED TOO CLOSELY	-	7	7
FAILED TO YIELD RIGHT-OF-WAY	3	148	151
FAILED TO KEEP IN PROPER LANE	-	64	64
OTHER CONTRIBUTING ACTION	6	75	81
HIT AND RUN	2	142	**144**
ALCOHOL INVOLVED	12	29	**41**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

PRINCIPAL ARTERIAL

CORRIDOR LENGTH

1.43 Miles

AVERAGE POSTED SPEED

45 mph

AVERAGE PREVAILING SPEED

52.9 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

0%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

N/A

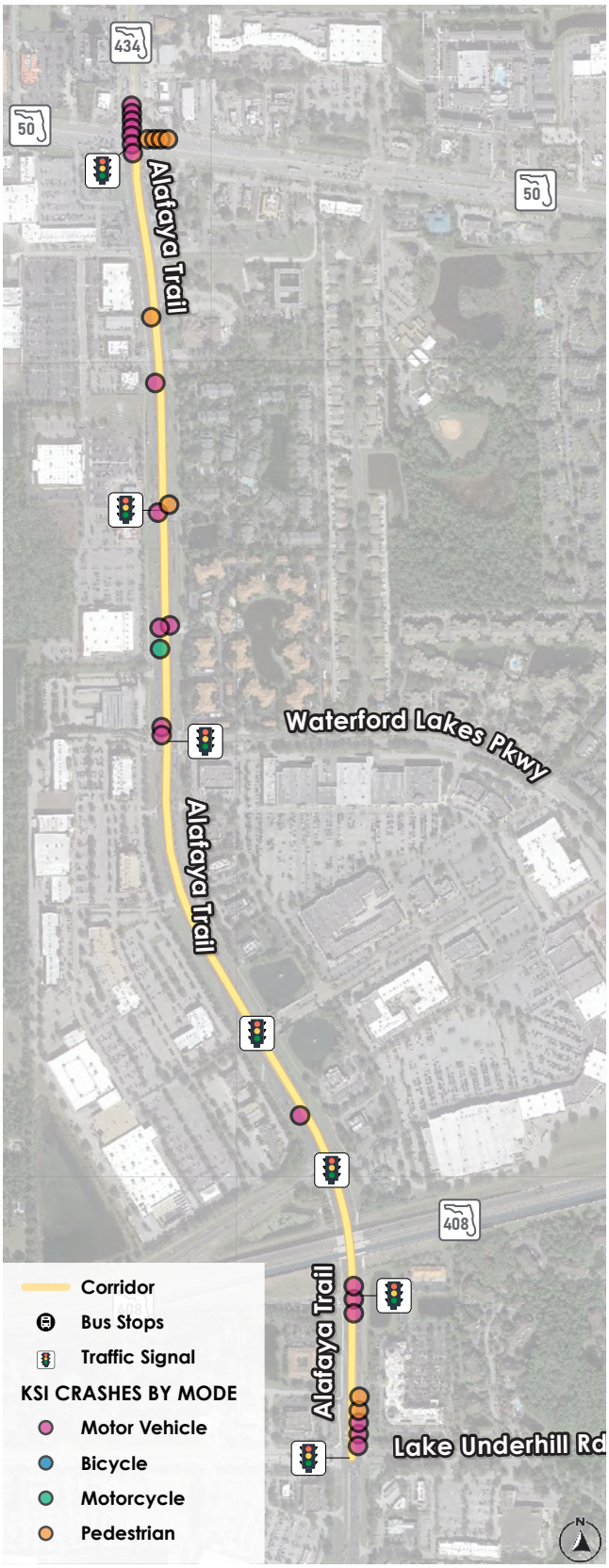
TRAVEL LANES / MEDIAN TYPE

6 lanes / **Paved, Grass, and None**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	17	691	708
DUSK-DAWN	1	41	42
NIGHT	11	240	251
LIGHTING CONDITION			
LIGHTED	11	226	237
NOT LIGHTED	-	13	13
ROAD SURFACE CONDITION			
DRY	28	865	893
WET	1	107	108

KSI CRASHES BY LOCATION



CORRIDOR 10

ALAFAYA TRAIL

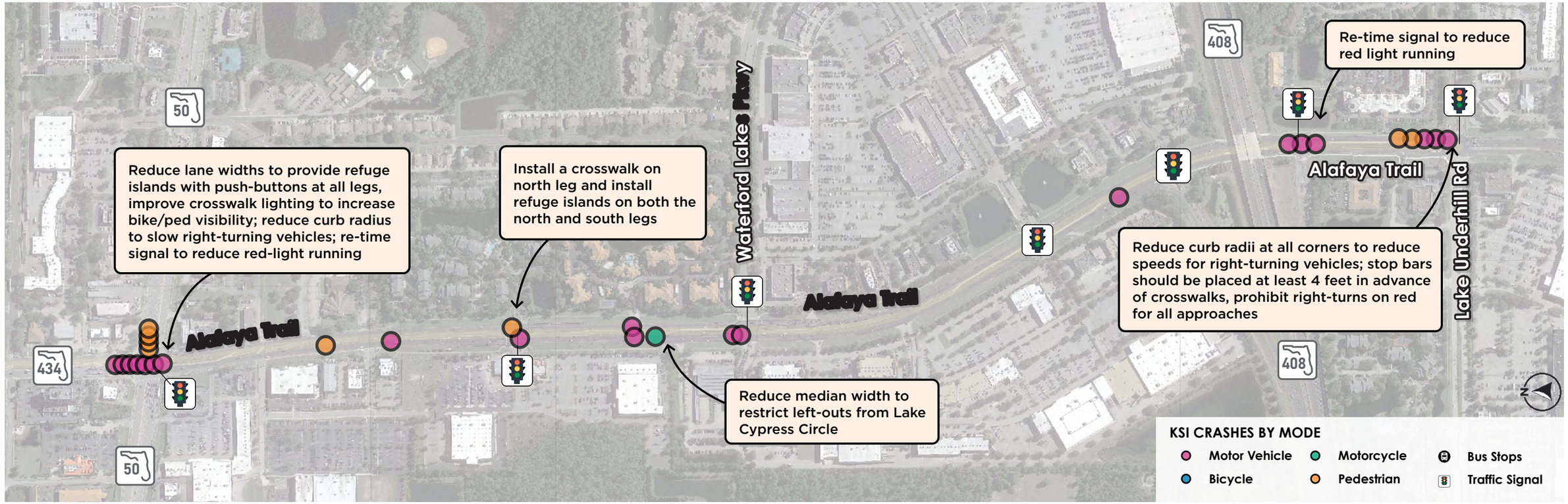
from E Colonial Dr. (SR 50) to Lake Underhill Rd.

VISION ZERO

The 2045 MTP includes a safety project and a shared use path project for the entire length of the corridor. Both projects are unfunded.
FDOT Projects include: 442390-2 Orange County Lighting Pedestrian Bundle.

TARGET SPEED

35 MPH



Around 41 percent of the KSI collisions ion this corridor involved alcohol. Red light running is also a contributing factor in numerous KSI crashes. The MTP includes both a safety project and a shared use path for the corridor, but both projects are unfunded. There are opportunities to enhance crosswalks along the corridor. Evaluate retiming traffic signals for speed management.

Project Prioritization Score: **78.75**

Planning Level Cost: **$675,000**
(does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 11

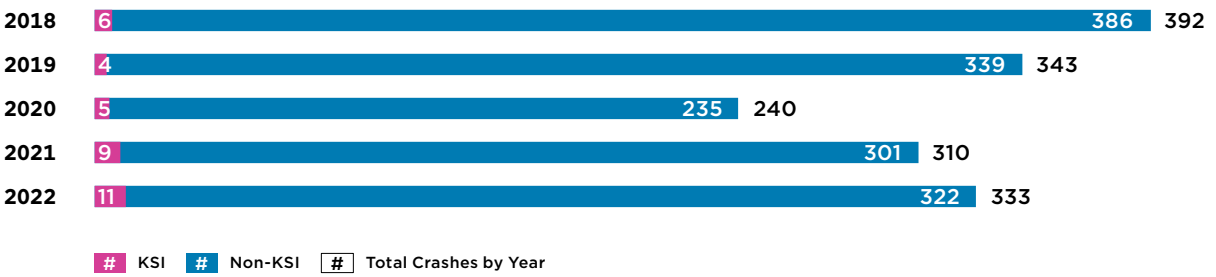
S KIRKMAN ROAD (SR 435)

from LB Mcleod Rd. to Major Blvd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

1,619	8	27	483	1,101
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
1,573 *Vehicle*	**3**	**15**	**457**	**1,098**
6 *Bike*			5	1
25 *Pedestrian*	5	6	14	
15 *Motorcycle*		6	7	2

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	6	899	**905**
LEFT TURN	6	86	**92**
SIDESWIPE	2	240	**242**
OTHER	7	125	**132**
ANGLE	2	50	**52**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	6	391	397
FOLLOWED TOO CLOSELY	2	386	388
FAILED TO YIELD RIGHT-OF-WAY	6	177	183
FAILED TO KEEP IN PROPER LANE	-	82	82
OTHER CONTRIBUTING ACTION	4	92	96
HIT AND RUN	3	259	**262**
ALCOHOL INVOLVED	-	20	**20**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORLANDO

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

PRINCIPAL ARTERIAL (C3C)

CORRIDOR LENGTH

2.24 Miles

AVERAGE POSTED SPEED

50 mph

AVERAGE PREVAILING SPEED

57.3 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

78%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **21,37,40,301,302,303** / **211,000**

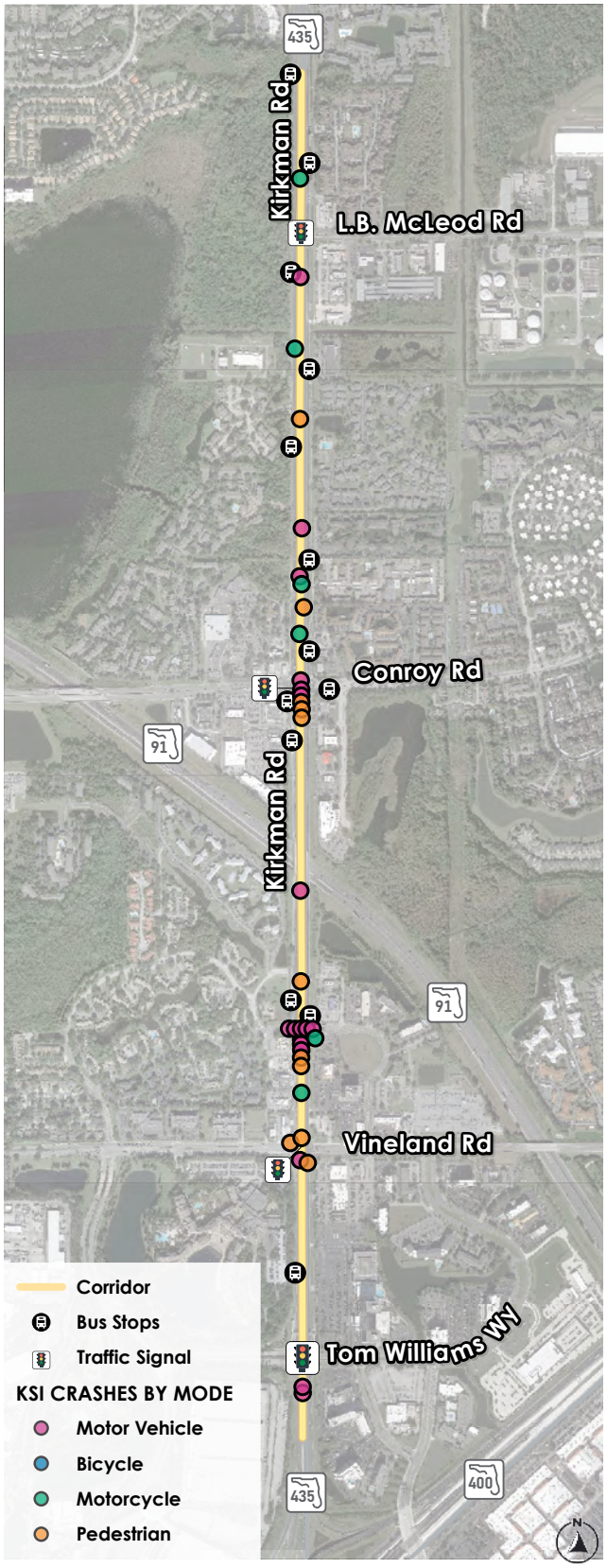
TRAVEL LANES / MEDIAN TYPE

6 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	11	960	971
DUSK-DAWN	-	67	67
NIGHT	24	557	581
LIGHTING CONDITION			
LIGHTED	18	514	532
NOT LIGHTED	6	39	45
ROAD SURFACE CONDITION			
DRY	33	1,338	1,371
WET	2	244	246

KSI CRASHES BY LOCATION



CORRIDOR 11

S KIRKMAN ROAD (SR 435)

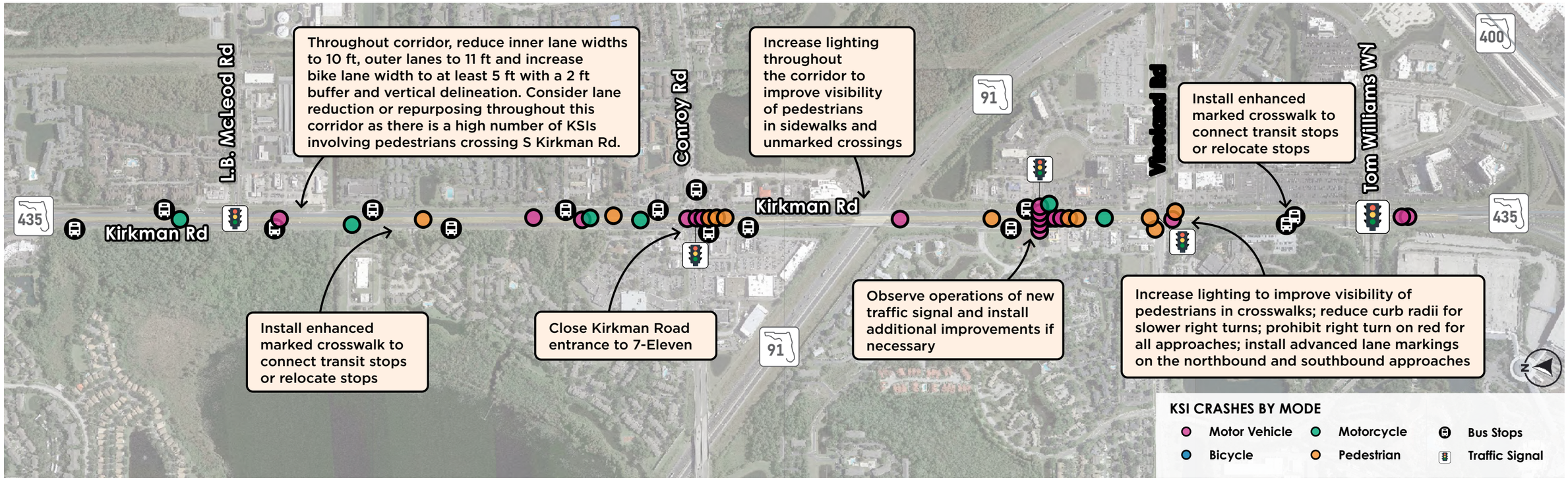
from LB Mcleod Rd. to Major Blvd.

VISION ZERO

Several projects have been constructed on the corridor in the past few years, including the installation of a traffic signal at the intersection of Kirkman Road and Windhover Drive and a shared use path from Raleigh Street (outside of the project corridor) and L.B. McLeod Road. There are several additional projects planned along the corridor. There is a proposal to extend the existing shared use path from L.B. McLeod Road to Conroy Road to connect to the Shingle Creek Trail system. The proposed shared use path includes a pedestrian bridge over Conroy Road. There are also a funded ITS/Technology project (MTP 2159) and one fully funded, one partially funded, and one unfunded Operational/Safety project (MTP 2055, 2045, and 2064, respectively). Details have not been decided for these projects.

TARGET SPEED

35 MPH



Prevailing speeds on the corridor are over 55 MPH. To help reduce speeds and improve bicycle safety, travel lane widths should be narrowed and reallocated to the bike lanes. Lane repurposing is another option to help reduce speeds. Signals can be coordinated to encourage drivers to drive the speed limit. A high percentage of the KSI collisions occur at night; therefore, lighting on the corridor should be improved. Transit stops that are not collocated with a signalized intersection could be relocated or an enhanced crosswalk could be installed at these locations. LYNX has also identified this corridor as a key transit corridor in their long range plans, and future improvements should incorporate transit enhancements.

Project Prioritization Score: **83.75**

Planning Level Cost: **$1,534,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 12

COLONIAL DRIVE (SR 50)

from Orange Blossom Trail N. to N Bumby Ave.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
2,863	9	30	784	2,040
2,771 *Vehicle*	**6**	**19**	**727**	**2,019**
11 *Bike*			8	3
33 *Pedestrian*	2	6	22	3
48 *Motorcycle*	1	5	27	15

CRASHES BY YEAR

KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	8	1,359	**1,367**
LEFT TURN	3	271	**274**
SIDESWIPE	1	454	**455**
OTHER	9	256	**265**
ANGLE	3	192	**195**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	6	604	610
FOLLOWED TOO CLOSELY	3	606	609
FAILED TO YIELD RIGHT-OF-WAY	7	299	306
FAILED TO KEEP IN PROPER LANE	-	176	176
OTHER CONTRIBUTING ACTION	4	185	189
HIT AND RUN	8	493	**501**
ALCOHOL INVOLVED	2	44	**46**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORLANDO

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

PRINCIPAL ARTERIAL (C4)

CORRIDOR LENGTH

2.65 Miles

AVERAGE POSTED SPEED

40 mph

AVERAGE PREVAILING SPEED

44.3 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

73%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **28,29,48,49** / **224,900**

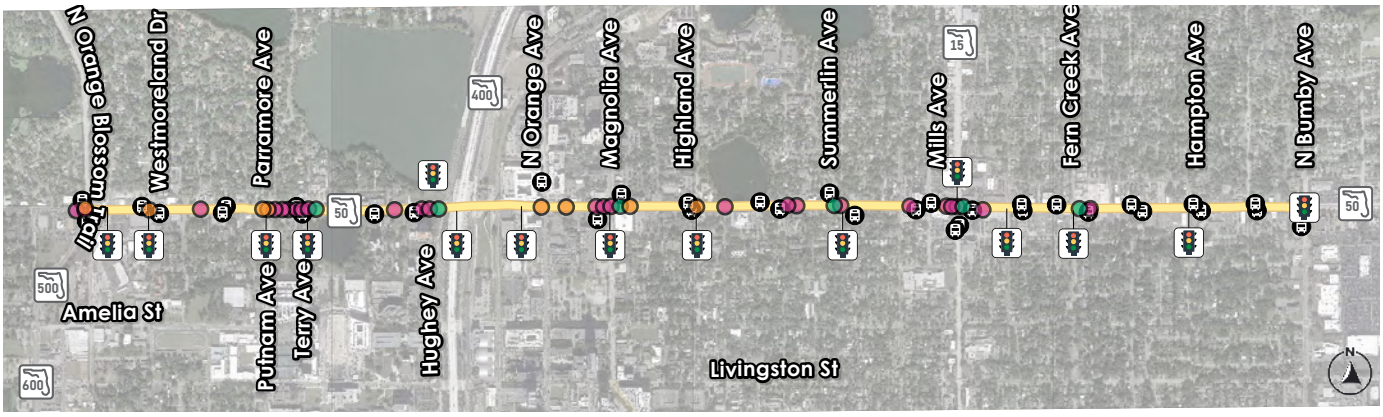
TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved, Grass, Brick, and None**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	17	1,977	1,994
DUSK-DAWN	-	75	75
NIGHT	22	772	794
LIGHTING CONDITION			
LIGHTED	21	731	752
NOT LIGHTED	1	23	24
ROAD SURFACE CONDITION			
DRY	36	2,554	2,590
WET	3	263	266

KSI CRASHES BY LOCATION



KSI CRASHES BY MODE

- Motor Vehicle
- Motorcycle
- Bicycle
- Pedestrian

- Bus Stops
- Traffic Signal

CORRIDOR 12

COLONIAL DRIVE (SR 50)

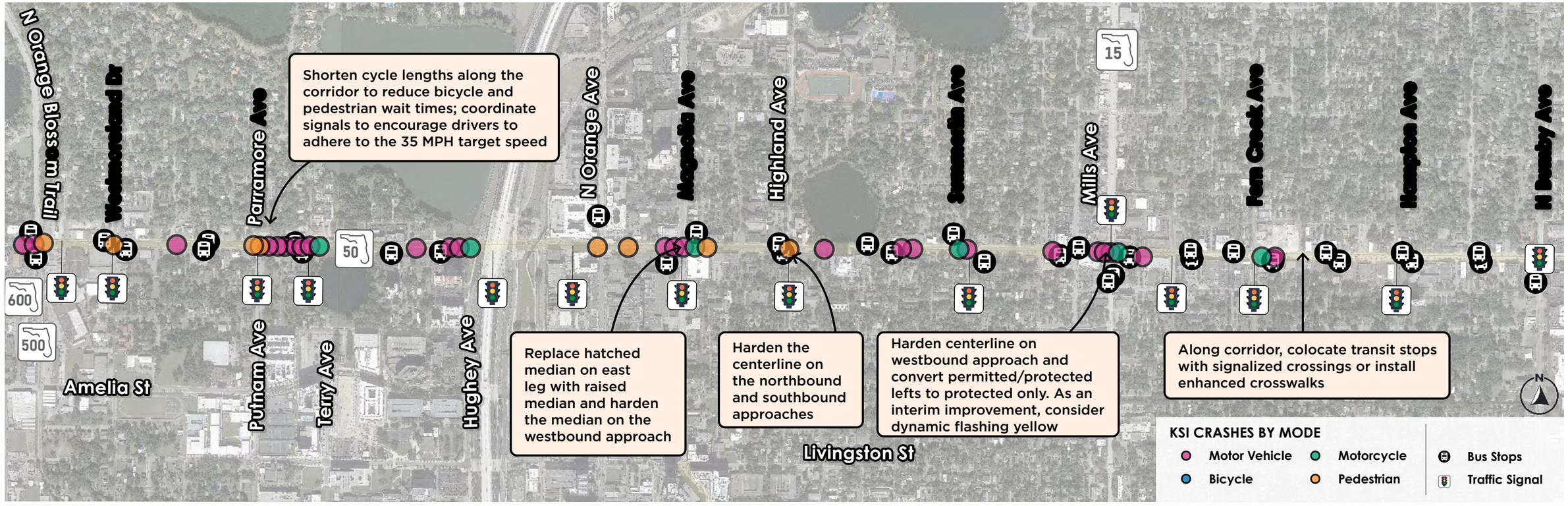
from Orange Blossom Trail N. to N Bumby Ave.

VISION ZERO

There are several FDOT projects that have recently been completed or are in the design process to improve pedestrian safety along the corridor. The improvements include signal upgrades, ADA improvements, reduced crossing distances, (FDOT 445693, 445695, 447607, and 447717). Additionally, there are two unfunded safety improvement projects (MTP 2231 and 2099), two fully funded safety improvement projects (MTP 2098 and 2108), and three fully funded complete streets projects (MTP 2165, 2168, and 2179) planned along various segments of the corridor. These projects do not have available details.

TARGET SPEED

35 MPH



Colonial Drive is a major highway in Central Florida, but in many areas, it is surrounded by commercial and residential areas with high numbers of vulnerable road users. The road characteristics do not match the land use, leading to increased traffic conflicts. There are several complete streets projects planned along the roadway which should help bring the roadway features and land use into alignment. The corridor also serves disadvantaged communities, with around 80 percent of the segment in a disadvantaged area. Cycle lengths on the roadway are long, with the majority of the green time serving Colonial Drive. This leads to long wait times for bicyclists and pedestrians trying to cross Colonial Drive and many look for gaps in traffic and cross during a red signal. Signal timing can also be used to help encourage drivers to adhere to the target speed of 35 MPH.

LYNX has also identified this corridor as a key transit corridor in their long range plans, and future improvements should incorporate transit enhancements.

Project Prioritization Score: **91.25**

Planning Level Cost: **$321,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 13

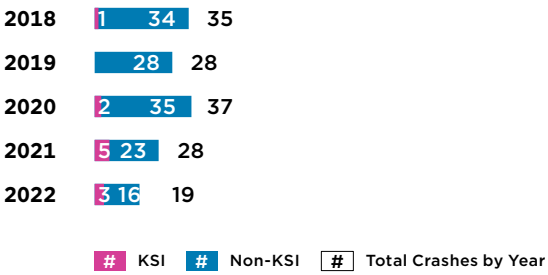
NORTH LANE

from Westgate Rd. to N Pine Hills Rd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
147	1	10	53	83
133 *Vehicle*		**7**	**44**	**82**
2 *Bike*			2	
10 *Pedestrian*	1	2	6	1
2 *Motorcycle*		1	1	

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	1	49	**50**
LEFT TURN	3	30	**33**
SIDESWIPE	1	12	**13**
OTHER	2	12	**14**
ANGLE	-	12	**12**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	1	45	46
FOLLOWED TOO CLOSELY	-	1	1
FAILED TO YIELD RIGHT-OF-WAY	2	40	42
FAILED TO KEEP IN PROPER LANE	1	5	6
OTHER CONTRIBUTING ACTION	-	10	10
HIT AND RUN	5	29	**34**
ALCOHOL INVOLVED	-	1	**1**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MAJOR COLLECTOR

CORRIDOR LENGTH

0.53 Miles

AVERAGE POSTED SPEED

35 mph

AVERAGE PREVAILING SPEED

47.8 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

100%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **49** / **72,100**

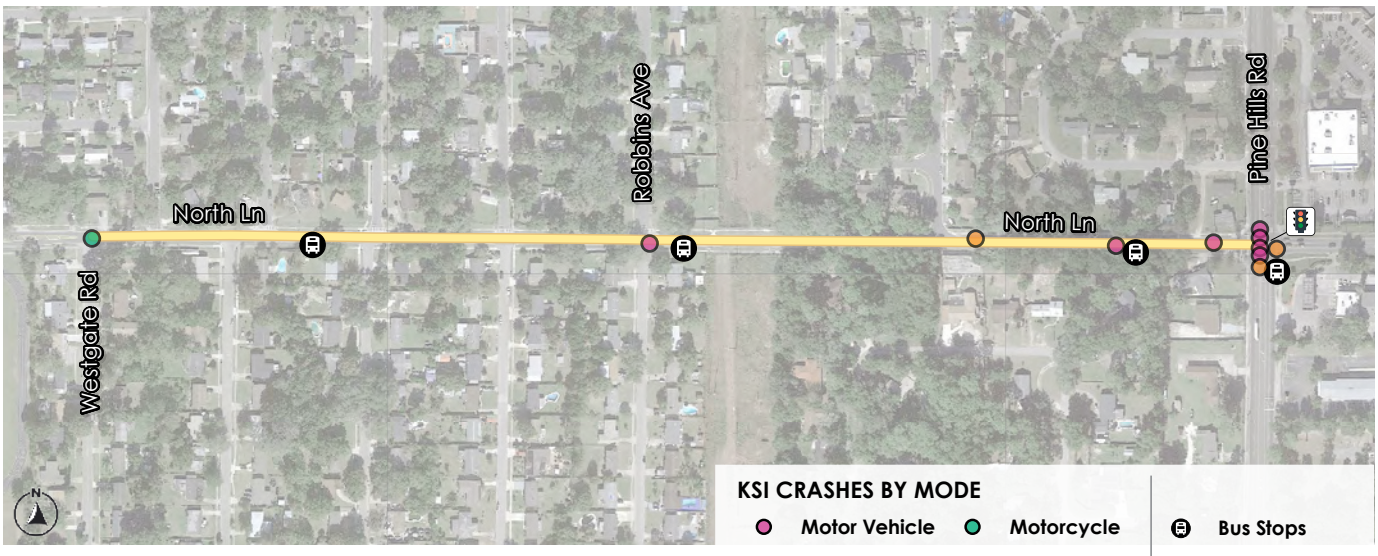
TRAVEL LANES / MEDIAN TYPE

2 lanes / **Paved and None**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	5	93	98
DUSK-DAWN	-	5	5
NIGHT	6	38	44
LIGHTING CONDITION			
LIGHTED	6	34	40
NOT LIGHTED	-	4	4
ROAD SURFACE CONDITION			
DRY	11	116	127
WET	-	20	20

KSI CRASHES BY LOCATION



CORRIDOR 13

NORTH LANE

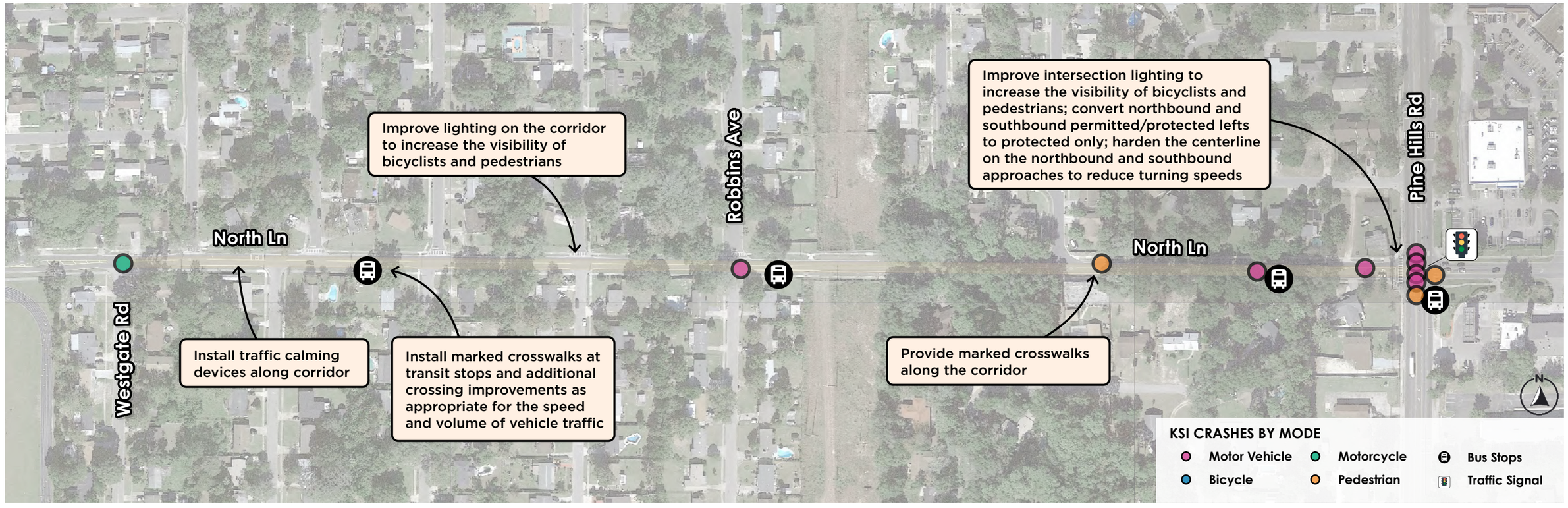
from Westgate Rd. to N Pine Hills Rd.

VISION ZERO

Phase II of Orange County Pine Hills Road Pedestrian Safety Project extends from Belco Drive to Bonnie Brae Circle and includes the North Lane intersection.

TARGET SPEED

35 MPH



North Lane is within a disadvantaged community and there is a middle school on the west end of the project segment. Prevailing speeds on the corridor are more than 10 mph over the posted speed limit. Over half of KSI collisions have occurred at night. Lighting on the corridor, particularly at the intersection of North Lane and Pine Hills Road should be improved to increase visibility. The only marked crosswalk on the segment is at the intersection with Pine Hills Road; other marked crosswalks should be provided.

Project Prioritization Score: **87.5**

Planning Level Cost: **$228,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 14

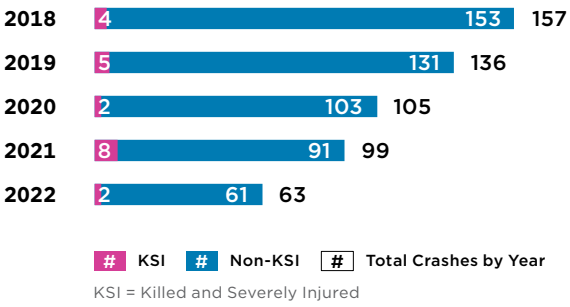
HIAWASSEE ROAD

from Colonial Dr. (SR 50) to Old Winter Garden Rd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

561	3	18	198	342
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
546 *Vehicle*	**2**	**16**	**188**	**340**
2 *Bike*			2	
7 *Pedestrian*	1	2	3	1
6 *Motorcycle*			5	1

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	5	263	**268**
LEFT TURN	6	63	**69**
SIDESWIPE	1	99	**100**
OTHER	1	34	**35**
ANGLE	2	26	**28**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	7	247	254
FOLLOWED TOO CLOSELY	-	3	3
FAILED TO YIELD RIGHT-OF-WAY	6	62	68
FAILED TO KEEP IN PROPER LANE	-	35	35
OTHER CONTRIBUTING ACTION	2	54	56
HIT AND RUN	3	99	**102**
ALCOHOL INVOLVED	-	5	**5**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MINOR ARTERIAL

CORRIDOR LENGTH

0.9 Miles

AVERAGE POSTED SPEED

45 mph

AVERAGE PREVAILING SPEED

52.6 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

100%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **37** / **88,500**

TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved, Grass, and None**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	11	376	387
DUSK-DAWN	-	31	31
NIGHT	10	133	143
LIGHTING CONDITION			
LIGHTED	9	124	133
NOT LIGHTED	1	9	10
ROAD SURFACE CONDITION			
DRY	18	482	500
WET	3	57	60

KSI CRASHES BY LOCATION

CORRIDOR 14

HIAWASSEE ROAD

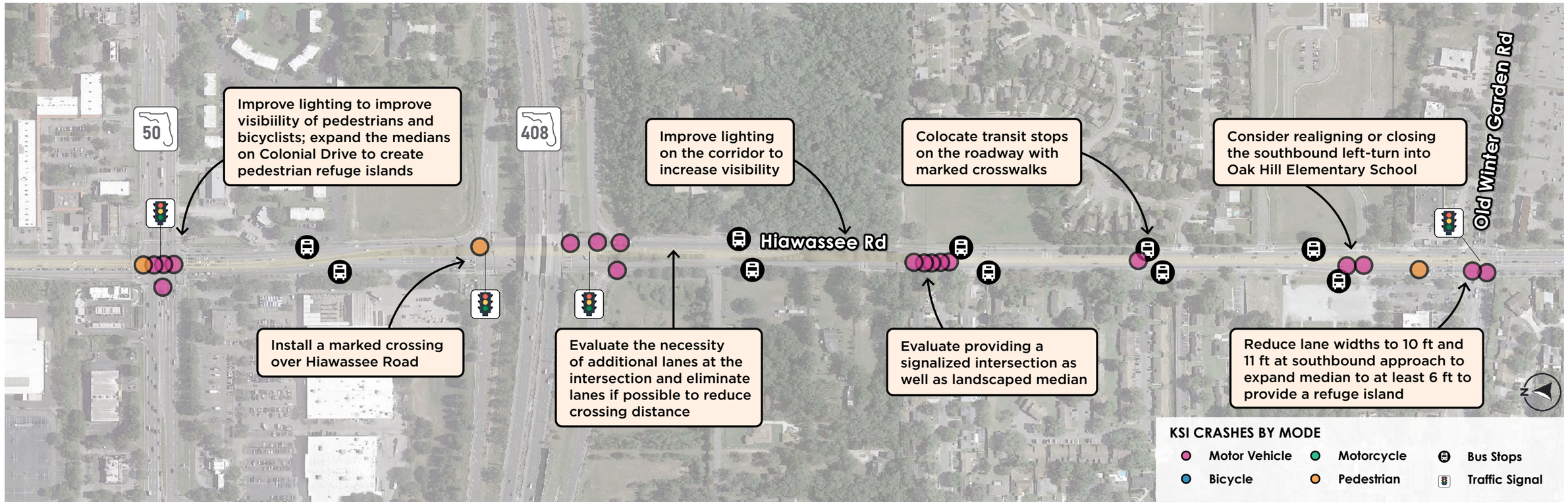
from Colonial Dr. (SR 50) to Old Winter Garden Rd.

VISION ZERO

The 2045 MTP includes a fully funded operational project that covers the entire project segment.

TARGET SPEED

35 MPH



The Hiawassee Road segment is fully located within a disadvantaged community and there is an elementary school within the study area. Around half of the KSI collisions occurred at night which indicates that lighting on the roadway may not be sufficient. There are several transit stops along the corridor, but they are generally not located near a marked crosswalk. Install enhanced marked crosswalks at existing stops or relocate stops to a marked crosswalk. The 2045 MTP includes a fully funded operational project for the study segment, but detail of the project are not known. Consider extending corridor north to Balboa Drive, the terminus of the County's Pedestrian/Bicycle Safety Study.

Project Prioritization Score: **96.25**

Planning Level Cost: **$785,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 15

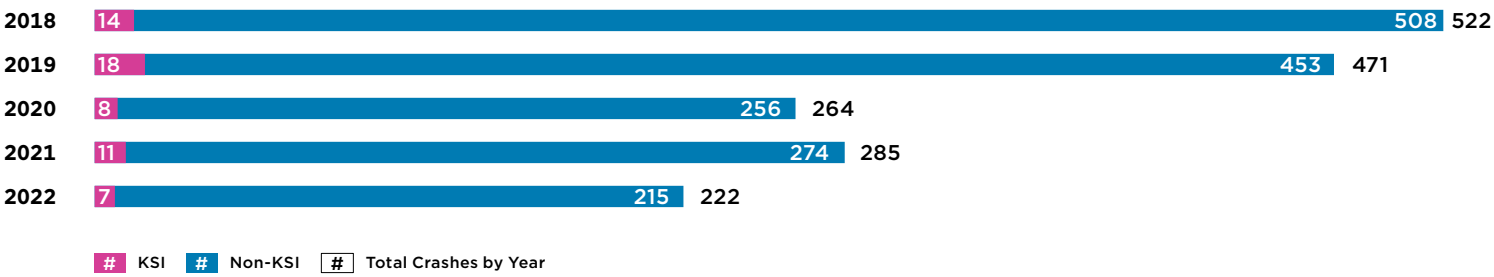
ALAFAYA TRAIL (SR 434)

from McCulloch Rd. to E Colonial Dr.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
1,764	3	55	526	1,180
1,675 *Vehicle*	**1**	**40**	**470**	**1,165**
33 *Bike*		1	25	7
37 *Pedestrian*	2	9	22	4
19 *Motorcycle*	1	5	9	4

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	19	977	**996**
LEFT TURN	12	176	**188**
SIDESWIPE	2	182	**184**
OTHER	3	102	**105**
ANGLE	5	81	**86**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	6	166	172
FOLLOWED TOO CLOSELY	-	2	2
FAILED TO YIELD RIGHT-OF-WAY	8	109	117
FAILED TO KEEP IN PROPER LANE	3	39	42
OTHER CONTRIBUTING ACTION	2	33	35
HIT AND RUN	7	209	**216**
ALCOHOL INVOLVED	2	25	**27**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

PRINCIPAL ARTERIAL (C3C)

CORRIDOR LENGTH

3.13 Miles

AVERAGE POSTED SPEED

45 mph

AVERAGE PREVAILING SPEED

52.8 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

24%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **104, 434** / **145,600**

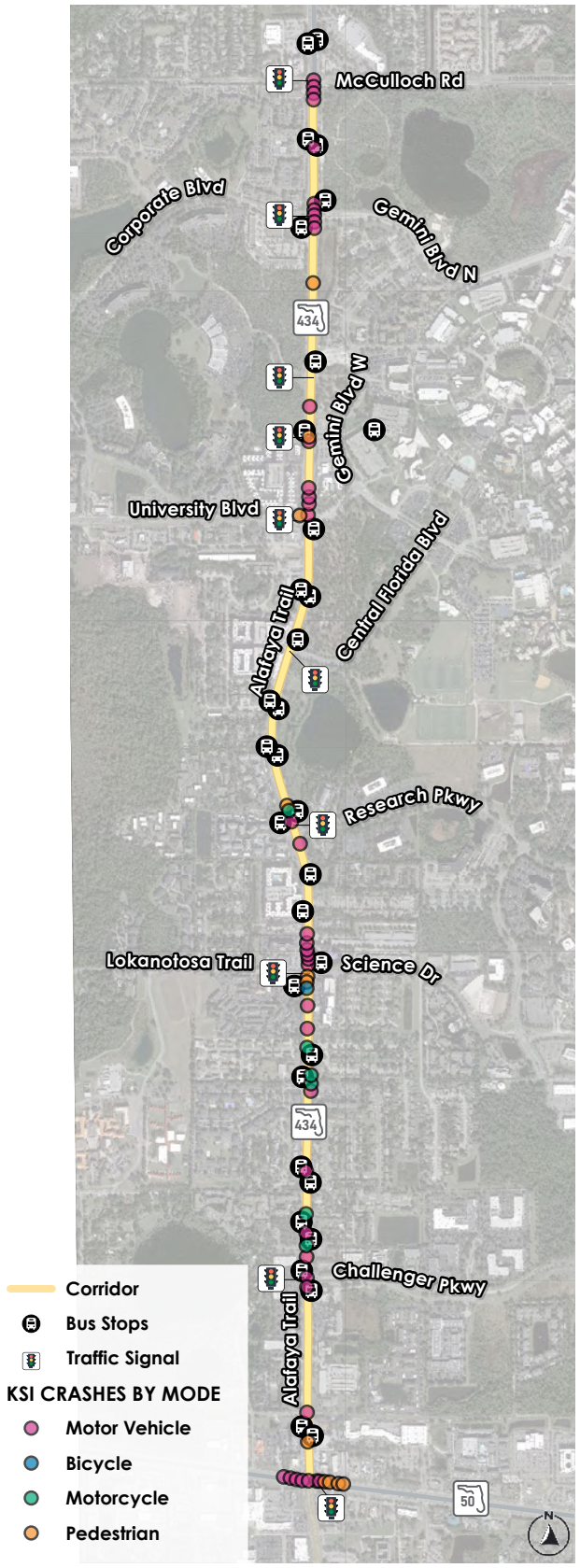
TRAVEL LANES / MEDIAN TYPE

6 lanes / **Paved, Grass, and None**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	32	1,090	1,122
DUSK-DAWN	4	94	98
NIGHT	22	520	542
LIGHTING CONDITION			
LIGHTED	22	476	498
NOT LIGHTED	-	44	44
ROAD SURFACE CONDITION			
DRY	49	1,490	1,539
WET	9	214	223

KSI CRASHES BY LOCATION



CORRIDOR 15

ALAFAYA TRAIL (SR 434)

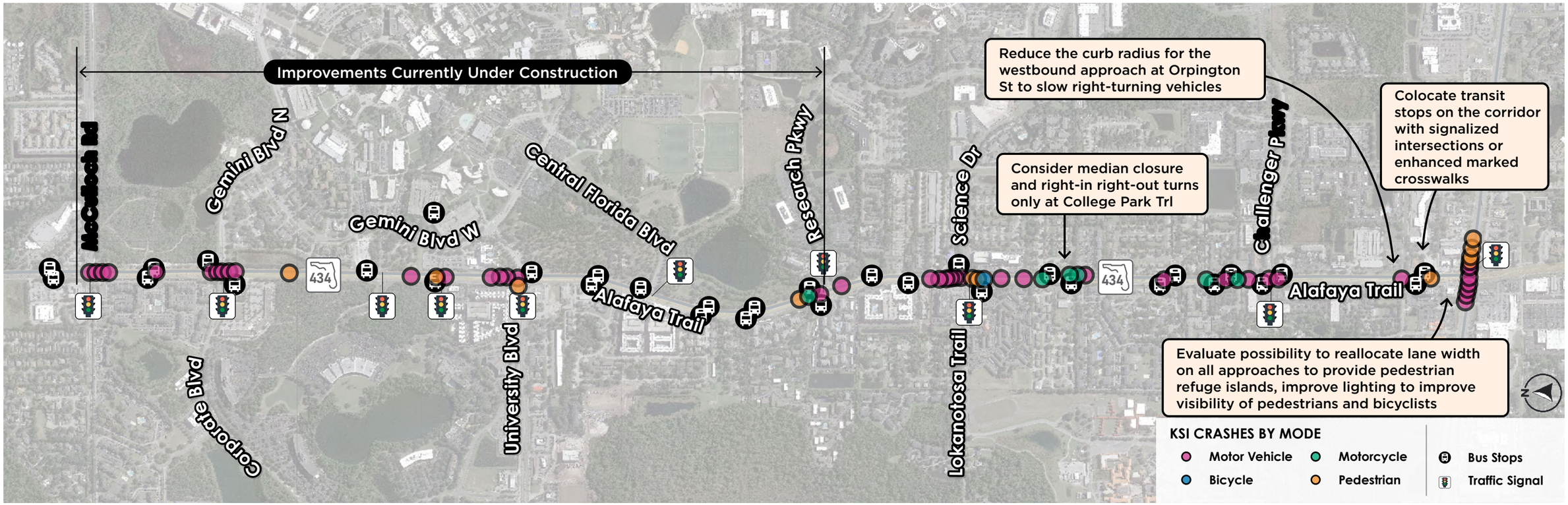
from McCulloch Rd. to E Colonial Dr.

There is a resurfacing project on the northern section of the corridor planned to start the design phase in 2025 (FDOT 448799). The Metroplan Orlando Transportation Improvement Program includes a fully funded safety project at the intersection with Science Drive/ Lokanotosa Trail (TIP 451245). No details have been provided for either project. There is also an unfunded shared use path project and a fully funded operational/safety project included in the 2045 MTP. The 2045 MTP also includes two fully funded complete streets projects from McCulloch Road to Research Parkway. The UCF Area Pedestrian Safety Study project is currently under construction. The project provides lighting upgrades and wider sidewalks, among other improvements, including fencing to channelize pedestrians to signalized crossings.

VISION ZERO

TARGET SPEED

35 MPH



Orange County also has a current project to construct an eastbound left turn lane in the median on Corporate Boulevard. The northern portion of this segment of Alafaya Trail forms the western boundary of the University of Central Florida main campus. Many students live on the west side of Alafaya Trail and must cross the roadway to get to campus. The speed limit is 45 mph but the prevailing speed is above 50 mph. There are two complete streets projects included in the 2045 MTP from McCulloch Road to Research Parkway. Details of the these projects are still unknown but will likely reduce the target speed and may include lane repurposing. As details of these projects are determined, similar treatments should be considered for the remainder of the segment.

Project Prioritization Score: **78.75**

Planning Level Cost: **$866,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 16

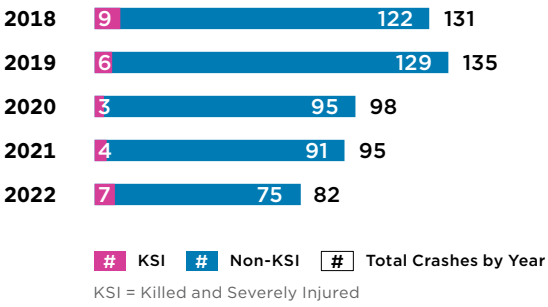
OAK RIDGE ROAD

from S. Orange Blossom to S Orange Ave

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
541	5	24	188	324
508 *Vehicle*		**16**	**174**	**318**
9 *Bike*		2	5	2
12 *Pedestrian*	3	3	5	1
12 *Motorcycle*	2	3	4	3

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	6	184	**190**
LEFT TURN	6	88	**94**
SIDESWIPE	5	77	**82**
OTHER	2	46	**48**
ANGLE	1	51	**52**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	6	166	172
FOLLOWED TOO CLOSELY	-	2	2
FAILED TO YIELD RIGHT-OF-WAY	8	109	117
FAILED TO KEEP IN PROPER LANE	3	39	42
OTHER CONTRIBUTING ACTION	2	33	35
HIT AND RUN	6	119	**125**
ALCOHOL INVOLVED	3	9	**12**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MAJOR COLLECTOR

CORRIDOR LENGTH

1.67 Miles

AVERAGE POSTED SPEED

45 mph

AVERAGE PREVAILING SPEED

47.1 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

98%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **7** / **29,500**

TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved and None**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	16	321	337
DUSK-DAWN	2	37	39
NIGHT	11	154	165
LIGHTING CONDITION			
LIGHTED	10	144	154
NOT LIGHTED	1	10	11
ROAD SURFACE CONDITION			
DRY	26	463	489
WET	3	49	52

KSI CRASHES BY LOCATION

CORRIDOR 16

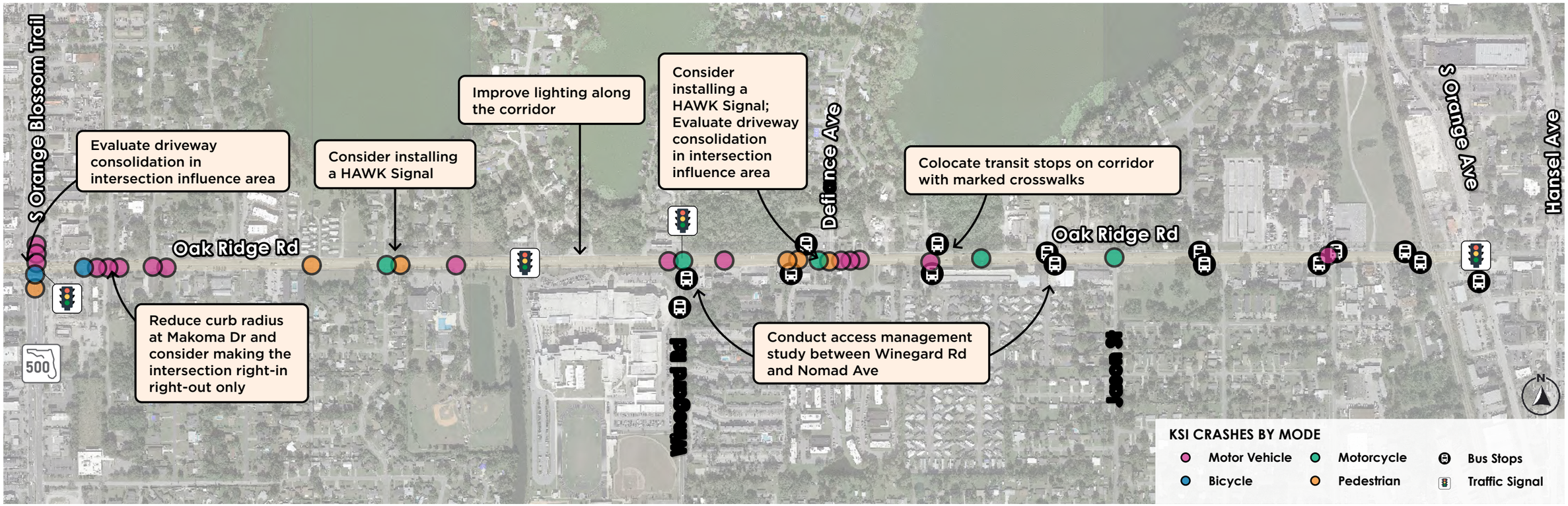
OAK RIDGE ROAD

from S. Orange Blossom to S Orange Ave.

There is an unfunded Operational/Safety project along the length of the corridor. No details have been provided.

TARGET SPEED

35 MPH



The majority of the corridor (98 pecent) is withing a disadvantaged area. Almost half of the collisions occurred at night or at dusk/dawn, indicating that lighting along the corridor may need to be improved. Around 20 percent of KSI and non-KSI collisions are hit and run collisions. While there are commercial uses directly fronting the roadway, the segment is surrounded by residential uses. There are also several churches, child care centers and private schools, a public high school, and and several parks and recreational facilities on the roadway. There are a high number of collisions related to the abundance of driveways on the roadway. An access management study would be beneficial to determine how driveways could be consolidated. The only marked crosswalks are on the corridor are at the signalized intersections. Consider adding marked crosswalks along the segment, particularly where there is a high number of pedestrian crossing. Defiance Avenue, Luzon Place, and transit stops are potential locations to install crosswalks. Because of the speed and size of the roadway, it is recommended that a PHB be installed with the crosswalks and potentially raised crosswalks.

LYNX has also identified this corridor as a key transit corridor in their long range plans, and future improvements should incoporate transit enhancements.

Project Prioritization Score: **95**

Planning Level Cost: **$590,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 17

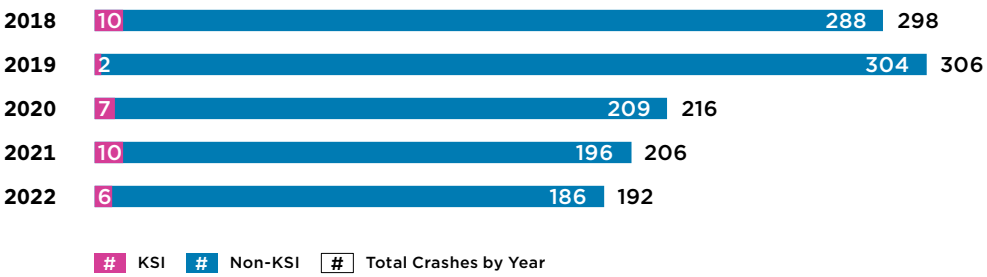
LEE ROAD

from N. Orange Blossom Trail to N. Wymore Rd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
1,218	4	31	325	858
1,175 *Vehicle*	**3**	**15**	**303**	**854**
9 *Bike*		1	6	2
18 *Pedestrian*		8	10	
16 *Motorcycle*	1	7	6	2

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	3	415	**418**
LEFT TURN	8	126	**134**
SIDESWIPE	2	292	**294**
OTHER	4	117	**121**
ANGLE	-	86	**86**

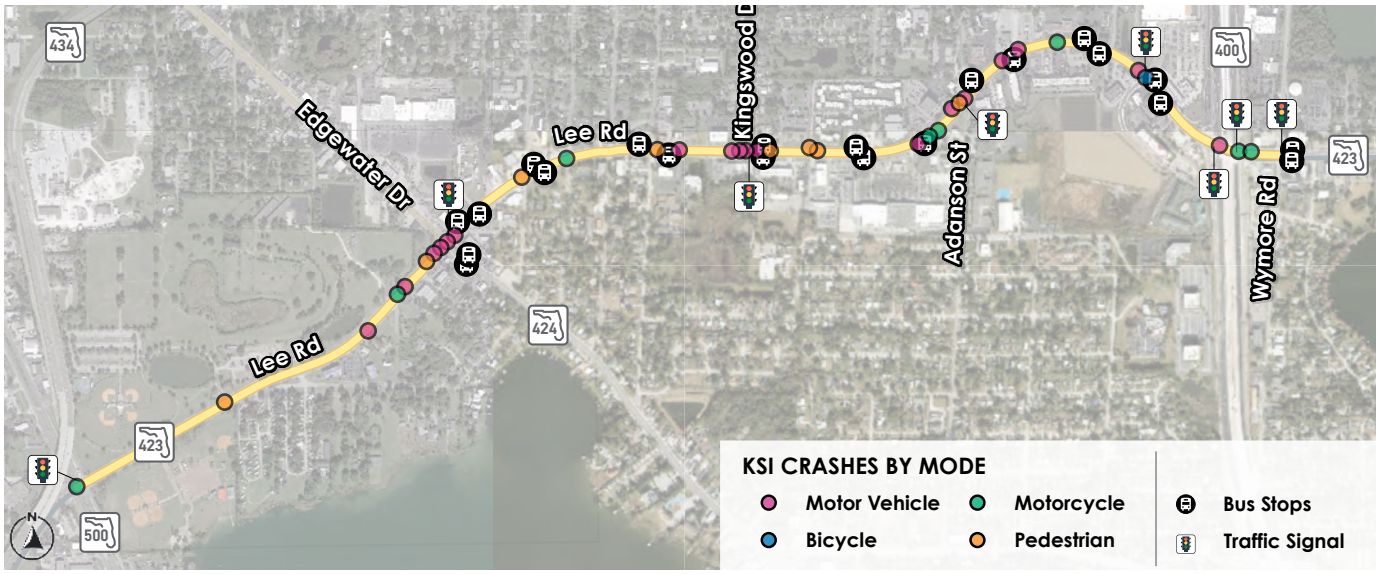
* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	6	367	373
FOLLOWED TOO CLOSELY	-	59	59
FAILED TO YIELD RIGHT-OF-WAY	4	163	167
FAILED TO KEEP IN PROPER LANE	4	93	97
OTHER CONTRIBUTING ACTION	3	105	108
HIT AND RUN	4	207	**211**
ALCOHOL INVOLVED	1	18	**19**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

KSI CRASHES BY LOCATION



HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

PRINCIPAL ARTERIAL (C3C/C4)

CORRIDOR LENGTH

2.23 Miles

AVERAGE POSTED SPEED

45 mph

AVERAGE PREVAILING SPEED

55 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

97%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **443** / **57,100**

TRAVEL LANES / MEDIAN TYPE

6 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	23	880	903
DUSK-DAWN	3	57	60
NIGHT	9	243	252
LIGHTING CONDITION			
LIGHTED	7	223	230
NOT LIGHTED	2	20	22
ROAD SURFACE CONDITION			
DRY	31	1,052	1,083
WET	4	128	132

CORRIDOR 17

LEE ROAD

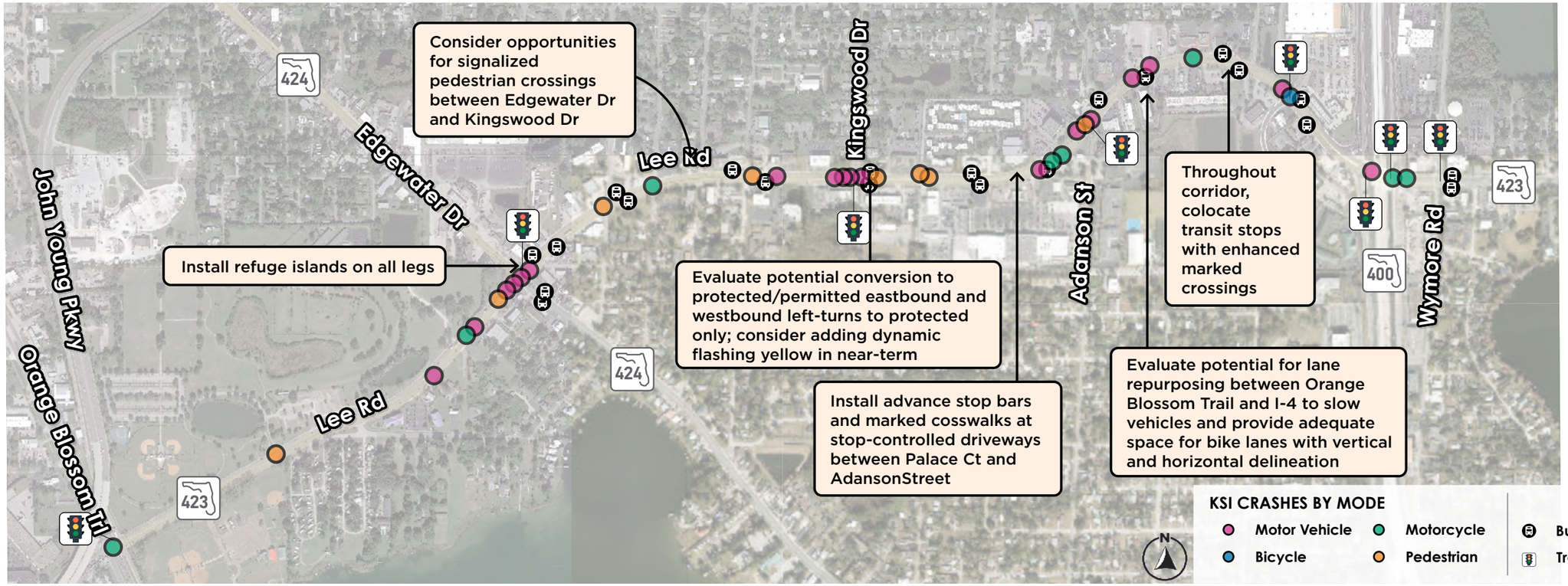
from N. Orange Blossom Trail to N. Wymore Rd.

VISION ZERO

There is a pedestrian safety project in the design phase along Lee Road from Kingswood Dr to Adanson Street. The project includes signal modifications and pedestrian improvements at the Kingswood Drive and Adanson Street intersections and a new signalized intersection at the shopping plaza entrance just west of the McDonald's. There are two unfunded safety projects along the corridor (2236 & 2238) and an unfunded operational/safety project at the intersection of Lee Road with Edgewater Drive.

NEAR TERM TARGET SPEED
40 MPH

LONG TERM TARGET SPEED
35 MPH



The study segment is almost entirely within a disadvantaged community. There are many families that live in the hotels along the corridor. Cycle lengths are long, favoring traffic on Lee Road, leading to pedestrians crossing in gaps in traffic. The only marked crossing on the corridor are at signalized intersections, so pedestrians frequently cross outside of crosswalks. Additional enhanced crossings are needed, and transit stops should be colocated with marked crossings. There are several projects planned along the segment. The only funded project includes an additional signalized crossing. Prevailing speeds on the roadway are 10 mph over the posted speed limit. Speed management strategies are needed to achieve the target speed.

Project Prioritization Score: **82.5**

Planning Level Cost: **$897,000**
(does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 18

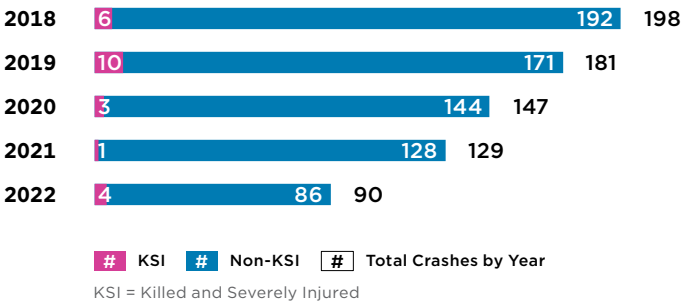
UNIVERSITY BOULEVARD

from S Semoran Blvd. (SR 436) to Lake Mirage Blvd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
745	1	23	200	521
702 *Vehicle*	**1**	**12**	**173**	**516**
21 *Bike*		5	14	2
9 *Pedestrian*		2	6	1
13 *Motorcycle*		4	7	2

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	5	398	**403**
LEFT TURN	4	73	**77**
SIDESWIPE	-	95	**95**
OTHER	3	54	**57**
ANGLE	4	25	**29**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	8	361	369
FOLLOWED TOO CLOSELY	-	5	5
FAILED TO YIELD RIGHT-OF-WAY	5	98	103
FAILED TO KEEP IN PROPER LANE	-	44	44
OTHER CONTRIBUTING ACTION	1	46	47
HIT AND RUN	2	103	**105**
ALCOHOL INVOLVED	-	9	**9**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MINOR ARTERIAL

CORRIDOR LENGTH

1.5 Miles

AVERAGE POSTED SPEED

45 mph

AVERAGE PREVAILING SPEED

52.6 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

86%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **13** / **41,000**

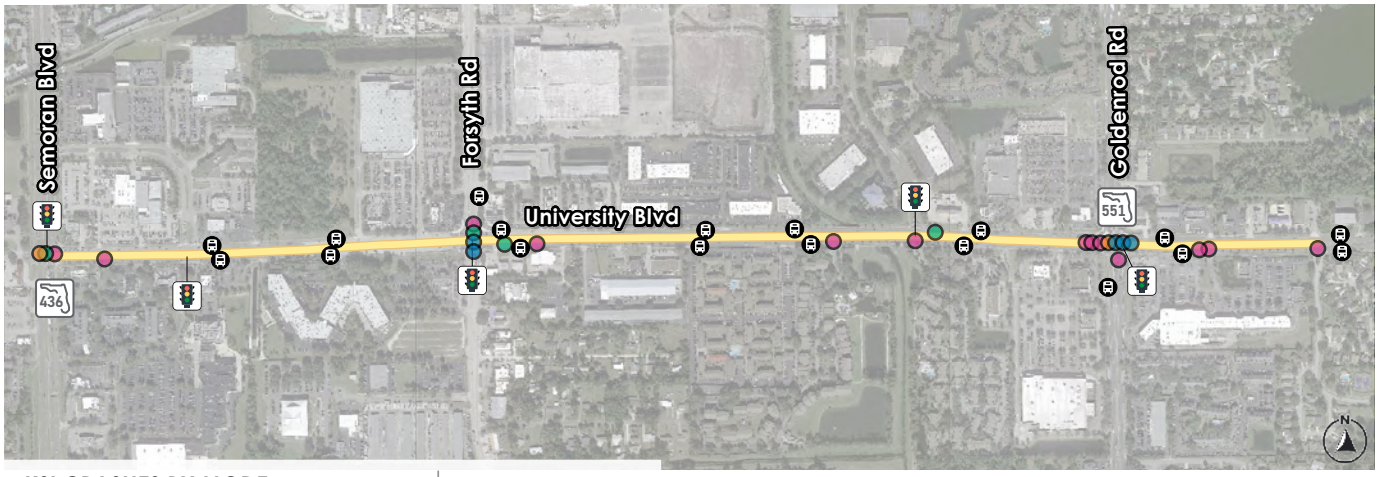
TRAVEL LANES / MEDIAN TYPE

6 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	16	566	582
DUSK-DAWN	-	35	35
NIGHT	8	120	128
LIGHTING CONDITION			
LIGHTED	8	118	126
NOT LIGHTED	-	2	2
ROAD SURFACE CONDITION			
DRY	23	611	634
WET	1	110	111

KSI CRASHES BY LOCATION



KSI CRASHES BY MODE

- Motor Vehicle
- Motorcycle
- Bicycle
- Pedestrian
- Bus Stops
- Traffic Signal

CORRIDOR 18

UNIVERSITY BOULEVARD

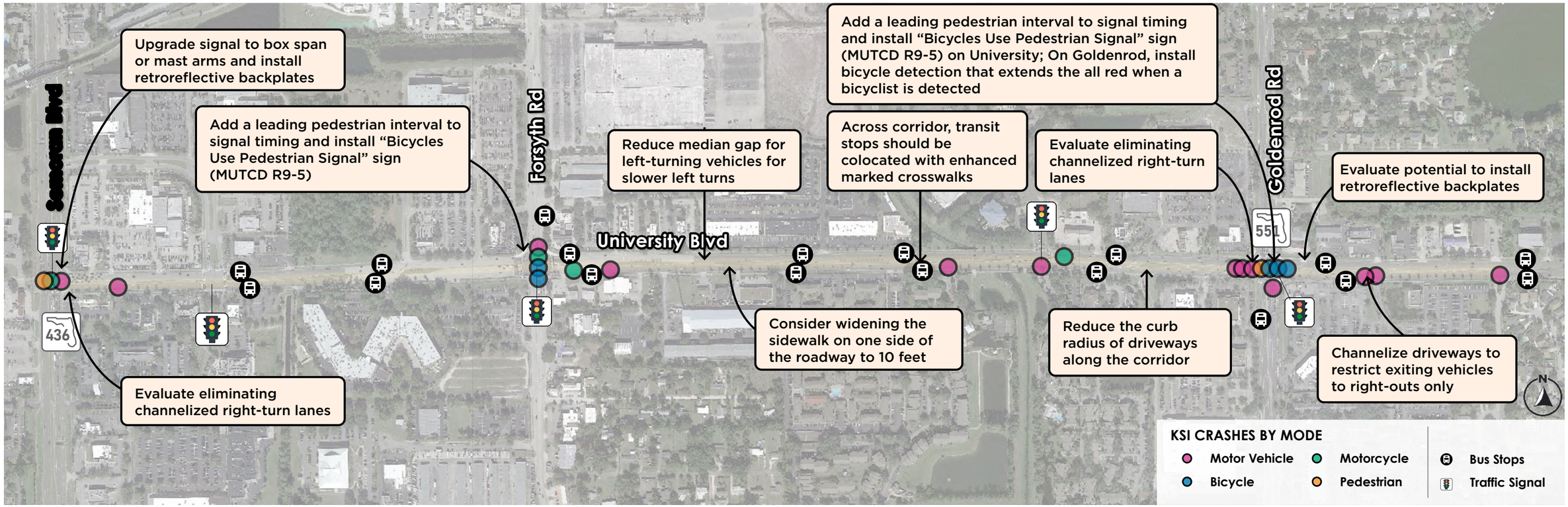
from S Semoran Blvd. (SR 436) to Lake Mirage Blvd.

There is a funded safety project planned at the intersection of University Boulevard and Semoran Boulevard (FDOT 451256). There is also a funded and unfunded operational/safety project on the corridor (MTP 7256 and 7257, respectively). Details about these projects are not known.

County currently conducting University Boulevard Pedestrian and Bicycle Safety Study from Semoran Boulevard to Goldenrod Rd. The County has conducted extensive coordination with LYNX and Full Sail, including on a proposed new superstop that LYNX is considering. The study will be completed in 2025 and any future improvements on this corridor should incorporate the final recommendations from that plan.

NEAR TERM TARGET SPEED
40 MPH

LONG TERM TARGET SPEED
35 MPH



The Cady Way Trail is located just north of the study corridor, contributing to a high volume of bicycles crossing University Boulevard. Bicycle improvements including leading pedestrian intervals should be incorporated at intersections with high bicycle volumes such as Forsyth Road and Goldenrod Road. Transit stops should be colocaed with enhanced marked crossings.

Project Prioritization Score: **87.5**

Planning Level Cost: **$887,000**
(does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 19

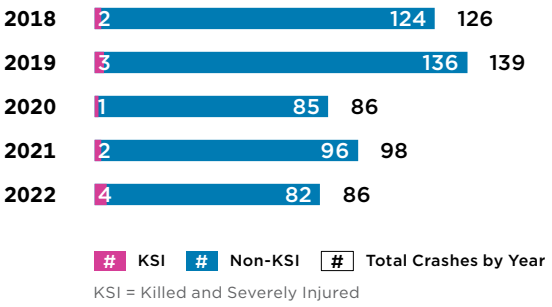
ROSALIND AVENUE

from E. Livingston St. to S. Lucerne Cir.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

535	1	11	105	418
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
509 *Vehicle*		**3**	**91**	**415**
2 *Bike*		1	1	
14 *Pedestrian*	1	4	7	2
10 *Motorcycle*		3	6	1

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	1	151	**152**
LEFT TURN	-	23	**23**
SIDESWIPE	1	128	**129**
OTHER	1	106	**107**
ANGLE	1	51	**52**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	2	100	102
FOLLOWED TOO CLOSELY	-	56	56
FAILED TO YIELD RIGHT-OF-WAY	2	50	52
FAILED TO KEEP IN PROPER LANE	-	48	48
OTHER CONTRIBUTING ACTION	1	30	31
HIT AND RUN	1	96	**97**
ALCOHOL INVOLVED	-	7	**7**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORLANDO

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

PRINCIPAL ARTERIAL

CORRIDOR LENGTH

1 Mile

AVERAGE POSTED SPEED

29.6 mph

AVERAGE PREVAILING SPEED

35.8 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

81%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **3,7,11,13,18,51,61,104,125 / 97,600**

TRAVEL LANES / MEDIAN TYPE

3 lanes / **Paved, Grass, and None**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	4	307	311
DUSK-DAWN	-	9	9
NIGHT	8	206	214
LIGHTING CONDITION			
LIGHTED	8	198	206
NOT LIGHTED	-	5	5
ROAD SURFACE CONDITION			
DRY	11	467	478
WET	1	56	57

KSI CRASHES BY LOCATION

CORRIDOR 19

ROSALIND AVENUE

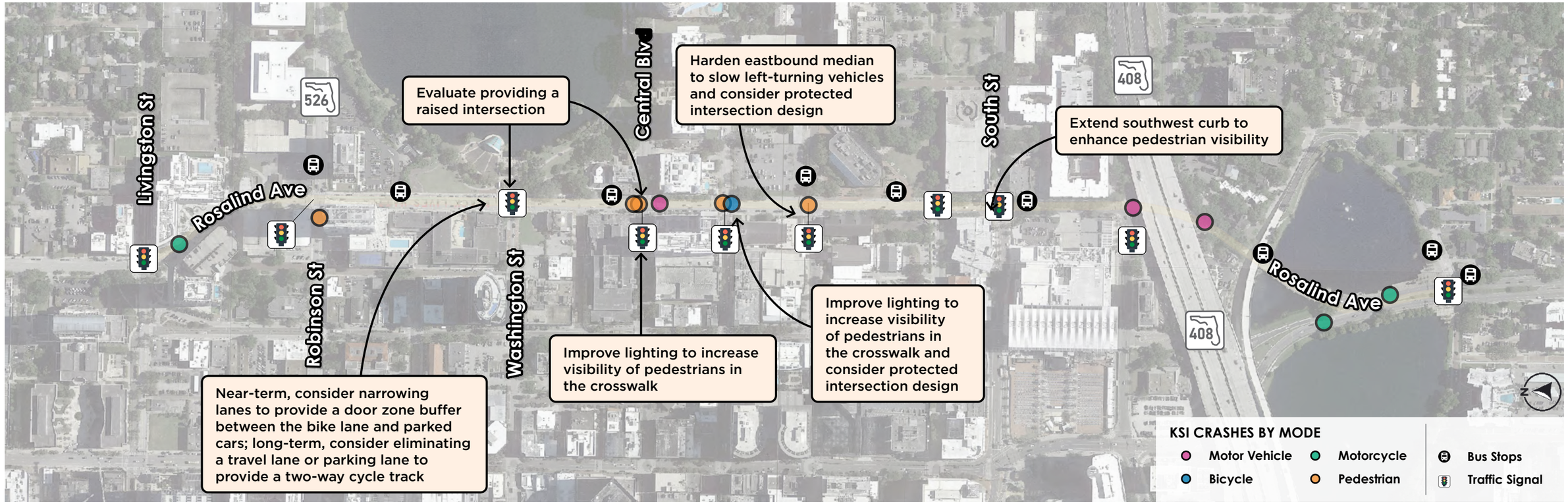
from E. Livingston St. to S. Lucerne Cir.

VISION ZERO

There are no planned improvements along this corridor. There is a corridor improvement project on Robinson Street that would add on-street bike facilities on Robinson Street, providing opportunities to connect bike facilities on Rosalind Avenue.

TARGET SPEED

25 MPH



Rosalind Avenue is a one-way northbound roadway in downtown Orlando with three vehicle lanes, a bicycle lane, and parking on both sides of the roadway. Because of the wide cross section, the roadway encourages higher speeds when traffic volumes are low. Although intersection lighting is provided, a lighting analysis should be conducted and lighting improved accordingly at several intersections.

Project Prioritization Score: **86.25**

Planning Level Cost: **$324,000**

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 20

S SEMORAN BOULEVARD (SR 436)

from Lake Underhill Rd. to Lake Margaret Dr.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
1,837	5	21	557	1,254
1,775 *Vehicle*	**2**	**9**	**519**	**1,245**
18 *Bike*		1	15	2
26 *Pedestrian*	3	9	14	
18 *Motorcycle*		2	9	7

CRASHES BY YEAR

KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	4	1,078	**1,082**
LEFT TURN	-	74	**74**
SIDESWIPE	2	257	**259**
OTHER	5	150	**155**
ANGLE	2	56	**58**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	4	430	434
FOLLOWED TOO CLOSELY	1	441	442
FAILED TO YIELD RIGHT-OF-WAY	2	180	182
FAILED TO KEEP IN PROPER LANE	-	91	91
OTHER CONTRIBUTING ACTION	4	100	104
HIT AND RUN	4	336	**340**
ALCOHOL INVOLVED	-	27	**27**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORLANDO / ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

PRINCIPAL ARTERIAL (C4)

CORRIDOR LENGTH

2.34 Miles

AVERAGE POSTED SPEED

46.4 mph

AVERAGE PREVAILING SPEED

53.8 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

6%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **4, 28, 436S / 377,700**

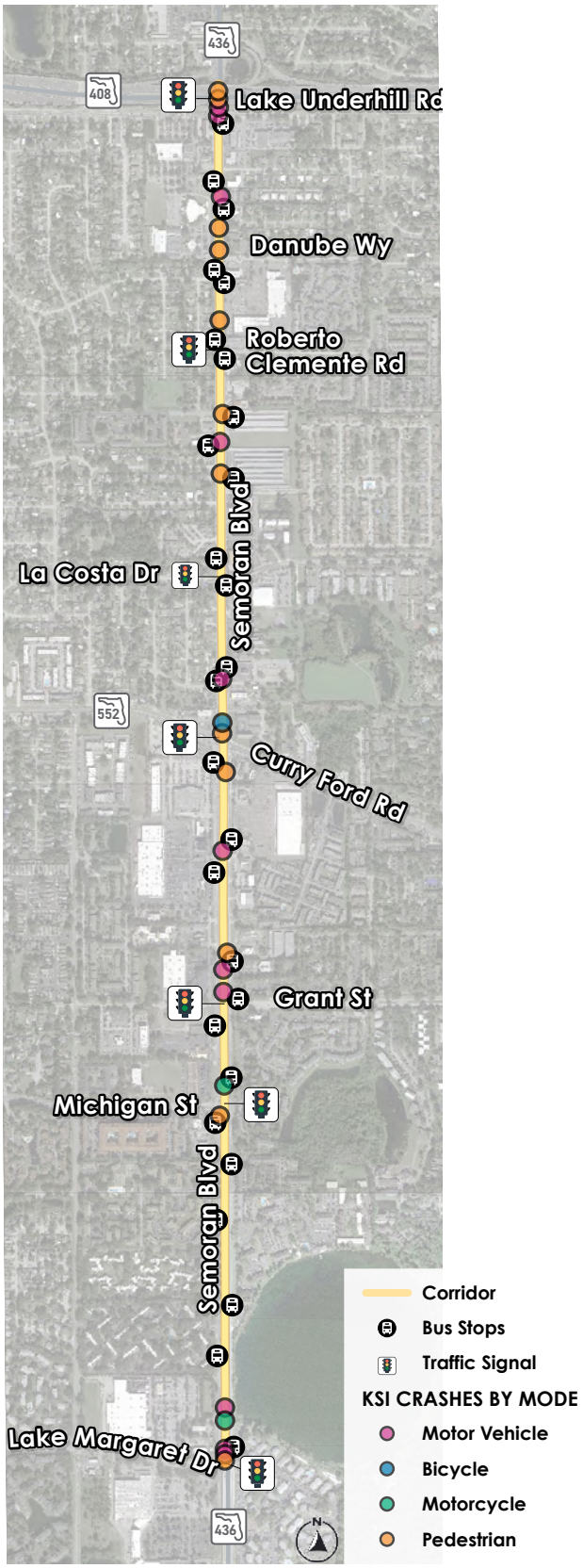
TRAVEL LANES / MEDIAN TYPE

6 lanes / **Paved, Grass, Brick, and None**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	9	1,255	1,264
DUSK-DAWN	-	72	72
NIGHT	17	484	501
LIGHTING CONDITION			
LIGHTED	17	477	494
NOT LIGHTED	-	6	6
ROAD SURFACE CONDITION			
DRY	23	1,554	1,577
WET	3	256	259

KSI CRASHES BY LOCATION



CORRIDOR 20

S SEMORAN BOULEVARD (SR 436)

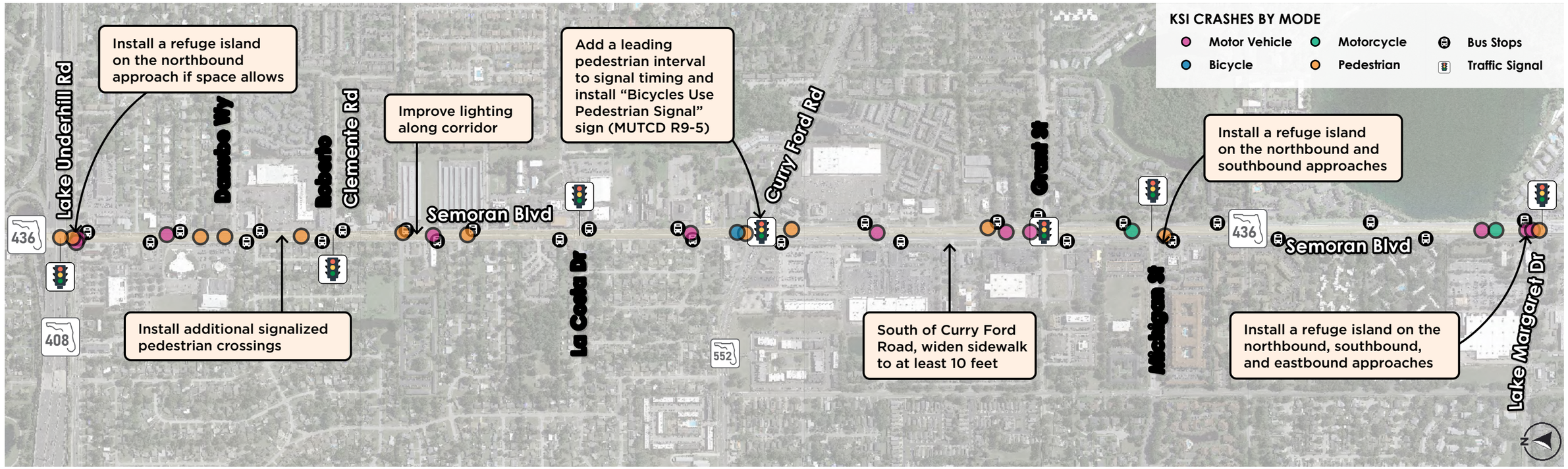
from Lake Underhill Rd. to Lake Margaret Dr.

VISION ZERO

There have been several lighting project on the corridor in recent years. Additionally, a signal improvement project at the intersection of Semoran Boulevard and Curry Ford Road (FDOT 443514-1). There are also three fully funded operational/safety (2051, 2049, and 2095).

NEAR TERM TARGET SPEED
40 MPH

LONG TERM TARGET SPEED
35 MPH



The land use surrounding the roadway is a wide mix of residential, commercial, industrial, and institutional uses. There are many destinations that might attract pedestrians and bicyclists, but marked crossings do not always align with desired paths. Additional signalized crossings should be added throughout the corridor, and transit stops should be colacated with crossings. Around 65 percent of the KSI collisions occurred at night. Therefore, a lighting study should be conducted and lighting improved accordingly. Crossing distances are long and pedestrian refuge islands at intersections would be beneficial.

Project Prioritization Score: **78.75**

Planning Level Cost: **$782,000**
(does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 21

W IRLO BRONSON MEMORIAL HIGHWAY

from Celebration Ave. to Four Winds Blvd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
1,791	18	51	566	1,156
1,687 *Vehicle*	**4**	**26**	**508**	**1,149**
19 *Bike*		4	15	
42 *Pedestrian*	8	10	20	4
43 *Motorcycle*	6	11	23	3

CRASHES BY YEAR

KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	13	891	**904**
LEFT TURN	9	147	**156**
SIDESWIPE	2	257	**259**
OTHER	11	143	**154**
ANGLE	-	57	**57**

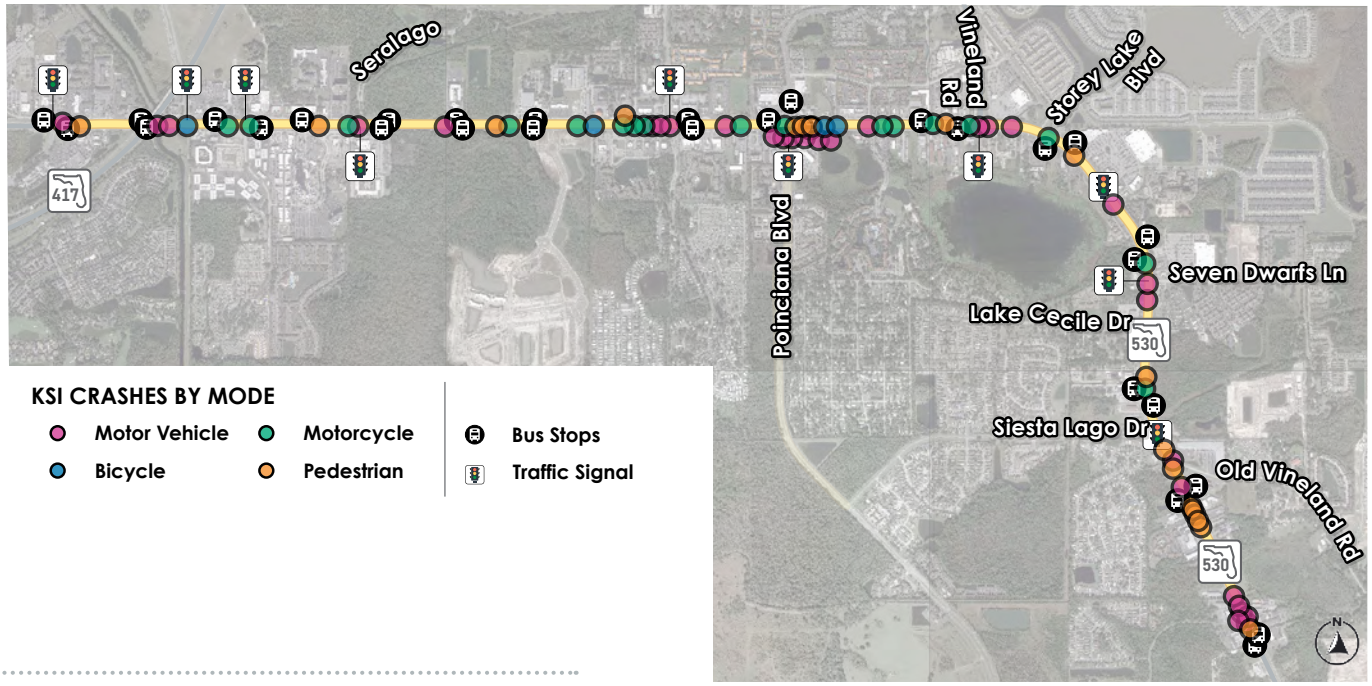
* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	16	736	752
FOLLOWED TOO CLOSELY	-	91	91
FAILED TO YIELD RIGHT-OF-WAY	10	234	244
FAILED TO KEEP IN PROPER LANE	2	97	99
OTHER CONTRIBUTING ACTION	6	106	112
HIT AND RUN	6	240	**246**
ALCOHOL INVOLVED	8	28	**36**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

KSI CRASHES BY LOCATION



HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

OSCEOLA COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

PRINCIPAL ARTERIAL (C3C)

CORRIDOR LENGTH

4.98 Miles

AVERAGE POSTED SPEED

45 mph

AVERAGE PREVAILING SPEED

56.1 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

94%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **55,56,306 / 650,900**

TRAVEL LANES / MEDIAN TYPE

6 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	27	1,096	1,123
DUSK-DAWN	1	75	76
NIGHT	41	551	592
LIGHTING CONDITION			
LIGHTED	38	505	543
NOT LIGHTED	3	45	48
ROAD SURFACE CONDITION			
DRY	64	1,524	1,588
WET	5	198	203

CORRIDOR 21

W IRLO BRONSON MEMORIAL HIGHWAY

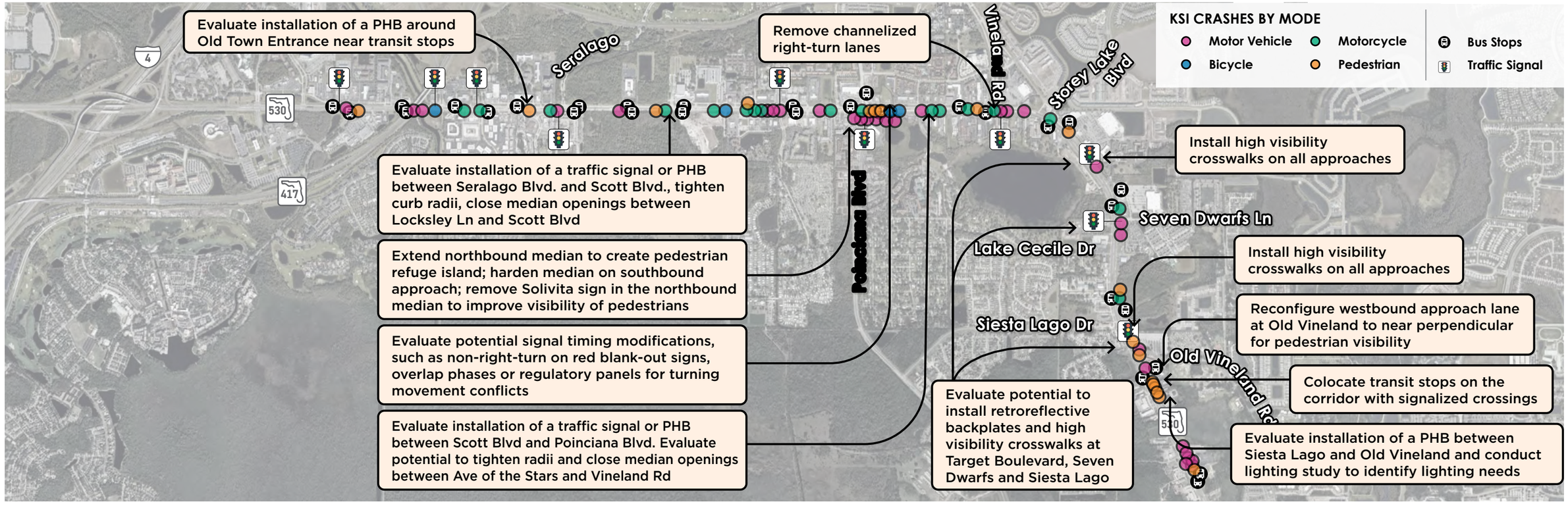
from Celebration Ave. to Four Winds Blvd.

VISION ZERO

There are plans to widen the existing bike lane to provide a 7-foot buffered bike lane from US 417 to Hoagland Boulevard (FDOT 448783 and 441021). There are also plans to install a new traffic signal, three pedestrian hybrid beacons, and sidewalk connections (FDOT 448783). Another FDOT lighting project was a recently completed that improved lighting at several intersections on the corridor. In addition, there is a fully funded safety improvements project (MTP 2128), fully funded ITS/Technology project (MTP 2007), unfunded safety improvements project (MTP 2248), and unfunded operational/safety project (MTP 2094) along the corridor.

TARGET SPEED

35 MPH



The corridor is in a high tourist location given its proximity to Walt Disney World. There are a large number of hotels, restaurants, shopping, and entertainment venues. Transit ridership is high along the corridor, as there are buses directly to the parks. There are projects planned on the corridor that will add additional signalized pedestrian crossings. Consider conducting an analysis to determine if pedestrian hybrid beacons should be installed in other locations as well. Speeds on the corridor are over 10 mph higher than the posted speed limit. Additional traffic calming measures are needed to achieve the target speed, including traffic signal timing strategies. A lighting project was completed on the corridor in 2021. As around 60 percent of the KSI collisions between 2018-2022 occurred at night or at dawn or dusk, more recent collision data should be evaluated to determine if the lighting project was sufficient or if additional improvements are necessary.

LYNX has also identified this corridor as a key transit corridor in their long range plans, and future improvements should incorporate transit enhancements.

Project Prioritization Score: **91.25**

Planning Level Cost: **$1,527,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 22

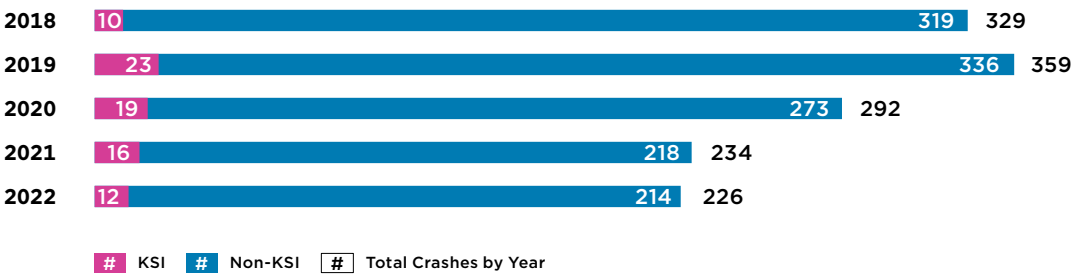
S GOLDENROD ROAD (SR 551)

from Lake Underhill Rd. to Beatty Dr.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
1,440	13	67	478	882
1,356 *Vehicle*	**7**	**54**	**427**	**868**
28 *Bike*		6	19	3
25 *Pedestrian*	3	3	17	2
31 *Motorcycle*	3	4	15	9

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	27	703	**730**
LEFT TURN	14	112	**126**
SIDESWIPE	1	162	**163**
OTHER	9	117	**126**
ANGLE	6	52	**58**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	28	628	656
FOLLOWED TOO CLOSELY	-	4	4
FAILED TO YIELD RIGHT-OF-WAY	21	204	225
FAILED TO KEEP IN PROPER LANE	4	71	75
OTHER CONTRIBUTING ACTION	5	93	98
HIT AND RUN	8	230	**238**
ALCOHOL INVOLVED	3	15	**18**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MINOR ARTERIAL (C3C)

CORRIDOR LENGTH

2 Miles

AVERAGE POSTED SPEED

45 mph

AVERAGE PREVAILING SPEED

56.9 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

52%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **3, 15** / **96,400**

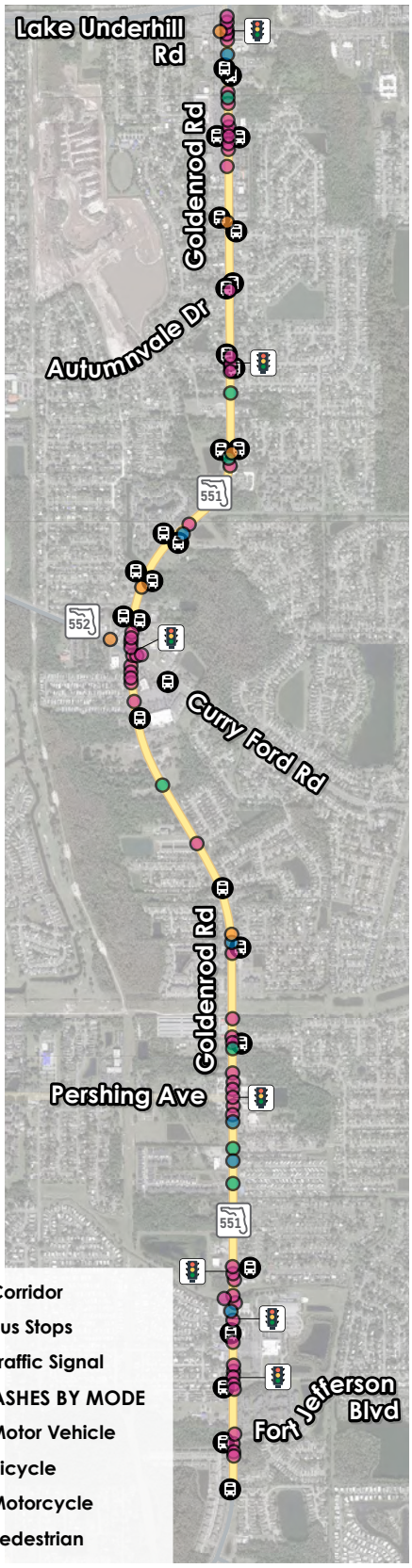
TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	45	936	981
DUSK-DAWN	4	74	78
NIGHT	31	350	381
LIGHTING CONDITION			
LIGHTED	30	334	364
NOT LIGHTED	1	16	17
ROAD SURFACE CONDITION			
DRY	73	1,211	1,284
WET	7	149	156

KSI CRASHES BY LOCATION



CORRIDOR 22

S. GOLDENROD ROAD (SR 551)

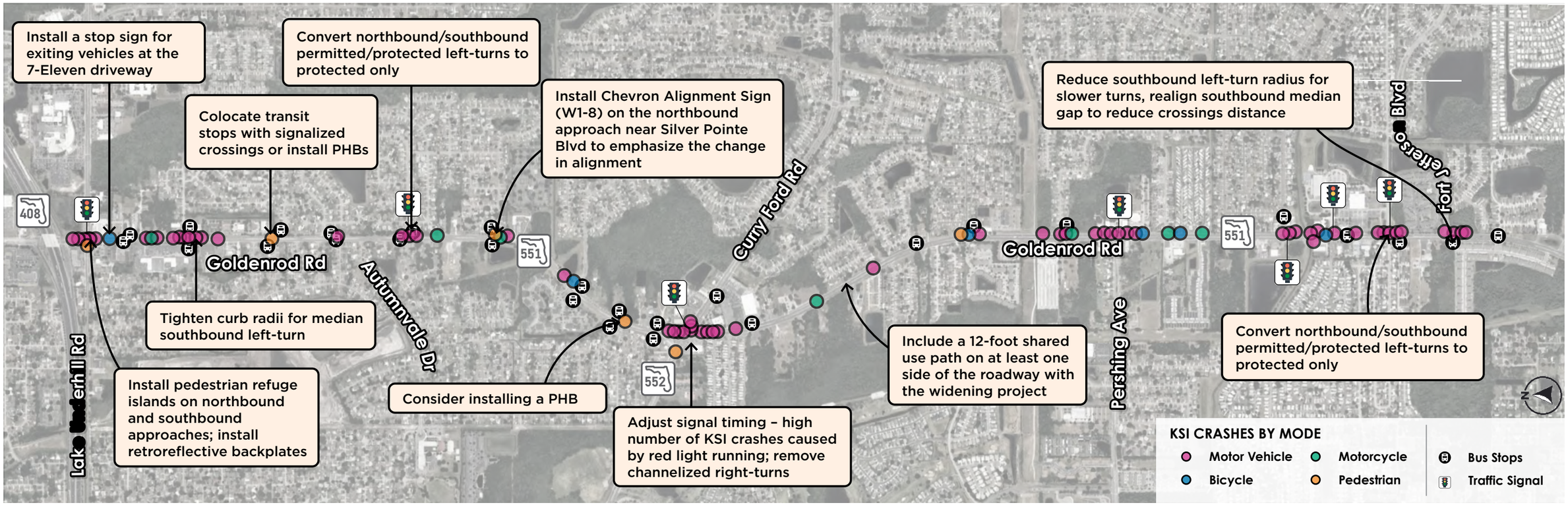
from Lake Underhill Rd. to Beatty Dr.

VISION ZERO

There are plans to widen Goldenrod Road from 4 to 6 lanes from Beatty Drive to SR 408 as part of three fully funded projects (MTP 2204, 2205, and 2203). There is also an unfunded safety improvements project (MTP 2235) on the corridor.

TARGET SPEED

40 MPH



This segment of Goldenrod Road is four lanes, but there are plans to widen it to six lanes. The widening project should include bicycle and pedestrian improvements, including a 12-foot shared use path on at least one side of the roadway. Speeds on the corridor are already 10 mph high than the posted speed limit, and widening the roadway will likely encourage even faster speeds. Additional traffic calming measures should be implemented in order to achieve the target speed. Pedestrian hybrid beacons (PHBs) should be installed at existing transit stops, or stops should be relocated to signalized crossings. Over 40 percent of KSI collisions on the corridor occurred at night. A lighting analysis should be conducted along the segment, and lighting improvements should be made accordingly.

Project Prioritization Score: **87.5**

Planning Level Cost: **$1,967,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 23

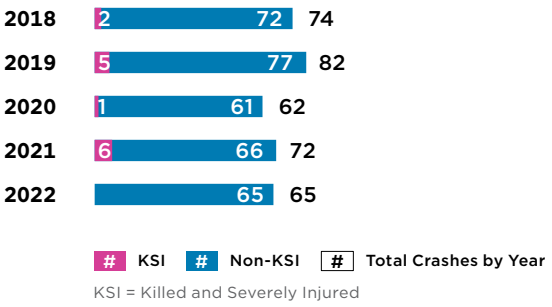
RONALD REAGAN BOULEVARD

from Eldersprings Cir. to Jones Ave.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
355	3	11	79	262
335 *Vehicle*	**1**	**6**	**72**	**256**
3 *Bike*			1	2
6 *Pedestrian*	1	2	3	
11 *Motorcycle*	1	3	3	4

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	1	177	**178**
LEFT TURN	4	36	**40**
SIDESWIPE	2	52	**54**
OTHER	-	12	**12**
ANGLE	1	24	**25**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	-	91	91
FOLLOWED TOO CLOSELY	1	53	54
FAILED TO YIELD RIGHT-OF-WAY	4	36	40
FAILED TO KEEP IN PROPER LANE	-	20	20
OTHER CONTRIBUTING ACTION	-	24	24
HIT AND RUN	1	35	**36**
ALCOHOL INVOLVED	1	5	**6**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

SEMINOLE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MINOR ARTERIAL (C3C)

CORRIDOR LENGTH

0.93 Miles

AVERAGE POSTED SPEED

43 mph

AVERAGE PREVAILING SPEED

53.76 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

100%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

N/A

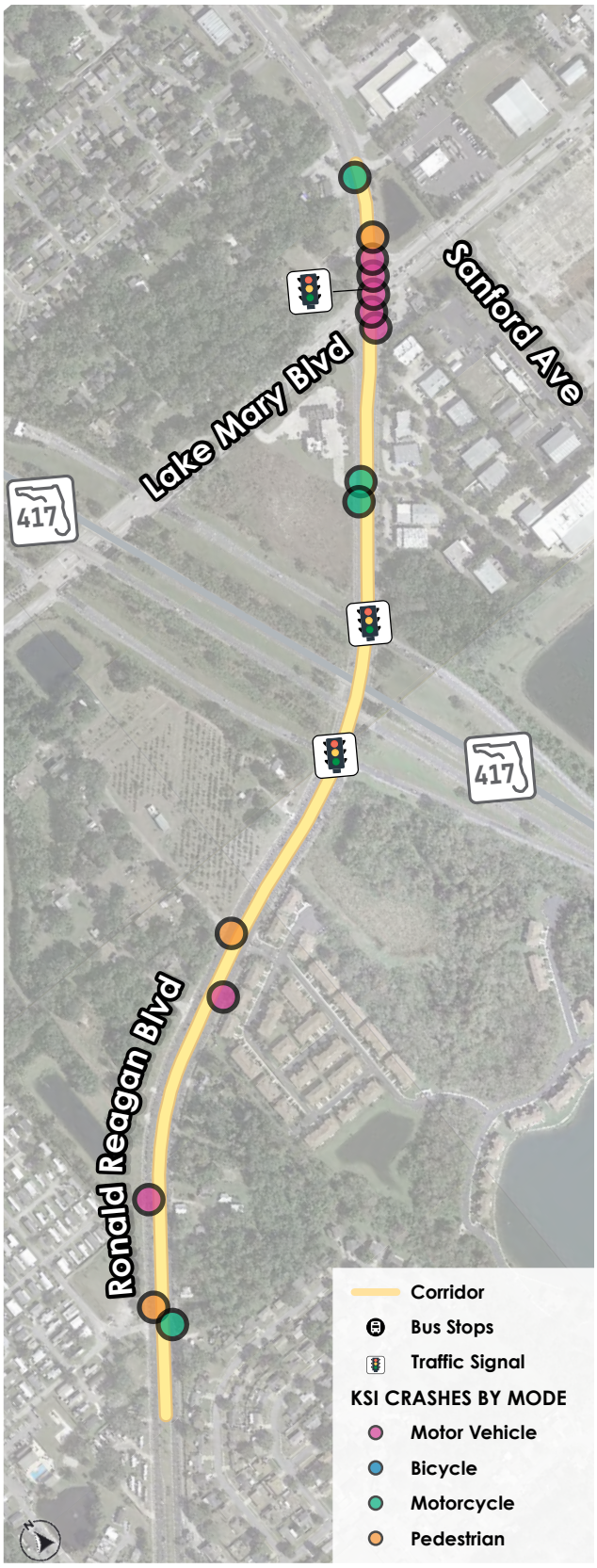
TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved, Grass, and Brick**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	5	233	238
DUSK-DAWN	2	25	27
NIGHT	7	83	90
LIGHTING CONDITION			
LIGHTED	2	59	61
NOT LIGHTED	5	23	28
ROAD SURFACE CONDITION			
DRY	12	295	307
WET	2	45	47

KSI CRASHES BY LOCATION



CORRIDOR 23

RONALD REAGAN BOULEVARD

from Eldersprings Cir. to Jones Ave.

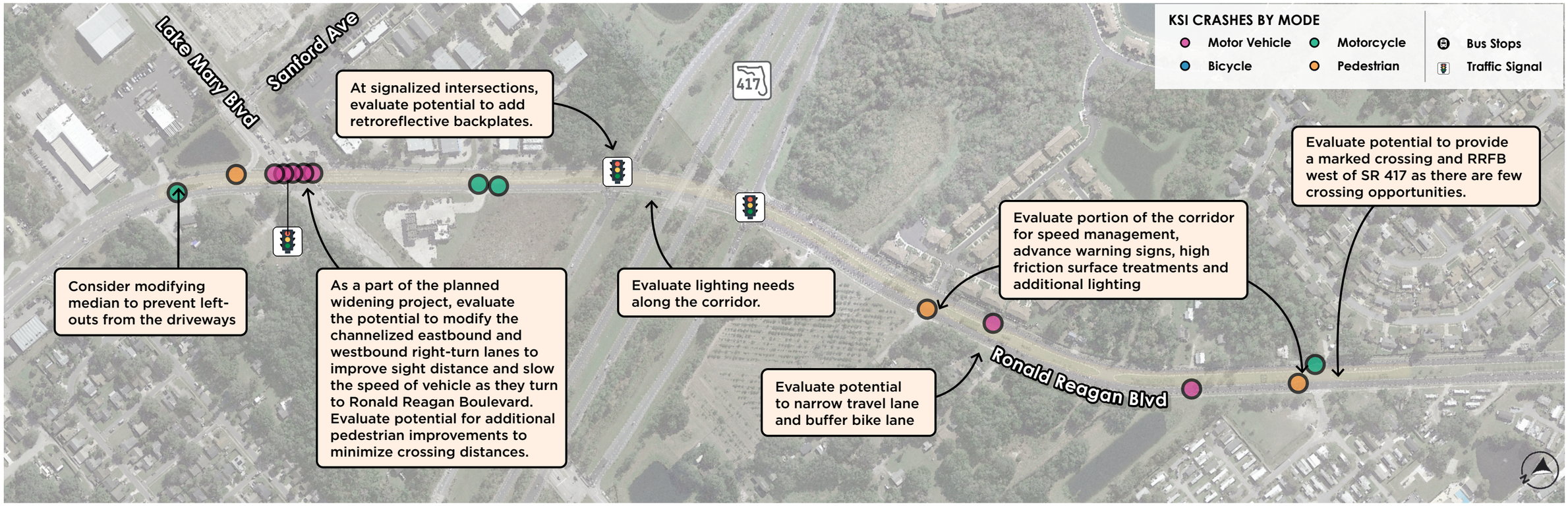
VISION ZERO

The county has a proposed project to widen the intersection of Ronald Reagan Boulevard at Lake Mary Boulevard to provide 2 northbound right turn lanes.

The intersection of Ronald Reagan Boulevard at Lake Mary Boulevard is proposed to be included in a County near-miss demonstration project using GridMatrix Data Analytics. Improvements identified and implemented based on that study should be documented and their effectiveness quantified.

TARGET SPEED

35 MPH



The entire study segment is within a transportation disadvantaged community. Over 60 percent of the KSI collisions on the corridor occurred at night or at dusk or dawn. A lighting analysis should be conducted along the segment, and lighting improvements should be made accordingly.

Project Prioritization Score: **83.75**

Planning Level Cost: **$320,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 24

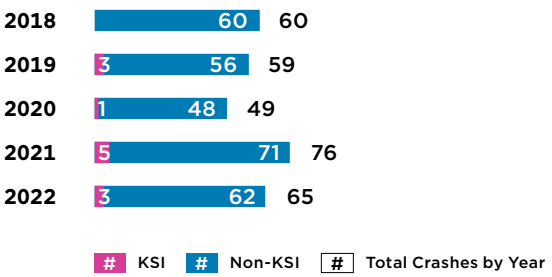
W 1ST STREET

from N. Persimmon Ave. to N. French Ave.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

309	3	9	73	224
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
294 *Vehicle*		**3**	**69**	**222**
2 *Bike*		1		1
9 *Pedestrian*	2	3	3	1
4 *Motorcycle*	1	2	1	

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	1	85	**86**
LEFT TURN	2	34	**36**
SIDESWIPE	-	75	**75**
OTHER	1	37	**38**
ANGLE	1	34	**35**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	2	83	85
FOLLOWED TOO CLOSELY	-	31	31
FAILED TO YIELD RIGHT-OF-WAY	3	48	51
FAILED TO KEEP IN PROPER LANE	-	30	30
OTHER CONTRIBUTING ACTION	-	49	49
HIT AND RUN	2	42	**44**
ALCOHOL INVOLVED		2	**2**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

SANFORD / SEMINOLE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

PRINCIPAL ARTERIAL (C3C)

CORRIDOR LENGTH

0.98 Miles

AVERAGE POSTED SPEED

43.1 mph

AVERAGE PREVAILING SPEED

50.1 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

100%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **34, 46E / 16,100**

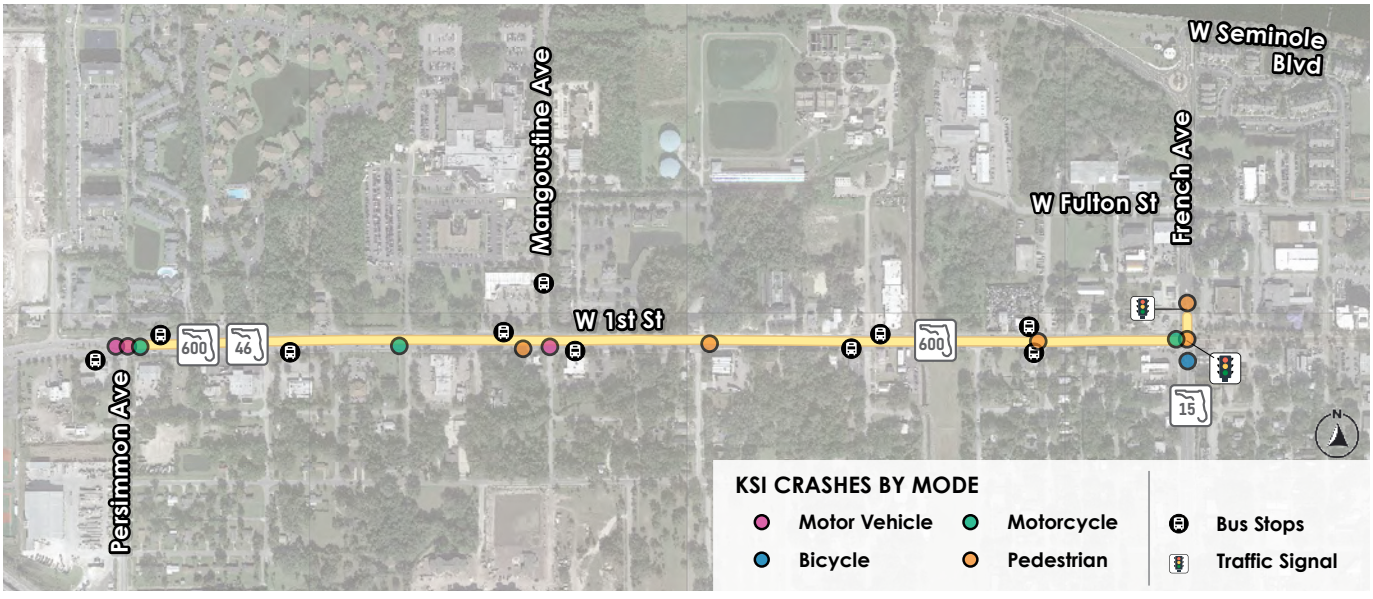
TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved, Grass, and None**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	5	216	221
DUSK-DAWN	1	11	12
NIGHT	6	70	76
LIGHTING CONDITION			
LIGHTED	5	65	70
NOT LIGHTED	1	3	4
ROAD SURFACE CONDITION			
DRY	11	267	278
WET	1	30	31

KSI CRASHES BY LOCATION



CORRIDOR 24

W 1ST STREET

from N. Persimmon Ave. to N. French Ave.

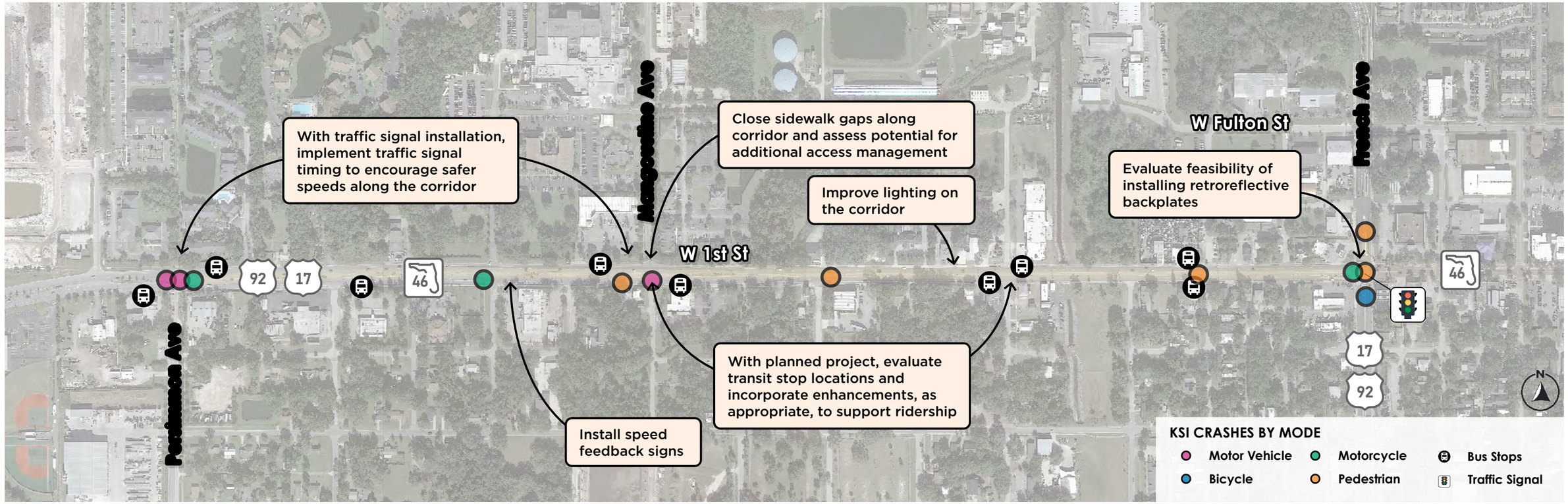
VISION ZERO

TARGET SPEED

35 MPH

A FDOT resurfacing project is planed along the corridor which will likely add a raised median and 7-foot buffered bike lane (FDOT 447103) as well as traffic signals at Persimmon Avenue and Mangoustine Avenue.

The intersection of 1st Street at French Avenue proposed to be included in a County near-miss demonstration project using GridMatrix Data Analytics. Improvements identified and implemented based on that study should be documented.



The study segment is currently a four-lane road with a two-lane left-turn lane and parking on both sides. The planned FDOT project will eliminate parking in some locations to provide a 7-foot buffered bike lane. The project will also install mid-block pedestrian crossings at locations to be determined that will be equipped with either an RRFB or PHB. It is recommended that the mid-block crossings be located at existing transit stops or that the stops be moved to the future mid-block crossings. Almost 60 percent of the KSI collisions on the corridor occurred at night or at dusk or dawn. A lighting analysis should be conducted along the segment, and lighting improvements should be made accordingly.

Project Prioritization Score: **96.25**

Planning Level Cost: **$581,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 25

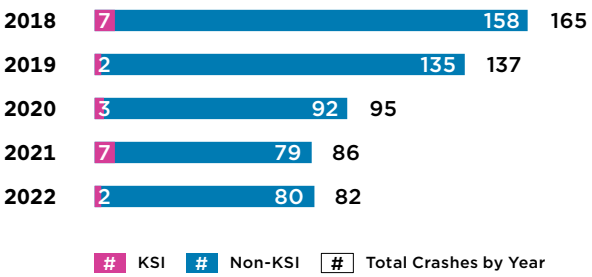
EDGEWATER DRIVE

from Clarcona Ocoee Rd. to Lee Rd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
565	-	21	184	360
531 *Vehicle*		**13**	**163**	**355**
13 *Bike*		1	9	3
12 *Pedestrian*		5	7	
9 *Motorcycle*		2	5	2

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	1	175	**176**
LEFT TURN	9	104	**113**
SIDESWIPE	-	97	**97**
OTHER	1	46	**47**
ANGLE	2	41	**43**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	1	175	176
FOLLOWED TOO CLOSELY	-	2	2
FAILED TO YIELD RIGHT-OF-WAY	5	129	134
FAILED TO KEEP IN PROPER LANE	-	46	46
OTHER CONTRIBUTING ACTION	1	41	42
HIT AND RUN	3	108	**111**
ALCOHOL INVOLVED	-	13	**13**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MINOR ARTERIAL (C3C)

CORRIDOR LENGTH

1.38 Miles

AVERAGE POSTED SPEED

42.6 mph

AVERAGE PREVAILING SPEED

51.3 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

100%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **23, 443** / **29,000**

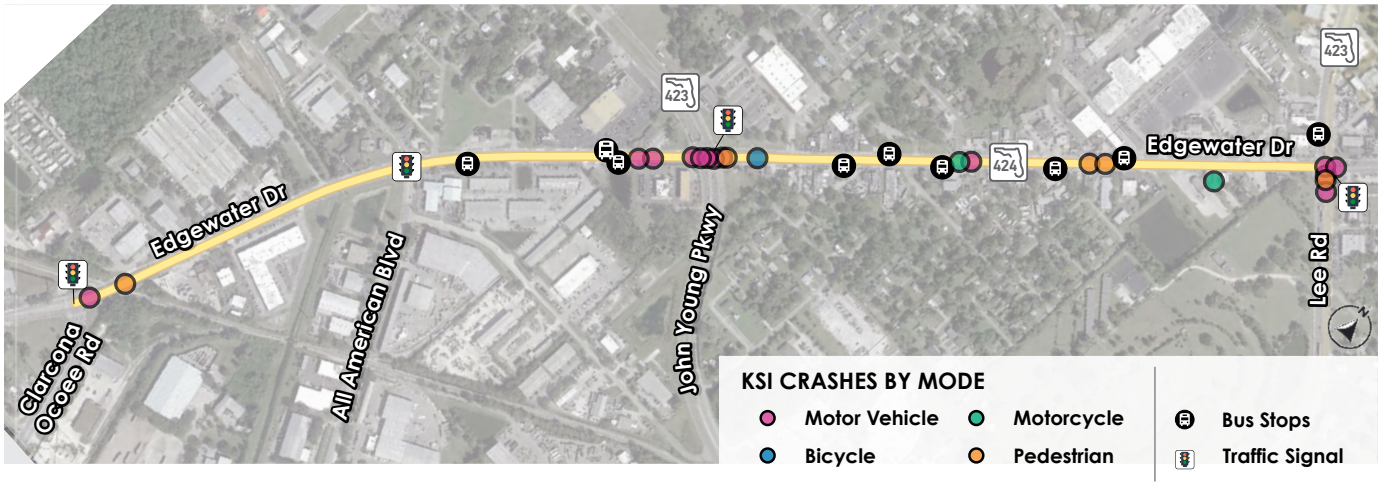
TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved, Grass, and None**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	13	390	403
DUSK-DAWN	1	40	41
NIGHT	7	114	121
LIGHTING CONDITION			
LIGHTED	6	96	102
NOT LIGHTED	1	17	18
ROAD SURFACE CONDITION			
DRY	18	489	507
WET	3	55	58

KSI CRASHES BY LOCATION



CORRIDOR 25

EDGEWATER DRIVE

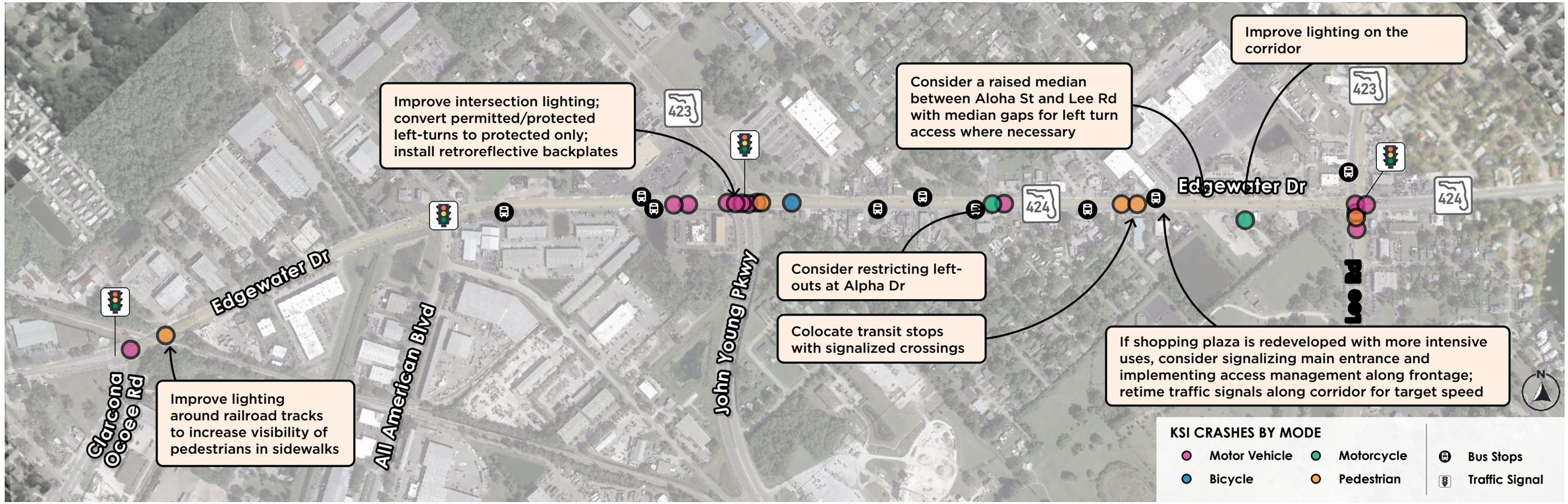
from Clarcona Ocoee Rd. to Lee Rd.

VISION ZERO

There are plans to install a Traffic Signal at the intersection of Edgewater Drive and Satel Drive (422708). The corridor intersects with a project included in the FDOT Tentative Work Program to resurface John Young Parkway from Edgewater Drive to Lee Road (452911-1). There is also a fully funded complete streets/safety/ops project (7118), an unfunded operational/safety project (2024), and an unfunded safety improvements project (2233) on portions of the corridor.

TARGET SPEED

35 MPH



Edgewater Drive is surrounded primarily by commercial land uses and has a large number of access points. Consider consolidating transit stops and colocating them with signalized crossings. A lighting study should be conducted along the corridor as around 40 percent of the KSI collisions on the segment occurred at night.

Project Prioritization Score: **78.75**

Planning Level Cost: **$683,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 26

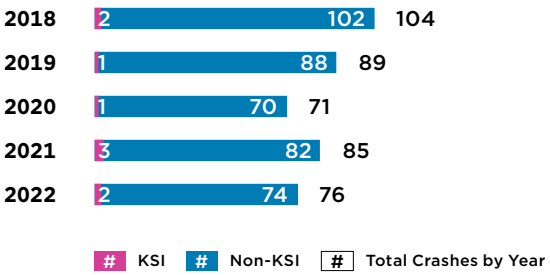
CONWAY ROAD

from Curry Ford Rd. to E. Michigan St.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

425	5	4	122	294
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
408 *Vehicle*	2	3	111	292
4 *Bike*			4	
5 *Pedestrian*	1		3	1
8 *Motorcycle*	2	1	4	1

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	1	156	**157**
LEFT TURN	2	70	**72**
SIDESWIPE	-	45	**45**
OTHER	1	65	**66**
ANGLE	2	23	**25**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	3	96	99
FOLLOWED TOO CLOSELY	-	51	51
FAILED TO YIELD RIGHT-OF-WAY	2	96	98
FAILED TO KEEP IN PROPER LANE	-	14	14
OTHER CONTRIBUTING ACTION	2	23	25
HIT AND RUN	1	70	**71**
ALCOHOL INVOLVED	1	8	**9**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORLANDO

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MINOR ARTERIAL (C3C/C3R)

CORRIDOR LENGTH

0.75 Miles

AVERAGE POSTED SPEED

40 mph

AVERAGE PREVAILING SPEED

50 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

0%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **51** / **41,500**

TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	5	264	269
DUSK-DAWN	1	21	22
NIGHT	3	131	134
LIGHTING CONDITION			
LIGHTED	3	130	133
NOT LIGHTED	-	1	1
ROAD SURFACE CONDITION			
DRY	9	370	379
WET	-	46	46

KSI CRASHES BY LOCATION

CORRIDOR 26

CONWAY ROAD

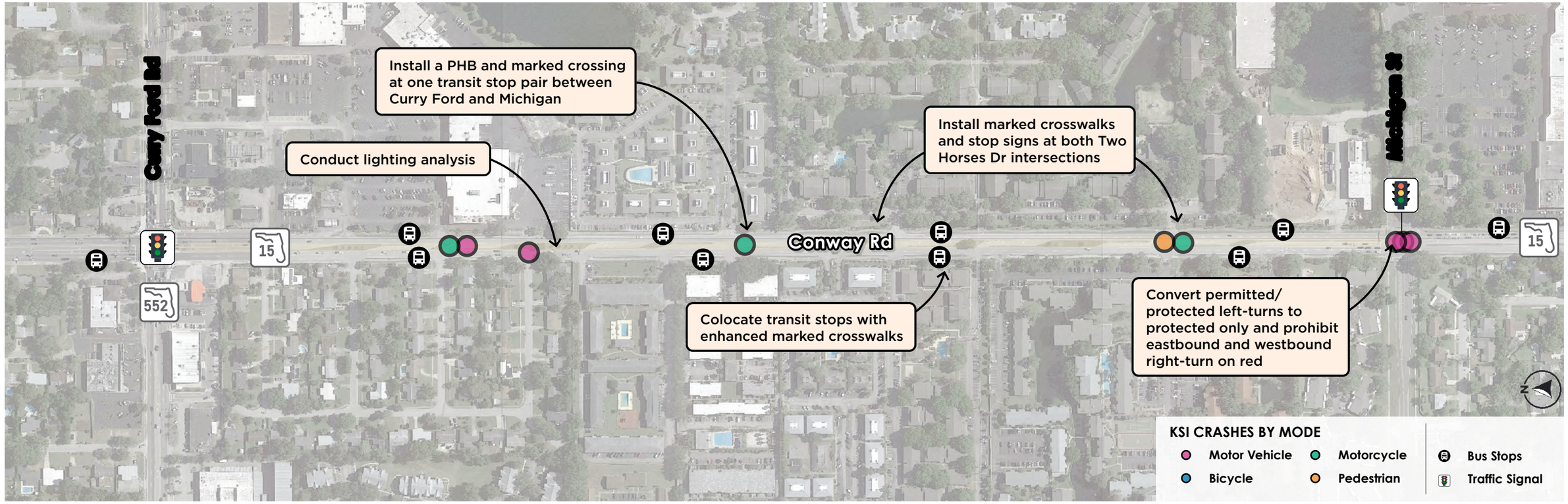
from Curry Ford Rd. to E. Michigan St.

VISION ZERO

There is a planned FDOT project that slightly overlaps the corridor (447090). The project includes adding separated bike lanes with concrete barriers. There are also two unfunded safety improvement projects planned for the segment (MTP 2100 and 2101).

TARGET SPEED

35 MPH



Prevailing speeds on the roadway are around 10 mph higher than the posted speed limit. Traffic calming measures are needed to achieve the target speed, including traffic signal timing strategies. Transit stops on the corridor should be colocated with enhanced marked crosswalks. Around half of the KSI collisions on the roadway occurred at night or at dusk or dawn; therefore, a lighting analysis should be conducted and lighting improved accordingly.

Project Prioritization Score: **83.75**

Planning Level Cost: **$264,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 27

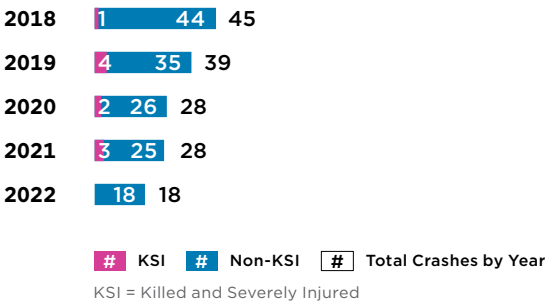
PERSHING AVENUE

from Woodgate Blvd. to S Goldenrod Rd.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

158	3	7	61	87
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
148 *Vehicle*	1	4	56	87
4 *Bike*		2	2	
3 *Pedestrian*	1		2	
3 *Motorcycle*	1	1	1	

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	1	76	**77**
LEFT TURN	1	22	**23**
SIDESWIPE	-	10	**10**
OTHER	1	13	**14**
ANGLE	-	5	**5**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	2	67	69
FOLLOWED TOO CLOSELY	-	2	2
FAILED TO YIELD RIGHT-OF-WAY	2	25	27
FAILED TO KEEP IN PROPER LANE	-	1	1
OTHER CONTRIBUTING ACTION	1	11	12
HIT AND RUN	1	20	**21**
ALCOHOL INVOLVED	-	2	**2**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORLANDO / ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MAJOR COLLECTOR

CORRIDOR LENGTH

0.68 Miles

AVERAGE POSTED SPEED

45 mph

AVERAGE PREVAILING SPEED

53.2 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

100%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **3** / **13,100**

TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	6	120	126
DUSK-DAWN	-	4	4
NIGHT	4	24	28
LIGHTING CONDITION			
LIGHTED	3	20	23
NOT LIGHTED	1	4	5
ROAD SURFACE CONDITION			
DRY	10	121	131
WET	-	27	27

KSI CRASHES BY LOCATION

CORRIDOR 27

PERSHING AVENUE

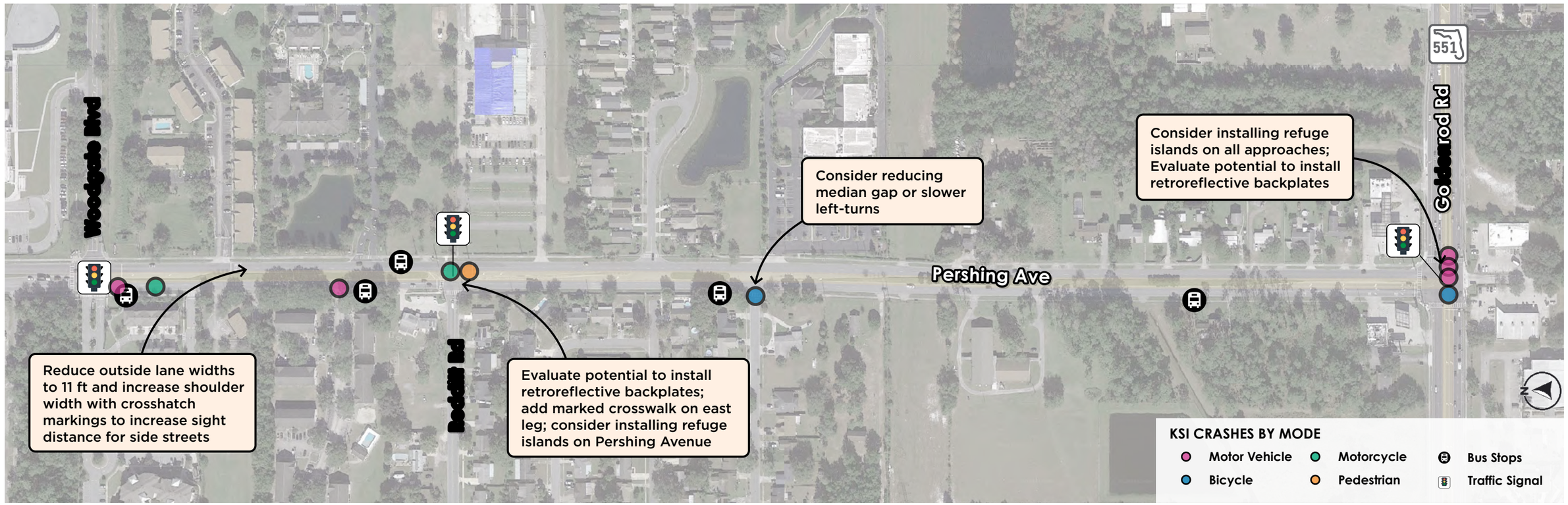
from Woodgate Blvd. to S Goldenrod Rd.

VISION ZERO

There are no planned projects on the corridor.

TARGET SPEED

35 MPH



The intersection of Pershing Avenue and Goldenrod Road was re-striped in 2020. The collision data used in this analysis from 2018-2022. More recent crash data should be analyzed when available to determine if new striping has improved conditions at the intersection.

Project Prioritization Score: **83.75**

Planning Level Cost: **$354,000**

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 28

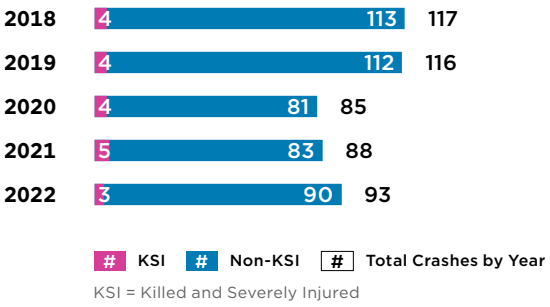
JOHN YOUNG PARKWAY

from SR 528 Ramps to Lazio Ln.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

499	4	16	140	339
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
488 *Vehicle*	**3**	**16**	**133**	**336**
1 *Bike*			1	
2 *Pedestrian*			2	
8 *Motorcycle*	1		4	3

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	11	301	**312**
LEFT TURN	4	18	**22**
SIDESWIPE	-	88	**88**
OTHER	2	16	**18**
ANGLE	-	18	**18**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	12	275	287
FOLLOWED TOO CLOSELY	-	4	4
FAILED TO YIELD RIGHT-OF-WAY	-	26	26
FAILED TO KEEP IN PROPER LANE	1	44	45
OTHER CONTRIBUTING ACTION	1	33	34
HIT AND RUN	5	63	**68**
ALCOHOL INVOLVED	-	7	**7**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

ORANGE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

PRINCIPAL ARTERIAL

CORRIDOR LENGTH

0.85 Miles

AVERAGE POSTED SPEED

55 mph

AVERAGE PREVAILING SPEED

57.5 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

0%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **57** / **12,200**

TRAVEL LANES / MEDIAN TYPE

6 lanes / **Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	11	334	345
DUSK-DAWN	1	30	31
NIGHT	8	115	123
LIGHTING CONDITION			
LIGHTED	8	107	115
NOT LIGHTED	-	8	8
ROAD SURFACE CONDITION			
DRY	19	430	449
WET	1	49	50

KSI CRASHES BY LOCATION

CORRIDOR 28

JOHN YOUNG PARKWAY

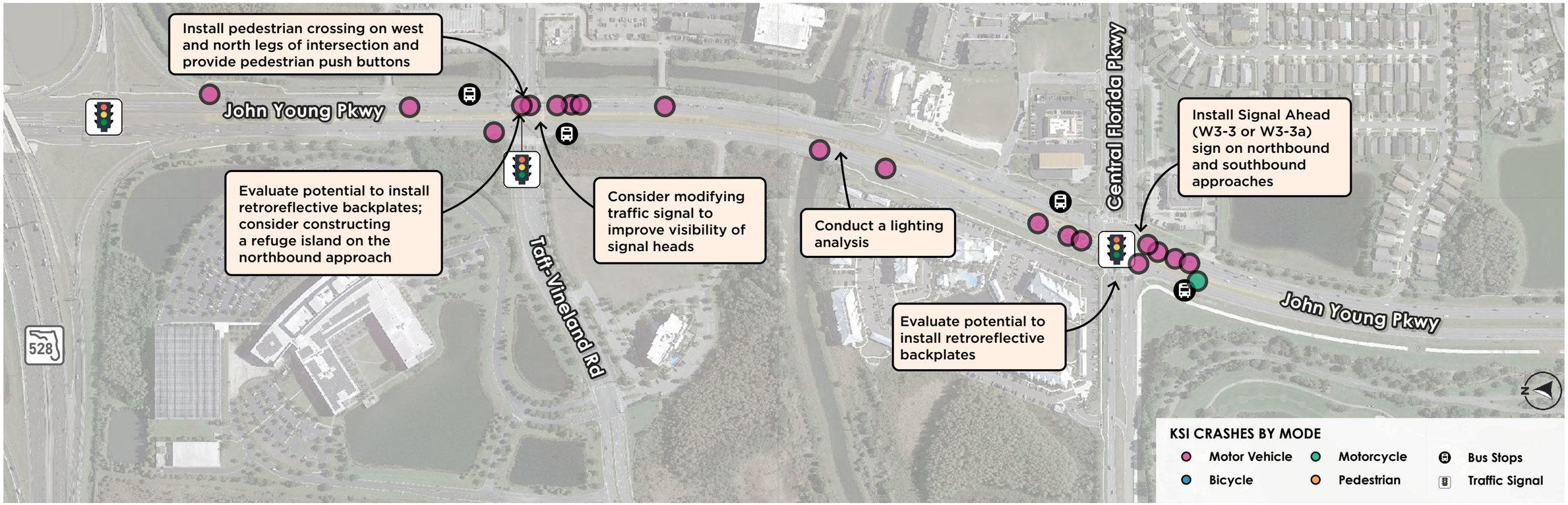
from SR 528 Ramps to Lazlo Ln.

VISION ZERO

There was a recent FDOT project to widen the eastbound SR 528 exit ramp at John Young Parkway (449465). There are also two unfunded operational/safety projects (MTP 2086 and 2087) and a partially funded ITS/technology project (MTP 3261) on the study segment.

TARGET SPEED

45 MPH



John Young Parkway is a higher speed roadway that appears to have little bicycle and pedestrian traffic. All non-signalized access points are restricted to right-in or right-in, right-out only. Around 45 percent of the KSI collisions on the roadway occurred at night or at dusk or dawn; therefore, consider conducting a lighting analysis improve the lighting accordingly. Prevailing speeds on the corridor are just slightly higher than the posted speed limit of 55 mph. If the speed limit is reduced, traffic calming measures will be necessary to encourage adherence to the speed limit.

Improvements on this road should consider the proposed alignment of the Sunshine Corridor.

Project Prioritization Score: **78.75**

Planning Level Cost: **$459,000** (does not include the cost of planned improvements).

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 29

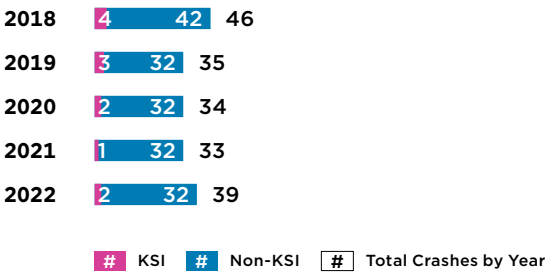
LAKE MARY BOULEVARD

from North of Celery Ave. to SR 46

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

187	3	9	60	115
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
177 *Vehicle*		4	58	115
- *Bike*				
- *Pedestrian*				
10 *Motorcycle*	3	5	2	

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	1	71	**72**
LEFT TURN	4	42	**46**
SIDESWIPE	1	13	**14**
OTHER	1	15	**16**
ANGLE	-	8	**8**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	3	48	51
FOLLOWED TOO CLOSELY	-	18	18
FAILED TO YIELD RIGHT-OF-WAY	4	34	38
FAILED TO KEEP IN PROPER LANE	1	7	8
OTHER CONTRIBUTING ACTION	-	9	9
HIT AND RUN	-	14	**14**
ALCOHOL INVOLVED	2	2	**4**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

SEMINOLE COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

MINOR ARTERIAL (C3R)

CORRIDOR LENGTH

0.91 Miles

AVERAGE POSTED SPEED

45 mph

AVERAGE PREVAILING SPEED

62.3 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

0%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **46E** / **4,800**

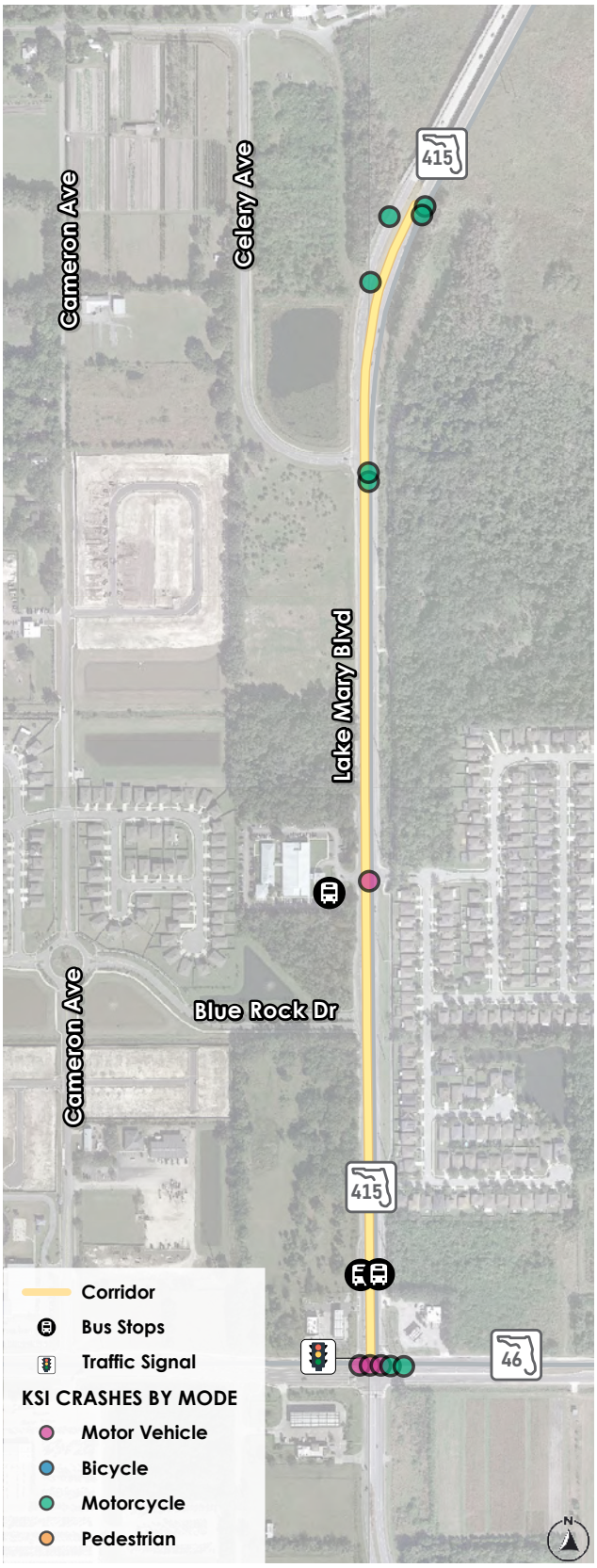
TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	5	111	116
DUSK-DAWN	-	20	20
NIGHT	7	44	51
LIGHTING CONDITION			
LIGHTED	1	22	23
NOT LIGHTED	6	21	27
ROAD SURFACE CONDITION			
DRY	12	152	164
WET	-	23	23

KSI CRASHES BY LOCATION



CORRIDOR 29

LAKE MARY BOULEVARD

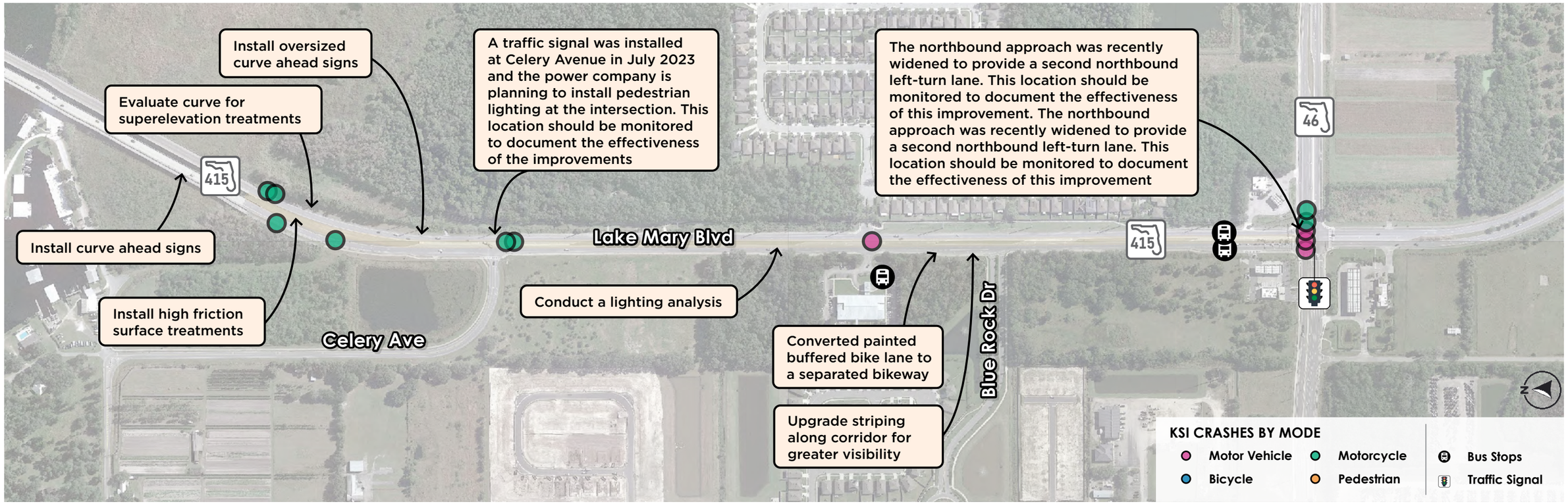
from North of Celery Ave. to SR 46

VISION ZERO

There are no planned projects on the study segment.

TARGET SPEED

45 MPH



Lake Mary Boulevard is a auto centric roadway. The prevailing speeds are over 15 mph higher than the posted speed limit. Traffic calming measures are needed to achieve the target speed. Almost 60 percent of the KSI collisions on the corridor occurred at night or at dusk or dawn. A lighting analysis should be conducted along the segment, and lighting improvements should be made accordingly. All of the fatal collisions and over half of the serious injury collisions on the roadway involved a motorcyclist. Much of the land around the roadway is undeveloped. Should the land use change, additional roadway modifications may be necessary.

Project Prioritization Score: **83.75**

Planning Level Cost: **$213,000**

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

CORRIDOR 30

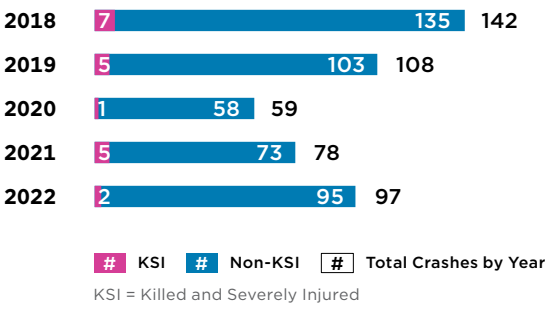
POINCIANA BOULEVARD

from W Irlo Bronson Memorial Hwy to Siesta Lago Dr.

CRASH STATISTICS (2018-2022) | Source: Signal 4 Analytics

484	3	17	171	293
TOTAL CRASHES	FATAL	SERIOUS INJURY	INJURY	NO INJURY
466 *Vehicle*	**1**	**12**	**160**	**293**
3 *Bike*		2	1	
6 *Pedestrian*	1	2	3	
9 *Motorcycle*	1	1	7	

CRASHES BY YEAR



KSI = Killed and Severely Injured

CRASH TYPE*

	KSI	NON-KSI	TOTAL
REAR END	2	190	**192**
LEFT TURN	7	80	**87**
SIDESWIPE	-	69	**69**
OTHER	4	25	**29**
ANGLE	-	23	**23**

* Crash type may not sum to total as not all crash types shown.

CONTRIBUTING ACTION**

	KSI	NON-KSI	TOTAL
CARELESS OR NEGLIGENT	2	178	180
FOLLOWED TOO CLOSELY	-	21	21
FAILED TO YIELD RIGHT-OF-WAY	4	100	104
FAILED TO KEEP IN PROPER LANE	2	33	35
OTHER CONTRIBUTING ACTION	3	30	33
HIT AND RUN	2	43	**45**
ALCOHOL INVOLVED	-	3	**3**

** Contributing action may sum to more than the total crash numbers as some crashes may have multiple contributing actions and not all contributing actions shown.

HIGH INJURY NETWORK (HIN) FACTS

JURISDICTION

OSCEOLA COUNTY

FUNCTIONAL CLASSIFICATION (CONTEXT CLASSIFICATION)

PRINCIPAL ARTERIAL

CORRIDOR LENGTH

1.29 Miles

AVERAGE POSTED SPEED

41.6 mph

AVERAGE PREVAILING SPEED

64 mph

% OF CORRIDOR IN TRANSPORTATION DISADVANTAGED AREA

100%

TRANSIT ROUTES / ANNUAL BOARDINGS/ALIGHTINGS (2022)

Link **306** / **0**

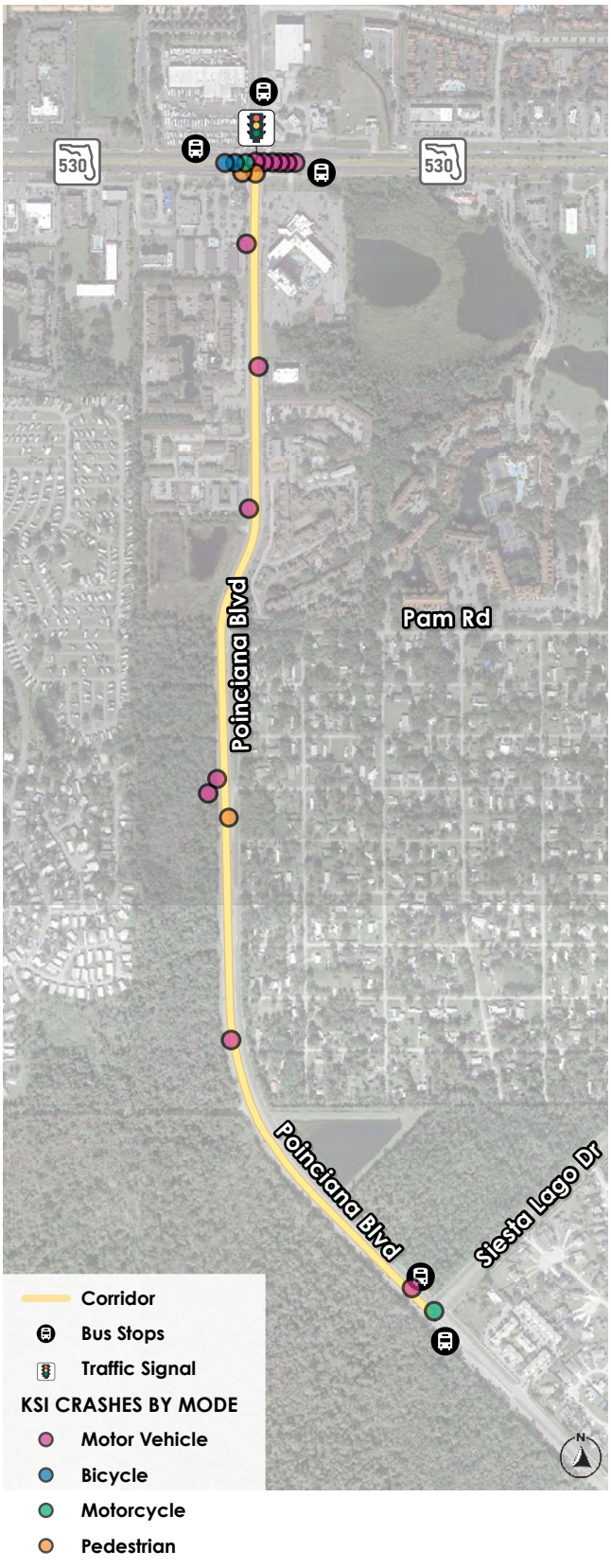
TRAVEL LANES / MEDIAN TYPE

4 lanes / **Paved and Grass**

CRASH CONTRIBUTING FACTORS

	KSI	NON-KSI	TOTAL
TIME OF DAY			
DAYLIGHT	7	302	309
DUSK-DAWN	1	24	25
NIGHT	12	137	149
LIGHTING CONDITION			
LIGHTED	10	116	126
NOT LIGHTED	2	21	23
ROAD SURFACE CONDITION			
DRY	18	386	404
WET	2	78	80

KSI CRASHES BY LOCATION



CORRIDOR 30

POINCIANA BOULEVARD

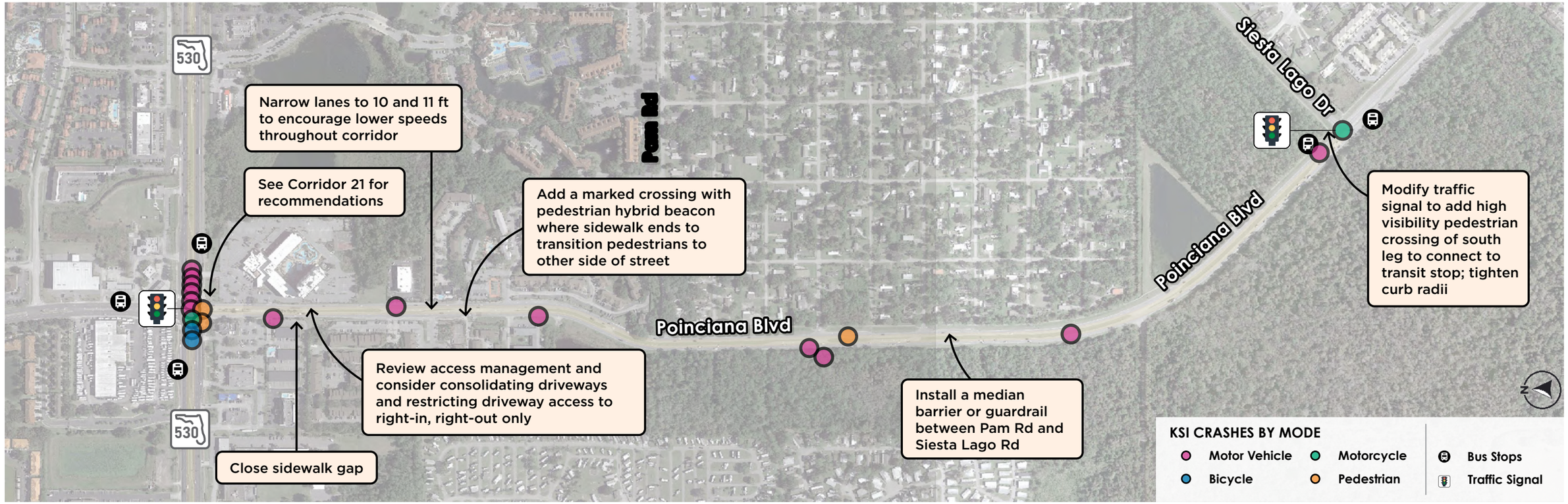
from W Irlo Bronson Memorial Hwy to Siesta Lago Dr.

VISION ZERO

There are no planned projects on the corridor.

TARGET SPEED

35 MPH



The priority for this corridor is pedestrian and bicyclist facilities. Right-of-way is limited and a detailed study should be conducted to determine feasibility of sidewalk connectivity on both sides. At a minimum, a midblock crosswalk should be provided near the Villas of Somerset to connect the sidewalk on the west side of the road (from the north) to the sidewalk on the east side of the road (to the south) with gap completion. North of Pam Avenue, the surround land use consists primarily of hotels and resorts. There are a large number of driveways and median openings. Consider consolidating driveways and restricting some driveways to right-in, right-out only. South of Pam Avenue, the surrounding land use is less developed and there are fewer access points. Should the land continue to develop, additional modifications may be needed.

Project Prioritization Score: **87.5**

Planning Level Cost: **$1,815,000**

Note: Not for construction purposes. All projects will require more detailed planning, engineering and community engagement, as well as collaboration with between agencies that have responsibility for the road and the jurisdiction the road traverses.

APPENDICES PART 2

Appendix Part 2F: Prioritization Criteria

Memorandum

VISION ZERO
CENTRAL FLORIDA
Counting down to zero traffic deaths

metroplan orlando
A REGIONAL TRANSPORTATION PARTNERSHIP

Date: April 26, 2024

To: Vision Zero Central Florida Partners

From: Mighk Wilson, MetroPlan Orlando
Kathrin Tellez, Fehr & Peers

Subject: Vision Zero Central Florida – Project Prioritization

Introduction

A core element of Vision Zero Action Plans is ***Project Delivery*** where decision-makers and system designers advance projects and policies for safe, equitable multimodal travel by securing funding and implementing projects, prioritizing roadways with the most pressing safety issues. As part of the Regional Vision Zero Action Plan, transportation safety countermeasures will be identified for the top 30 high injury network (HIN) segments, identified using the Safety Score, which is calculated based on the total number of crashes, the highest level of injury sustained in each crash, and the travel mode of victims. As a part of the County and jurisdictional action plans being prepared concurrently, transportation safety countermeasures will also be identified for their top corridors.

This document outlines the process to develop criteria that can be used to prioritize roadway improvements that have transportation safety benefits. The criteria will be used to identify projects to incorporate into the typical MetroPlan Orlando project funding process through the Metropolitan Transportation Plan (MTP), as well as select projects that could be a part of a regional implementation grant application through the U.S. Department of Transportation's Safe Streets and Roads for All (SS4A) grant program. This document summarizes prioritization criteria used by MetroPlan Orlando on other planning projects and presents Vision Zero Action Plan prioritization criteria.

Existing Criteria

As the regional planning agency, MetroPlan Orlando has developed evaluation criteria based on goals articulated in the 2045 MTP to prioritize transportation system improvements. Most recently, a prioritization process was completed for the Prioritized Project List (PPL) and the Active Transportation Plan (ATP) project. The criteria from the PPL is summarized in Error! Reference source not found. and the criteria from the ATP project is summarized in Error! Reference source not found., along with its potential applicability to the regional Vision Zero Action Plan as the criteria used for Vision Zero project prioritization should have some alignment with the criteria used for other regional planning purposes. Based on the review, all criteria used in the PPL and ATP prioritization processes have some applicability to Vision Zero.

Table 1: Prioritized Project List Evaluation Criteria and Applicability to Vision Zero Action Plan

Goal Area / Weight	PPL Evaluation Criteria	Applicable to Vision Zero	Notes
Safety and Security / 33%	Crash Rate	Yes	Improving safety is the primary goal of the Vision Zero Action Plan.
	Fatal & Serious Injury Crash Rates	Yes	
	Number of Pedestrian & Bicycle Crashes	Yes	
	Evacuation Route Designation	Yes	Potential changes on designated evacuation routes would need to be reviewed to assess if changes could negatively affect the evacuation process.
Reliability and Performance / 13%	Travel Time Reliability (Auto)	Yes	While safety projects can reduce crashes, thereby reducing non-recurring congestion and increasing auto travel time reliability, these metrics are traditionally focused on congestion relief projects. As these metrics are not included as a part of the Vision Zero Action Plan, these effects may be best measured as part of the Congestion Management Process (CMP) or other auto-focused study.
	Unreliability on Constrained Corridor	Yes	
	Fiber Optic Presence	Yes	
	Segment Actively Monitored/Managed	Yes	
	Relative Change: Future Congested Speeds	Yes	
Access & Connectivity / 27%	Transit System Headways	Yes	Safety projects in areas with a high density of destinations have the potential to benefit multiple trip types.
	Population: ½ Mile of Non-Transit Corridor	Yes	
	Jobs: ½ Mile of Non-Transit Corridor	Yes	
	Food & Healthcare Locations: ½ Mile of Corridor	Yes	
	Cultural & Recreational Locations: ½ Mile of Corridor	Yes	
	MTP Centrality Analysis Score (Critical Sidewalk Need)	Yes	Closing sidewalk gaps could improve safety outcomes.

Goal Area / Weight	PPL Evaluation Criteria	Applicable to Vision Zero	Notes
Health & Environment / 7%	Bicycle Level of Traffic Stress (LTS)	Yes	Projects that improve the bicycle level of traffic stress would either have a separation component (such as a shared use path) or a speed reduction element. Would need to bring LTS into the analysis.
	Residential Density: ¼ Mile of Multimodal Facility	Yes	Projects in areas with a high density of destinations have the potential to benefit multiple trip types.
	Non-Residential Density: ¼ Mile of Multimodal Facility	Yes	Projects in areas with a high density of destinations have the potential to benefit multiple trip types.
	Public Health Indicator Rates	Yes	While safety projects are likely to improve public health outcomes, this can be difficult to measure.
	Intensity & Proximity: Environmental Justice Populations	Yes	Safety projects can improve mobility choices for Environmental Justice populations.
	Relative Change: Vehicle Miles Traveled (VMT) (2020 vs. 2045)	Yes	A reduction in VMT on a per capita basis could reduce per capita crash exposure. While safety projects and providing other transportation options are likely to reduce vehicle miles of travel on a per capita basis, this can be difficult to measure.
Investment & Economy / 20%	Percentage of Commercial Vehicle Traffic	Yes	Transportation safety projects on truck routes may need additional considerations.
	Statewide Truck Bottlenecks	Yes	Reducing or eliminating truck bottlenecks could have a safety benefit.
	Intensity & Proximity: Freight Intensive Land Uses	Yes	Transportation safety projects in the vicinity of freight intensive land uses may need additional considerations.
	Relative Change: Vehicle Hours Traveled	Yes	A reduction in total vehicle hours of travel could reduce crash exposure and improve crash outcomes.
	Cost Burdened Households: ¼ Mile of Corridor	Yes	Safety projects can improve mobility choices for cost burdened households.
	Percentage of Visitor Traffic	Yes	Transportation safety projects in high visitor areas may need additional considerations, like wayfinding.
	Cost of Congestion	Yes	Safety projects can reduce non-recurring congestion caused by traffic crashes.

Source: MetroPlan Orlando; Fehr & Peers, 2024

Table 2: Active Transportation Plan Evaluation Criteria and Applicability to Vision Zero Action Plan

Goal Area / Weight	ATP Evaluation Criteria	Applicable to Vision Zero	Notes
Transportation Disadvantaged / Historically Underserved Areas[1] / 15%	Meets 4 or 5 of the ETC[1] Criteria **or** in an area with > 18% of households identified as Zero Car Households	Yes	The effects of traffic crashes disproportionately affect people who live in transportation disadvantaged communities.
	Meets 2 or 3 of the ETC Criteria **or** in an area with ≥ 12% of households identified as Zero Car Households		
	Meets 1 of the ETC Criteria **or** in an area with ≥ 6. 3% of households identified as Zero Car Households		
Bicycle and Pedestrian Safety / 30%	More than 5 crashes involving a person walking or biking **or** any pedestrian / bicycle fatalities	Yes	Improving safety outcomes is a key goal of the Vision Zero Action Plan, but not limited to bicyclists and pedestrians.
	4 - 5 bike/ped crashes		
	2 - 3 bike/ped crashes		
	1 bike/ped crash		
Accessibility and Connectivity, Comfort[4]	Percent improvement in walking access to destinations	Yes	Safety projects in areas with a high density of destinations have the potential to benefit multiple trip types. However, these criteria may be difficult to consistently measure across the region. Would need to bring LTS into the analysis.
	Percent improvement in biking access to destinations.	Yes	
	Number of people for whom access is improved for walking trips.	Yes	
	Number of people for whom access is improved for biking trips.	Yes	
	New or improved PLOC[2] for a walking facility	Yes	
	New or improved LTS[3] for a biking facility	Yes	
Jurisdictional Significance	Qualitative low/medium/high ranking by local jurisdiction on the proposed project's local significance	Yes	This factors local preferences and priorities.
Regional Impact	Facility eligible for inclusion in the SunTrail or Coast to Coast Network	No	

1. Additional information can be found on the US DOT Equitable Transportation Community (ETC) Explorer website: https://www.transportation.gov/priorities/equity/justice40/etc-explorer
2. PLOC = Pedestrian Level of Comfort
3. LTS = Level of Traffic Stress
4. See Active Transportation Plan for additional details on how accessibility was evaluated.

Source: MetroPlan Orlando; Fehr & Peers, 2024

Draft Vision Zero Prioritization Criteria

Based on the priorities identified by the MetroPlan Orlando Board in various MetroPlan Orlando policy documents, the goals of the Vision Zero Action Plan and the criteria used in other recent projects, such as the Active Transportation Plan, an **initial** set of prioritization criteria was developed and shared with the Regional Task Force for feedback. Initial feedback from the Task Force was incorporated into an updated set of draft prioritization criteria that was then discussed with a subset of key stakeholders, including the consultant teams working on county and local plans, as well as representatives from Orange, Osceola and Seminole counties.

Potential evaluation criteria presented in **Table 3** primarily focus on safety and transportation disadvantage, with some additional prioritization criteria to consider, such as incorporation of the Federal Highway Administration's (FHWA) proven safety countermeasures, potential effectiveness, and regional impact. Some criteria presented in **Table 3** may be more applicable for a local agency to include as a part of their plan to differentiate between projects. Key considerations for each of the potential criteria include ease of analysis and replicability of the prioritization are provided to help inform the selection of the final prioritization criteria.

Table 3: Potential Evaluation Criteria Regional Vision Zero Action Plan

Performance Indicator	Description	Scoring Considerations
Transportation Underserved Communities	Meets 4 or 5 of the ETC Criteria	The effects of traffic crashes disproportionately affect people who live in transportation underserved communities. These criteria will also be a factor in future SS4A applications. However, this factor may not be relevant for state funding sources. As more than 50% of the HIN is through a transportation underserved community, disadvantage is accounted for in some of the other potential prioritization criteria. This data is readily available for all roadways in the region and can be consistently measured. The ETC criteria measure different aspects of transportation disadvantage and there are opportunities for jurisdictions to weigh different criteria as part of a local prioritization process, if desired.
	Meets 2 or 3 of the ETC Criteria	
	Meets 1 of the ETC Criteria	
Safety Score	Divide scores into quartiles, with the highest quartile receiving all points, second quartile receiving 75% of points, etc.	The Safety Score was the basis of the HIN/Top Intersection identification and weights crashes including people outside a vehicle higher than car and truck occupants. This data is readily available for all roadways in the region and can be consistently measured.

Performance Indicator	Description	Scoring Considerations
Do proposed improvements include FHWA's proven safety countermeasures?	Points allocated based on a proportion of project that includes proven safety countermeasures.	A focus on only FHWA proven safety countermeasures could limit application of innovative approaches as well as other countermeasures that have a proven crash reduction benefit. However, use of these proven strategies could result in projects that are eligible for additional funding sources. Use of this performance indicator would need to identify a method to consistently evaluate potential safety benefit of projects for comparison purposes.
Reduction in Target Speed/ Design Speed (for segment improvements)	Points allocated based on reduction in Target Speed.	Points would be allocated based on overall reduction in Target Speed within the allowable range for the context classification/ designation; projects with target speed already at the lowest end of the range would receive full points. At a planning stage, there may be insufficient information to set target speed that can be kept throughout the entirety of the planning, design and construction process. For new roadways, points could potentially be allocated on a sliding scale depending on target speed and context (100% for target speed at lowest end of allowable range).
Number of KSI crashes per mile linked to the safety concern that the countermeasure addresses.	Scaled point application based on the highest to lowest.	This criterion was in the 2023 SS4A Grant application. The criteria would ensure that identified improvements have a connection to the crashes on a corridor.
Project is on multiple high injury networks.	Scaled point application based on the overlap of networks, with a 100% overlap receiving all points.	A project on both the regional HIN and a county HIN, or county HIN and a local HIN would potentially have regional and local significance that could make it a good candidate for SS4A funding. This data is readily available and could measure the potential regional impact of an improvement.
Road already has planned improvements	Scaled point application based on level of planning/ construction readiness.	Could be an opportunity to leverage already committed funds to accelerate project delivery. May be difficult to measure consistently.
Would the proposed project provide secondary benefits to the community?	This performance standard would prioritize projects that could have co-benefits, such as providing reciprocal access that reduces trips on the regional network or creates a new connection between land uses.	The metric could include a discussion of land uses, surrounding community characteristics with clear connection to proposed improvement, and includes community input and support received. May be difficult to measure consistently at the regional scale.

Performance Indicator	Description	Scoring Considerations
Project includes vehicular capacity increasing elements.	Scaled point application based on the amount of vehicle capacity provided, with no additional capacity receiving 100% of points.	This performance indicator could penalize projects in rapidly growing areas where roadway expansions are needed to accommodate growth and have been planned for. To support development of safer streets in growing communities, criteria could include considerations for roadways developed with low Target Speeds that incorporate appropriate bicycling and pedestrian facilities for the context, frequent crossing locations, street lighting and other features that are shown to promote transportation safety. Could include considerations for providing new parallel facilities rather than widening existing corridors. Converting a conventional intersection to a roundabout would not count as adding capacity.
Improvements include low cost/quick build improvements of proven effectiveness	Points could be allocated based on how quickly improvements could be implemented (0-2 years, 2-5 and beyond 5 years)	One of the goals of SS4A is the implementation of low cost / quick build strategies. These should be implemented at a number of locations as there could be significant administrative costs if only implemented at a few locations.

Source: MetroPlan Orlando; Fehr & Peers, 2024

Based on the considerations presented in **Table 3**, initial prioritization criteria, feedback from the Task Force, and focused conversations with stakeholders, prioritization criteria were developed and goal area weights established, as presented in **Table 4**. The primary purpose of this criteria is to identify projects that could be included in a regional SS4A grant application or other safety-focused grant program. Once projects throughout the region are identified, they will be ranked for prioritization.

High priority safety improvements identified through this process may also be added to the 2050 MTP or incorporated into an already planned project in the PPL or TIP. Local jurisdictions can also use these criteria or a modified version for their own project prioritization process. For projects selected for inclusion in a regional SS4A grant application, additional information will be needed for the grant application, requiring a greater level of planning than is occurring for this initial screening. Information related to potential SS4A grant application criteria is provided at the end of this memorandum.

Table 4: Safety Project Evaluation Criteria Scoring and Weight

Performance Indicator	Description	Criteria Scoring	Goal Area Weight
Safety Score – Corridor Projects Source: Signal 4 Analytics, MetroPlan Orlando HIN Calculations. Analysis Notes: Reflects score weighted on a per mile basis for corridors. See notes below for scoring of intersections.	> 10,424 to 17,478	1.0	50%
	> 8,953 to 10,424	0.75	
	> 6,903 to 8,953	0.50	
	1,410 to 6,903	0.25	
Safety Score – Intersection Projects Source: Signal 4 Analytics, MetroPlan Orlando HIN Calculations.	> 1,050 to 10,140	1.0	
	> 299 to 1,050	0.75	
	> 36 to 299	0.50	
	1 to 36	0.25	
Transportation Underserved Source: Regional Equity Profiles, MetroPlan Orlando. Analysis Notes: A buffer of 100 feet should be applied to each corridor to identify if it is with a census tract that meets the criteria. For corridors that cross multiple census tracts, use data from census tract that at least 50% of corridor travels through.	Meets 4 or 5 of the ETC Criteria	1.0	15%
	Meets 2 or 3 of the ETC Criteria	0.75	
	Meets 1 of the ETC Criteria	0.50	
	Is within the top 50th percentile of the region but does not meet any of the ETC Criteria	0.25	
Safety Benefit Notes: Based on the FDOT context classification guidelines, where applicable. Where a context classification has not been set, use proposed reduction in speed or resulting target speed to determine scoring. Potential countermeasures to achieve the desired target speed would need to be conceptually identified.	Target Speed set for the lowest allowable for context classification or functional classification (corridor project).	1.0	15%
	Project is on a C3C, Principal Arterial, Minor Arterial, or Major Collector and includes major speed reduction elements (corridor project).	0.75	
	Project is on a C3C, Principal Arterial, Minor Arterial, or Major Collector and includes minor speed reduction elements (corridor project).	0.50	

Performance Indicator	Description	Criteria Scoring	Goal Area Weight
	Project includes features that slow vehicles through an intersection (roundabout, reduced curb radii, protected intersection elements, etc.) (intersection project).	1.0	
	Project primarily includes elements that are tied to safety history (such as lighting, high friction surface treatment, signal phasing modifications, outreach/ engagement) (intersection or corridor project).	1.0	
Project is on multiple high injury networks [Regional, County (all roads), County (County roads), Local (all roads), Local (local roads) or high-risk network] Notes: Overlapping HINs can be found on visionzerocfl.gov.	Project is on 2 networks	1.0	10%
	Project is on 1 network	0.5	
Implementation Timeline Notes: assessment of implementation time should also consider agency coordination.	Project primarily includes low-cost / quick build elements, or	1.0	10%
	A publicly available concept plan that included public engagement has been prepared; or	1.0	
	At least 50% of project extents are in an adopted plan that included public engagement specific to the project corridor; or	0.75	
	Project can be completed within 5-years; or	1.0	
	Project is identified as an unfunded need in the MTP.	0.5	

Source: MetroPlan Orlando; Fehr & Peers, 2024

Scoring Guidance

The following provides some scoring guidance to assist in the development of consistent prioritization scores across the region. The sample calculations are intended to capture a wide range of situations, but there may be circumstances that were not considered and consultation with MetroPlan Orlando staff is advised.

For the purposes of scoring guidance, sample projects were developed to serve as examples:

> **Example Corridor Project 1**: Holden Avenue from Rio Grand Avenue S to Lake Holden Hill Drive (Regional HIN Corridor 31).
>
> Example Project Description: Mark a crosswalk at Almark Drive at Holden Avenue and provide a raised crosswalk, median refuge and RRFB. Install Speed Feedback signs.
>
> **Example Corridor Project 2:** Oak Ridge Road from S. Orange Blossom Trail to S Orange Avenue (Regional HIN Corridor 16).
>
> Example Project Description: Install a raised median and add additional marked and controlled crossing locations, co-located with transit stops, improve lighting, and incorporate additional speed management strategies, such as travel lane narrowing. Widen sidewalks where feasible. Design for a target speed of 35 miles per hour (current posted speed is 45).

Safety Score

The Safety Score was calculated for each corridor and intersection based on the process outlined in the Regional High Injury Network memorandum dated February 29, 2024, with crash weights assigned based on the crash severity and if someone outside a car or truck was involved. Safety Scores for each HIN segment and top intersection are provided on the HIN factsheets developed for each jurisdiction.

> **Example Corridor Project 1 (Holden Avenue)**: This segment has a safety score of 10,402 and falls into the second quartile of the scoring criteria and is assigned **37.5 points** for the Safety Score criteria (0.75 * 50).
>
> **Example Corridor Project 2 (Oak Ridge Avenue)**: This segment has a safety score of 12,054 and falls into the first quartile of the scoring criteria and is assigned **50 points** for the Safety Score criteria (1.0 * 50).

Transportation Underserved

Transportation underserved data was developed as a part of the Regional Equity Profiles prepared by MetroPlan Orlando. A GIS layer with data by census tract is provided on the Vision Zero hub site

and at this link: Equity Index_V2 | Tableau Public[1]. A buffer of 100 feet should be applied to each corridor to identify if it is with a census tract that meets the criteria as this will capture roads that might be on the boundary of a transportation underserved community. For corridors that cross multiple census tracts, use data from census tract that at least 50 percent of corridor travels through. If the corridor is within 2 census tracts when considering the 100-foot buffer, use the data for the most underserved tract.

Example Corridor Project 1 (Holden Avenue): There are four census tracts that touch this road segment, as shown on **Figure 1**. Based on a review of the ETC data, data from the checked census tract should be used as it bounds the longest length of the corridor. The tract meets 2 of the 5 criteria and would receive **11.25 points** for the transportation undeserved category (0.75 * 15).

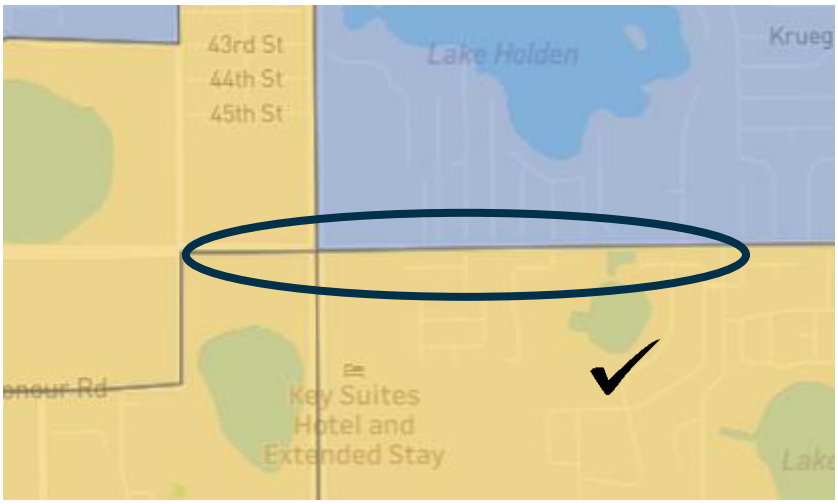


Figure 1: Example Corridor 1 ETC Calculations

Example Corridor Project 2 (Oak Ridge Avenue): This segment is adjacent to two transportation underserved tracts, as shown in **Figure 2**. One tract meets 4 of the 5 ETC criteria and the other meets 2 of the 5 criteria. This corridor would be assigned **15 points** for the Transportation Underserved criteria (1.0 * 15), based on using the data from the most underserved tract.

[1] https://public.tableau.com/app/profile/sigal.carmenate/viz/EquityIndex_V2/DisadvantagedIndicator

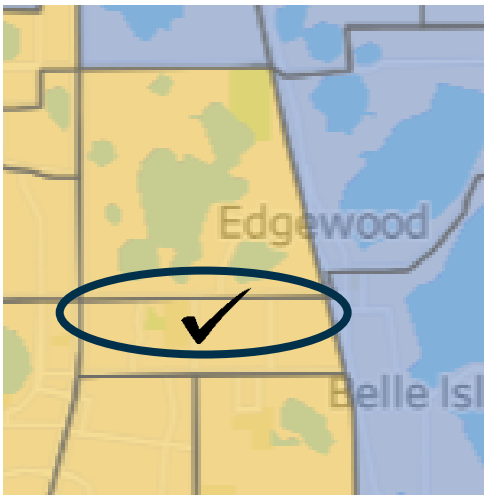


Figure 2: Example Corridor 2 ETC Calculations

Safety Benefit

The scoring for the Safety Benefit category is the most subjective of all the scoring criteria and should be based on a general description of safety elements that would be included in a corridor project. While it is understood that specific details might change in the final design, the overall goals of the project should be noted, such as speed reduction through physical roadway features or low/cost quick build speed management elements.

> **Example Corridor Project 1 (Holden Avenue):** The project includes minor speed reduction elements (1 raised crosswalk) and some awareness countermeasures (speed feedback sign). The speed limit for the roadway is posted at 35 mph and the prevailing speed is 45 miles per hour based on connected vehicle data. More effective measures are likely needed to achieve a prevailing travel speed of 35 miles per hour. As the project includes minor speed reduction elements, it is assigned half the available points for this criterion and is assigned **7.5 points** for Safety Benefit (0.5 * 15).
>
> **Example Corridor Project 2 (Oak Ridge Avenue):** The project includes significant speed reduction elements and would be designed to achieve a target speed at the lowest allowable speed for the context classification, which would allow for full points in this category to be assigned or **15 points** for Safety Benefit (1.0 * 15).

Regional Benefit

Projects on multiple HINs are expected to benefit a larger number of people, and these roads are likely to have more severe safety issues if they are on multiple HINs. The Regional HIN memorandum identifies the HIN overlap for the 118 regional HIN segments. The Vision Zero hub site has a web map that identifies all HINs to determine the overlap.

> **Example Corridor Project 1 (Holden Avenue):** This segment is on three High Injury Networks, the regional HIN, the All-Roads Orange County HIN and the Orange County roads HIN. This segment would be assigned **10 points** for the Regional Benefit criteria (1.0 * 10).

Example Corridor Project 2 (Oak Ridge Avenue): This segment is on three High Injury Networks, the regional HIN, the All-Roads Orange County HIN and the Orange County roads HIN. This segment would be assigned **10 points** for the Regional Benefit criteria (1.0 * 10).

Implementation Timeline

Safety projects do not start to save lives until they are implemented, so prioritizing projects that have the greatest chance of being implemented within 5-years will provide a greater safety benefit while more complex projects are planned and designed. For the assessment of *if a project can be completed within 5-years*, considerations should be made for projects included in the MTP in the Plan Period II or III where additional funding could help accelerate the implementation timeframe. For projects within Plan Period I, is there sufficient time to incorporate additional safety elements into the design? If a project is about to be constructed or has recently had corridor improvements, the effectiveness of those improvements should be monitored for a few years after project completion to assess their effectiveness and relative need for additional countermeasures.

Example Corridor Project 1 (Holden Avenue): A portion of this corridor is identified in the 2045 MTP for an operational / safety project between US 17/92 and S. Orange Avenue with an estimated cost of $6.5 million in 2020 dollars. This is an unfunded need. While the project is in an adopted plan that included some level of public engagement, it is likely that the engagement did not focus on the specific corridor or identify specific needs. However, proposed project elements include primarily low-cost and quick build elements that could be implemented on a pilot basis. Therefore, this corridor is assigned **10 points** for Implementation Timeline (1.0 * 10). Should the MTP project be considered for prioritization through this process, the points for this category would decrease, with the points for the safety benefit potentially increasing.

Example Corridor Project 2 (Oak Ridge Avenue): There is an unfunded project identified for the entire length of the corridor (MTP Project 7132) that would provide operational and safety improvements, with an estimated cost of $8 million in 2020 dollars. While the project is in an adopted plan that included some level of public engagement, it is likely that the engagement did not focus on the specific corridor or identify specific needs. The project does not primarily include low cost/quick build elements as significant speed management is needed along the corridor, including access management. Therefore, this corridor is assigned **5 points** for Implementation Timeline as it is an unfunded need in the 2045 MTP (0.5 * 10).

Table 5 provides a summary of the scoring comparison, which shows that the example Holden Avenue project would score 76.25 points while the Oak Ridge Avenue project would score 95 points.

Table 5: Scoring Example Summary

Performance Indicator	Example Project 1 (Holden Avenue)	Example Project 2 (Oak Ridge Avenue)
Safety Score – Corridor Projects	37.5	50.0
Safety Score – Intersection Projects[1]	N/A	N/A
Transportation Underserved	11.25	15
Safety Benefit	7.5	15
Regional Benefit	10	10
Implementation Timeline	10	5
Total	**76.25**	**95**

1. For an intersection project, the intersection score would replace the corridor score.

Source: MetroPlan Orlando; Fehr & Peers, 2024

SS4A Implementation Grant Criteria

The following summarizes key aspects for the SS4A Implementation Grant criteria based on the 2024 Notice of Funding Opportunity (NOFO):

- **Safety Impact** – is the project likely to significantly reduce or eliminate roadway KSIs, employ low-cost high-impact strategies over a wide geographic area, and include evidence-based projects and strategies?
- **Equity, Engagement and Collaboration** – Includes investments in transportation underserved communities and outreach with a variety of public and private stakeholders.
- **Effective Practices and Strategies** – Projects are reflective of practices that promote systemic safety improvements.
- **Other USDOT Strategic Goals** – Projects also address other goals, such as sustainability and resilience, and support economic competitiveness.
- **Project Readiness** – Project can be completed within 5-years; includes outreach, environmental review, design, all agency approvals, ROW acquisition, all other needed activities, and construction.

While the funding criteria is likely to change with the 2025 NOFO, implementing agencies will need to be able to develop narratives and analysis to support the above criteria.

Next Steps

A rubric for tracking of projects on the regional, county and local roads HIN was developed and it is anticipated that as projects are developed, the relevant information will be included in a GIS layer of the various HIN/project segments for further prioritization and tracking at the regional level. The rubric includes the following data needs:

Project ID: to be developed based on municipality name.

Road Information: Road name and extents.

Project Description: Brief project description that provides overall goals of the project and some specific strategies that would be included, like lane narrowing, intersection treatments, midblock crossings, lighting, and other details that can help with a general understanding of the project. Avoid generic terms such as safety improvement.

Other Project IDs: MTP, FDOT or other project identification number for tracking purposes.

Prioritization Scores: Scores for each of the prioritization criteria.

Existing Posted Speed: Current posted speed - use weighted average if multiple posted speeds.

Target Speed: Proposed Target Speed; if the proposed target speed is not identified, it is assumed that the existing posted speed would remain.

Low Cost / Quick Build: Yes or no based on primary composition of project; if it includes utility relocation, curb reconstruction, drainage, ROW acquisition, etc., it is likely not quick build.

Planning Level Cost Estimate: High level planning costs based on information provided in the engineering toolkit and published FDOT information.

Notes: Any additional information that might be helpful to track, such as recently completed improvements where effectiveness should be monitored.

Appendix Part 2G: Demonstration Projects

DEMONSTRATION PROJECTS

AS PART OF THE CENTRAL FLORIDA VISION ZERO ACTION PLAN EFFORTS, demonstration activities were conducted in Orange, Osceola, and Seminole counties within the MetroPlan Orlando region. These activities were designed to evaluate safety strategies and collect data to inform both regional and local safety action plans.

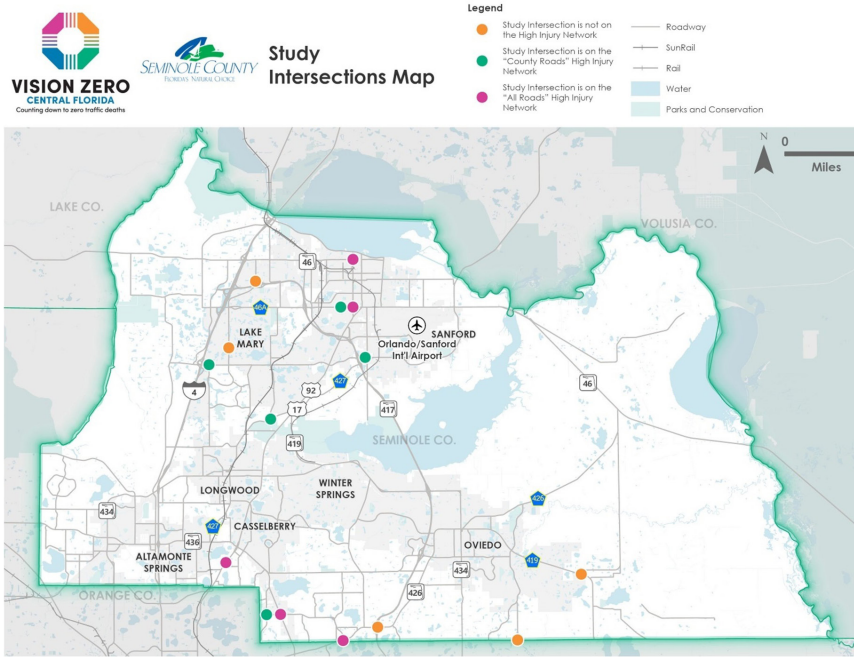
The goal was to measure the potential benefits of various programs/strategies and assess their feasibility for broader, systematic implementation aimed at eliminating traffic-related deaths and serious injuries.

ORANGE COUNTY

In Orange County, the demonstration activity focused on youth education and bicycle safety. A middle school bicycle education program "Bike Club in a Box" was developed. This program included all necessary materials for implementation, such as an instructor guidebook, scorecard, student handouts, and implementation requirements and strategies. The program serves as a model for how a regional middle school Bike Club could be launched, tested, and scaled, providing a framework for future deployments at additional schools across the region. The findings support broader education-based strategies in the Regional Safety Action Plan by laying the groundwork for youth-focused safety initiatives.

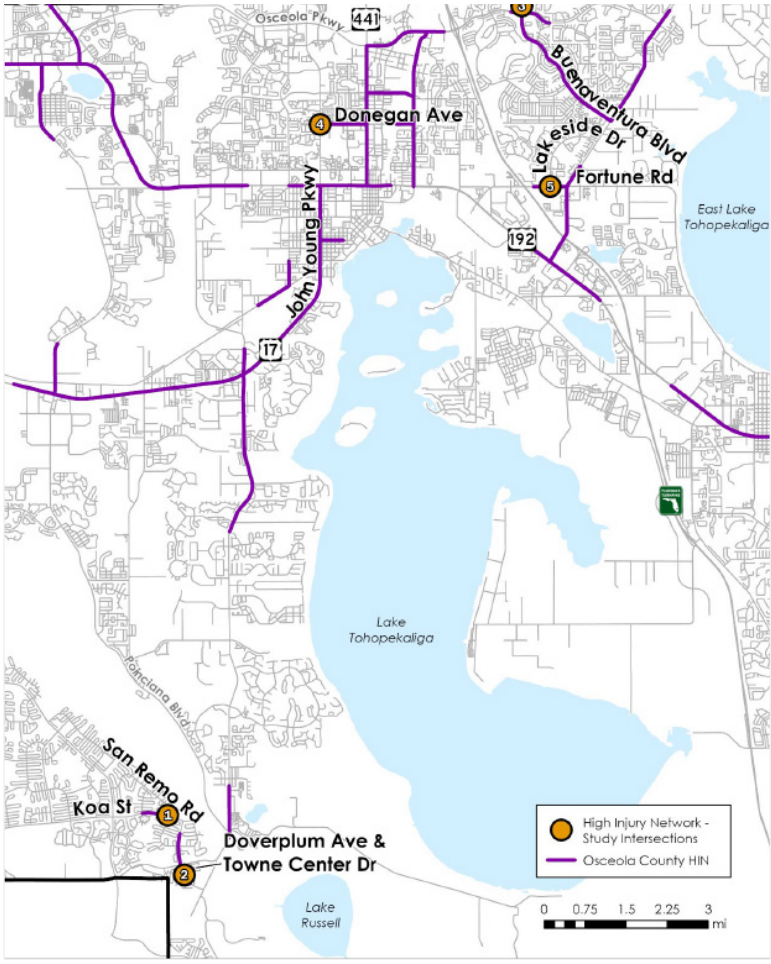
SEMINOLE COUNTY

In Seminole County, the demonstration activity tested the effectiveness of near-miss monitoring technology at 15 signalized intersections over a seven-month period from October 2024 to April 2025. This technology identifies potential collision events and unsafe interactions before actual crashes occur, offering a proactive method of assessing intersection safety. The data collected helped identify dangerous behaviors and conflict zones, confirming the technology's usefulness in addressing fatal and serious injury crashes. In addition to validating the tool's value, the demonstration activity documented challenges and lessons learned, and provided recommendations for future deployments. These insights contribute to the Regional Safety Action Plan by supporting the use of advanced technology to evaluate and prioritize safety improvements.



OSCEOLA COUNTY

Osceola County's demonstration activity focused on infrastructure analysis to improve pedestrian and bicyclist safety. The study examined five crossing locations by analyzing turning movement counts, non-motorist volumes, historical crash data, transit usage, and field observations. The objective was to identify appropriate treatments and countermeasures to enhance safety at each location. Recommendations were supported by a benefit-cost analysis, demonstrating the expected reduction in crashes relative to the cost of improvements. The analysis emphasized a data-driven approach to identifying effective infrastructure solutions for non-motorists and supports a systematic methodology for applying similar safety enhancements at other high-risk locations across the region.
These results feed directly into the Regional Safety Action Plan by providing measurable strategies for improving conditions for pedestrians and bicyclists.



COLLECTIVELY, THE THREE DEMONSTRATION ACTIVITIES PROVIDE IMPORTANT INSIGHTS AND PRACTICAL MODELS FOR EDUCATION, TECHNOLOGY, AND ENGINEERING-BASED SOLUTIONS.

EACH DEMONSTRATION ACTIVITY OFFERED VALUABLE LESSONS REGARDING IMPLEMENTATION, DATA COLLECTION, AND OUTCOME EVALUATION THAT WILL HELP INFORM THE FUTURE MAJOR UPDATE OF THE REGIONAL ACTION PLAN. THESE EFFORTS REFLECT A COMPREHENSIVE, COLLABORATIVE COMMITMENT TO ADVANCING THE GOAL OF VISION ZERO ACROSS CENTRAL FLORIDA.

Bike Club in a Box

Middle School Bicycle Safety Pilot Program

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July 2025

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User Guide

The Bike Club in a Box consists of all materials needed to deploy a pilot Bike Club program at your middle school. Whether you are a school staff member, parent volunteer, or instructor, you can use this Box to create, run, and track the performance of a semester-long Bike Club program at your school. This User Guide will introduce you to each of the components of the Box and how to use them.

A. Implementation Calendar

The Implementation Calendar is a recommended schedule for deploying an after or before school Bike Club during the Spring semester, including all of the steps to take before and after deploying the club.

B. Instructor Guidebook

The Instructor Guidebook is a resource for instructors to get familiar with the 12-week curriculum they will be teaching to middle school students. It includes all of the key skills and strategies that will be covered and a week-by-week lesson overview including lesson descriptions and bike handling drills and activities.

C. Instructor Scorecard

The Instructor Scorecard will be completed each week by the Bike Club instructors to evaluate the effectiveness of each lesson and each student's proficiency at the key skills and strategies over the course of the program.

D. Middle School Drill Book

The Middle School Drill Book supplements the Instructor Guidebook providing detailed descriptions and diagrams for each drill including tips for how to modify CyclingSavvy drills for middle school students.

E. Student Handouts

The Student Handouts include a handout for each week's lesson including the key skills and strategies covered for that week and step by step instructions for how to properly execute a key skill or strategy from that week.

F. Exit Surveys

The Exit Surveys will be distributed to all participants in the Bike Club including instructors, staff representatives, and students, at the end of the semester. The surveys will ask for feedback to assess the performance of the program including the effectiveness of teaching strategies and participant satisfaction.

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Implementation Calendar

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A

Implementation Calendar

August

- Internal Project Kick-off
- Connect with school districts and school(s)
- Submit curriculum to review for consistency with school policies

September - October

- Select staff representatives to host club
- Circulate promotional materials across school communication channels and platforms
- Final curriculum edits
- Partner with local bike shop or organizations for supplies donations

November - December

- Confirm which instructor(s) trained under the CyclingSavvy course will be assigned for your program
- Recirculate promotional materials across school communication channels and platforms
- Open club for sign-up and enrollment

January

- Distribute permission slips and waivers
- Collect permission slips and waivers
- Obtain supplies (extra helmets, bikes, lights, etc.)

February - April

12-Week Program

May

- Distribute exit surveys
- Debrief with internal team, review Instructor Scorecard, and exit surveys
- Conclude program
- Identify modifications to the course for future bike clubs

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Instructor Guidebook

Middle School Bicycle Safety Pilot Program

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B

Introduction

This Instructor Guide outlines teaching strategies and exercises to be covered over the course of a 12-week after school bike program geared towards middle school students. In addition to providing a fun and engaging extracurricular activity for students, the "bike club" will teach students key bike handling skills and traffic safety strategies equipping them to navigate routes to and from school, and beyond, more effectively and safely. By the end of the 12-week program, students should be proficient in the following skills and strategies:

Essential Skills and Strategies		
Bicycling Mechanics Skills	Starting/ Stopping	Balance
	One-Handed Riding	Turning
	Gear Shifting	Speed Management
Hazard Awareness Skills	Shoulder Check	Hazard Avoidance
	Communication	Emergency Breaking
Knowledge & Preparedness Skills	Understanding Roadway Rules	Group Riding Strategies
	Signaling	Sidewalk & Path Issues
	Route Planning	
Positioning	Intersection Positioning	Lane Positioning
Safety Equipment	Visibility	Helmet Wearing

Throughout the 12-week program, each meeting will generally include a short 10-minute lesson by the instructor, followed by 20 minutes of bike drills, and ending with a 30-minute bike ride on local roads surrounding the school campus. The bike program will generally follow the schedule outlined below and will include 9 weeks of novel content, two review/assessment sessions, and one in-classroom "rainy day" session.

Schedule and Curriculum Outline

Week	Description	Target Skills
1	Program Introduction	
2	Starting, Stopping, and Balancing	
3	Making Turns	
4	Emergency Maneuvers Turning & Stopping	
5	Review 1	
6	Roadway Position	

Break

7	High Risk Situations and Weather	
8	Patterns and Space	
9	Sidewalk & Path Risks	
10	Local Routes	
11	Review 2	
12	Road Users Laws for All (Classroom Setting)	

**Gray icons indicate a skill that has been introduced in a previous lesson*

Teaching Strategies Outline

The following lessons are adapted from the CyclingSavvy Course for the instruction of middle school students. Corresponding student handouts will be provided for each lesson detailing key skills, strategies and graphical depictions. For detailed instructions on how to set up the drills and activities for middle school students, reference the Middle School Drillbook included as an appendix.

Each lesson includes a brief description, target skills and strategies to be covered, and two to three activities or bike handling drills. Instructors should record students' performance and teaching strategy effectiveness weekly using the Scorecard.

Lesson 1 - Program Introduction |

Description: *Lesson 1 will begin with an introduction to the program, including logistics, proposed meeting schedule, and how to access the online CyclingSavvy Course. The introduction will be followed by a lesson on essential skills needed before riding a bike including what are different parts of the bicycle, how to do a bike health checkup, and how to adjust bike saddles and helmets.*

Activity 1: Course Introduction – Learn about course structure and meet fellow students.

Activity 2: Pre-ride ABCs Checklist Presentation and Practice – Learn the ABCs and check to make sure your bike is safe to ride.

Lesson 2 – Starting, Stopping, and Balancing |

Description: *This lesson will cover the basics of riding a bike, teaching students the correct form for effectively starting, stopping, balancing, and managing speed on a bike. Students will strengthen their ability to ride their bike in a straight line.*

Activity 1: Stopping, Starting & Balance Demonstration & Drill

Activity 2: Gear Shifting Demonstration & Acceleration Drill

Activity 3: Slow Balance Demonstration & Snail Race Drill

Activity 4: Shoulder Check Demonstration and Drill

Lesson 3 – Making Turns |

Description: *This lesson will focus on essential skills needed for effectively turning when biking. Students will learn the basics of turning using the following drills:*

Activity 1: Cone Weave Drill

Activity 2: Follow the Leader Drill

Activity 3: High-Speed Cornering Drill

Lesson 4 – Emergency Maneuvers Turning & Stopping |

Description: *This lesson will focus on emergency turning and stopping maneuvers. Students will strengthen their ability to confront emergency situations.*

Activity 1: Rock Dodge Drill

Activity 2: Snap Turn Drill

Activity 3: Quick Stop Drill

Lesson 5 – Review 1 |

Description: *This lesson will give students the chance to review and master key skills from lessons 1-4 before proceeding to Part 2 of the course. Students will have a chance to practice, and trouble shoot, skills that need improvement before being examined on their performance on a series of repeat drills.*

Activity 1: Free Practice and Instructor Assistance

Activity 2: Part 1 Skills and Strategies Assessment

- ABC Quick Check
- Starting, Stopping & Balance Drill
- Acceleration Drill
- Shoulder Check Drill
- Snap Turn Drill
- Emergency Stop Drill

Lesson 6 – Roadway Position |

Description: *This lesson will focus on techniques for riding safely on the road, negotiating intersection crossings, identifying hazards, and lane control.*

Activity 1: Presentation on Lane Position

Activity 2: Intersection Crossing Drill

Lesson 7 – High-Risk Situations and Weather |

Description: *This lesson will focus on high-risk situations, weather conditions, and best practices to make safe decisions when put in these situations, along with how to avoid them entirely.*

Activity 1: Presentation on Crash Causes/Hazards, and Countermeasures

Activity 2: Door Zone Drill

Lesson 8 – Patterns and Space |

Description: *This lesson covers best practices for getting and managing space on the road, along with important traffic patterns and behaviors that bicyclists need to know to ride safely.*

Activity 1: Control and Release Drill

Activity 2: Changing Lanes and Negotiation Drill

Lesson 9 – Sidewalk and Path Risks |

Description: *This lesson will focus on rules, best practices, and hazards to look out for when riding on a sidewalk or multi-use path.*

Activity 1: Presentation on Hazards, Pedestrian Rules, and Countermeasures

Activity 2: Pedestrian Passing Drill

Activity 3: Sidewalk Hazards and Reentering Drill

Lesson 10 – Local Routes |

Description: *This lesson covers how to plan bike routes and gets students familiar with existing local routes.*

Activity 1: Presentation on Digital Mapping Tools

Activity 2: Route Planning Exercise

Activity 3: Group Ride to a Local Destination

Lesson 11 – Review 2 |

Description: *This lesson will give students the chance to review and master key skills before completion of the course. Students will have a chance to practice, and trouble shoot, skills that need improvement before being examined on their performance on a series of repeat drills.*

Activity 1: Free Practice and Instructor Assistance

Activity 2: Lessons 6-9 Skills and Strategies Assessment

- Lane Position Drill
- Control and Release Drill
- Changing Lanes and Negotiation Drill

Bonus/Rainy Day Lesson – Road Users Laws for All (Classroom) |

Description: *This lesson will focus on different laws and their application to all road users. Rules for bike lanes and other bike infrastructure will also be discussed.*

Activity 1: Bicycle-Specific Lane Positions Laws & Mandatory Facility Use Presentation/Discussion.

Activity 2: Laws for All Drivers, Including Bicycle-Specific and Pedestrian Laws Presentation/Discussion.

Activity 3: Road User Laws Trivia

Instructor Scorecard

Middle School Bicycle Safety Pilot Program

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C

Program Scorecard

Instructions – *Use the following scorecard to assess the success of the Bike Club Program. Complete Sections A & B each week, answering each question for that week's column.*

Section A - Lesson Assessment

Rate 1-4 for how well the lesson meets each standard – 1 is Does Not Meet Standard, 2 is Needs Improvement, 3 is Meets Standard, 4 is Exceeds Standard	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Lesson was effective at teaching the target bike skills.												
Students seemed to enjoy and be engaged during the lesson and drills.												
Students' safety and wellbeing was maintained throughout the meeting.												
The difficulty level of the material and drills was appropriate for middle school aged children.												
Equipment and facilities needed were available for the lesson.												
List any suggestions for lesson improvement.												

Section B - Student Assessment

For each student, provide a score of 1-4 for the student's proficiency at all listed skills. (A is Did Not Attend, 1 is Not Proficient, 2 is Needs Improvement, 3 is Proficient, 4 is Very Proficient)	Week 1	Week 2	Week 3	Week 4	Week 6	Week 7	Week 8	Week 9	Week 10	Week 12	Student Average Attendance
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
										Program Average Attendance	

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Middle School Drill Book

Middle School Bicycle Safety Pilot Program

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D

Introduction

Adapting CycleSavvy Drills for Middle School Students

This Middle School Drill Book supplements the Instructor Guide providing detailed descriptions of presentation talking points and instructions for conducting bike handling drills. The concepts and strategies used to develop the teaching strategies for the Bike Program in a Box, rely upon CyclingSavvy coursework and materials including the Essentials Short Course, the CyclingSavvy Basics course, the CyclingSavvy Mastery course, the CyclingSavvy Drill Booklet, and the Bicycling Street Smarts CyclingSavvy Edition booklet. Instructors hired to implement the "Bike Program in a Box" are assumed to have gone through the CyclingSavvy Instructor Training and are familiar with CyclingSavvy concepts, strategies, and drills for how to ride a bicycle safely and effectively on the transportation system.

For Lessons 1-4, presentations and drills will follow the CyclingSavvy Drill Booklet which can be accessed at the following link: https://cyclingsavvy.org/wp-content/uploads/2018/04/drillbooklet-2018PRINT.pdf. Lessons 6-10 presentations are based on CyclingSavvy course content, and the drills allow students to practice the concepts and strategies for how to ride on roads and sidewalks (i.e. turning at intersections, lane control, facing high risk situations and hazards, etc.) before trying them out on the road.

This drill book provides suggestions for how to present concepts and conduct drills in a way that is appropriate for middle school students, including modifications to the CyclingSavvy drills where needed. Please note, the content in this Drill Book is preliminary and will be further refined during a later phase of the bike program project.

Lesson Talking Points & Drills

Lesson 1 - Program Introduction |

Activity 1 – Pre-ride ABCs Checklist Presentation and Practice – Learn the ABCs and check to make sure your bike is safe to ride.

CyclingSavvy Activity Overview:

A is for air

- A recommended range for tire pressure is listed on the sidewall of the tire.
- Inspect tires for wear or damage.

B is for brakes

- Spin wheel to test for even contact with rims and no rubbing on tire.
- Pull brake levers. There should be a thumb's width of space between the lever and the handlebar.

C is for cranks, chain and cassette

- Keep chain clean and lubed. Make sure the derailleur is shifting properly, and the chain is not skipping.
- Pull the cranks outward to ensure the crank bolt is tight

Quick is for quick releases

- Quick releases can be found on hubs, brakes and seat posts.
- A hub quick release should engage at 90° and point backwards.

Check

- Inspect for loose items (bolts, fenders, racks, lights, bags).
- Drop test - see if anything falls off or out of baskets/bags
- Lights if you plan to be out after dark (check batteries).
- Tools, tire repair items, pump.
- Test shifting and brakes in the first block of your ride.

Modification Tips:

While the CyclingSavvy Drillbook suggests 5 minutes maximum for this presentation, allow extra time for middle school students to grasp all concepts. Modify presentation to include two example bikes for students to interact with. One bike meets the ABCs checklist and a second bike does not meet the checklist to show students what to look for when something isn't right.

- Conduct a drop test with the "wrong bicycle" for an example of things falling off.
- Have a small supply bag on hand with tools, tire repair items, and pump.
- On the correct bicycle, have all the needed lights and reflectors.

After students have learned the ABCs, they will break into pairs and take turns going through the checklist for their bikes. The instructors will go around to each pair to go through the checklist again for each students' bike.

Lesson 2 – Starting, Stopping, and Balancing |

Activity 1 – Stopping, Starting & Balance Drill

CyclingSavvy Activity Overview:

We will be learning how to properly stop, start, and balance on our bikes in this lesson. The "balance stop" will allow you to stop on your bike without putting your foot down, a skill that is legal at stop signs and will also help you be more efficient in situations where you may be stopping and going frequently.

See page 2 of the *CyclingSavvy Drill Book* for more information on starting, stopping, and balancing.

Instructions/How-To:

- Always stand in front of the seat with your feet flat on the ground. Standing on your toes with your bottom on the seat can be uncomfortable and may cause injury over time.
- To start, lift your pedal to the 2 o'clock position and push off propelling yourself forward while lifting yourself onto the saddle.
- To stop, stand up on one pedal, bring your bike to a full stop and lower your opposite foot to touch down on the ground.
- Remember to keep your pedals horizontal and look ahead when cycling. If you begin to feel unbalanced, pedal forward and the motion will help you adjust and regain control.

There are some common mistakes that new cyclists can make when learning these skills. Some of them include:

- Slow starts can make it easier to slip and fall. Try to start with good momentum.
- Putting a foot down before stopping. Make sure you come to a full stop before putting your foot to the ground to avoid injury.
- Pulling the pedal up too high. Make sure to keep your pedals at about 3 and 9 o'clock to avoid imbalance.
- Jumping off both pedals can present risk of injury.

For this drill, students will become familiar with the skills listed above. To set up, have the students circle around the instructor and familiarize themselves with the circuit. When riding the circuit, there will be two stops the students will be asked to do as the drill goes on: 1. Stop with one foot on the ground and in front of the saddle. Power pedal position, then restart. 2. Balance stop with both feet on the pedals, then pedal out of the stop.

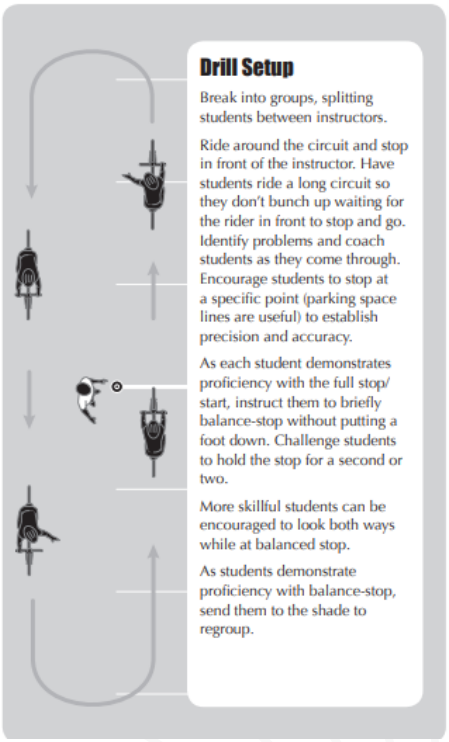

Figure 1 – Stop, Starting, and Balancing Drill – CyclingSavvy Drill Booklet (2018)

Modification Tips:

Before beginning, have the instructor demonstrate the talking points in the drill book that are the "wrong" things to do.

Activity 2 – Gear Shifting Demonstration & Acceleration Drill

CyclingSavvy Activity Overview:

This activity will cover the basics of gear shifting and managing your speed in different scenarios. An easy way to think of shifting gears is to think of what makes it "harder" or "easier" as you ride. Learning to shift your gears effectively can allow you to speed up quickly, maintain balance, and start and stop seamlessly.

See page 4 of the *CyclingSavvy Drill Book* for more information on shifting gears.

Instructions/How-To:

- To get used to gear shifting, practice using your gears to speed up and then slow back down. Begin pedaling and shift to the easiest gear. As you speed up, begin shifting to harder gears until you reach the top gear. Next slow down gradually, shifting down until you reach the easiest gear.
- You can also use your gears to find the right gear for balance. Riding slowly on an easier gear, or trying to start out in a hard gear can feel uncomfortable. Find the "just right" gear for your speed and terrain that feels balanced.

For this drill, students will race each other using their gear shifting skills to accelerate. Start by placing two cones, the first cone approximately 50 ft from the starting line and the second cone spaced out an additional 50 ft, or 100 ft from the starting line. Students will line up along the starting line, making sure to start in their lowest gear. They will race to the first cone, making sure to up-shift along the way so that they reach the highest gear by the time they get to the cone. They will then continue to the second cone, making sure to down-shift to the lowest gear by the time they reach the finish line.

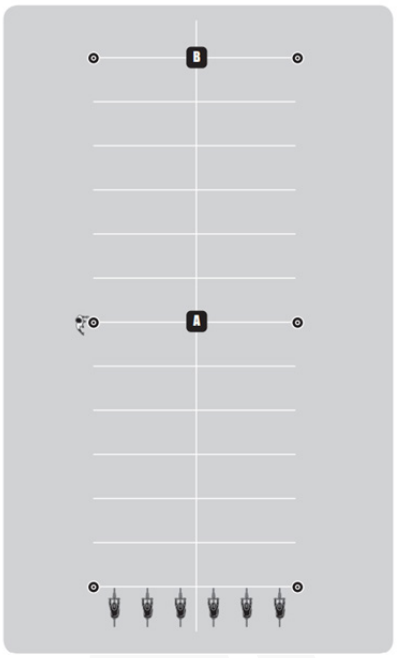

Figure 2 – Acceleration Drill – CyclingSavvy Drill Booklet (2018)

Modifications:

No modifications are needed for this concept and drill.

Activity 2 – Snail Race Drill

CyclingSavvy Activity Overview:

How slow can you go? To test the students' balance, each cyclist will be asked to line up and "race" to the finish line. But the last one to cross the line will win – slow and steady really does win the race. All students must ride in a straight line as slowly as possible without touching a foot to the ground. Once a student touches their foot to the ground, they're out.

For more information on this drill and previous instruction, please reference page 6 of the *CyclingSavvy Drill Book*.

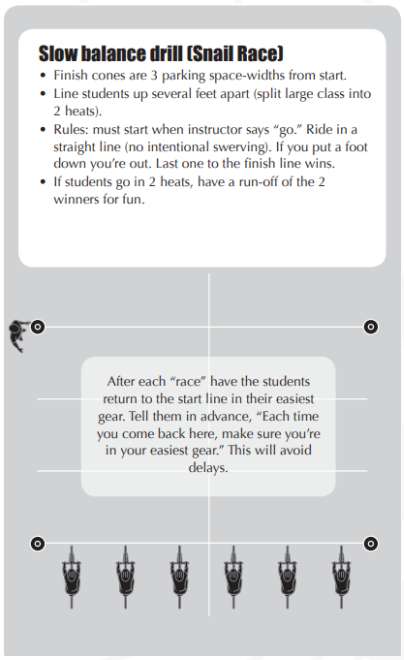

Figure 3 – Snail Race Drill – CyclingSavvy Drill Booklet (2018)

Modification Tips:

For middle school students, consider breaking the group into pairs if possible and structuring this like a bracket. Gives students more than one chance to try and keeps the activity going a little longer. The instructor could also have a stuffed toy turtle or snail to give out to the winner.

Consider using sidewalk chalk to draw the straight lines the students are meant to stay on during this activity, might be helpful.

Activity 3 – Shoulder Check Drill

CyclingSavvy Activity Overview:

Just like cars need to stay in their lanes on the road and avoid swerving, it's important for cyclists to do the same! Keeping your movements predictable as a cyclist keeps everyone on the road safe. Students will practice how to ride in a straight line in this exercise.

With the skill of riding in a straight line, cyclists must master being able to turn their head to scan for overtaking vehicles without making the bike swerve. This is a critical skill in that allows cyclists to both see approaching vehicles and to communicate with the drivers before moving laterally on the roadway.

Please reference page 10 of the *CyclingSavvy Drill Book* for more information.

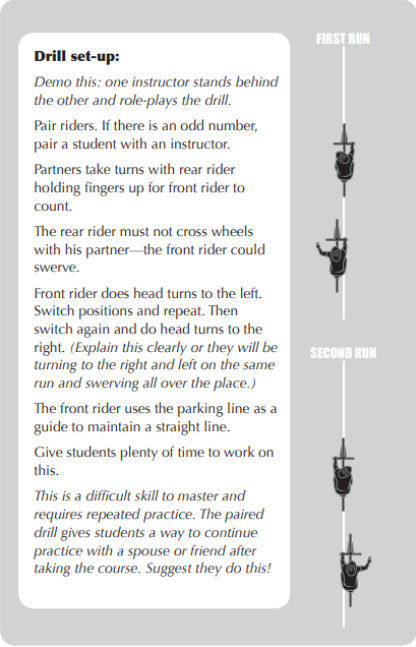

Figure 4 – Shoulder Check Drill – CyclingSavvy Drill Booklet (2018)

Modification Tips:

With only one projected instructor per course, the initial demonstration can be static and instructor can choose a student to help them. Instructor can take the front position to demonstrate what the shoulder check should look like on either side and the student can hold up various numbers for the instructor to call out.

There should also be a static demonstration of what not to do during this drill like crossing wheels, going too fast, swerving, or switching sides in the same run.

Each pair of students should go one at a time, continuing to demonstrate to students what this is supposed to look like and giving the instructor the opportunity to help each pair individually. At the end of the session, have all pairs practice at once independently with the instructor circulating.

Lesson 3 – Making Turns

Activity 1 – Cone Weave Drill

CyclingSavvy Activity Overview:

Cycling can be serious business, especially when it comes to learning about how to stay safe on the roadway. But, cycling can also be tons of fun! In this drill, we'll learn more about turning and using our weight and body position to move the bike in a fluid motion – almost like we're dancing. Students will weave around cones in a continuous loop to really get the hang of it.

Please reference page 12 of the *CyclingSavvy Drill Book* for further details.

How-To/Instructions:

To properly weave through the cones and "dance" on your bike, press your handlebars towards the cones, shift your hips from side-to-side and follow these steps:

- Make sure to look where you want to go.
- Lift up inside foot when going around the cone for balance.
- When turning, push the handlebar into the motion creating more fluidity.

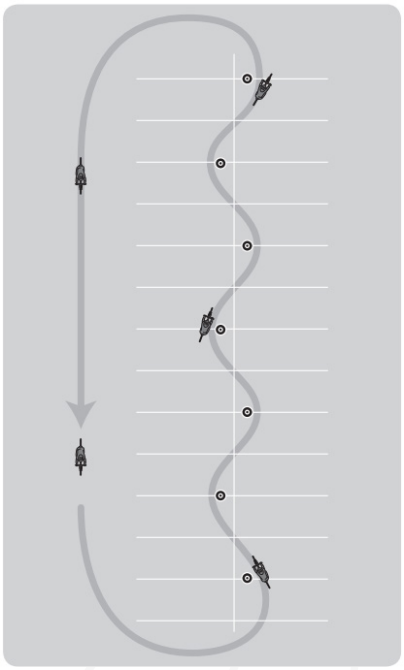

Figure 5 – Cone Weave Drill – CyclingSavvy Drill Booklet (2018)

Modification Tips:

Play music during each round of the drill. Select songs with increasing tempo and have students increase their speed to match the song. This will allow students to practice turning at different speeds.

Always test out drills and modifications for safety prior to having students practice the drills.

Activity 2 – Follow the Leader Drill

Just like we began to practice in the last activity, this drill helps students learn and get a feel for directing their head where they want to go and the impact this has on their accuracy of movement. Throughout this drill, the turns will get progressively tighter, finishing with U-turns.

For more detail on this skill, reference page 14 of the *CycleSavvy Drill Book*.

Make sure students don't cheat any corners and complete the turns laid out!

CyclingSavvy Activity Overview:

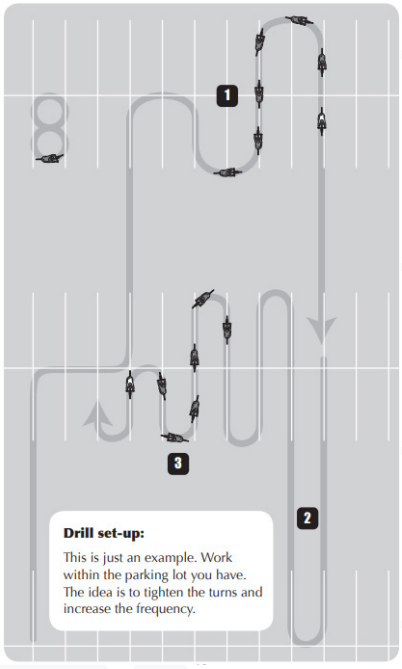

Figure 6 – Follow the Leader Drill – CyclingSavvy Drill Booklet (2018)

Modification Tips:

Use a low-traffic paved area with existing striping for this drill, such as a quiet section of parking lot. Have the most confident student rider lead the group through the course. Add trees to this graphic to show where students who may need one-on-one instruction can go to practice tighter turns individually, and when they are comfortable and ready, can rejoin the group.

Activity 3 – High-Speed Cornering Drill

CyclingSavvy Activity Overview:

This drill shows cyclists how to lean the bike safely through a high-speed turn, keeping the inside pedal up, and effectively using the full roadway width to maintain speed.

For more specific detail on the execution of a high-speed corner, please reference page 16 of the *CyclingSavvy Drill Book*.

Figure 7 – High-Speed Cornering Drill – CyclingSavvy Drill Booklet (2018)

Lesson 4 – Emergency Maneuvers Turning & Stopping |

Activity 1 – Rock Dodge Drill

CyclingSavvy Activity Overview:

This drill is meant to allow students to practice the skills needed to quickly avoid hazards in their paths. Wind can spread branches on the sidewalk, rocks can sometimes only be seen close-up, or blind corners can hide what is on the path around them. Learning how to quickly navigate around obstacles is an important cycling skill.

The primary goal is to avoid any hazards with the front wheel of the bike. Hitting the front wheel can make you loose control where the rear wheel is more forgiving of hazards. Students will practice specifically the handlebar snap in this drill.

Important! Make sure students understand that if they may fall it is important to always try and fall to your right. Turning the handlebars left makes the bike lean right, so if the front wheel hits the object, you will fall to the right. This will keep you out of the road and hopefully out of harms way.

For more specifics on this skill and drill, please reference pages 16 and 17 of the *CyclingSavvy Drill Book*.

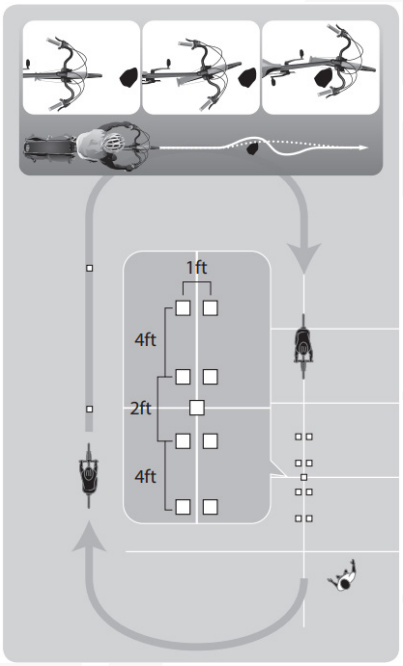

Figure 8 – Rock Dodge Drill – CyclingSavvy Drill Booklet (2018)

Modification Tips:

For the first round, students should practice while straddling the bike, then while riding without going through the sponges. For the final round, students will avoid the "rock" between the sponges.

Activity 2 – Quick Stops

CyclingSavvy Activity Overview:

Just like when you're in a car, braking hard and fast can cause you to lurch forward. Learning how to safely come to a quick stop on your bike in case of an emergency is critical.

The form we will learn in this activity will help you avoid going over your handlebars in an emergency.

For this drill and specifics on the quick stop, please reference pages 20 and 22 of the *CyclingSavvy Drill Book*.

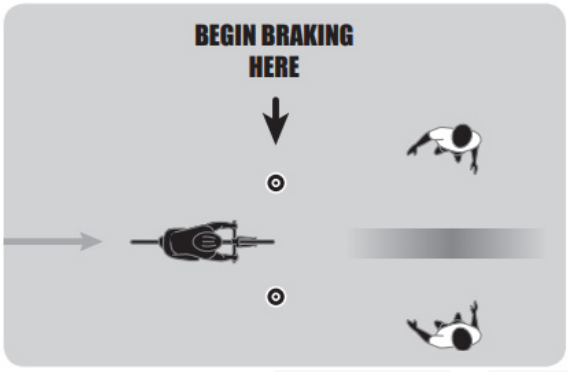

Figure 10 – Quick Stop Drill – CyclingSavvy Drill Booklet (2018)

Modification Tips:

Note that just as this would be conducted during the adult course, it will be important to walk students through the drill off their bikes first only attempting the drill on their bikes when they have a handle on their body positioning. Having the instructors spot the riders can also be a good method of instruction, especially on first attempts.

Demonstrating the entire drill, including where to begin stopping and where to end stopping can be helpful so students can first see and then do.

Lesson 6 – Roadway Position |

Activity 1 - Presentation on Crash Causes/Hazards, and Countermeasures

Talking Points:

Sometimes the bike lane is not the safest place to be as it pushes the bicyclist to the edge of the roadway decreasing visibility for drivers. This is especially true at an intersection where a lot is happening at once and it can be hard for drivers and bicyclists to see an oncoming hazard. For this reason, we will cover riding within the travel lane including what rules to be aware of and hazards to avoid.

The best strategy for reducing conflicts with motorists is to use lane control to position yourself in the center of the travel lane. This increases your visibility and predictability to drivers, reducing the likelihood that they won't see you until it's too late.

When approaching an intersection, leave the bike lane and merge into the travel lane to ensure visibility for drivers. Give yourself plenty of time to move to the appropriate lane depending on the direction you intend to travel.

When crossing an intersection, there are 3 primary conflicts with motorists that can occur: right hooks, left crosses, and drive-outs.

- **Right hook** – occurs when a motorist passes and then turns right into the bicyclist's path either clipping or cutting off the bicyclist.
- **Left cross** – occurs when a motorist traveling in the opposite direction turns left into the path of the bicyclist.
- **Drive out** – occurs when a motorist traveling along an intersecting roadway travels straight, left or right into the bicyclist's path.

Do's and Don'ts for Crossing Intersections:

- **DO** scan the entire intersection before turning to look out for any potential conflicts with motorists, bicyclists, or pedestrians.
- **DO** use a shoulder check and hand signal any time you are changing lanes or turning to check for motorists and let them know what you intend to do.
- **DO** position yourself in the center or left of the lane to increase your visibility to drivers.

- **DO** yield to any pedestrians.
- **DON'T** share a lane with a right-turning vehicle when turning right.

Activity 2 – Intersection Crossing Drill

Students will practice crossing an intersection on the road. They will utilize their lane control skill along with being able to identify how to avoid right hooks, left hooks, and drive outs.

Use cones or existing striping to form three travel lanes and a bike lane (the left most lane will be the opposite direction of travel; the two right most lanes will be the left turn lane and the travel lane).

Students will take turns practicing intersection crossing including, leaving the bike lane at the appropriate time, positioning to take control of the lane, and choosing the appropriate lane of travel for turning or going straight. In three rounds, the students will practice traveling straight, turning right, and turning left.

Two instructors will act as cars, one traveling in the same direction, and one in the opposite direction to the student. Instructor's will choose to travel straight, left, or right to test students' ability to avoid the 3 primary motorist conflicts.

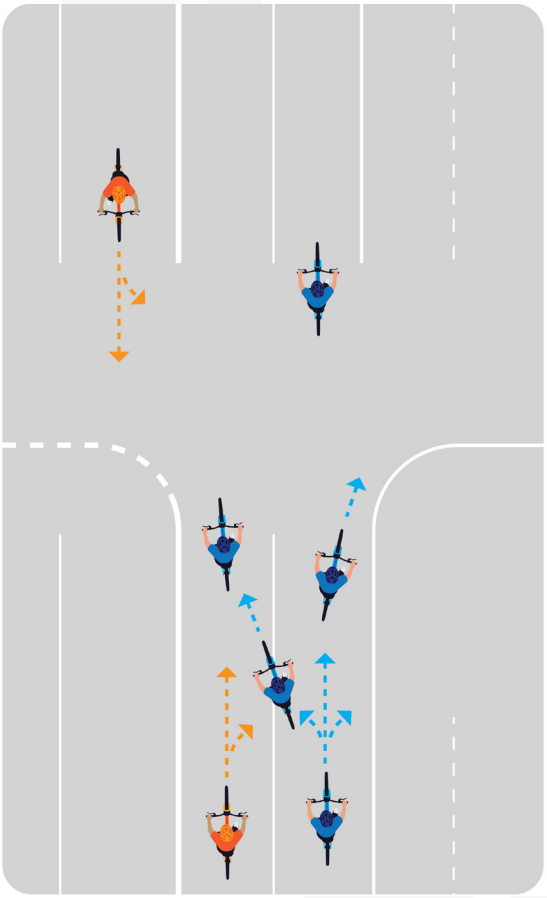

Figure 11 – Intersection Crossing Drill – CyclingSavvy Drill Booklet (2018)

Lesson 7 – High Risk Situations and Weather

Activity 1 – Presentation on High-Risk Scenarios and Countermeasures

Talking Points:

In the previous lesson we introduced the importance of positioning yourself in the roadway to increase visibility and avoid oncoming hazards. In this lesson, we'll take a look at high-risk situations and different roadway conditions where a crash is likely to occur. For each situation, you'll learn how to position yourself to avoid a crash and countermeasures to use when facing a hazard.

- **The Right Edge** – This can be a dangerous place to be because you are less visible to motorists and more likely to face roadway hazards that will cause you to swerve. To avoid these scenarios, it's best to position yourself in the center of the travel lane.
- **The door zone** – This occurs when a travel lane or bike lane is located to the left of on-street parking spaces leaving bicyclists susceptible to a motorist opening their door in the bicyclist's path. These crash types make up about one fourth of urban bike crashes (CyclingSavvy Essentials Course). To avoid these dangerous scenarios, always ride at least 5 feet to the left of parked cars. This allows for a 4-foot-wide car door, plus an extra foot to avoid the startle response that occurs when a car door suddenly opens next to you.
- **Large Vehicles** – Large trucks have huge blind spots and can block other drivers from seeing bicyclists making them very dangerous. It is important to never ride to the right of a large truck. Instead, position yourself behind the truck in the same lane, using the inside left of the lane to ensure visibility to oncoming vehicles.
- **The rising and setting sun** – Avoid east/west at sunrise or sunset when the sun is ahead of or behind you as this decreases both your ability to see, and drivers' ability to see you. When the sun is behind you, consider using headlights to increase your visibility.
- **Poor Weather** – Wet and stormy conditions can create additional hazards to watch out for. When riding in the rain be sure to break sooner and allow yourself greater distance between other vehicles. Keep away from puddles. Puddles and standing water can hide hazards like potholes!

Activity 2 – Lane Position Demonstration & Drill

Use cones or existing striping to form two travel lanes, a bike lane, and a row of on-street parking spaces starting about halfway along the other lanes. The two travel lanes will represent a left turn lane and a through lane. Use a measuring tape to identify a 5 ft distance to the left of the parking spaces, where students should position themselves.

Students will ride in a loop, starting in the bike lane and taking the correct position when approaching the parking spaces. In the first round, a cone will be placed to indicate the 5 ft distance mark from the parking spaces. In successive rounds, students will have to judge the distance for themselves.

In the final round, the instructor will act as a semi-truck traveling in the leftmost lane around the circuit. When approaching or being approached by the "semi" students will practice merging lanes to correctly position themselves to the leftmost side of the lane behind the instructor.

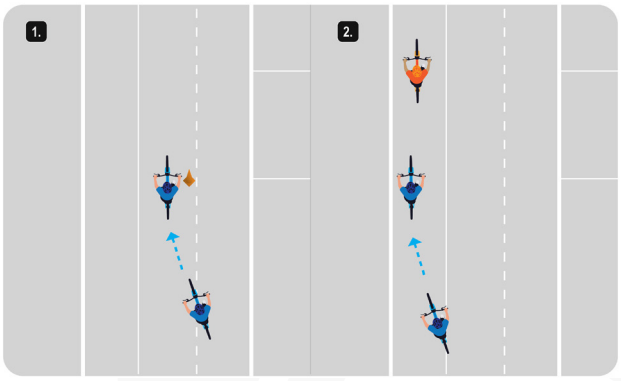

Figure 12 – Lane Position Drill – CyclingSavvy Drill Booklet (2018)

Lesson 8 – Patterns and Space

Activity 1 – Presentation on Getting and Managing Space

Talking Points:

One of our best strategies for reducing crashes with vehicles is being seen and communicating clearly what we intend to do. By positioning to the left of center of the lane (taking control of the lane), we communicate to drivers early on that they will have to change lanes to pass us. This gives them lots of opportunity to make a move before they are close to us – and makes it less likely that they will get mad and honk!

What happens when we don't position ourselves correctly in the lane? This tells drivers that they can stay fully or partially in the lane when passing us, which is something we definitely do not want! This is very dangerous and can lead to a crash.

The same applies when we want to merge into a different lane. Starting in the middle of the lane we use all of the tools in our toolbelt to communicate to drivers where we are wanting to go: we use the shoulder check and we use hand signals to make it clear that we are intending to merge. Once a driver sees this, and we can tell that they are slowing down or moving over for us, then it's safe to make the merge. Remember – patience is key!

Activity 1 – Control and Release Drill

Use cones or existing striping to mark out two same direction travel lanes and a bike lane. Students will divide into groups of three and will take turns practicing control and release. One student will take and manage control of the lane while others will pretend to act as cars.

The lane control student will start in the bike lane then use signaling and shoulder checks to take control of the lane. Once the student has control of the lane, they will use hand signals and their position in the lane to communicate to the other students how/if they want them to pass. Right side of lane = share lane to pass, center lane = change lanes to pass, left side of lane = do not pass. The students acting as cars will demonstrate their understanding of the signals to pass when appropriate.

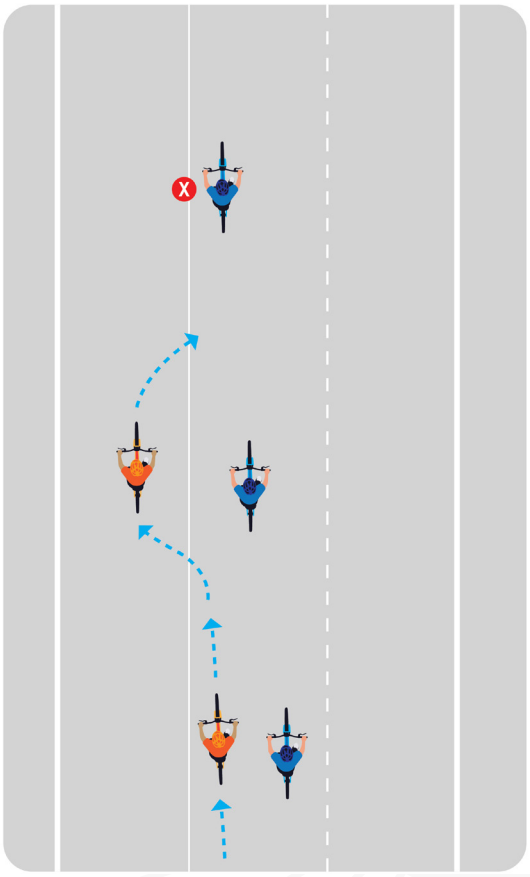

Figure 13 – Control and Release Drill – CyclingSavvy Drill Booklet (2018)

Activity 2 – Changing Lanes and Negotiation Drill

Use cones or existing striping to mark out three travel lanes in the same direction of travel. Students will divide into groups of three and will take turns practicing lane changes and negotiation. One student will be the bicyclist while others will pretend to be cars.

The bicyclist will start in the center lane, then will complete the following steps to merge into the left or right lane. **Step 1** – Shoulder check to look for cars in the lane you want to merge to (and to signal your intent to the car). **Step 2** – Hand signal to indicate you'd like to merge. **Step 3** – Shoulder check again to make sure the motorist has slowed and is yielding to you. **Step 4** – Merge into the other lane. Lane control student will start in the bike lane then use signaling and shoulder checks to take control of the lane. The students acting as cars can decide if they want to be "courteous drivers" who yield to the bicyclist, or they may refuse to yield. The "bicyclist" student will use their judgment to merge only when a driver yields.

To make the drill more challenging, mark out a finish line so that students must merge before reaching the line. This will help them practice trying to merge into a turn lane in time to make the turn.

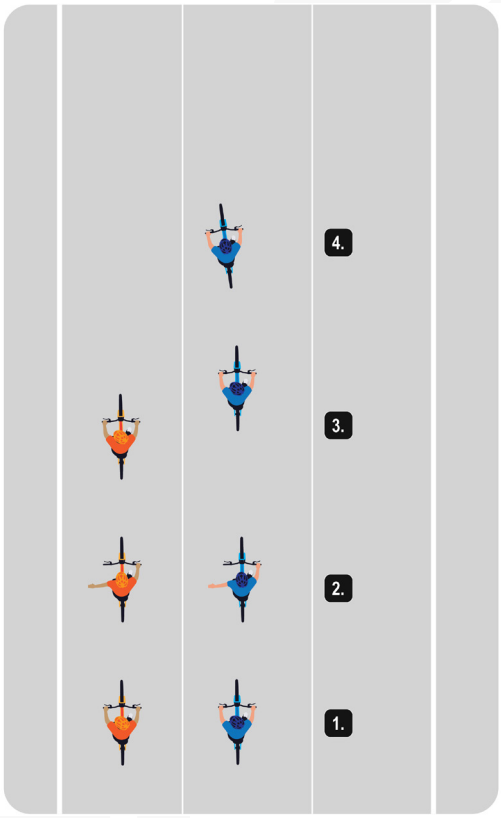

Figure 14 – Changing Lanes and Negotiation Drill – CyclingSavvy Drill Booklet (2018)

Lesson 9 – Sidewalk and Path Risks |

Description: This lesson will focus on rules, best practices, and hazards to look out for when riding on a sidewalk or multi-use path.

Activity 1 – Presentation on Hazards, Roadway Rules, and Countermeasures

Talking Points:

Riding a bicycle on a sidewalk or multi-use path requires following specific rules to keep everyone, including pedestrians, safe. Start by learning the local rules, as some places may not allow bikes on sidewalks. If it's okay to ride there, always yield to people walking. You can let them know you're coming by saying "excuse me" or ringing a bell. Keep your speed low so you can quickly respond if someone stops suddenly or steps in front of you. Remember to stop at intersections and crosswalks like you would if you were riding on the road. Keep in mind that your speed on a bike makes it much harder for cars to spot you then when you're riding on the road. Be sure to check all directions before crossing an intersection looking out for cars, pedestrians, and other cyclists.

There are good habits that can help you stay safe when riding your bike on sidewalks or multi-use paths. Always be alert and pay attention to your surroundings. Keep both hands on the handlebars and your eyes forward. Wearing a helmet is very important—it protects your head if you fall or have an accident. If you're riding at night or when it's getting dark, use lights so that others can see you easily. Stay on the right side of the path (unless passing someone) to make room for others and so faster riders can pass you safely.

While riding a bike on sidewalks and paths it's important to look out for hazards that could pop up in your path. Be careful of rough spots, poles, or things like rocks that could cause you to crash. Pedestrians, especially kids and pets, might move unpredictably, so be ready to stop quickly or swerve into the grass if necessary. When reentering the sidewalk, make sure to turn your bike so that you enter the sidewalk at an angle. Make use of all the skills and strategies in your toolkit to prevent crashes including shoulder checks, hand signals, and emergency maneuvers such as the quick stop and handle bar snap.

Activity 2 – Pedestrian Passing Drill

Use a sidewalk for this drill. Students will divide into groups of two, and will take turn as the bicyclist and the pedestrian. The pedestrian student will start walking along the sidewalk. The bicyclist will then use signals to indicate to the pedestrian their intent to pass, and once the pedestrian moves to the side, will pass on the left side of the sidewalk. Students will then switch roles and repeat the drill.

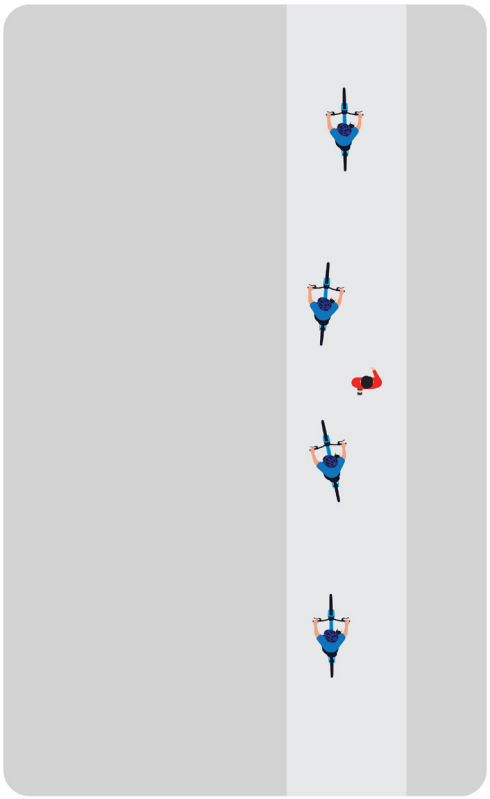

Figure 15 – Pedestrian Passing Drill – CyclingSavvy Drill Booklet (2018)

Activity 3 – Sidewalk Hazards and Reentering Drill

Use a sidewalk for this drill with single cones set up as hazards along the way. The final hazard will be a line of cones fully blocking the sidewalk. Students will take turns riding along the sidewalk and maneuvering around the cones. For the first round, students will practice a quick stop at the line of cones. For the second round, students will swerve into the grass to avoid the cones, leaving the sidewalk. When reentering, students will practice turning their bike into the sidewalk so that they enter at an angle.

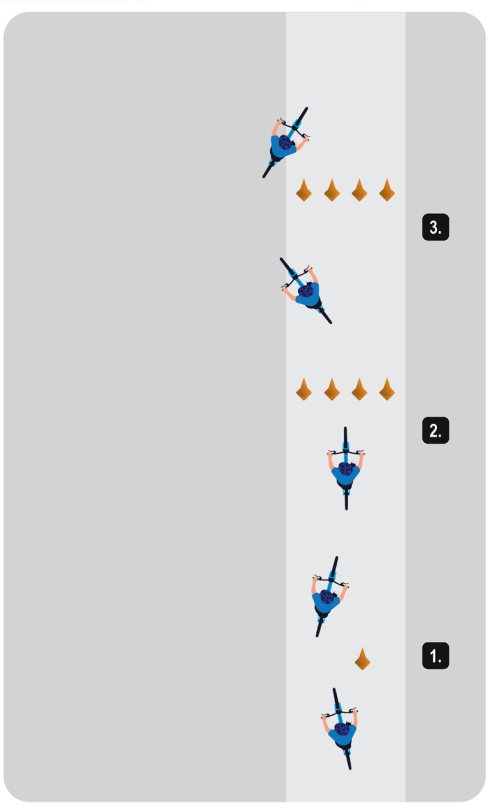

Figure 16 – Sidewalk Hazards and Reentering Drill – CyclingSavvy Drill Booklet (2018)

Lesson 9 – Local Routes |

Description: This lesson covers how to plan bike routes and gets students familiar with existing local routes.

Activity 1 – Presentation on Digital Mapping Tools (Google Maps, Apple Maps, etc.)

Talking Points:

Planning a bike route to local destinations using digital mapping tools can be a fun and useful skill for middle school students. First, start by choosing a digital mapping tool that provides bike-friendly routes, such as Google Maps. Use the tools features such as labeled bike lanes routes marked as bike-friendly, usually with a bike symbol on the map. Tools like these can also show different paths based on distance or difficulty, allowing you to choose the one that best suits your needs. You can even use the directions feature to estimate how long your journey might take, helping you plan accordingly.

It's important to consider factors such as distance, time, and weather when planning your bike route. Make sure to choose a route that fits within your schedule and energy levels; you don't want it to be too long or too challenging for a comfortable ride. Check the weather forecast to avoid riding in uncomfortable

or unsafe conditions like heavy rain or strong winds. By understanding and using these digital mapping tools, you'll be able to find the best bike routes to explore local destinations effectively and safely.

Activity 2 – Route Planning Exercise

Students will break into groups of two and use their smart phones to plan a bicycling route from the provided starting and ending points. Students will complete the following steps using an online mapping tool:

1. Open your mapping tool and make sure the biking layer is turned on to show biking features.
2. Next, type in your starting and ending locations into the directions box and select cycling as your mode of travel.
3. Review the suggested routes from the zoomed-out view, looking at the time it would take to get to your destination, the number of lanes, presence of bike lanes, and adjacent trails or sidewalks.
4. Next, zoom in and/or use street view to plan how you would maneuver along the route – would you use the travel lanes, bike lanes, or both? Would you have to merge lanes, make a turn, or could you stay on the same road the entire trip? Is there a side road or local road you could take with less traffic?
5. Note any potential hazard areas you see including on-street parking, high speed limits, quick lane change scenarios, unsignalized intersections, and any unusual roadway striping or intersections.
6. Use all of these considerations to identify the safest and most efficient route to take. Once you select your route, go back along the route at the zoomed in level and write out each step you would take including when you would leave and reenter the bike lane, any lane changes, and turns.

Each pair will present their route to the group and the instructor will provide feedback and suggestions.

Starting Location: Timber Springs Middle School (16001 Timber Park Lane, Orlando, FL 32828)

Destination: Joury Ice Cream & Cafe (457 Avalon Park S Blvd #200, Orlando, FL 32828)

Activity 3 – Group Ride to a Local Destination

For this activity, the instructor will present a pre-determined route to a local destination that is within 20 minutes from the school noting the exact path to be taken including lanes and turns, any potential hazards, and strategies and skills that will be used (e.g. lane control, shoulder check, signaling, and emergency maneuvers). The instructor will then lead the students on a group ride to the destination as a social activity and celebration for making it to the last lesson.

Bonus/Rainy Day Lesson – Road Users Laws for All (Classroom) |

Description: This lesson will focus on different laws and their application to all road users. Rules for bike lanes and other bike infrastructure will also be discussed.

Activity 1 – Bicycle-Specific Lane Positions & Mandatory Facility Use Laws Presentation

Talking Points:

It's important to understand what the law says about where we can ride a bike. Some laws discourage skills and strategies which we know are supported by research and data. When riding your bike, it's always important to choose your safety over anything else! Doing your own research and planning your routes ahead can allow you to remain safe while also abiding by state and local laws.

In Florida, there are several restrictive bike laws to know about which tell us where we can or can't ride our bikes:

1. **Far to Right rule** – Bicyclists are required to ride as far to the right of the roadway as possible.
2. **Mandatory Bike Lane** – Bicyclists must use the bike lane if it is present.
3. **Single File Riding** – When riding in a group, bicyclists must ride in a single file line.
4. **Local Regulation Allowed** – Local governments are allowed to have their own laws for bike riding, so be sure to research local laws for the cities or counties you bike in.

Exceptions and Takeaways:

- The shoulder is not part of the roadway! If there's no bike lane, the right lane is as far to the right as you can get.
- You can always leave the bike lane if needed to avoid hazards such as objects, rough patches and potholes, the door zone, and intersection conflicts.
- A traffic ticket is better than a visit to the ER! Always choose your safety when in doubt.

Activity 2 – Laws for All Drivers, Including Bicycle-Specific and Pedestrian Laws Presentation

Talking Points:

Bicyclists have a pretty cool superpower – they are able to use both the road and the sidewalk when biking! When you ride on a sidewalk, you instantly become a pedestrian in the eyes of the law and must follow any laws that apply. Note, some local governments do not allow bikes to ride on sidewalks so make sure to know the laws of cities and counties where you ride.

Here are a few pedestrian laws we should be sure to know when riding or walking a bike on the sidewalk:

Intersections:

- Intersections have crosswalks along all sides, regardless of whether they are marked. This is true for all types of intersections.
- When crossing at a crosswalk, you may only cross when there's a walk sign. If there's no pedestrian signal, you may cross when there's a green light for your direction of travel.
- At an intersection without traffic signals (stop signs and yield signs), drivers must yield to you when you cross.
- The minute your foot touches the pavement, the crosswalk is activated and drivers can't enter it.
- Don't walk into a crosswalk in front of drivers who don't have time to stop.

Midblock Crossings:

- At midblock crossings without crosswalks, if both intersections at the corner of the block are signalized, you must cross at one of them and not at the midblock location.
- When crossing at a midblock location without a crosswalk, you must yield to cars in the roadway.

Driveways:

- When crossing a driveway, drivers must yield to you.

Remember – drivers might not be aware of or might ignore these laws, so always be extra careful when riding your bike on the sidewalk. Scan the road and intersections for any hazards and points of conflict and be ready to make an emergency maneuver or get off your bike when you need to.

Activity 3 – Roadway and Sidewalk Laws Trivia

Students will break up into groups of three. The instructor will ask a series of questions and the first group to raise their hand and answer correctly will get a point. The group with the most points wins.

Sample Questions:

1. You're crossing at a signalized intersection with a crosswalk and a pedestrian signal. Which action is correct:

a. Cross the street when the light turns red for the street you're crossing. You don't need to wait for the walk sign when the light is red.

b. Wait to get a walk sign and then cross the street.

c. Scan the intersection and make sure no vehicles or pedestrians are coming. You may cross as soon as it's clear, no need to wait for the traffic light or walk sign.

(correct answer is b)

2. A pedestrian is crossing the street at a four way stop (stop signs at each direction). Who must yield?

a. The pedestrian

b. The cars

(correct answer is b)

3. When does a crosswalk become activated?

a. The minute the light turns green

b. The minute the walk sign flashes

c. As soon as the pedestrian's foot hits the pavement

(correct answer is c)

4. Draw the following intersection on a white board: Draw two intersecting roadways. Draw sidewalks on the north side of the east/west road and the east side of the north/south road. Draw one crosswalk at the north quadrant of the intersection. Ask the teams to count the number of crosswalks in the picture.

(correct answer is 4)

5. You are riding on a road with a left turn lane, a through lane, and a bike lane. Which of the following are true:

a. You must ride in the bike lane if it is present.

b. If you plan to turn left, you must leave the bike lane and merge into the left lane to make a left turn.

c. You must stay in the bike lane unless you approach the "door zone", a row of on-street parking spaces. Then you can merge into the through lane to maintain a safe 5 ft distance.

d. All of the above.

(correct answer is d)

6. You are riding on a roadway but no bike lane is present, so you must ride in the paved shoulder to meet the "far to the right" rule, traveling as far to the right of the road as possible.

a. True

b. False

(correct answer is b)

7. You decide to ride your bike to the ice cream store with a group of friends. Which of the following scenarios obey the roadway laws:

a. You and your friends ride on the road next to each other so you can still talk while you ride.

b. You ride on the sidewalk, making sure to get out of the way of any pedestrians.

c. You start riding in the bike lane single file until it ends. You then merge onto the sidewalk where you now have to obey pedestrian laws.

d. B and C

e. All of the Above.

(correct answer is d)

Student Handouts

Middle School Bicycle Safety Pilot Program

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E

1. Program Introduction

Welcome to Week 1 of the Bike Club! This lesson will introduce you to basic skills needed before riding a bike including what are different parts of the bicycle, how to do a bike health checkup, and how to adjust bike saddles and helmets.

Today I Practiced:

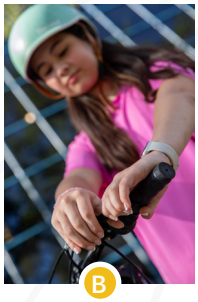
- **Helmet Wearing**
- Starting/ Stopping
- Balance
- Speed Management
- Gear Shifting
- Shoulder Check
- Turning
- One-Handed Riding
- Signaling
- Emergency Breaking
- Hazard Avoidance
- Intersection Positioning
- Lane Positioning
- Visibility
- Communication
- Understanding of Roadway Rules
- Sidewalk & Path Issues
- Route Planning
- Group Riding Strategies

Key Takeaways

Pre-ride ABCs Checklist

Bicycling safety starts with a bike that is safe to ride! Always run through the **ABCs checklist** before getting on your bike! **A** – is for *Air*. Check your tires for damage and air pressure. **B** – is for *Brakes*. Brake pads should be at least ¼ inch thick. **C** – is for *Cranks*, *Chain*, and *Cassette*. 12 chain links should be 12 inches max. **S** – is for *Safety*, your helmet should be snug and should cover your forehead.

A


B

C

Test Your Knowledge:

The "B" in the ABC checklist stands for what?

A. Basket **B.** Brakes **C.** Body

Fact of the Day

Fred A Birchmore circled the globe by bicycle in 1935. The entire 40,000 mile trip went across Europe, Asia, and the United States. He pedaled 25,000 miles and traveled the rest by boat. Birchmore used 7 sets of tires through his entire trip – be like Birchmore and check your bike for safety!

2. Starting, Stopping, & Balancing

Welcome to Week 2 of the Bike Club! This lesson will strengthen your ability to ride your bike in a straight line by learning how to start, stop, and balance on your bike.

Today I Practiced:

- **Helmet Wearing**
- Starting/ Stopping
- Balance
- Speed Management
- Gear Shifting
- Shoulder Check
- Turning
- One-Handed Riding
- Signaling
- Emergency Breaking
- Hazard Avoidance
- Intersection Positioning
- Lane Positioning
- Visibility
- Communication
- Understanding Roadway Rules
- Sidewalk & Path Issues
- Route Planning
- Group Riding Strategies

Key Takeaways

Shoulder Check

A shoulder check is a way for you to check for cars and communicate to drivers that you want to do something. There are 3 ways to do a shoulder check:

With arms locked and straight, tuck your chin to your shoulder.

With arms loosened but still holding onto the handle bars, rotate your torso and turn your head.

Take one hand of the handlebars and pivot your torso to look over this shoulder.

Test Your Knowledge:

True or False? When stopping your bike, you should always put your foot down first.

A. True **B.** False

Fact of the Day

Bicycle Moto Cross (BMX), an extreme style of bicycle track racing, became a sport in the 2008 Summer Olympic Games in Beijing China. Perfect your balance! Team USA needs you!

3. Making Turns

Welcome to Week 3 of the Bike Club! Last week we focused on starting, stopping, and balance while riding in a straight line. This week we will practice turning in different situations.

Today I Practiced:

- **Helmet Wearing**
- Starting/ Stopping
- Balance
- Speed Management
- Gear Shifting
- Shoulder Check
- Turning
- One-Handed Riding
- Signaling
- Emergency Breaking
- Hazard Avoidance
- Intersection Positioning
- Lane Positioning
- Visibility
- Communication
- Understanding Roadway Rules
- Sidewalk & Path Issues
- Route Planning
- Group Riding Strategies

Key Takeaways

Hand Signals

Hand signals help you to communicate effectively to cars and other cyclists what you're about to do. When turning there's a few hand signals you can use to tell other vehicles which direction you're planning to go:

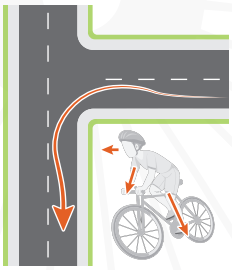
Left Turn

Right Turn

Alternate Right Turn

High-Speed Cornering / Turn

In order to make turn at high speeds, remember the visual on the right of the bell curve around the 90 degree corner. First, move slightly to the left (after using a shoulder check to make sure nothing is coming), then sharply curve around the corner.



Test Your Knowledge:

What is NOT something you should do when turning on your bike?

A. Lift your inside foot in the turn

B. Take both hands off the handlebars

C. Look ahead to where you are going

Fact of the Day

The Amstel Gold Race in the hills of the Netherlands has one of the most twisty cycling courses in the world, with cyclists taking hairpin turns at speeds over 20 mph.

4. Emergency Turns & Stops

Welcome to Week 4 of the Bike Club! We learned about turning last week and this week we will learn how to turn and stop in emergency or urgent situations. Avoiding hazards and breaking in an emergency are critical skills to keep you safe on your rides!

Today I Practiced:

- **Helmet Wearing**
- Starting/ Stopping
- Balance
- Speed Management
- Gear Shifting
- Shoulder Check
- Turning
- One-Handed Riding
- Signaling
- Emergency Breaking
- Hazard Avoidance
- Intersection Positioning
- Lane Positioning
- Visibility
- Communication
- Understanding Roadway Rules
- Sidewalk & Path Issues
- Route Planning
- Group Riding Strategies

Key Takeaways

Quick Stop

A quick stop is an emergency move when you need to stop quickly to avoid a collision. When breaking quickly you have to remember two things: **body position and hand brakes**.

1) Hand brakes – you must use both breaks when making a quick stop. Your left break stops your front wheel and your right break stops the rear wheel.

2) Body position – breaking quickly can cause your body to fly forward and your rear wheel to leave the ground. Yikes! Keep your pedals horizontal at 3 oclock and 9 oclock and keep your weight as low and far back as possible (even shifting behind the saddle if you are able).

Test Your Knowledge:

When dodging a hazard, which way should you turn your handlebars when dodging a hazard?

A. Left **B.** Right

Fact of the Day

Mountain biking is one of the most popular forms of cycling in the U.S! Dodging items in your path is a critical skill for mountain bikers.

6. Roadway Position

Welcome to Week 6 of the Bike Club! This week we will practice navigating the roadway safely as a cyclist. It is important to learn the skills of intersection crossings, identifying line hazards, and lane control.

Today I Practiced:

- **Helmet Wearing**
- Starting/ Stopping
- Balance
- Speed Management
- Gear Shifting
- Shoulder Check
- Turning
- One-Handed Riding
- Signaling
- Emergency Breaking
- Hazard Avoidance
- Intersection Positioning
- Lane Positioning
- Visibility
- Communication
- Understanding Roadway Rules
- Sidewalk & Path Issues
- Route Planning
- Group Riding Strategies

Key Takeaways

Intersection Positioning

When crossing an intersection, it's important to look out for: right hooks, left hooks, and drive outs.

Use lane control (riding in center of lane) when crossing an intersection. When turning left you have to leave the bike lane.

Test Your Knowledge:

What should you NOT do when cycling on the road?

A. Move against the flow of traffic

B. Ride in a bike lane or on a sidewalk

C. Check behind you and signal before turning

Fact of the Day

Cycling can be stress free! Cycling has been shown to lower stress levels – the physical activity releases endorphins which can improve mood and reduce anxiety.

7. High Risk Situations & Weather

Welcome to Week 7 of the Bike Club! This week we will cover what to do if you get caught in a high risk situation like bad weather or poorly lit conditions. We will learn about some of the things that can cause a bicycle accident, what high risk situations are, and how to avoid them entirely if we can.

Today I Practiced:

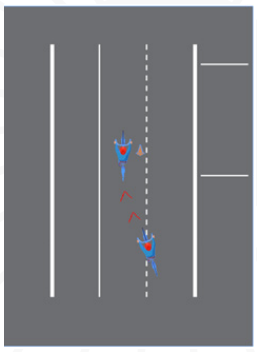
- **Helmet Wearing**
- Starting/ Stopping
- Balance
- Speed Management
- Gear Shifting
- Shoulder Check
- Turning
- One-Handed Riding
- Signaling
- Emergency Breaking
- Hazard Avoidance
- Intersection Positioning
- Lane Positioning
- Visibility
- Communication
- Understanding Roadway Rules
- Sidewalk & Path Issues
- Route Planning
- Group Riding Strategies

Key Takeaways

High Risk Situations to Look Out For:

- The right edge
- The door zone
- Parking spaces along the street
- Large vehicles
- Riding into or away from the sunrise and sunset
- Poor Weather

When riding on the road, keep an eye out for hazards along the edge of the roadway that could cause you to swerve into traffic. When riding next to on-street parking spaces remember the 5 ft rule - ride at least 5 ft into the travel lane to avoid crashing into an unexpected open car door.



Test Your Knowledge:

What is important to consider when riding in bad weather or poor lighting conditions?

A. Visibility **B.** Route Safety **C.** Both A & B

Fact of the Day

Even the pros wait for bad weather to pass. The 2025 Tour de France was delayed multiple times due to rainstorms.

8. Patterns & Space

Welcome to Week 8 of the Bike Club! This week we will learn some of the best ways to manage space on the road. We will also be learned about important traffic patters and behaviors that cyclists should know.

Today I Practiced:

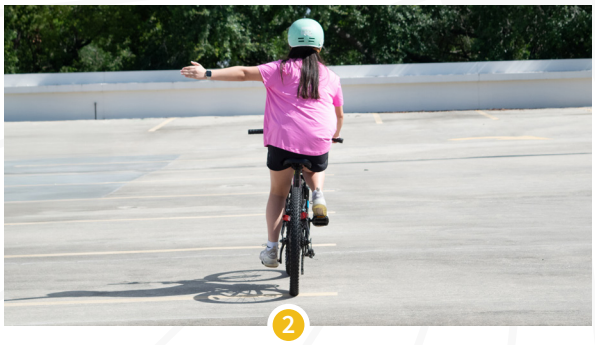
- **Helmet Wearing**
- Starting/ Stopping
- Balance
- Speed Management
- Gear Shifting
- Shoulder Check
- Turning
- One-Handed Riding
- Signaling
- Emergency Breaking
- Hazard Avoidance
- Intersection Positioning
- Lane Positioning
- Visibility
- Communication
- Understanding Roadway Rules
- Sidewalk & Path Issues
- Route Planning
- Group Riding Strategies

Key Takeaways

Changing Lanes

Changing lanes starts with a shoulder check followed by a turning signal – both of these maneuvers signal to cars on the road that you intend to change lanes.

1



2

Test Your Knowledge:

When cyclists use hand signals, who are they communicating to?

A. Cars **B.** Motorcyclists **C.** Everyone on the road

Fact of the Day

Hand signals for cyclists became common practice in the United States in 1994.

9. Sidewalk & Path Risks

Welcome to Week 9 of the Bike Club! This week we will learn about riding our bikes on sidewalks and multi-use paths. We will cover what the rules are and what hazards to watch out for.

Today I Practiced:

- **Helmet Wearing**
- Starting/ Stopping
- Balance
- Speed Management
- Gear Shifting
- Shoulder Check
- Turning
- One-Handed Riding
- Signaling
- Emergency Breaking
- Hazard Avoidance
- Intersection Positioning
- Lane Positioning
- Visibility
- Communication
- Understanding Roadway Rules
- Sidewalk & Path Issues
- Route Planning
- Group Riding Strategies

Key Takeaways

Sidewalk and path issues

Counter to what most people think, most bicycle crashes are solo and do not involve cars. Sidewalks are intended for pedestrians, but there are times when we might opt to ride our bike on the sidewalk. Here are some general rules for riding on the sidewalk:

• Always yield to pedestrians when on the sidewalk – you're in their space after all! If you have to pass a pedestrian, pass in the street.

• If you ever go off the edge of the sidewalk, make sure to reenter the sidewalk at an acute angle to avoid crashing.

Free Response!

What is the skill you have found most useful to learn so far? Why?

Fact of the Day

It is about the same amount of energy to cycle at a slow to medium pace as it is to walk, and you can go farther faster!

10. Local Routes

Welcome to Week 10 of the Bike Club! Now that we have covered so many of the essential skills to stay safe on our bikes, this week we will learn how to plan routes as a group so we can put all of these new skills to good use!

Today I Practiced:

- **Helmet Wearing**
- Starting/ Stopping
- Balance
- Speed Management
- Gear Shifting
- Shoulder Check
- Turning
- One-Handed Riding
- Signaling
- Emergency Breaking
- Hazard Avoidance
- Intersection Positioning
- Lane Positioning
- Visibility
- Communication
- Understanding Roadway Rules
- Sidewalk & Path Issues
- Route Planning
- Group Riding Strategies

Key Takeaways

Routing and Group Riding Strategy

Planning your route on Google or Apple Maps is good practice to make sure you know where you're going and what is along the way.

Test Your Knowledge:

What should you make sure is on your route?

A. Bike lanes or sidewalks **B.** Less busy streets **C.** Both A and B

Fact of the Day

In recent years, apps like Strava have also become popular for route planning and tracking.

12. Road Users Laws for All

Welcome to Week 12 of the Bike Club! Staying safe on the road means knowing how to stay safe through the skills we've been learning and understanding the responsibility cyclists have to keeping everyone on the roadway safe. This week, we will learn about the roadway laws all cyclists should know.

Today I Practiced:

- **Helmet Wearing**
- Starting/ Stopping
- Balance
- Speed Management
- Gear Shifting
- Shoulder Check
- Turning
- One-Handed Riding
- Signaling
- Emergency Breaking
- Hazard Avoidance
- Intersection Positioning
- Lane Positioning
- Visibility
- Communication
- Understanding Roadway Rules
- Sidewalk & Path Issues
- Route Planning
- Group Riding Strategies

Key Takeaways

Road Laws

Test Your Knowledge:

True or False? You only have to know state laws for cyclists; the local ones don't matter.

A. True **B.** False

Fact of the Day

Wearing your helmet can reduce risk of head injury by 85% making it an important safety practice for all cyclists..

Exit Surveys

Middle School Bicycle Safety Pilot Program

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F

Exit Surveys

The following exit surveys will be distributed by email to all participating instructors, students, and school representatives requesting input on participants' general satisfaction with the program and any recommendations for future modifications.

Instructor Exit Survey	
Rating Questions – *Rate how strongly you agree or disagree with each statement from 1 to 5 (1 – Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree)*	
The program was effective at teaching the target bike skills to the students.	
Students seemed to enjoy and stay engaged with the program.	
Students' safety and wellbeing were maintained throughout the program.	
The difficulty level of lessons and drills was appropriate for middle school aged children.	
Equipment and facilities needed were available throughout the program.	
I enjoyed serving as an instructor for this program.	
I would recommend this program to other instructors.	
Open Ended Questions	
What went well?	
What didn't go well?	
Do you feel you had the resources needed (staffing, materials, facilities, etc.) to facilitate the program? If no, please explain.	
List any modifications used to overcome challenges during the program.	
List any recommended solutions to improve the program in the future.	

School Representatives Exit Survey	
Rating Questions – *Rate how strongly you agree or disagree with each statement from 1 to 5 (1 – Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree)*	
The program was effective at teaching the target bike skills to the students.	
Students seemed to enjoy and stay engaged with the program.	
Students' safety and wellbeing were maintained throughout the program.	
The difficulty level of lessons and drills was appropriate for middle school aged children.	
Equipment and facilities needed were available throughout the program.	
I enjoyed serving as a staff representative for this program.	
The program was in line with school policies and procedures.	
Open Ended Questions	
What went well?	
What didn't go well?	
List any solutions used/recommended to overcome challenges in the future.	
Program Data	
Students:	
Number of Applicants	
Average Attendance	
Student Turnover (Number of students enrolled in the program at the beginning versus at the end)	
Instructors:	
Instructor Turnover (list the number of times (if any) 1) an instructor quit and 2) a new one was hired)	

Student Exit Survey

Rating Questions – *Rate how strongly you agree or disagree with each statement from 1 to 5 (1 – Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree)*	
I learned new bike skills and/or improved skills I already knew.	
I feel more confident about my ability to ride a bike to and from school safely.	
I had fun during the club and enjoyed the lessons and bike drills.	
I felt safe during the club (both on campus and on bike rides).	
The lessons and drills weren't too difficult for me to learn.	
I would recommend the Bike Club to a friend.	

Open Ended Questions

What did you like about the Bike Club?

What didn't you like?

What changes would you make to the Bike Club?

OSCEOLA COUNTY

VISION ZERO

OSCEOLA COUNTY

VISION ZERO ACTION PLAN

Demonstration Project

FINAL June 2025

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APPENDIX

Appendix A: Turning Movement Counts
Appendix B: Crash Data and Collision Diagrams
Appendix C: Transit Routes and Ridership
Appendix D: Stakeholder Meeting Slides and Notes
Appendix E: Warrant Forms and Programmed Project Excerpts
Appendix F: Detailed Conceptual Plans and Cost Estimates
Appendix G: Benefit-Cost Analysis

1 INTRODUCTION

I.I Background and Purpose

MetroPlan Orlando prepared a Vision Zero Safety Action Plan (VZAP) for Central Florida, the culmination of a year-long effort which analyzed crash data, identified high injury networks, and pinpointed needed safety projects across the region. In addition to the Central Florida regional plan, which was adopted by MetroPlan in September 2024, individual Safety Action Plans were prepared for the three counties and 19 cities within the regional boundaries. Osceola County adopted their own Safety Action Plan in November 2024. These plans were funded by a Safe Streets and Roads for All (SS4A) federal grant and are rooted in Vision Zero principles with a goal to reach zero traffic deaths by the year 2050.

The **Vision Zero Central Florida Safety Action Plan** summary can be referenced at:
https://metroplanorlando.gov/safety/vision-zero-central-florida/

The **Osceola County VZAP** summary can be referenced at:
https://www.osceola.org/Community/Transportation-and-Transit/Transportation-Studies/Vision-Zero-Action-Plan

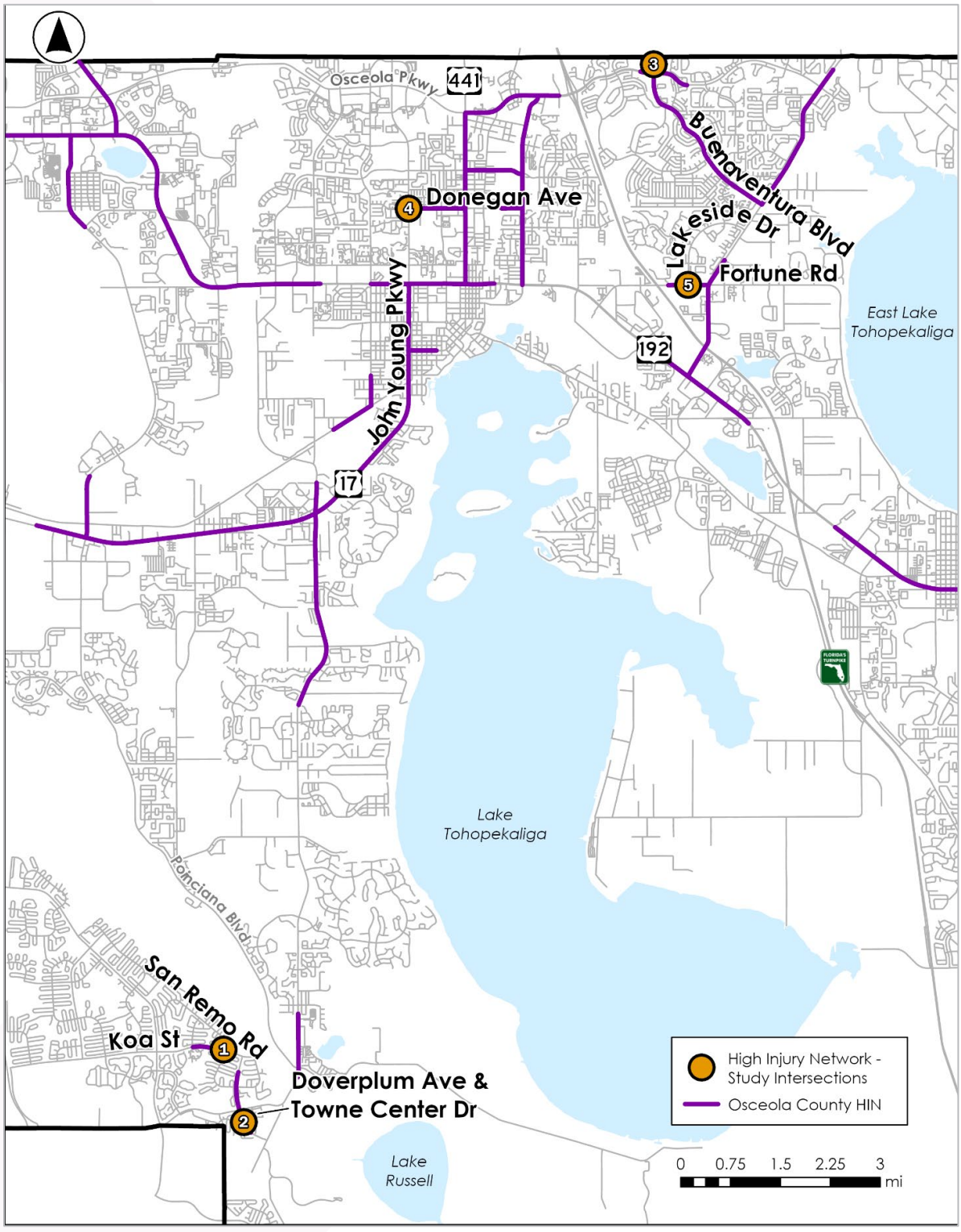
As part of the development of the regional Vision Zero Action Plan, demonstration activities were conducted in each county. Kimley-Horn and Associates, Inc. has been retained by MetroPlan Orlando to conduct an engineering study focused on pedestrian and bicycle crossings at five targeted intersections on the Osceola County High Injury Network. The purpose of this study is to inform and supplement the Vision Zero Safety Action Plan effort with additional analysis to provide Osceola County with specific recommendations of appropriate treatments and countermeasures to improve non-motorist crossing safety. The intent is to demonstrate a quantifiable safety benefit for recommended safety enhancements to move projects into implementation. The goal is also to identify a systematic approach to implementing similar types of improvements at other locations throughout the county that demonstrate similar characteristics and needs.

The analysis is based on turning movement counts, pedestrian and bicyclist volumes, five-year historical crash data, transit boardings and alightings, field review of existing conditions, peak hour observations, and application of guiding criteria in the Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices, 11th Edition (MUTCD), the FHWA Safe Transportation for Every Pedestrian (STEP) Program, and the Florida Department of Transportation (FDOT) Traffic Engineering Manual 2025 (TEM).

Figure I-1 shows the study locations in map view. The study locations included the following pedestrian crossings identified in the Osceola County High Injury Network:

1. **Koa Street** & San Remo Road *(two-way stop intersection)*
2. **Doverplum Avenue** & Country Club Road/Towne Center Drive *(all-way stop intersection)*
3. **Buenaventura Boulevard** & Town & Country Shopping Mall *(midblock segment)*
4. **John Young Parkway** & Donegan Avenue *(signalized intersection with crosswalks)*
5. **Fortune Road** & Lakeside Drive *(signalized intersection without crosswalks)*

Figure I-1: Project Location Map



I.II Data Collection Methodology

I.II.I Traffic Counts

Two days of 12-hour vehicle turning movement counts (TMCs), pedestrian crossings, and bicycle crossings were collected at the five study locations from October 17 to 22, 2024. The non-motorist data was further sub-classified by adults, children, and elderly or mobility-limited users.

The days and times for data collection varied slightly based on adjacent land use and stakeholder input for peak conflict periods. Data for intersections near schools and residential areas was collected during typical weekdays (Tuesday-Thursday), whereas data for intersections near retail developments was collected during both a typical weekday (Tuesday-Thursday) and weekend (Saturday). The data collection is summarized in **Table I-1**. Raw counts are included in **Appendix A**.

Table I-1: Data Collection Days and Times by Study Location

Intersection	Tuesday	Thursday	Saturday
Koa Street & San Remo Road	7 AM – 7 PM	7 AM – 7 PM	-
Doverplum Avenue & Country Club Road/Towne Center Drive	8 AM – 8 PM	8 AM – 8 PM	-
Buenaventura Boulevard & Town & Country Shopping Mall	-	9 AM – 9 PM	12 PM – 12 AM
John Young Parkway & Donegan Avenue	-	7 AM – 7 PM	10 AM – 10 PM
Fortune Road & Lakeside Drive	7 AM – 7 PM	7 AM – 7 PM	-

I.II.II Historic Crash Data

Five years of historical crash data (from 2018 to 2022 as included in the VZAP analysis) plus additional recent crash data for current years (from 2023 to 2024) were obtained for all study locations from the Signal Four Analytics online database. Crash data is provided in **Appendix B**.

I.II.III Field Reviews

Field observations were conducted at the study locations on Thursday, November 14, 2024 and Friday, November 15, 2024 at various times corresponding with the peak periods of non-motorist activity documented in the data collection. The review observed traffic patterns, non-motorist activity, adjacent land uses, and design constraints that could influence the recommended improvements. Field observation dates and times are summarized in **Table I-2**.

Table I-2: Field Observation Days and Times by Study Location

Intersection	Thursday	Friday
Koa Street & San Remo Road	3:15 PM – 4:15 PM	-
Doverplum Avenue & Country Club Road/Towne Center Drive	4:30 PM – 5:30 PM	-
Buenaventura Boulevard & Town & Country Shopping Mall	-	12:30 PM – 1:30 PM
John Young Parkway & Donegan Avenue	-	2:45 PM – 4 PM
Fortune Road & Lakeside Drive	-	11:45 AM – 12:15 PM

I.II.IV Speed Data

Speed data was obtained for each study location cross street (as available) from MetroPlan Orlando's Speed Differential 85th Minus Posted GIS layer. This dataset was used in the Regional Vision Zero Central Florida analysis and includes posted speed alongside 50th and 85th percentile observed speeds. The speed data supplements the analysis in understanding widespread driver behavior and where design criteria based on the posted speed limit may need additional enhancements to ensure safety.

I.II.V Benefit-Cost Analysis

For each location, engineering recommendations were formulated to address the safety concerns noted in the crash history and the field reviews. A benefit-cost analysis was prepared to support the recommendations in identifying the impact of the improvements measured in expected crash reduction savings versus total construction cost. For each location, the FHWA Crash Modification Factors Clearinghouse website was reviewed to determine the anticipated reduction in crashes that would result from the proposed improvements. A Crash Modification Factor (CMF) can be viewed as the percentage of historic crashes remaining after implementation of a given improvement. The cost savings per crash was determined based upon the Highway Safety Improvement Program Guideline (HSIPG) average crash costs by facility type contained in Chapter 122 of the FDOT Design Manual. An opinion of probable construction cost (OPCC) was prepared using the FDOT Historical Costs. Unit prices for each item were developed using FDOT 12-month moving statewide averages, FDOT 6-month moving statewide averages, and FDOT 12-month moving area 8 averages.

I.III Stakeholder Input

A multi-agency stakeholder group was formed to provide input and guidance throughout this evaluation. Representatives from MetroPlan Orlando, Osceola County, and LYNX, who were engaged in the regional Vision Zero Action Plan process, were included at three demonstration project-specific meetings:

1. September 2024: Project kickoff meeting to discuss goals, approach, and methodology. This meeting established consensus on data collection days, times, and extents.
2. December 2024: Interim analysis meeting to review the data collection results and propose preliminary countermeasures. This meeting also identified overlapping or adjacent projects that should be considered in the recommendations.
3. April 2025: Final deliverable meeting to review the draft report, concepts, and comments. This meeting served as the final concurrence on study recommendations and updated status on existing programmed project coordination.

Meeting presentations and annotated discussion summaries are included in **Appendix D**.

I.IV Report Documentation

The rest of this report will describe the study and analysis of each location under separate sections following the same general outline for each:

- Existing Conditions
    - Roadway Characteristics and Context
    - Historic Crash Analysis
    - Transit Routes and Ridership
    - Speed Profiles
- Qualitative Assessment
- Engineering Analysis
    - Site-Specific Recommendations
    - Systematic Applications of Similar Treatments
    - Benefit-Cost Analysis
    - Concepts

1.0 KOA STREET & SAN REMO ROAD

1.1 Existing Conditions

1.1.1 Roadway Characteristics and Context

The intersection of Koa Street & San Remo Road currently operates as a **two-way stop-controlled intersection**. The eastbound and westbound approaches at the intersection are free-flow while the northbound and southbound approaches are stop-controlled. The context classification of both roadways is **C3R – Suburban Residential**. The land use adjacent to this intersection is residential. **Figure 1-1** shows an aerial of this intersection.

Koa Street (eastbound/westbound) is a **two-lane undivided urban major collector**. At the study location, the eastbound and westbound approaches operate with a shared left-turn/through/right-turn lane. The posted speed limit is **45 miles per hour**. The 2024 AADT was 14,600 vehicles.

San Remo Road (northbound/southbound) is a two-lane undivided local roadway. At the study location, the northbound and southbound approaches operate with a shared left-turn/through/right-turn lane. The posted speed limit is 30 miles per hour.

There are two schools in the vicinity of this intersection: Koa Elementary School approximately 2 miles west on Koa Street and Deerwood Elementary School approximately 3 miles northwest on Marigold Avenue. There are existing sidewalks along the south side of the eastbound and westbound approaches, and a sidewalk along the east side of the northbound approach. There are no bicycle facilities along any approaches of this intersection.

The vehicular and non-vehicular volume data collected on Thursday, October 17, 2024, and Tuesday, October 22, 2024, have been summarized in **Figure 1-2** and **Figure 1-3**. These exhibits present the maximum hourly pedestrian and bicycle volumes for each leg of the intersection, along with the total and maximum hourly entering vehicular volume. **The highest volume of uncontrolled non-motorist crossings in a single hour was 11.**

Figure 1-1: Koa Street & San Remo Road – Aerial View

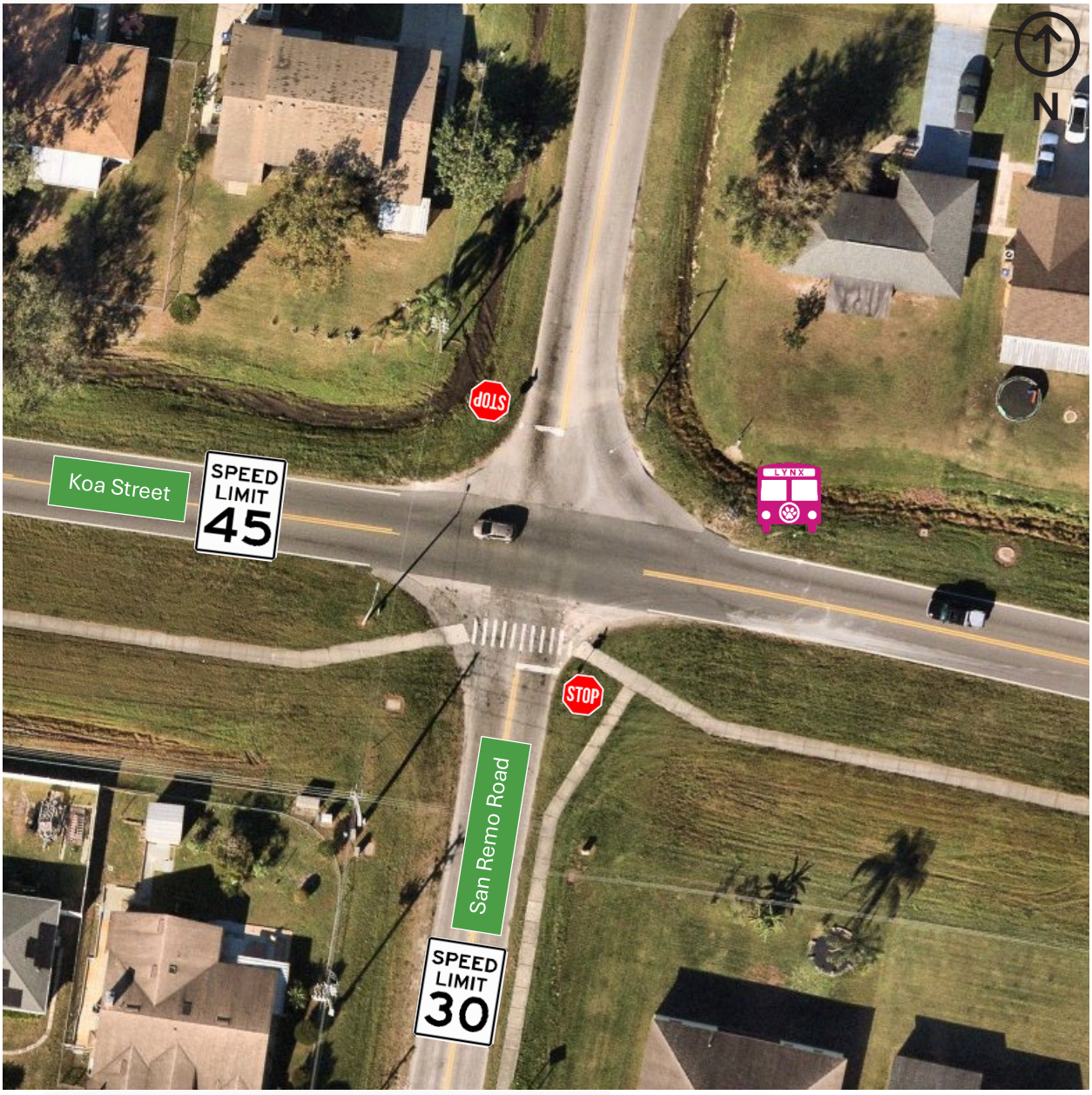


Figure 1-2: Koa Street & San Remo Road – Thursday Data Collection

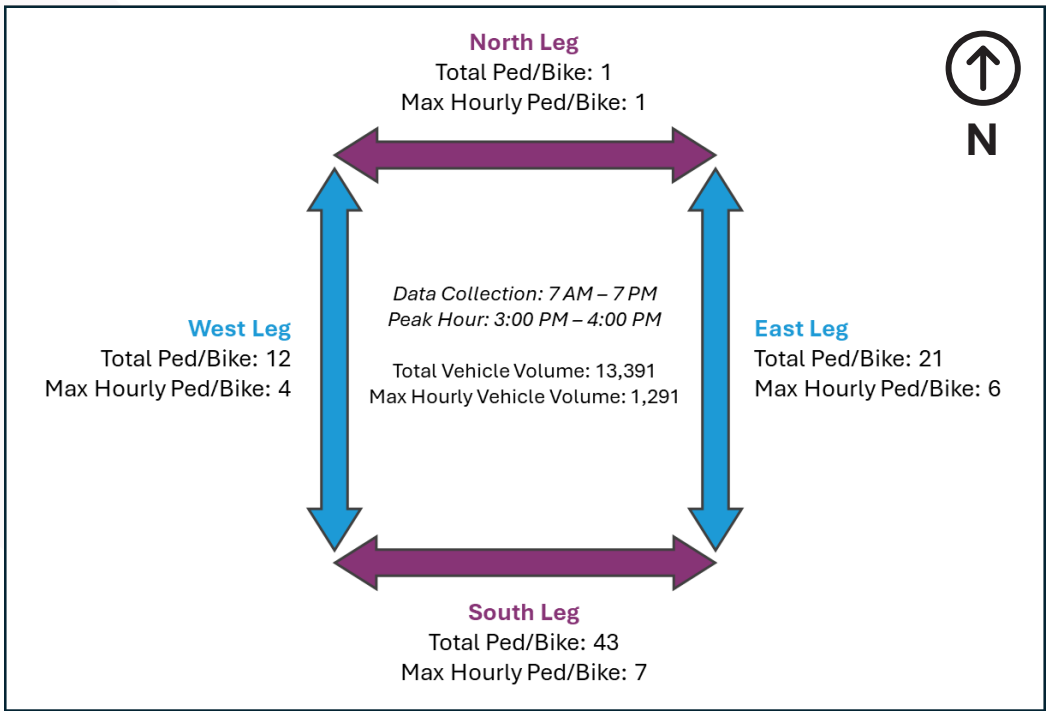
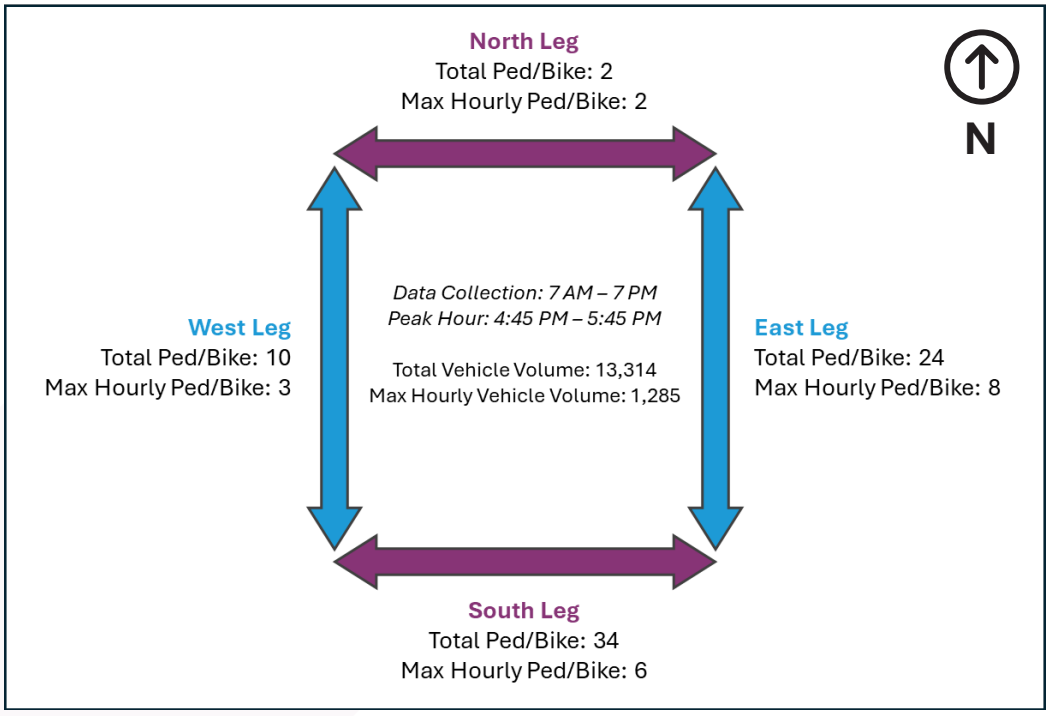


Figure 1-3: Koa Street & San Remo Road – Tuesday Data Collection



1.1.1.1 Related Programmed Projects and Planning Studies

The intersection of Koa Street & San Remo Road is listed #1 on Osceola County's 2023 Signal Priority List. Additionally, MetroPlan Orlando's Critical Sidewalk Gaps Program has identified the majority of the segment of Koa Street from Marigold Avenue to Doverplum Avenue as a critical sidewalk segment, which refers to stretches of inadequate or missing sidewalks needed in order to improve pedestrian safety and accessibility. The figure below displays the critical sidewalk segment relative to the study location.

1.1.2 Historic Crash Analysis

Five years of historical crash data (from 2018 to 2022) plus additional recent crash data (from 2023 to 2024) was obtained for the intersection of Koa Street & San Remo Road from *Signal Four Analytics*. A total of 73 crashes occurred during this time. Crash data is provided in **Appendix B**. Summaries of crash statistics related to crash type, severity, and lighting condition are provided in **Table 1-1**, **Table 1-2**, and **Table 1-3**, respectively.

Figure 1-4 and **Figure 1-5** show crash severity by year and crashes by lighting condition, respectively. A diagram of historical crashes at this intersection is provided in **Appendix B**.

There were no fatal crashes and there were five serious injury crashes. The most common crash type was an angle crash followed by a left turn crash. Over 22% of the crashes occurred under dark conditions. Additionally, as shown in **Figure 1-6**, there are peaks in crash frequency from 3 PM to 6 PM.

Table 1-1: Koa Street & San Remo Road – Crashes by Type

Crash Type	# of Crashes	% of Crashes
Angle	42	58%
Left Turn	19	26%
Rear End	4	5%
Off Road	3	4%
Bicycle	1	1%
Pedestrian	1	1%
Head On	1	1%
Animal	1	1%
Other/Unknown	3	3%
Total	73	100%

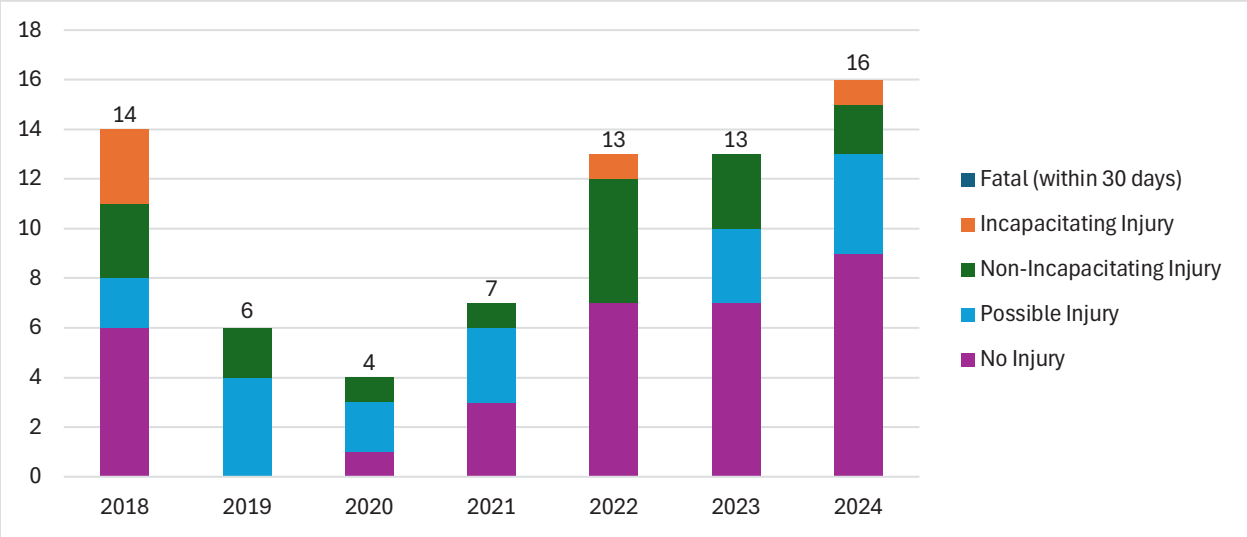
Source: Signal Four Analytics 2018 to 2024

Table 1-2: Koa Street & San Remo Road – Crashes by Severity

Severity	# of Crashes	% of Crashes
K – Fatality	0	-
A – Incapacitating Injury	5	7%
B – Non-Incapacitating Injury	17	23%
C – Possible Injury	18	25%
O – No Injury	33	45%

Source: Signal Four Analytics 2018 to 2024

Figure 1-4: Koa Street & San Remo Road – Crash Severity by Year



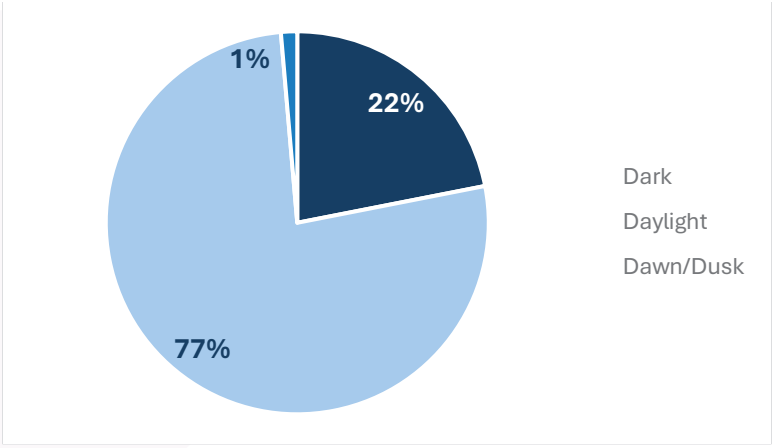
Source: Signal Four Analytics 2018 to 2024

Table 1-3: Koa Street & San Remo Road – Crashes by Lighting Condition

Lighting Condition	# of Crashes	% of Crashes
Daylight	56	77%
Dark – Lighted	13	18%
Dark – Not Lighted	3	4%
Dawn/Dusk	1	1%

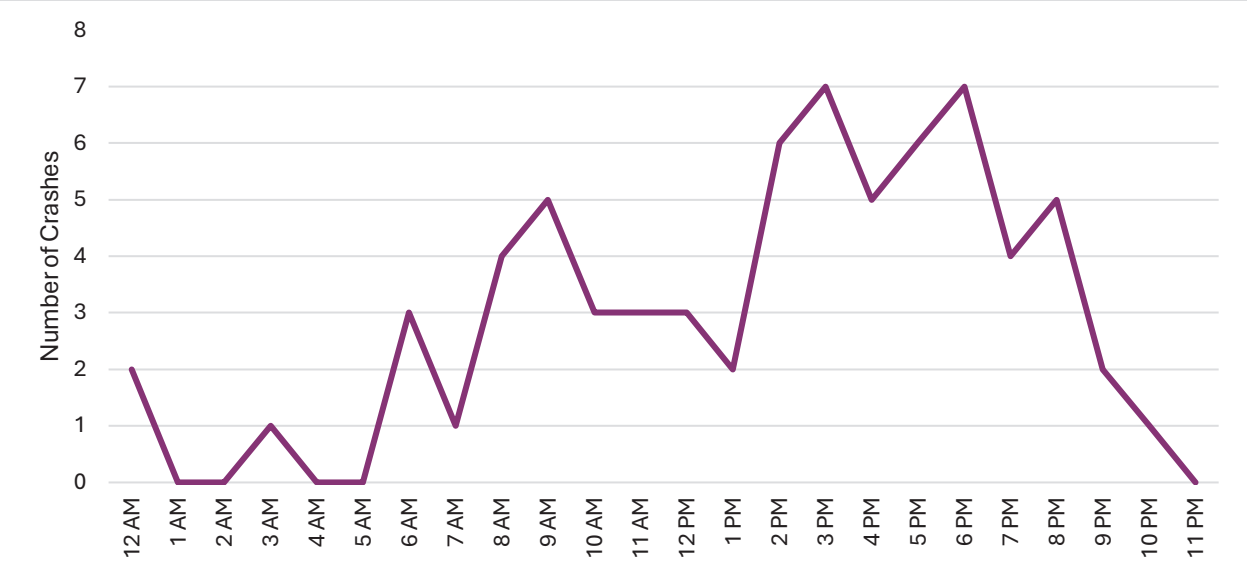
Source: Signal Four Analytics 2018 to 2024

Figure 1-5: Koa Street & San Remo Road – Crashes by Lighting Condition



Source: Signal Four Analytics 2018 to 2024

Figure 1-6: Koa Street & San Remo Road – Crashes by Time of Day



Source: Signal Four Analytics 2018 to 2024

1.1.2.1 Non-Motorist Crashes

The pedestrian and bicycle crash report narratives were reviewed to assess the contributing circumstances surrounding each crash involving a non-motorist. There was one pedestrian crash and one bicycle crash. Both occurred with **non-motorists crossing the uncontrolled east leg** of the intersection in conflict with left-turning vehicles from the minor street. The following bullets describe the key takeaways of each crash:

1. May 2018: Southbound left-turning vehicle on San Remo Road struck a **pedestrian** crossing Koa Street on the east leg. Daylight. Incapacitating injury.

2. January 2020: Southbound left-turning vehicle on San Remo Road struck a **bicyclist** crossing Koa Street on the east leg. Dark conditions. Injury.

1.1.3 Transit Routes and Ridership

Access to existing transit facilities at the intersection of Koa Street & San Remo Road was evaluated for accessibility, ADA compliance, and ridership. **Figure 1-7** provides a visual of the existing bus stop facilities.

The intersection features a bus stop on the northeast quadrant that serves LYNX Route 426 (Poinciana Circulator), which circles the Poinciana area and provides stops at Poinciana Walmart, Deerwood Elementary School, Poinciana Medical Center, and the intersections of Amiens Way and Chestnut Street. The service hours for Route 426 are 5 AM to approximately 11 PM during weekdays

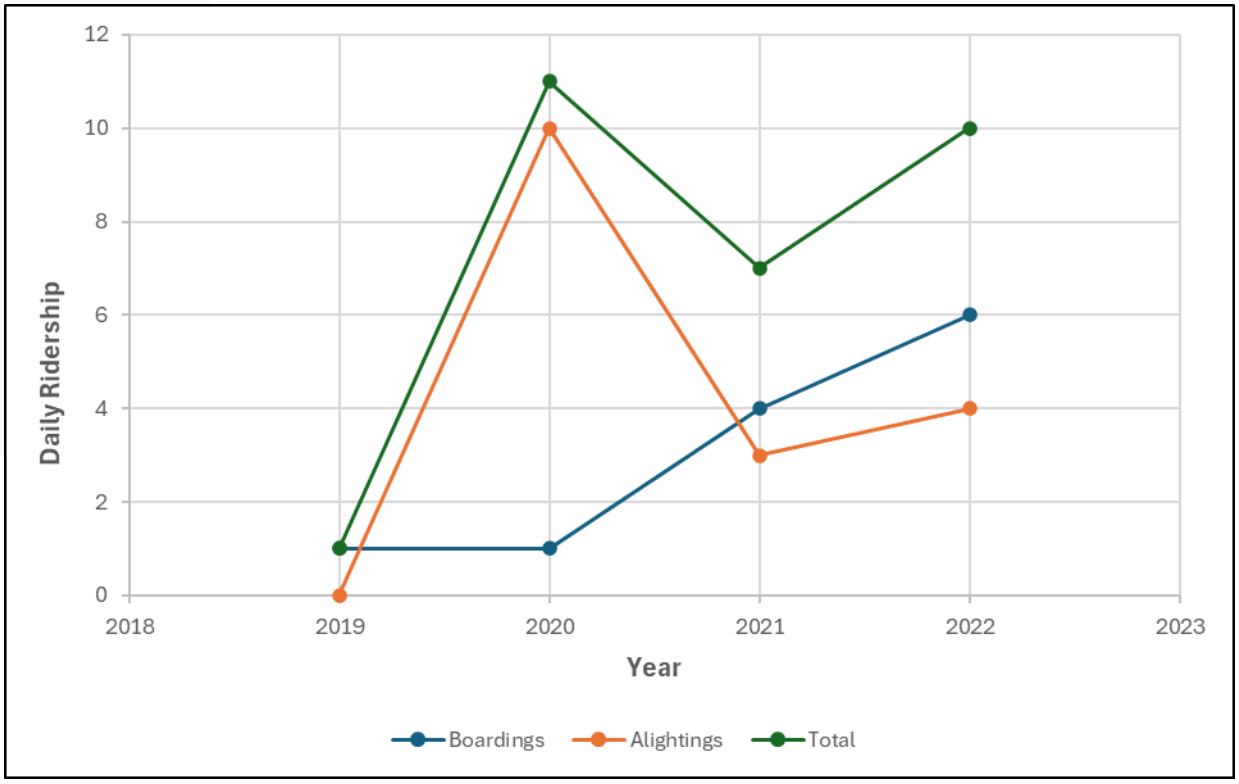
and Saturdays. No service is provided on Sundays. The scheduled headway for Route 426 is 30 minutes. The route map is included in **Appendix C**.

Figure 1-7: Koa Street & San Remo Road – LYNX Stop Photo

As previously noted, the north side of Koa Street near San Remo Road does not feature any pedestrian facilities. As a result, the bus stop is inaccessible via sidewalk, and there are no crosswalks to cross Koa Street from the existing sidewalk facilities on the south side of the road.

Ridership data between 2019 and 2022 was provided by the Central Florida Regional Transit Authority (LYNX) and evaluated for trends. The ridership data is provided in **Appendix C**. A summary of boarding (onboards) and alighting (offboards) data for the bus stop at the intersection of Koa Street & San Remo Road is provided in **Figure 1-8**.

Figure 1-8: Koa Street & San Remo Road – LYNX Ridership Data Summary



As shown, ridership at the intersection of Koa Street & San Remo Road has remained steady between 2020 and 2022, with an average of approximately nine total boardings and alightings per day. Boardings have slightly increased and alightings have decreased. No trends in ridership at this bus stop were observed.

1.1.4 Speed Profiles

As reported in the previously mentioned Vision Zero Action Plan, the 85th and 50th percentile speed data was determined for each intersection cross street, if available. The speed data reported was:

Koa Street

Posted Speed	50th Percentile	85th Percentile
	45 mph	50 mph

1.2 Qualitative Assessment

A professional engineer visited the site to observe traffic patterns, non-motorist activity, adjacent land uses, and design constraints that could influence the recommended improvements. The observation period occurred on Thursday, November 14th, 2024 from 3:15-4:15 PM.

1.2.1 Existing Infrastructure

- There is an existing crosswalk on the south leg marked with "continental" longitudinal bars.
- The pavement markings are worn, and the pavement is in poor condition on the south leg of the intersection.
- Light poles are present on the northeast and southwest corners of the intersection and are labeled 110 W.

Eastbound Koa Street Approach

Westbound Koa Street Approach

Northbound San Remo Road Approach

Southbound San Remo Road Approach

Poor Pavement Condition and Worn Markings

Poor Pavement Condition and Worn Markings

1.2.2 Pedestrian and Bicyclist Activity

- At 3:19 PM, a school bus unloaded on the northeast corner; three students crossed the intersection on the east leg traveling southbound and one student walked NB.
- At 3:20 PM, another school bus unloaded on the northeast corner; one student crossed the intersection east leg traveling southbound.
- At 3:25 PM, a school bus for Mater Brighton Lakes Academy unloaded a group of students further south (facing northbound) on the south leg of San Remo Road. Parents parked on the shoulder to pick students up.
- At 3:56 PM, a school bus unloaded a group of students further north (facing southbound) on the north leg of San Remo Road. Parents walked students home from the bus.
- Four other buses traveled through the intersection to the north or south during the hour.
- One student on a bike made an eastbound left-turn across the west leg of the intersection.

School Bus Unloading on Koa Street

School Bus Unloading on San Remo Road

1.2.3 Transit Activity

- One LYNX bus drove through the intersection but did not stop.

1.2.4 Intersection Operations

- Cars were observed complying with the activated school bus STOP signs and allowing students to unload and cross safely.
- The maximum queue observed was 10 vehicles southbound and 7 vehicles eastbound.

1.2.5 Design Constraints

- The right-of-way appears very wide along the south side of Koa Street.
- There are significant drainage ditches along the north side of Koa Street and San Remo Road.
- Overhead electric runs along the west and south sides of the intersection. Brighthouse and Centurylink fiber markers and pull boxes were noted on the south side of Koa Street. Numerous utilities are located on the southwest corner near the right-of-way line.

Ample Right-of-Way South of Koa Street

Ditch on Northwest Corner

Overhead Electric South of Koa Street

Utilities on the Southwest Corner

1.3 Engineering Analysis

1.3.1 Site-Specific Recommendations

Based on the traffic counts, pedestrian and bicyclist activity, and field review, the following improvements are recommended and are illustrated in **Figure 1-9** (note that recommendations listed to "consider" are not included on the concept plans or in the subsequent cost estimates):

1. **Construct a new traffic signal.** The traffic volumes and angle crash frequency indicate that a traffic signal is warranted at the intersection. A preliminary Traffic Signal Warrant Analysis (TSWA) was performed as a part of this review and confirms that MUTCD Warrants 1B, 2, and 7 are satisfied. At the interim stakeholder meeting, the County confirmed that **a new traffic signal is currently programmed for construction this year** stemming from their Signal Priority List.

   As a part of the new traffic signal, it is recommended to include:

   - "Ladder" style special emphasis crosswalks on all legs of the intersection
   - Countdown pedestrian signals with pushbutton activation
   - Pedestrian landing areas (with guiderail where adjacent to ditch slopes)
   - Supplemental lighting to meet horizontal and vertical illuminance
   - Sidewalk connection to the LYNX stop on the northeast corner
   - ADA-compliant bus stop pad to serve the LYNX stop on the northeast corner

   The presence of the ditches along the north side of Koa Street and both sides of the north leg of San Remo Road makes placement of a signal structure difficult. The preferred signalization layout would include two dual mast arms on opposite corners. However, the Florida Green Book clear zone for 16,000 AADT at 45 mph and 1:6 slope is 20 feet, and the ditches are located within the clear zone. It is recommended to consider installing a single diagonal mast arm from the southeast corner to control all approaches. This will avoid placing a signal structure within the clear zone and allow for streamlined construction without major drainage modifications.

2. **Construct a westbound right-turn lane.** The maximum eastbound/westbound left-turn volume in a single hour is 20 vehicles; therefore, no left-turn lanes are recommended at this time, in order to keep the cross section narrow for pedestrian crossings and manage speeds. The maximum right-turn volume in a single hour is 93 vehicles eastbound and 190 vehicles westbound. Based on this volume, it is recommended to consider a westbound right-turn lane in the future. However, since this will involve drainage impacts to the ditch on the north side of Koa Street, it will require significantly higher evaluation, design time, and construction funding than the signal alone. Construction of the traffic signal should take priority for quick implementation. When the right-turn lane is considered, it would likely be optimal to widen to the south where there is ample right-of-way, but this would require longer transition distances for widening along Koa Street.

3. **Perform an Intersection Control Evaluation (ICE).** It is typically recommended to perform an ICE prior to any new signalization to confirm that a traditional traffic signal is the most appropriate form of traffic control. Given the characteristics of the study intersection, most of the alternative geometries in ICE would be ruled out. However, a roundabout may still be viable and could offer better speed management and safety than a traffic signal.

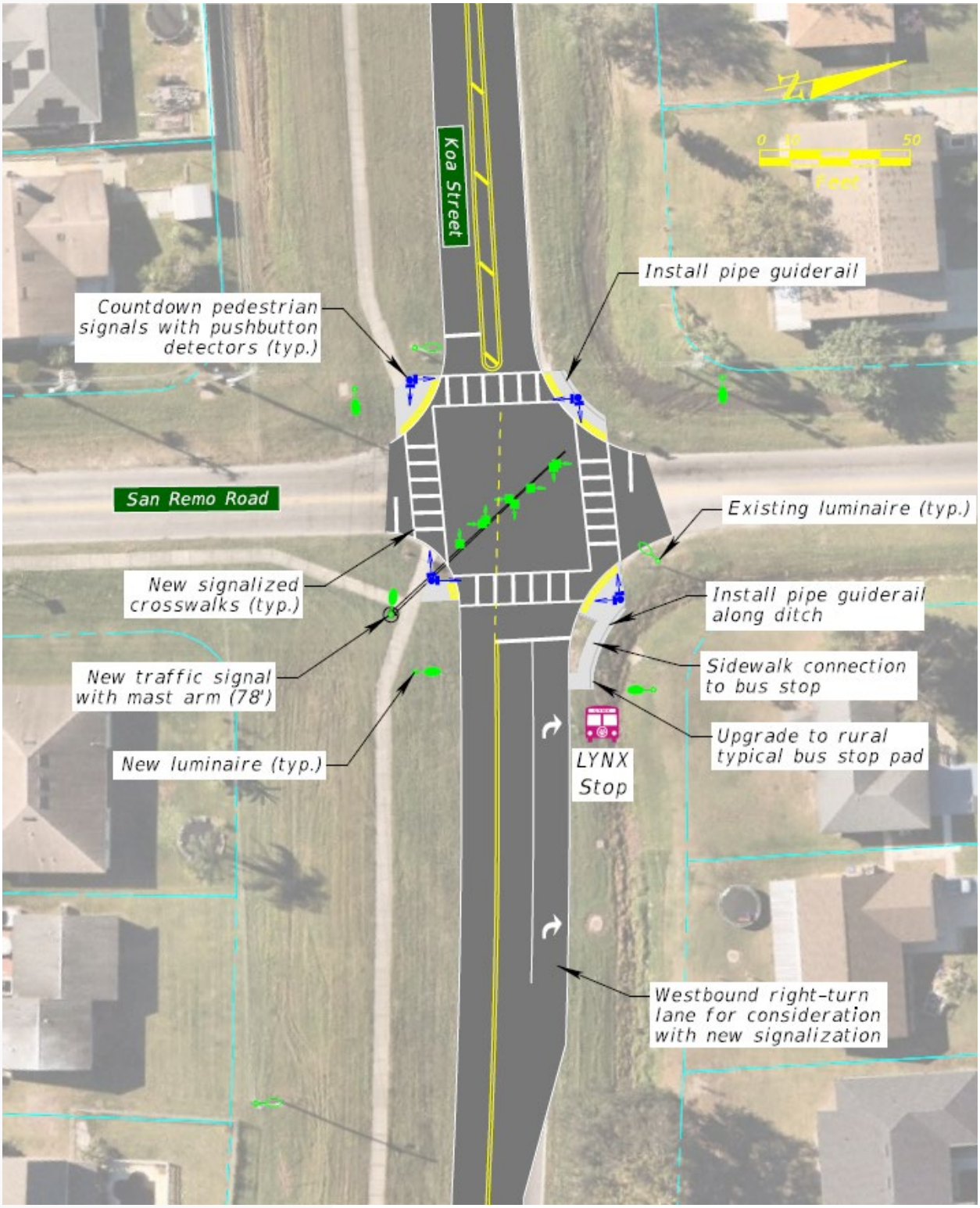
   Roundabouts feature fewer conflict points than conventional stop-controlled or signalized intersections and promote lower entry and circulating speeds as drivers navigate the horizontal deflection. Single-lane roundabouts generally perform well up to 17,000 vehicles per day (*reference: FDOT ICE Manual*) with a maximum circulating flow of 1,800 vehicles per hour (*reference: FHWA Roundabouts: An Informational Guide*), which is suitable for the conditions at Koa Street and San Remo Road. Roundabouts can also provide nearly an 80% reduction in fatal and injury crashes in comparison to stop control or signalization (*reference: FHWA Proven Safety Countermeasures*) due to the elimination of perpendicular crossing movements and left turns. It is recommended to consider future roundabout construction at the intersection concurrent with changes in control at adjacent intersections or traffic patterns, similar to the nearby Marigold Avenue Roundabout project soon to be under construction in Poinciana. A roundabout at the intersection, or a series of roundabouts along the Koa Street corridor, can contribute to overall speed management to reach a lower target speed than the current posted speed of 45 mph that would be more context-appropriate for the surrounding residential area.

4. **Consider implementing speed management along Koa Street.** The existing posted speed limit on Koa Street is 45 mph and collected speed data indicates that 50% of drivers are exceeding this speed. The C3R context classification and the surrounding residential land uses would ideally be suited for a 35-40 mph posted speed to provide safer conditions for non-motorists and vehicles turning to or from side streets. However, Koa Street was originally designed for the posted 45 mph and this cannot successfully be lowered without accompanying infrastructure changes to support and encourage lower speeds by drivers. Recommended potential speed management strategies to reach a target speed of 35 mph for this corridor include roundabouts, horizontal deflection, speed tables, and street trees.

5. **Consider expansion of multimodal connectivity along Koa Street and San Remo Road.** The existing pedestrian and bicyclist network through the intersection consists of sidewalk along one side of Koa Street and sidewalk along one side of San Remo Road only to the south of the intersection. With the density of residential uses, the presence of transit stops, and the proximity within a 2-mile radius of Koa Elementary School, it is critical to provide safe, attractive routes for pedestrians and to offer multiple crossing opportunities and redundant paths where possible. The following additional multimodal improvements should be considered in the future:

   - Completion of the sidewalk gap on the north side of Koa Street west to San Lorenzo Road
   - New sidewalk to the north on the entirety of San Remo Road
   - New shared-use path on the south side of Koa Street in place of the existing sidewalk

Figure 1-9: Koa Street & San Remo Road – Conceptual Plan



1.3.2 Systematic Applications of Similar Treatments

The characteristics observed at this intersection are similar to other locations throughout the County. Similar treatments, including traffic signalization, pedestrian crossing treatments, or roundabout construction, can be applied to other locations meeting the following screening criteria:

1. Locations to evaluate for **traffic signalization**:
    - Unsignalized intersections with more than six total angle and pedestrian crashes in a three-year period
        - Evaluate MUTCD signal warrant thresholds for vehicular and pedestrian volumes
        - Evaluate access management spacing requirements from existing signals
2. Locations to evaluate for **pedestrian crossing treatments**, such as PHBs, RRFBs, or uncontrolled signing and markings:
    - Two-way stop-controlled intersections with a school bus stop that feeds both sides of the uncontrolled approaches or with a public bus stop lacking sidewalk connectivity
        - Emphasis on residential areas or residential across from commercial attractors
        - Select crossing treatment based on posted speed limit, number of lanes, hourly vehicular volumes, and pedestrian demand (see FDOT TEM for detailed criteria)
3. Locations to consider for **roundabout construction**:
    - Intersections with more than six total angle and pedestrian crashes in a three-year period
        - At least 150 feet of right-of-way width
        - At most 17,000 AADT for a two-lane roadway
        - At most 1,800 hourly volume for a two-lane roadway

1.3.3 Benefit-Cost Analysis

To obtain a quantitative measure of the benefits expected to be received from **the recommended improvements of construction of a traffic signal and a westbound right-turn lane**, a safety benefit-cost analysis was prepared using anticipated crash reduction benefits and a preliminary cost estimate.

The following CMF Clearinghouse entries were deemed applicable to the recommended improvements:

- 0.60 CMF for pedestrian/bicyclist crashes for high-visibility crosswalk
- 0.65 CMF for angle and left-turn crashes for new traffic signal

For a suburban 2-lane undivided roadway, the FDOT average crash cost was reported as $267,397 per crash. The total estimated annual safety benefit resulting from the elimination of correctable crashes is approximately $855,670.

An opinion of probable construction cost (OPCC) was prepared using the FDOT Historical Costs. Allocations of 10 percent each for mobilization and MOT were added plus 25 percent for P.E. & C.E.I. and 25 percent for contingency. The improvements were broken up into separate subtotals for the traffic signalization and the westbound right-turn lane since these may be completed separately. The cost per mile model (CPM) was used for the right-turn lane as a conservatively high estimate given the unknown drainage impacts. The total design and construction cost is approximately $1,410,213.

Using the annual safety benefits and the estimated costs annualized over the expected service life at a 4% interest rate, the benefit-cost ratio calculated is 7.54. The benefit-cost analysis is summarized in **Table 1-4.** The detailed conceptual plan and the OPCC are provided in **Appendix F** and the benefit-cost calculations are provided in **Appendix G**.

Table 1-4: Koa Street & San Remo Road – Benefit-Cost Summary

Total Crash Reduction	Annual Crash Reduction	Annual Safety Benefit	Annualized Cost	B/C Ratio
22.2	3.2	$855,670	$113,450	7.54

2.0 DOVERPLUM AVENUE & COUNTRY CLUB ROAD/ TOWNE CENTER DRIVE

2.1 Existing Conditions

2.1.1 Roadway Characteristics and Context

The intersection of Doverplum Avenue & Country Club Road/Towne Center Drive currently operates as an **all-way stop intersection**. The context classification of Doverplum Avenue is **C3R – Suburban Residential**. The context classification of Country Club Road (west of Doverplum Avenue) is C3R – Suburban Residential and Towne Center Drive (east of Doverplum Avenue) is C3C – Suburban. Traffic is a mix of commuter traffic and local traffic. The County noted that this intersection is sometimes used as a cut-through for vehicles to avoid the traffic signal to the north at Cypress Parkway. The land uses adjacent to this intersection are residential west of Doverplum Avenue and commercial east of Doverplum Avenue. **Figure 2-1** shows an aerial of this intersection.

Doverplum Avenue (northbound/southbound) is a **two-lane undivided urban major collector**. At the study location, the northbound approach operates with a shared left-turn/through/right-turn lane. The southbound approach operates with an exclusive left-turn lane and a shared through/right-turn lane. The posted speed limit is **30 miles per hour**. The 2024 AADT was 14,600 vehicles.

Country Club Road west of Doverplum Avenue is a two-lane undivided roadway. Towne Center Drive east of Doverplum Avenue is a two-lane private roadway leading to the Walmart shopping center and providing back access to several other commercial properties. At the study location, the eastbound approach operates with a shared left-turn/through/right-turn lane. The westbound operates with a shared left-turn/through and an exclusive right-turn lane. The posted speed limit is 30 miles per hour.

There are existing sidewalks along the south side of the eastbound approach and the north side of the westbound approach. There are no bicycle facilities along any approaches of this intersection.

The vehicular and non-vehicular volume data collected on Thursday, October 17, 2024, and Tuesday, October 22, 2024, have been summarized in **Figure 2-2** and **Figure 2-3**. These exhibits present the maximum hourly pedestrian and bicycle volumes for each leg of the intersection, along with the total and maximum hourly entering vehicular volume. **The highest volume of non-motorists crossing all legs of the intersection in a single hour was 32.**

Figure 2-1: Doverplum Avenue & Country Club Road/Towne Center Drive – Aerial View

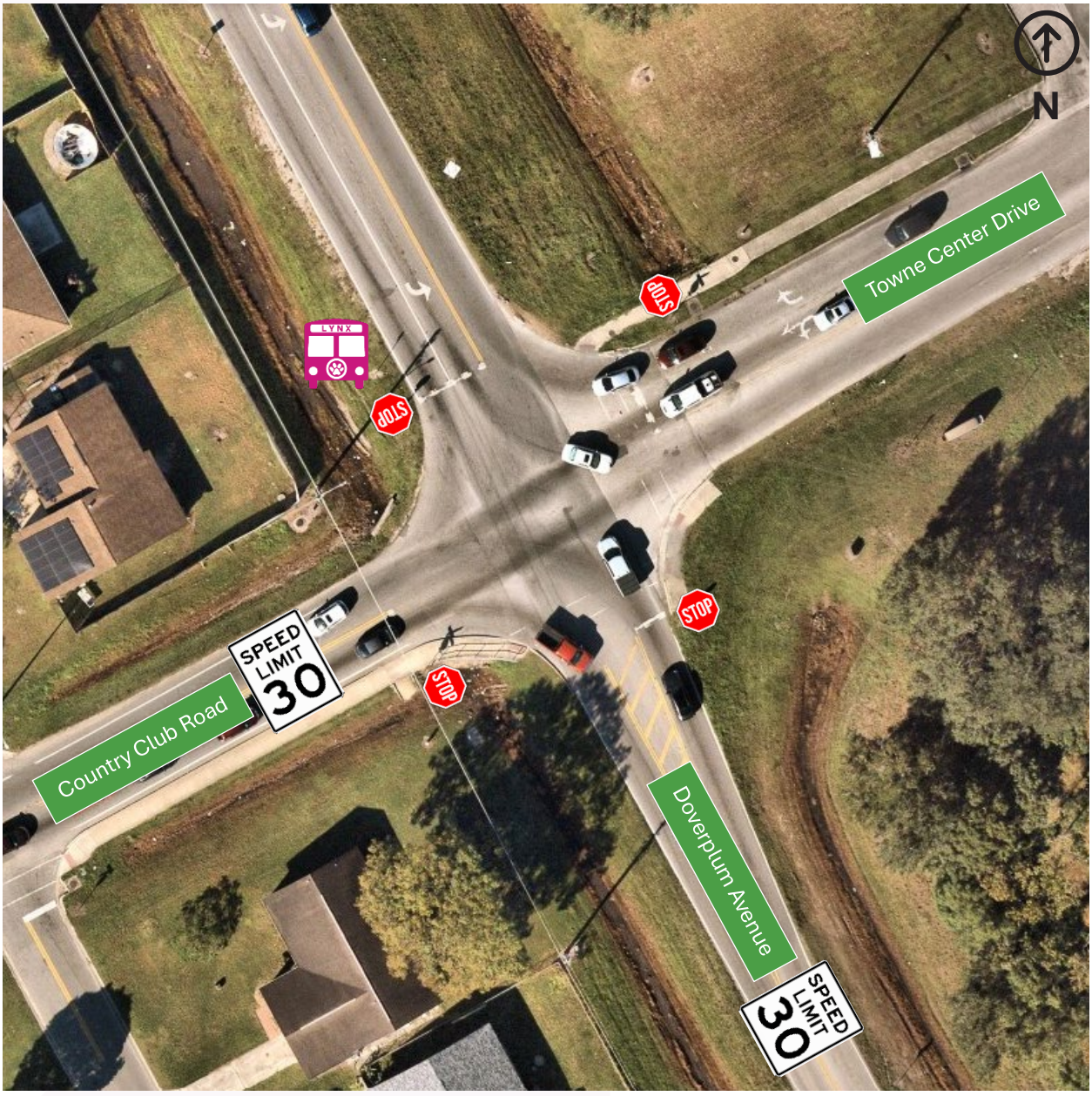


Figure 2-2: Doverplum Avenue & Country Club Road – Thursday Data Collection

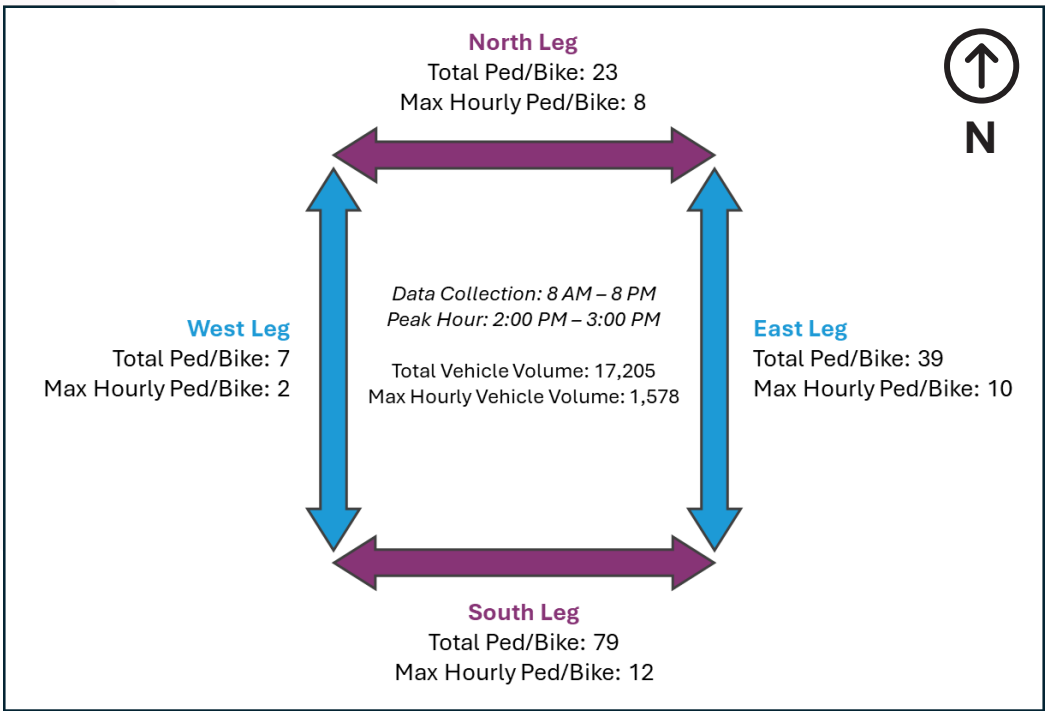
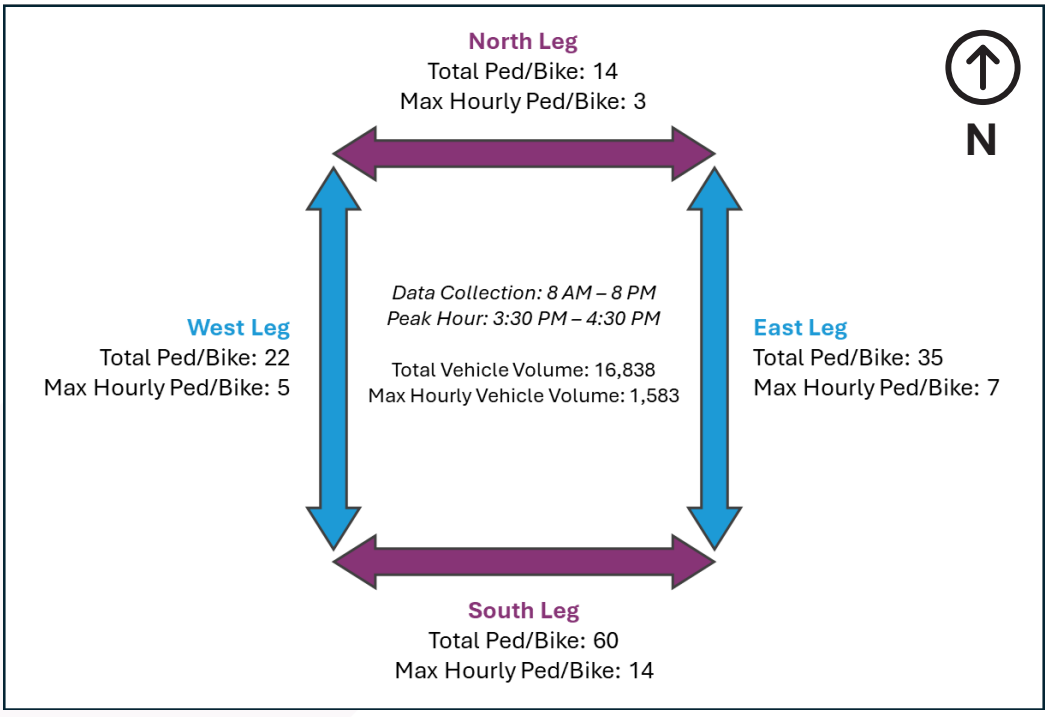


Figure 2-3: Doverplum Avenue & Country Club Road – Tuesday Data Collection



2.1.1.1 Related Programmed Projects and Planning Studies

The intersection of Doverplum Avenue & Country Club Road/Towne Center Drive is listed #6 on Osceola County's 2023 Signal Priority List. Additionally MetroPlan Orlando's Critical Sidewalk Gaps Program has identified the segment of Doverplum Avenue from Koa Street to Old Pleasant Hill Road as a critical sidewalk segment, which refers to stretches of inadequate or missing sidewalks in order to improve pedestrian safety and accessibility. The figure below displays the critical sidewalk segment relative to the study location.

2.1.2 Historic Crash Analysis

Five years of historical crash data (from 2018 to 2022) plus additional recent crash data (from 2023 to 2024) was obtained for the intersection of Doverplum Avenue & Country Club Road/Towne Center Drive from *Signal Four Analytics*. A total of 38 crashes occurred during this time. Crash data is provided in **Appendix B**. Summaries of crash statistics related to crash type, severity, and lighting condition are provided in **Table 2-1**, **Table 2-2**, and **Table 2-3**, respectively. **Figure 2-4** and **Figure 2-5** show crash severity by year and crashes by lighting condition, respectively. A diagram of historical crashes at this intersection is provided in **Appendix B**.

There were no fatal crashes and there was one serious injury crash. The most common crash type was an angle crash and a left-turn crash. Over 22% of the crashes occurred under dark conditions. Additionally, as shown in **Figure 2-6**, there are peaks in crash frequency throughout the afternoon and evening hours.

Table 2-1: Doverplum Avenue & Country Club Road – Crashes by Type

Crash Type	# of Crashes	% of Crashes
Angle	13	34%
Left Turn	13	34%
Rear End	5	13%
Other/Unknown	3	8%
Sideswipe	2	5%
Bicycle	1	3%
Pedestrian	1	3%
Total	**38**	**100%**

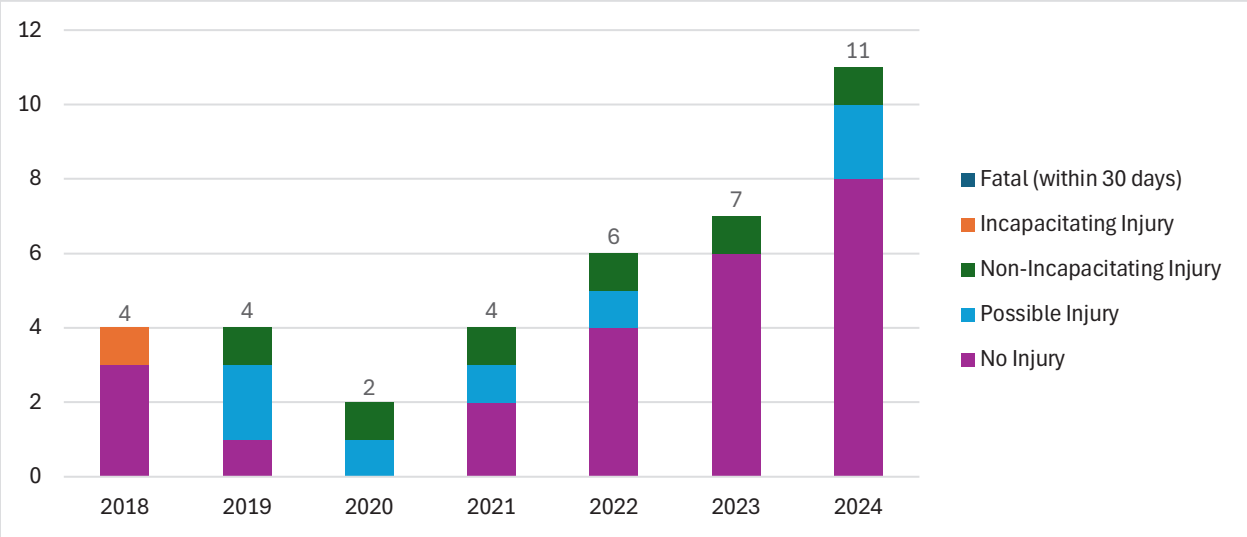
Source: Signal Four Analytics 2018 to 2024

Table 2-2: Doverplum Avenue & Country Club Road – Crashes by Severity

Severity	# of Crashes	% of Crashes
K – Fatality	0	-
A – Incapacitating Injury	1	3%
B – Non-Incapacitating Injury	6	16%
C – Possible Injury	7	18%
O – No Injury	24	63%

Source: Signal Four Analytics 2018 to 2024

Figure 2-4: Doverplum Avenue & Country Club Road – Crash Severity by Year



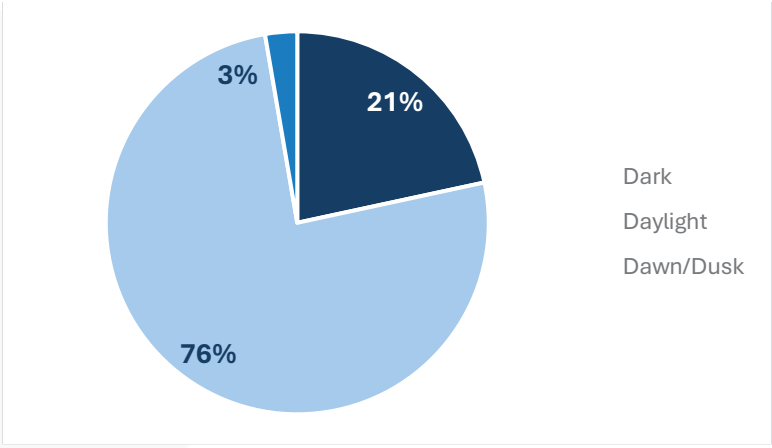
Source: Signal Four Analytics 2018 to 2024

Table 2-3: Doverplum Avenue & Country Club Road – Crashes by Lighting Condition

Lighting Condition	# of Crashes	% of Crashes
Daylight	28	76%
Dark - Not Lighted	5	14%
Dark - Lighted	3	7%
Dawn/Dusk	1	3%

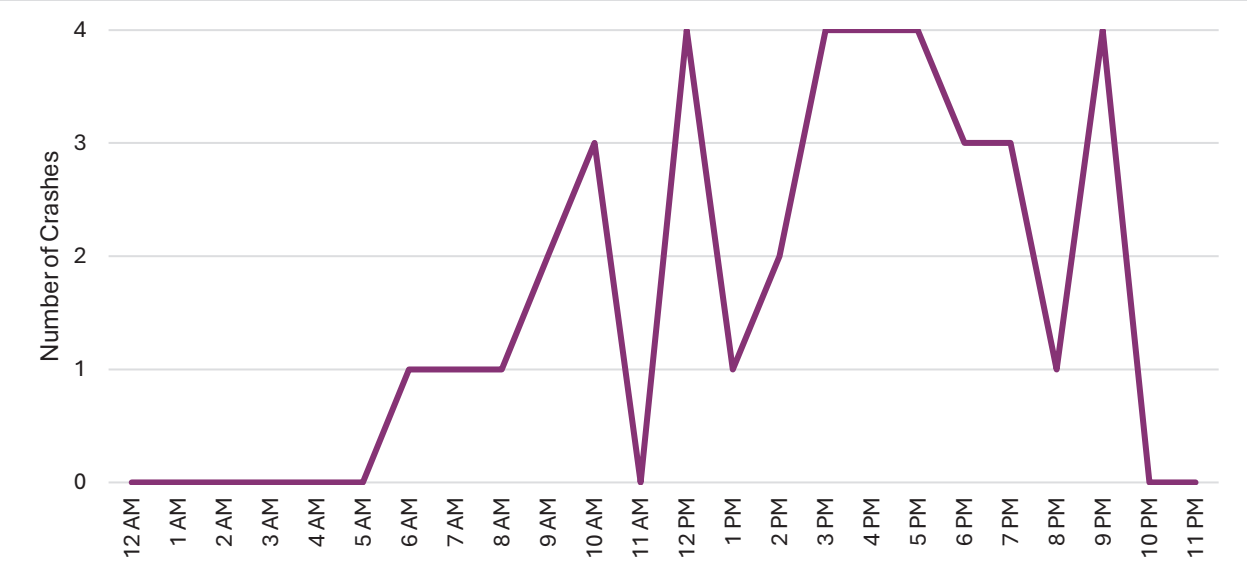
Source: Signal Four Analytics 2018 to 2024

Figure 2-5: Doverplum Avenue & Country Club Road – Crashes by Lighting Condition



Source: Signal Four Analytics 2018 to 2024

Figure 2-6: Doverplum Avenue & Country Club Road – Crashes by Time of Day



Source: Signal Four Analytics 2018 to 2024

2.1.2.1 Non-Motorist Crashes

The pedestrian and bicycle crash report narratives were reviewed to assess the contributing circumstances surrounding each crash involving a non-motorist. There was one pedestrian crash and one bicycle crash. The following bullets describe the key takeaways of each crash:

1. April 2021: Northbound left-turning vehicle on Doverplum Avenue struck a **pedestrian** crossing the west leg of the intersection with no marked crosswalk. Dusk conditions. Injury.

2. May 2022: Eastbound vehicle on Town Center Drive struck a **bicyclist** east of Doverplum Avenue crossing outside of the intersection. Dark conditions. No injury.

2.1.3 Transit Routes and Ridership

Access to existing transit facilities at the intersection of Doverplum Avenue & Country Club Road/Towne Center Drive was evaluated for accessibility, ADA compliance, and ridership. **Figure 2-7** provides a visual of the bus stop.

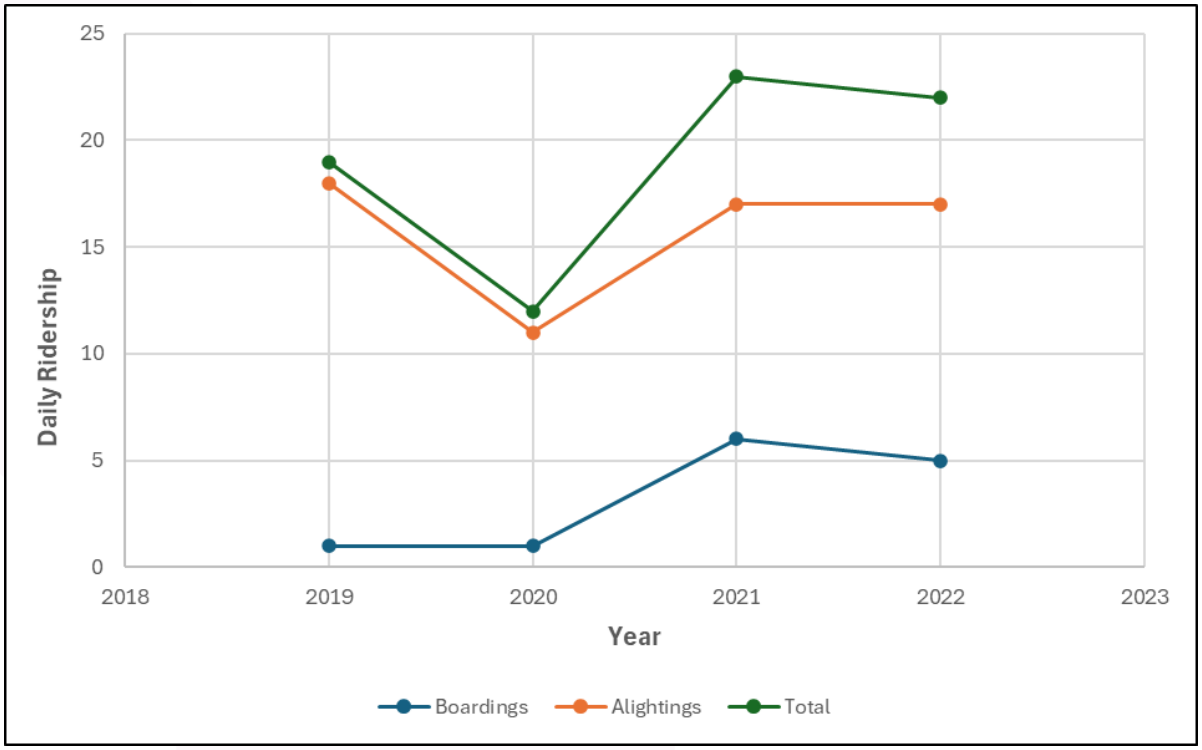
The intersection features a bus stop on the northwest quadrant that serves LYNX Route 26 (Pleasant Hill Road / Poinciana), provides stops at Poinciana Walmart, the intersection of US 17/92 and Pleasant Hill Road, and the Kissimmee Intermodal Station. The service hours for Route 26 are 5 AM to approximately 10 PM during weekdays and Saturdays, while Sunday service hours are from approximately 6 AM to 10 PM. The scheduled headway for Route 26 is 30 minutes. The route map is included in **Appendix C**.

Figure 2-7: Doverplum Avenue & Country Club Road – LYNX Stop Photo

As previously noted, Doverplum Road does not feature any pedestrian facilities in the vicinity of Country Club Road. As a result, the bus stop is inaccessible via sidewalk.

Ridership data between 2019 and 2022 was provided by the Central Florida Regional Transit Authority (LYNX) and evaluated for trends. The ridership data is provided in **Appendix C**. A summary of boarding (onboards) and alighting (offboards) data for the bus stop at the intersection of Doverplum Avenue and Country Club Road is provided in **Figure 2-8**.

Figure 2-8: Doverplum Avenue & Country Club Road – LYNX Ridership Data Summary



As shown, ridership at the intersection of Doverplum Avenue & Country Club Road has ranged from 12 and 23 total riders between 2019 and 2022. No trends in ridership at this bus stop were observed.

2.1.4 Speed Profiles

As reported in the previously mentioned Vision Zero Action Plan, the 85th and 50th percentile speed data was determined for each intersection cross street, if available. The speed data reported was:

Doverplum Avenue

Posted Speed	50th Percentile	85th Percentile
	40 mph	50 mph

2.2 Qualitative Assessment

A professional engineer visited the site to observe traffic patterns, non-motorist activity, adjacent land uses, and design constraints that could influence the recommended improvements. The observation period occurred on Thursday, November 14th, 2024 from 4:30-5:30 PM.

2.2.1 Existing Infrastructure

- Pavement markings throughout the intersection are worn. Pavement condition is poor on the east leg (private road to commercial center). Rutting was noted on the northwest corner at the edge of pavement.
- The southbound and westbound approaches have two lanes, which makes it difficult to see the STOP sign on the shoulder from the inside lanes.
- The stop line on the west leg (eastbound approach) is set very far back (roughly 36 feet per aerial measurement).
- One light pole is present on the northwest corner, labeled as Duke Energy.

Northbound Doverplum Avenue Approach

Southbound Doverplum Avenue Approach

Eastbound Country Club Road Approach

Westbound Towne Center Drive Approach

2.2.2 Pedestrian and Bicyclist Activity

- Multiple non-motorists were observed throughout the hour:
  - One bike crossed the south leg
  - 2 bikes crossed the north leg (no crosswalk)
  - 2 pedestrians crossed the south then east legs
  - One bike rode in the northbound lanes and turned left at the intersection
  - One bike rode in the eastbound lane, turned left, then rode against traffic on the southbound shoulder

Pedestrians in East Leg Crosswalk

Bicyclist in Southbound Lane after Crossing

2.2.3 Transit Activity

- LYNX was observed traveling through the intersection, but no stops were made.

2.2.4 Intersection Operations

- Significant queuing was observed in multiple directions for the entire hour with heavy congestion:
  - Northbound – queue extended beyond the horizontal curve, over 20 vehicles
  - Southbound – max queue of 7 vehicles
  - Eastbound – max queue of 10 vehicles
  - Westbound – queue extended beyond the horizontal curve, over 20 vehicles
- Honking was heard multiple times due to driver impatience and confusion over the right-of-way for the all-way stop.

Westbound Towne Center Drive Queue

Northbound Doverplum Avenue Queue

2.2.5 Design Constraints

- There is a significant ditch along the west side of Doverplum Avenue.
- The right-of-way appears very wide along the east side of Doverplum Avenue.
- Overhead electric runs along the west and north sides of the intersection. Fiber and sanitary sewer were noted on the northeast corner. Multiple utilities were noted behind the ditch on the northwest and southwest corners.

Doverplum Avenue West Side Ditch

Doverplum Avenue East Side Right-of-Way

Ditch and Accommodations on SW Corner

Headwall and Ditch on NW Corner

2.3 Engineering Analysis

2.3.1 Site-Specific Recommendations

Based on the traffic counts, pedestrian and bicyclist activity, and field review, the following improvements are recommended and are illustrated in **Figure 2-9** (note that recommendations listed to "consider" are not included on the concept plans or in the subsequent cost estimates):

1. **Construct new crosswalks on the west and north legs.** There is existing sidewalk along the south side of Country Club Road and the north side of Towne Center Drive with standard crosswalks on the east and south legs of the intersection. Despite the presence of a LYNX bus stop on the northwest corner, there are no crosswalks and no connecting sidewalks. It is recommended to install new special emphasis "ladder" style crosswalks on the west and north legs of the intersection to provide full connectivity on each leg of the all-way stop. Ramp work will be needed to modify the existing ramps on the southwest and northeast corners and to construct a new ramp on the northwest corner. The sidewalk connection from the ramp to the bus stop on the northwest corner will require pipe guiderail along the pedestrian path due to the ditch grading. An ADA-compliant boarding and alighting bus stop pad is recommended to serve Stop 9828 on the northwest quadrant of the intersection. Since Doverplum Avenue is not a curbed section, the bus stop pad will need to be designed for a rural setting in accordance with guidance provided in FDOT's *2022 Accessing Transit* design handbook.

2. **Restripe the existing crosswalks on the east and south legs and all stop lines.** It is recommended to restripe the existing crosswalks as special emphasis "ladder" style to match the new crosswalks and provide added visibility to the high volume of pedestrians and bicyclists crossing heavy turning movements. Stop lines for each approach should also be refurbished.

3. **Install intersection lighting.** While lighting enhancements are typically prioritized at signalized intersections and midblock crosswalks, lighting can also improve safety at stop-controlled approaches. It is recommended to supplement at least one luminaire on each intersection approach to provide adequate vertical illumination to pedestrians in the crosswalks.

4. **Update advanced warning signage.** There are existing Bicycle warning signs (W11-1) on the northbound and southbound approaches of Doverplum Avenue that have been in place since at least 2011 based on historic street view imagery. However, the traffic counts indicate that pedestrians outnumber bicyclists at the intersection by a factor of 2.5. It is recommended to remove the Bicycle warning signs and replace them with Pedestrian Ahead warning signs (W11-2 with W16-9P). It is also recommended to add a Pedestrian Ahead warning sign to the eastbound approach of Country Club Road. Since Towne Center Drive is a private roadway, no signing improvements have been recommended for the westbound approach.

5. **Complete sidewalk gap to the north along the east side of Doverplum Avenue.** There is existing sidewalk along the east side of Doverplum Avenue north of the study intersection that

provides connectivity to the surrounding commercial developments, residential areas, and continues onto Cypress Parkway. It is recommended to complete the existing sidewalk gap between Towne Center Drive and the existing sidewalk, a distance of approximately 420 feet. The right-of-way appears sufficient and no other feasibility concerns were noted.

6. **Consider a future northbound left-turn lane on Doverplum Avenue.** The peak hour northbound left-turn volume is 270 vehicles and queues were observed extending well beyond sight during the field review. The excessive delay for the northbound approach contributes to impatient drivers failing to yield the right-of-way to other directions of travel or pedestrians. It is recommended to evaluate the feasibility of a northbound left-turn lane when roadway improvements are programmed in the future, including signalization, resurfacing, or widening.

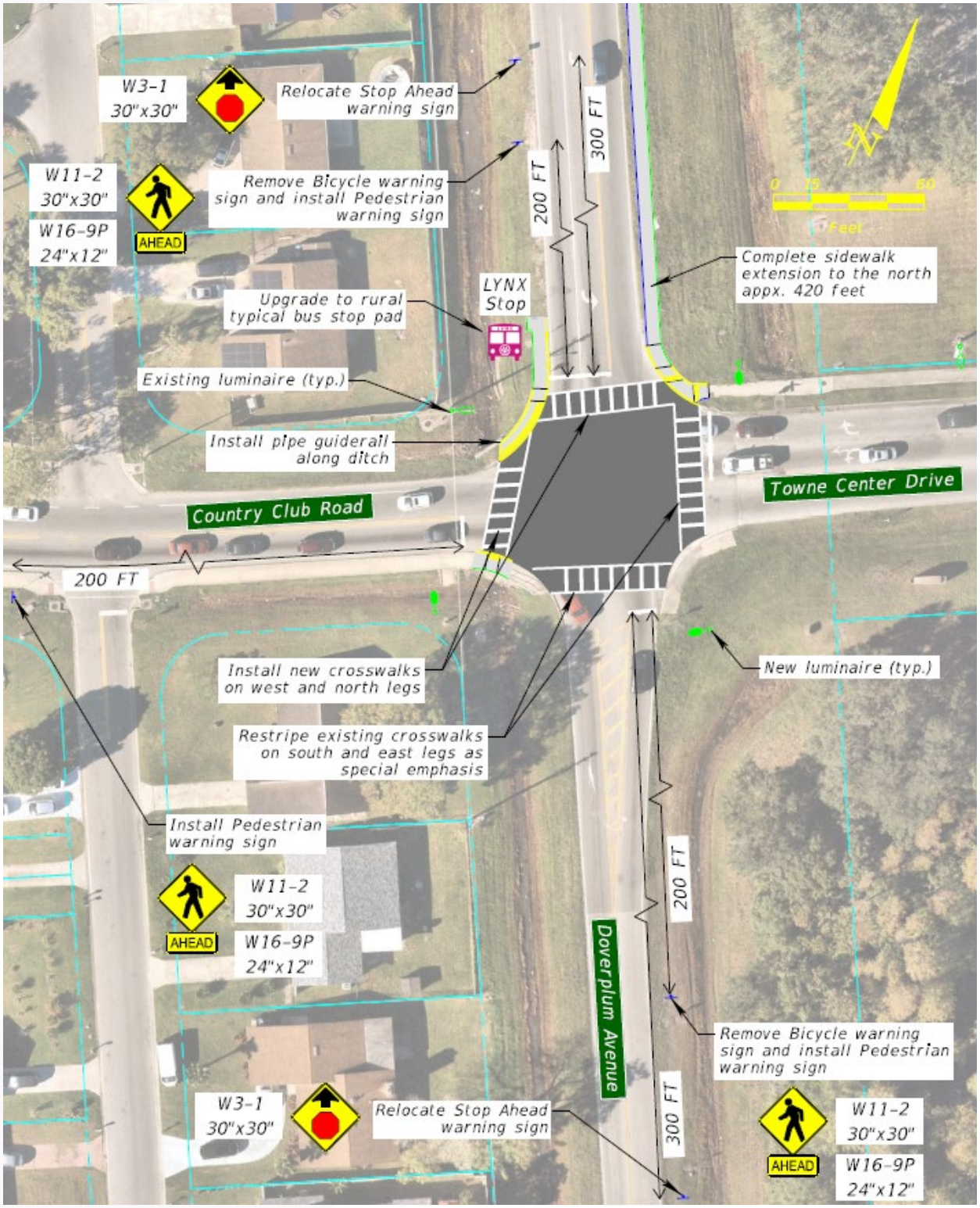
7. **Consider future signalization of the intersection.** The traffic volumes and angle crash frequency indicate that a traffic signal is warranted at the intersection. A preliminary Traffic Signal Warrant Analysis (TSWA) was performed as a part of this review and confirms that MUTCD Warrants 1A, 2, and 7 are satisfied. If a signal is installed in the future, full pedestrian facilities with countdown pedestrian signals and pushbutton actuation should be installed.

8. **Consider implementing speed management along Doverplum Avenue.** The existing posted speed limit on Doverplum Avenue is 30 mph and collected speed data indicates that 50% of drivers are exceeding the posted speed by 10 mph. The corridor would benefit from a targeted enforcement campaign to create awareness. In order to effectively reduce the prevalence of speeding, accompanying infrastructure changes are needed to support and encourage lower speeds by drivers. Recommended potential speed management strategies for this corridor include roundabouts, horizontal deflection, speed tables, and street trees. If speeds are successfully lowered to the posted speed in the future, shared lane markings (sharrows) can be considered along Doverplum Avenue to provide bicycle connectivity to the south.

9. **Consider expansion of multimodal connectivity along Doverplum Avenue and Country Club Road.** The existing pedestrian and bicyclist network through the intersection consists of sidewalk along one side of each minor street. With the density of residential, commercial, and institutional uses, it is critical to provide safe, attractive routes for pedestrians and to offer multiple crossing opportunities and redundant paths where possible. The following additional multimodal improvements should be considered in the future:

    - New sidewalk on the north side of Country Club Road
    - New sidewalk on the west side of Doverplum Avenue
    - New shared-use path along the east side of Doverplum Avenue from Cypress Pkwy to Old Pleasant Hill Road

Figure 2-9: Doverplum Avenue & Country Club Road – Conceptual Plan



2.3.2 Systematic Applications of Similar Treatments

The characteristics observed at this intersection are similar to other locations throughout the County. Similar treatments, including traffic signalization, marked pedestrian crosswalks, and/or low-cost signing and pavement marking enhancements, can be applied to other locations meeting the following screening criteria:

1. Locations to evaluate for **traffic signalization**:
    - Unsignalized intersections with more than six total angle and pedestrian crashes in a three-year period
        - Evaluate MUTCD signal warrant thresholds for vehicular and pedestrian volumes
        - Evaluate access management spacing requirements from existing signals
2. Locations to evaluate for **marked pedestrian crosswalks**:
    - All-way stop-controlled intersections with a public bus stop lacking connectivity
        - Include curb ramps or pedestrian landings on corners
        - Include sidewalk connection to transit stop
3. Locations to evaluate for **non-motorist signing and marking enhancements** (including warning signs and upgrade to "ladder" style special emphasis crosswalks):
    - Unsignalized intersections adjacent to major generators such as shopping centers
    - Multilane all-way stop-controlled approaches
    - Corridors with 50th percentile speeds above the posted speed limit

2.3.3 Benefit-Cost Analysis

To obtain a quantitative measure of the benefits expected to be received from **the recommended improvements of enhanced signing and pavement marking for crosswalks, lighting, and sidewalk gap completion**, a safety benefit-cost analysis was prepared using anticipated crash reduction benefits and a preliminary cost estimate.

The following CMF Clearinghouse entries were deemed applicable to the recommended improvements:

- 0.60 CMF for pedestrian/bicyclist crashes for high-visibility crosswalk
- 0.90 CMF for angle crashes for low-cost signing and pavement marking

For a suburban 2-lane undivided roadway, the FDOT average crash cost was reported as $267,397 per crash. The total estimated annual safety benefit resulting from the elimination of correctable crashes is approximately $133,699.

An opinion of probable construction cost (OPCC) was prepared using the FDOT Historical Costs. Allocations of 10 percent each for mobilization and MOT were added plus 25 percent for P.E. & C.E.I. and 25 percent for contingency. The improvements were broken up into separate subtotals for the signing and pavement marking enhancements and the sidewalk extension since these may be completed separately. The total design and construction cost is approximately $165,916.60.

Using the annual safety benefits and the estimated costs annualized over the expected service life at a 4% interest rate, the benefit-cost ratio calculated is 9.31. The benefit-cost analysis is summarized in **Table 2-4.** The detailed conceptual plan and the OPCC are provided in **Appendix F** and the benefit-cost calculations are provided in **Appendix G**.

Table 2-4: Doverplum Avenue & Country Club Road – Benefit-Cost Summary

Total Crash Reduction	Annual Crash Reduction	Annual Safety Benefit	Annualized Cost	B/C Ratio
3.4	0.5	$133,699	$14,411	9.31

3.0 BUENAVENTURA BOULEVARD & TOWN AND COUNTRY SHOPPING MALL

3.1 Existing Conditions

3.1.1 Roadway Characteristics and Context

The segment of Buenaventura Boulevard along Town & Country Shopping Mall spans approximately 650 feet between existing LYNX transit stops. The segment includes a raised median with one full median opening and four right-in/right-out commercial driveways. The northbound and southbound approaches at the median opening are free-flow while the eastbound and westbound approaches are stop-controlled. The context classification of Buenaventura Boulevard is **C3C – Suburban Commercial**. The land uses immediately adjacent to this intersection are commercial with residential further to the north. **Figure 3-1** shows an aerial of this segment with data collection zones for the pedestrian and bicyclist counts depicted.

Buenaventura Boulevard (northbound/southbound) is a **four-lane divided urban minor arterial**. There are exclusive left-turn lanes at the full median opening and right-turn lanes at the driveways. The posted speed limit is **40 miles per hour**. The 2024 AADT was 34,000 vehicles.

There are existing sidewalks along both sides of Buenaventura Boulevard and several sidewalk connections into the Town & Country Shopping Mall. There are no bicycle facilities along any approaches of this segment.

The vehicular and non-vehicular volume data collected on Thursday, October 17, 2024, and Saturday, October 19, 2024, have been summarized in **Figure 3-2** and **Figure 3-3**. These exhibits present the maximum hourly pedestrian and bicycle volumes for each leg of the intersection, along with the total and maximum hourly entering vehicular volume. **The highest volume of uncontrolled non-motorist crossings in a single hour was 15.**

3.1.1.1 Related Programmed Projects and Planning Studies

While located just outside of the study limits, the segment of Buenaventura Boulevard south of Osceola Parkway to Simpson Road is under design for Safety and Complete Streets projects to include roadway improvements, signalization improvements, and improved access for pedestrians, bicyclists, and motorists. The northern limit of the Complete Streets project is the signalized intersection of Buenaventura Boulevard at Osceola Parkway, immediately south of the study limits. There are two additional FDOT Local Agency Program (LAP) projects focused on signal reconstruction along Buenaventura Boulevard from Florida Parkway to Osceola Parkway that will incorporate signal enhancements to meet current criteria that are scheduled to complete final plans in 2025.

Figure 3-1: Buenaventura Boulevard & Town and Country Shopping Mall – Aerial View

Figure 3-2: Buenaventura Boulevard & Town and Country – Thursday Data Collection

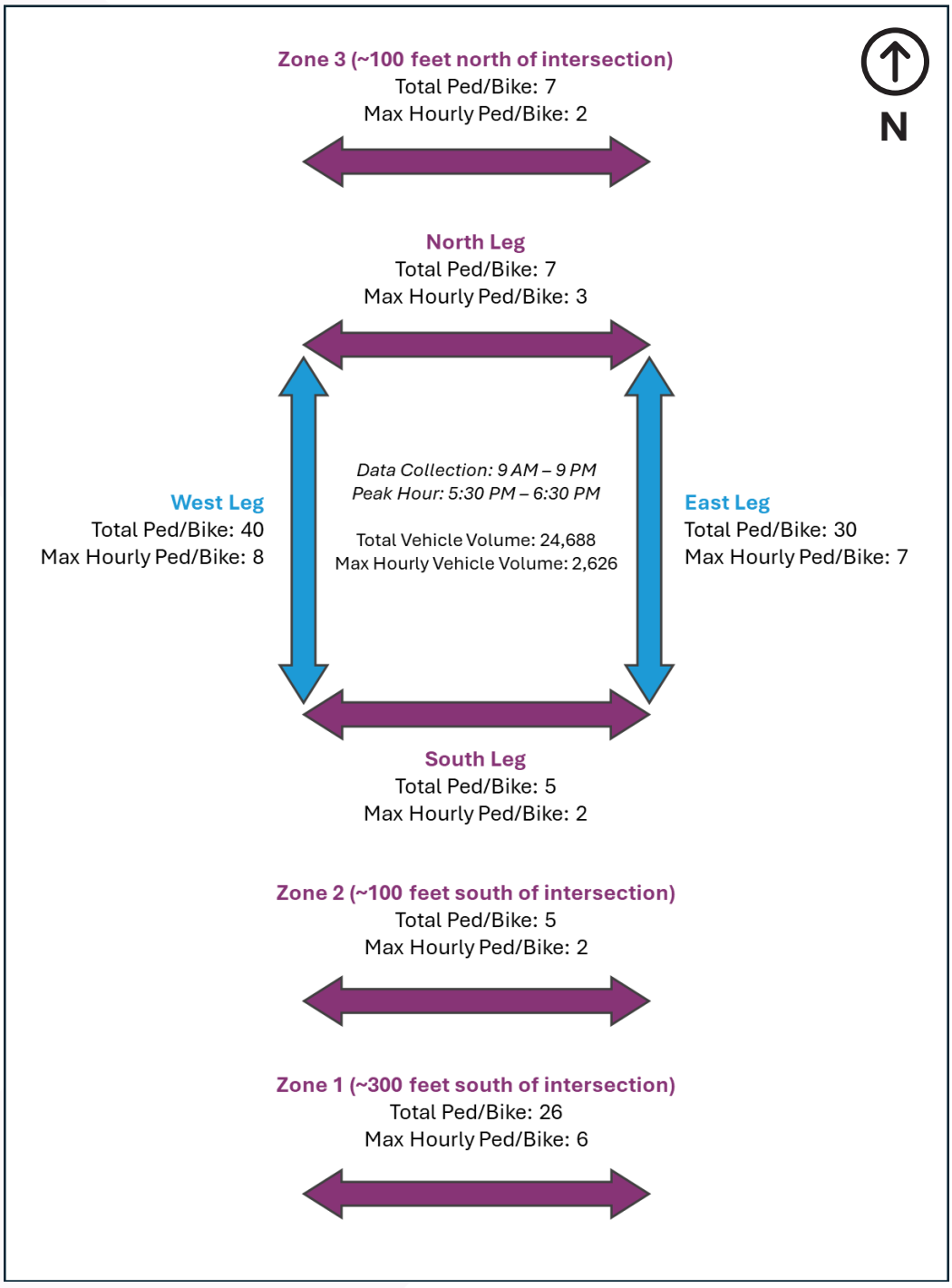
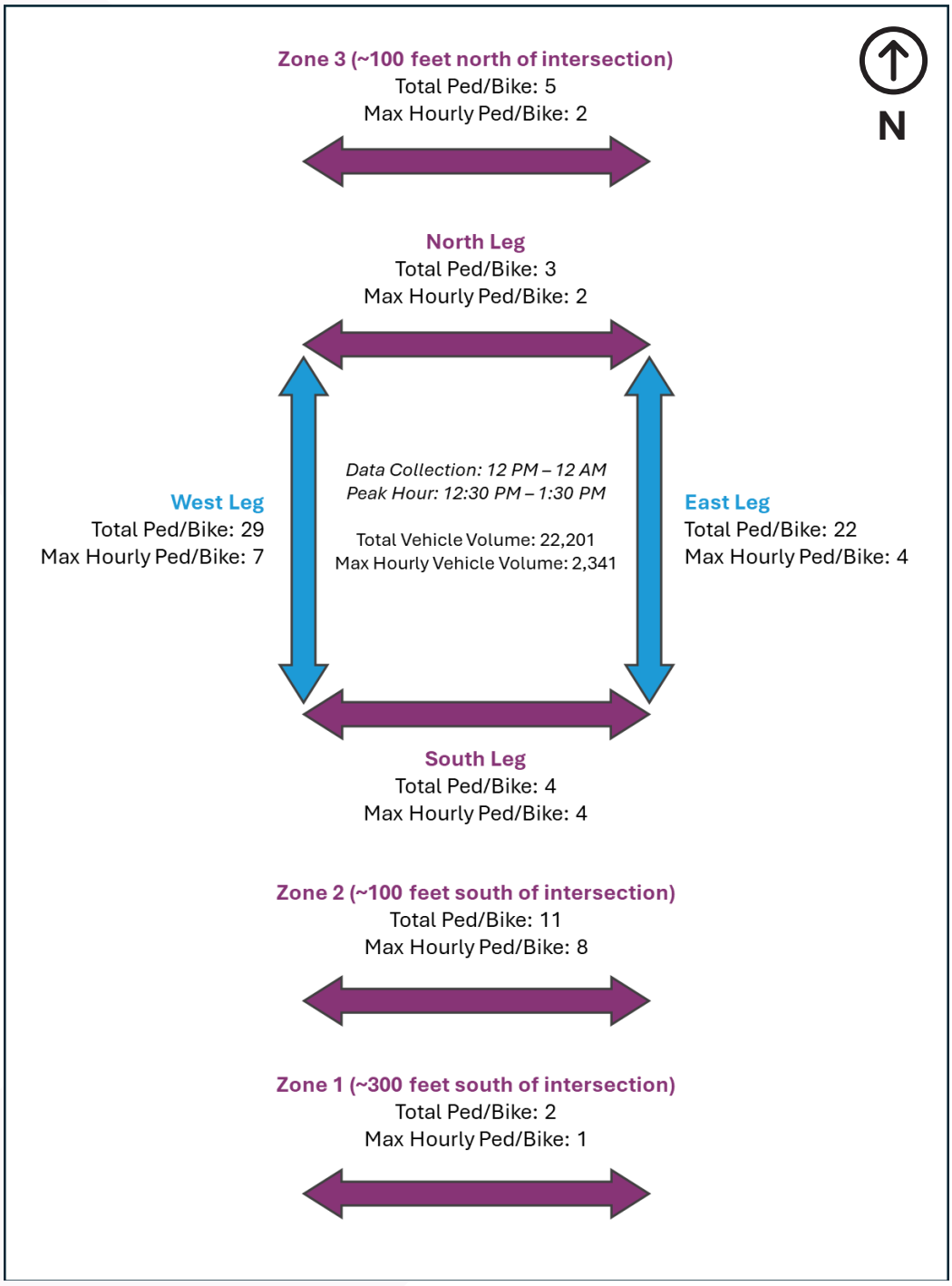


Figure 3-3: Buenaventura Boulevard & Town and Country – Saturday Data Collection



3.1.2 Historic Crash Analysis

Five years of historical crash data (from 2018 to 2022) plus additional recent crash data (from 2023 to 2024) was obtained for the segment of Buenaventura Boulevard along Town & Country Shopping Mall from *Signal Four Analytics*. A total of 171 crashes occurred during this time. Crash data is provided in **Appendix B**. Summaries of crash statistics related to crash type, severity, and lighting condition are provided in **Table 3-1**, **Table 3-2**, and **Table 3-3**, respectively. **Figure 3-4** and **Figure 3-5** show crash severity by year and crashes by lighting condition, respectively. A diagram of historical crashes at this intersection is provided in **Appendix B**.

There were two fatal crashes and three serious injury crashes. The most common crash type was a left-turn crash. Over 16% of the crashes occurred under dark conditions. Additionally, as shown in **Figure 3-6** and **Figure 3-7**, there are peaks in crash frequency at 5 PM and on Fridays.

Table 3-1: Buenaventura Boulevard – Crashes by Type

Crash Type	# of Crashes	% of Crashes
Left Turn	56	33%
Rear End	43	25%
Angle	28	16%
Sideswipe	20	12%
Other/Unknown	11	6%
Right Turn	8	5%
Off Road	3	2%
Pedestrian	2	1%
Total	**171**	**100%**

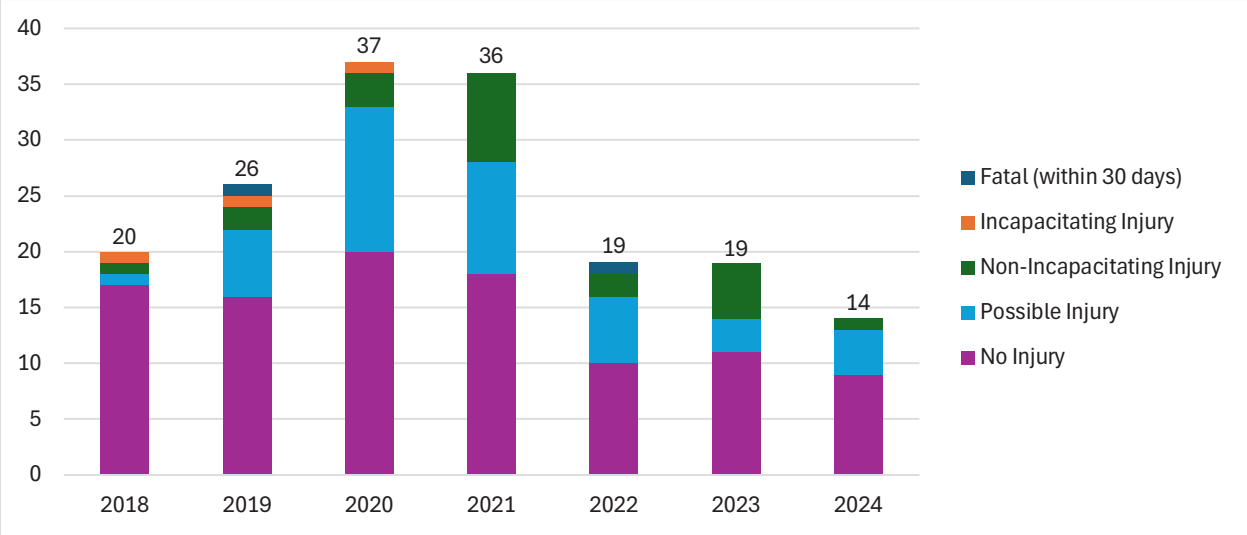
Source: Signal Four Analytics 2018 to 2024

Table 3-2: Buenaventura Boulevard – Crashes by Severity

Severity	# of Crashes	% of Crashes
K – Fatality	2	1%
A – Incapacitating Injury	3	2%
B – Non-Incapacitating Injury	22	13%
C – Possible Injury	43	25%
O – No Injury	101	59%

Source: Signal Four Analytics 2018 to 2024

Figure 3-4: Buenaventura Boulevard – Crash Severity by Year



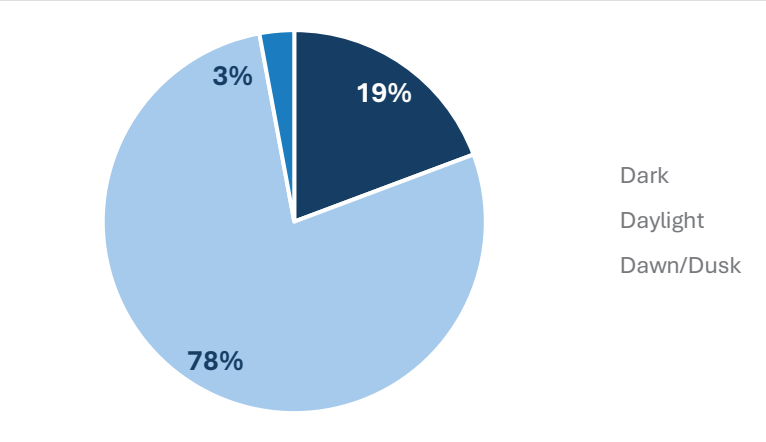
Source: Signal Four Analytics 2018 to 2024

Table 3-3: Buenaventura Boulevard – Crashes by Lighting Condition

Lighting Condition	# of Crashes	% of Crashes
Daylight	133	78%
Dark - Lighted	23	13%
Dawn/Dusk	10	6%
Dark - Not Lighted	5	3%

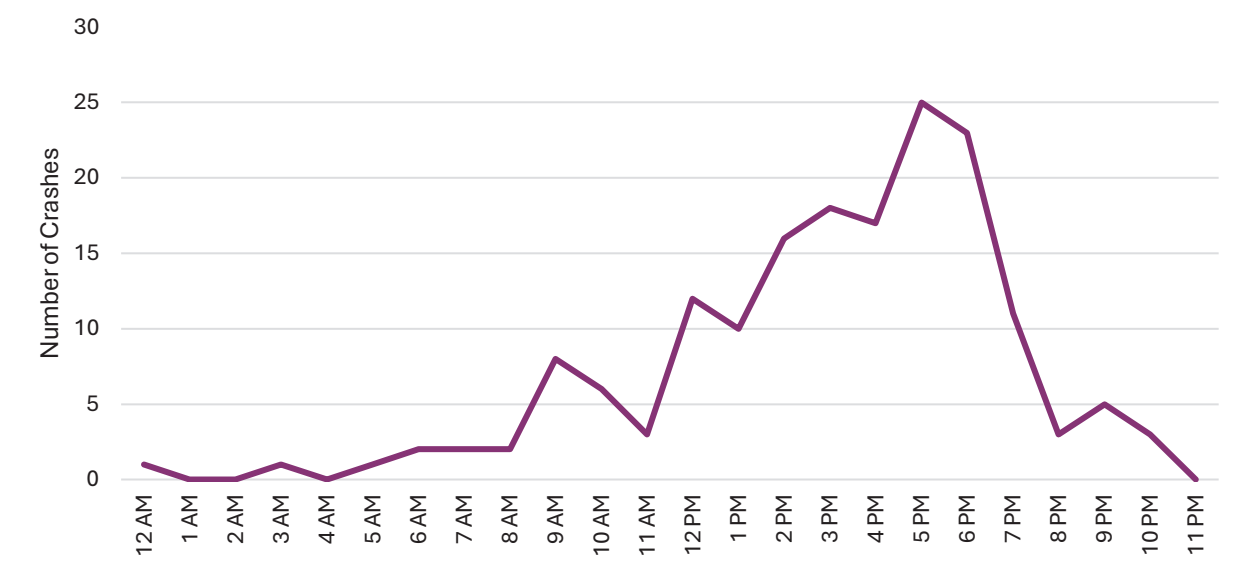
Source: Signal Four Analytics 2018 to 2024

Figure 3-5: Buenaventura Boulevard – Crashes by Lighting Condition



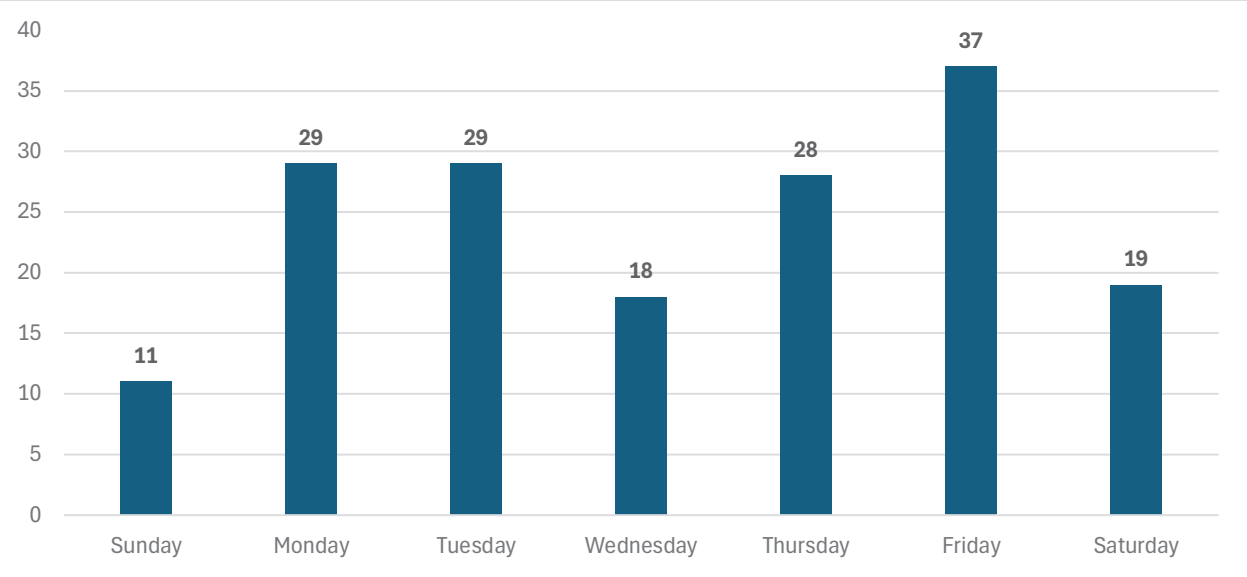
Source: Signal Four Analytics 2018 to 2024

Figure 3-6: Buenaventura Boulevard – Crashes by Time of Day



Source: Signal Four Analytics 2018 to 2024

Figure 3-7: Buenaventura Boulevard – Crashes by Day of Week



Source: Signal Four Analytics 2018 to 2024

3.1.2.1 Non-Motorist Crashes

The pedestrian and bicycle crash report narratives were reviewed to assess the contributing circumstances surrounding each crash involving a non-motorist. There were no bicycle crashes and two pedestrian crashes. The following bullets describe the key takeaways of each crash:

1. January 2018: Eastbound vehicle exiting the shopping plaza driveway struck a **pedestrian** in the marked crosswalk at the stop-controlled approach. Dark conditions. Incapacitating injury.

2. January 2019: Southbound vehicle on Buenaventura Boulevard struck a **pedestrian** crossing midblock. Dark conditions. Fatality.

An extended review of pedestrian and bicycle crash report narratives was performed at the adjacent traffic signal of Buenaventura Boulevard & Osceola Parkway since this is the only existing controlled pedestrian crossing location near the study limits. Seven non-motorist crashes occurred within the signalized intersection limits, including three **conflicts with southbound right-turning vehicles in the west leg crosswalk**. Over half of the crashes occurred during dark conditions. The details of each crash are summarized in **Table 3-4**.

Table 3-4: Buenaventura Boulevard & Osceola Parkway – Non-Motorist Crash Details

	Month/Year	Severity	Non Motorist Type	In Crosswalk	Vehicle Direction	Vehicle Movement	Lighting Condition
1	Jun 2018	C	Pedestrian	West Leg	SB	Right	Dark
2	Nov 2018	B	Pedestrian	South Leg	EB	Right	Daylight
3	Nov 2019	C	Pedestrian	West Leg	SB	Right	Dark
4	Jun 2020	B	Bicycle	East Leg	EB	Through	Dawn
5	May 2021	C	Bicycle	South Leg	SB	Through	Daylight
6	May 2021	C	Bicycle	Outside	WB	Through	Dark
7	Dec 2021	B	Pedestrian	West Leg	SB	Right	Dark

Source: Signal Four Analytics 2018 to 2024

3.1.3 Transit Routes and Ridership

Access to existing transit facilities on Buenaventura Boulevard along Town & Country Shopping Mall was evaluated for accessibility, ADA compliance, and ridership. **Figure 3-8** provides a visual of the bus stops.

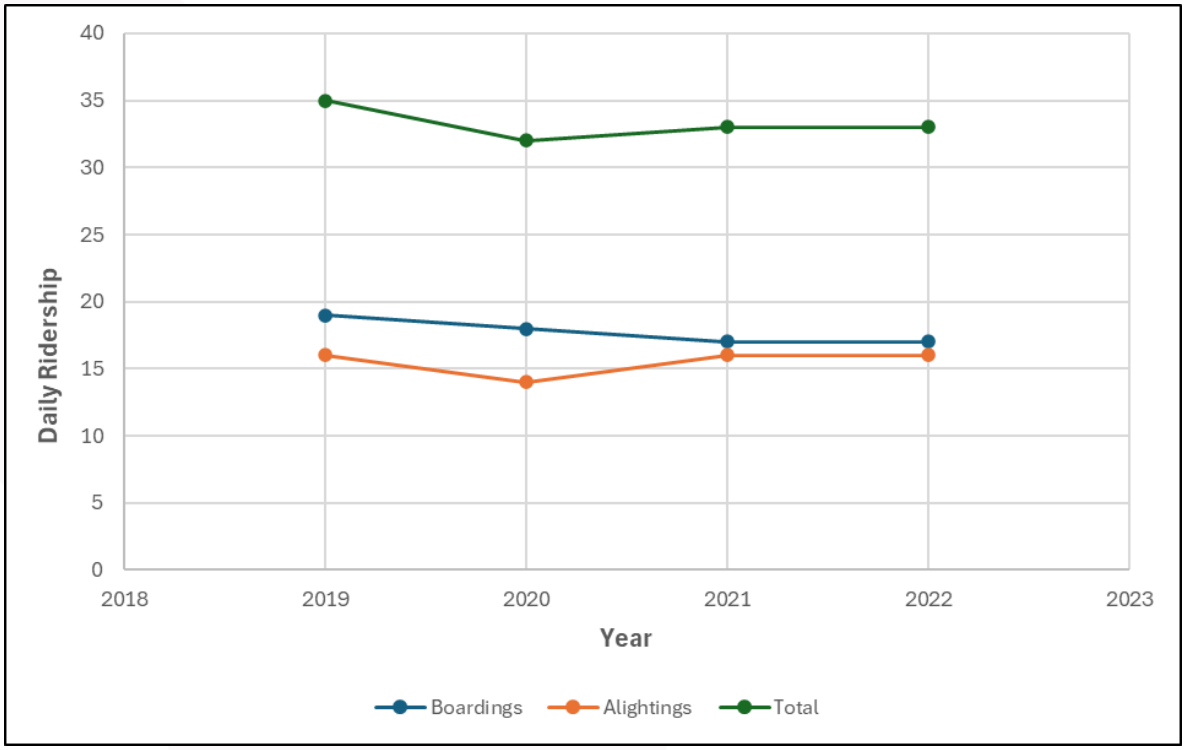
The area features bus stops on the west and east sides of Buenaventura Boulevard that serve LYNX Route 18 (S. Orange Avenue / Kissimmee), which provides several stops between Kissimmee Intermodal Station and LYNX Center Station. The service hours for Route 18 are 5:30 AM to approximately 9 PM during weekdays and Saturdays. No service is provided on Sundays. The scheduled headway for Route 18 is approximately one hour. The route map is included in **Appendix C**.

Figure 3-8: Buenaventura Boulevard – LYNX Stop Photos

The southbound bus stop features a transit shelter while the northbound bus stop only features a boarding and alighting area. Both stops are accessible via sidewalk.

Ridership data between 2019 and 2022 was provided by the Central Florida Regional Transit Authority (LYNX) and evaluated for trends. The ridership data is provided in **Appendix C**. A summary of boarding (onboards) and alighting (offboards) data for these bus stops is provided in **Figure 3-9**.

Figure 3-9: Buenaventura Boulevard – LYNX Ridership Data Summary



As shown, ridership at these two stops has remained steady between 2019 and 2022, with an average of approximately 32 total boardings and alightings per day. No trends in ridership at this bus stop were observed.

3.1.4 Speed Profiles

As reported in the previously mentioned Vision Zero Action Plan, the 85th and 50th percentile speed data was determined for each intersection cross street, if available. The speed data reported was:

Buenaventura Boulevard

Posted Speed	50th Percentile	85th Percentile
	45 mph	**52 mph**

3.2 Qualitative Assessment

A professional engineer visited the site to observe traffic patterns, non-motorist activity, adjacent land uses, and design constraints that could influence the recommended improvements. The observation period occurred on Thursday, November 15th, 2024 from 12:30-1:30 PM.

3.2.1 Existing Infrastructure

- The raised median has transverse cuts at regular intervals, indicating it was likely a retrofit improvement and that drainage may be a concern with any new construction.
- The segment is curb and gutter with the exception of the east side of the road towards the north end, where there are shallow swales with inlets and culverts.
- The pavement markings at the retail driveways and the Osceola Pkwy signal are worn "continental" style crosswalks with several damaged or missing detectable warning mats.
- There are audible pedestrian signals at the Osceola Pkwy signal.
- There are luminaires on the mast arms at the Osceola Pkwy signal labeled 250 W.

Looking Northbound on Buenaventura Blvd

Looking Southbound on Buenaventura Blvd

Raised Median with Drainage Cuts

Rural Drainage at North End

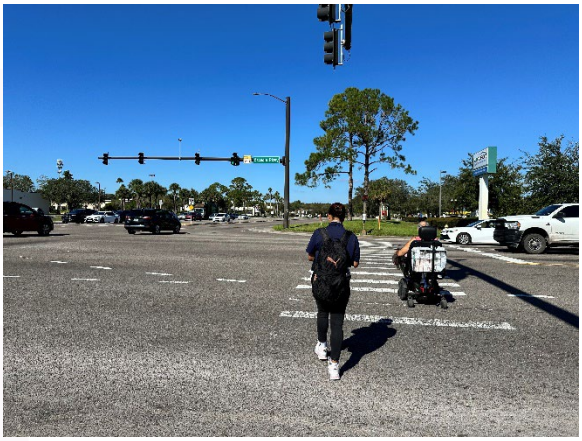
Worn Pavement Markings at Osceola Parkway

Driveway Crosswalk and Detectable Warning

3.2.2 Pedestrian and Bicyclist Activity

- Minimal pedestrian activity was observed along the corridor.
- One pedestrian crossed Buenaventura Blvd at the median opening.
- One pedestrian crossed Buenaventura Blvd at the southern LYNX bus stop but was not destined to or from a bus boarding.
- A motorized wheelchair user was observed using two legs (east and north) of the signalized crosswalks at the Osceola Pkwy signal.

Pedestrian Crossing Buenaventura Blvd



Pedestrians Crossing Osceola Parkway

3.2.3 Transit Activity

- No LYNX buses were observed stopping or traveling through the corridor during the hour; however, it is possible that buses passed while the engineer was traversing and documenting other observations.

3.2.4 Intersection Operations

- There is a guide sign and a channelized right-turn lane in the southbound direction at the retail driveway for Buenaventura Downs in advance of Osceola Pkwy, indicating there may have been previous operational issues between the driveway and signal.
- The southbound queue from the Osceola Pkwy signal extended several hundred feet during one cycle at 1:00 PM.
- There is a fatal motorcycle crash memorial near the AutoZone and Goodyear driveway on the north end of the corridor.

Advanced Signing at Driveway

Channelization at Driveway

Southbound Queue from Osceola Parkway

Fatal Memorial Near AutoZone

3.2.5 Design Constraints

- Utilities observed on the west side of Buenaventura Blvd include: Centurylink and MCI communications behind the sidewalk, water at the back of sidewalk, and storm sewer in the utility strip in front of the sidewalk. Utilities observed on the east side of Buenaventura Blvd include: Crown Castle communications and storm sewer.
- There were survey marks and temporary barricades at the southwest and southeast corners of the Osceola Parkway signal.

Utilities Along Buenaventura Blvd

Repair Activities at SE Corner of Osceola Pkwy

3.3 Engineering Analysis

3.3.1 Site-Specific Recommendations

Based on the traffic counts, pedestrian and bicyclist activity, and field review, the following improvements are recommended and are illustrated in **Figure 3-10** (note that recommendations listed to "consider" are not included on the concept plans or in the subsequent cost estimates):

1. **Conduct Countywide Prioritization for Midblock Crossings.** The maximum sum of non-motorist crossings counted along the entire 650-foot study segment of Buenaventura Boulevard totaled 17 in a single hour. The minimum pedestrian demand threshold for a proposed marked crosswalk recommended in the TEM is 20 or more pedestrians during a single hour. While the TEM allows for an exemption from the volume threshold for certain context classifications (including C3C), it is unlikely that the addition of a single marked crosswalk would consolidate and capture all pedestrian crossings along the entire study area. For the posted speed and cross section on this segment of Buenaventura Boulevard, the appropriate marked crosswalk treatment would be an overhead Pedestrian Hybrid Beacon. Construction of a PHB would be a significant investment and careful consideration should be given to selecting optimal locations to maximize safety benefits for systemwide needs. Therefore, it is recommended to "do nothing" at this time for the study segment, and instead, to begin a regional assessment of higher-need midblock locations for potential consideration of new marked crosswalks. Candidate locations can be reviewed and ranked based on:
    a. Pedestrian and bicyclist crash history
    b. Pedestrian and bicyclist crossing volumes
    c. Number of lanes required to cross
    d. Conflicting vehicular volumes
    e. Comparison of 50th and 85th percentile speeds to posted speed limit
    f. Presence of transit stops, school facilities, trails, and shared-use paths

2. **Signal enhancements at Osceola Parkway**. Since no new midblock treatments are recommended at this time, the existing signalized crosswalks at the Osceola Parkway signal should be upgraded to provide safe crossing options nearby. The crash history revealed multiple historic crashes involving conflicts with turning vehicles. The following signal enhancements are recommended for added visibility of pedestrians, and should be incorporated into the existing FDOT LAP signal reconstruction project:
    a. "Ladder" style special emphasis crosswalks meeting current standards
    b. Flexible retroreflective backplates for northbound and southbound signal heads
    c. Supplemental lighting on each approach
    d. Replacement of street name sign panels with internally illuminated signs
    e. Replacement of existing R10-15a "Turning Vehicles Yield to Pedestrians" static panels with pushbutton-actuated dual-message blank-out signs (see Section 4.3.1)

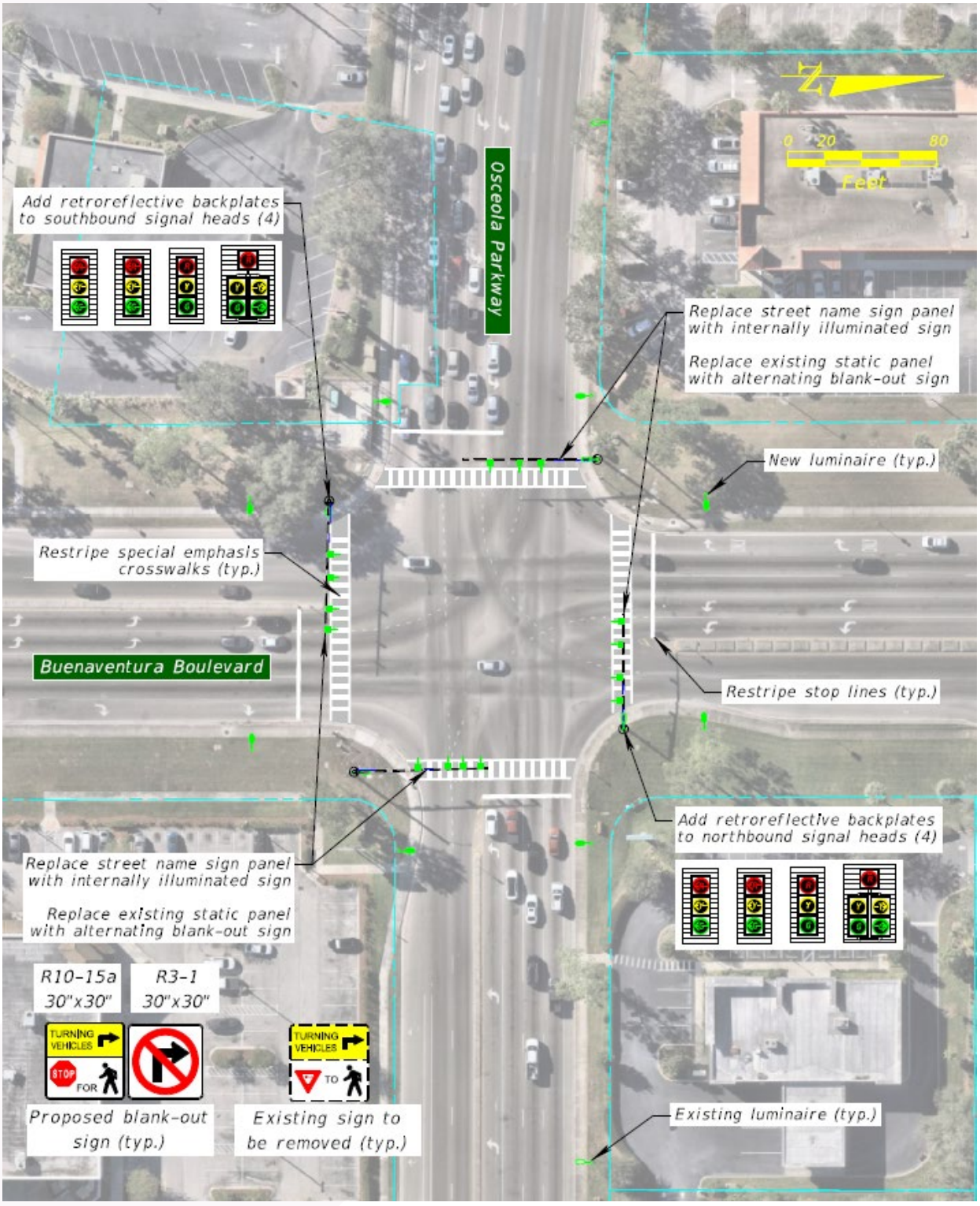
3. **Consider Roadway Lighting on Buenaventura Boulevard.** There is no existing lighting along the study segment of Buenaventura Boulevard and both historic pedestrian crashes occurred under dark conditions. With the adjacent retail land uses and transit stops, there is high potential for nighttime non-motorist activity. Since a midblock crosswalk is not recommended at this time, it is recommended to consider segment lighting that will provide interim enhanced safety for pedestrians attempting to cross in unmarked locations along the segment at night.

4. **Consider Complete Street Extension on Buenaventura Boulevard.** The segment of Buenaventura Boulevard south of Osceola Parkway is nearing final design and impending construction of major Safety and Complete Streets improvements: signalization upgrades, crosswalk enhancements, roundabout construction, and sidewalk/shared-use path additions. The two programmed projects cover nearly all of Buenaventura Boulevard within Osceola County, a distance of 2.4 miles, only omitting the ¼-mile segment under study in this evaluation (from north of Osceola Parkway to the Orange County line). Once the improvements are constructed, the cross section and characteristics remaining on this study segment will be significantly different than the character of the roadway segments on either side. The rest of Buenaventura Boulevard to the south within Osceola County and the transition to Landstar Boulevard to the north in Orange County will both be narrow four-lane cross sections with wide grass medians. When compared to the study segment's total width of up to eight lanes (inclusive of left- and right-turn lanes) with a narrow concrete traffic separator, this presents a discontinuity that is much more vehicle-focused and less pedestrian and bicyclist centered. It is recommended to consider extending similar Complete Street treatments through the remaining section of Buenaventura Boulevard, including evaluating the potential for:

    a. Speed management
    b. Lane narrowing
    c. Lane reduction
    d. Bicycle facilities
    e. Shared-use path
    f. Access management
    g. Transit stop upgrades or relocation

    The implementation of these improvements will require operational analysis to determine access management needs and whether turn lanes can be removed in order to reduce the pavement width and lower the exposure of non-motorist crossings. Coordination with LYNX and public involvement with the adjacent businesses will also be needed.

Figure 3-10: Buenaventura Boulevard & Osceola Parkway – Conceptual Plan



3.3.2 Systematic Applications of Similar Treatments

The characteristics observed at this intersection are similar to other locations throughout the County. Similar treatments, including midblock crossing treatments or signalized crosswalk enhancements, can be applied to other locations meeting the following screening criteria:

1. Locations to evaluate for **new midblock crossing treatments**:
    - Roadways with context classification C3C and transit stops at uncontrolled locations
    - Locations of midblock fatal pedestrian or bicyclist crashes
    - Considerations for ranking and prioritizing locations should account for:
        - Pedestrian and bicyclist crash history
        - Pedestrian and bicyclist crossing volumes
        - Number of lanes required to cross
        - Conflicting vehicular volumes
        - Comparison of 50th and 85th percentile speeds to posted speed limit
        - Presence of transit stops, school facilities, trails, and shared-use paths
2. Locations to evaluate for **signalized crosswalk enhancements** (including pavement markings, backplates, lighting, and pushbutton-actuated blank-out signs)
    - Signalized intersections with historic vehicle-pedestrian crashes involving left- or right-turning vehicles
    - Signalized intersections with high proportions of nighttime pedestrian and bicycle crashes

3.3.3 Benefit-Cost Analysis

To obtain a quantitative measure of the benefits expected to be received from **the recommended improvements of signalized crosswalk enhancements (signing, markings, backplates, lighting)**, a safety benefit-cost analysis was prepared using anticipated crash reduction benefits and a preliminary cost estimate.

The following CMF Clearinghouse entries were deemed applicable to the recommended improvements:

- 0.60 CMF for pedestrian/bicyclist crashes for high-visibility crosswalk
- 0.85 CMF for all crashes for retroreflective backplates (northbound and southbound)

For an urban 6-lane divided roadway, the FDOT average crash cost was reported as $123,598 per crash. The total estimated annual safety benefit resulting from the elimination of correctable crashes is approximately $160,677.

An opinion of probable construction cost (OPCC) was prepared using the FDOT Historical Costs. Allocations of 10 percent each for mobilization and MOT were added plus 25 percent for P.E. & C.E.I. and 25 percent for contingency. The total design and construction cost is approximately $283,356.

Using the annual safety benefits and the estimated costs annualized over the expected service life at a 4% interest rate, the benefit-cost ratio calculated is 6.66. The benefit-cost analysis is summarized in **Table 3-5.** The detailed conceptual plan and the OPCC are provided in **Appendix F** and the benefit-cost calculations are provided in **Appendix G**.

Table 3-5: Buenaventura Boulevard & Osceola Parkway – Benefit-Cost Summary

Total Crash Reduction	Annual Crash Reduction	Annual Safety Benefit	Annualized Cost	B/C Ratio
8.8	1.3	$160,677	$24,256	6.66

An additional crash reduction and cost estimate were prepared to illustrate the high investment that installation of a midblock Pedestrian Hybrid Beacon entails and why it is first recommended to conduct a countywide assessment to prioritize locations.

The following CMF Clearinghouse entries were deemed applicable:

- 0.50 CMF for pedestrian/bicyclist crashes for pedestrian hybrid beacon

For the same FDOT average crash cost, the total estimated annual safety benefit resulting from the elimination of correctable crashes is approximately $12,360.

The FDOT Cost per Mile (CPM) Models Reports include an estimate for a Midblock Crossing detailed as "signalized mid-block crossing with four lanes and middle turn lane with parking on both sides". The estimate includes a single 60-foot mast arm, which would not be adequate to reach across the entire 85-foot cross section of Buenaventura Boulevard. Using the CPM cost of $285,450 plus an additional $98,000 mast arm (with added mobilization, MOT, P.E. & C.E.I., and contingency), the total design and construction cost of a PHB is approximately $550,250. This estimate also does not include lighting, which would be required to meet vertical illuminance for a new midblock crosswalk.

Using the annual safety benefits and the estimated costs annualized over the expected service life, the benefit-cost ratio calculated is 0.27. The benefit-cost analysis is summarized in **Table 3-6**.

Table 3-6: Buenaventura Boulevard Pedestrian Hybrid Beacon – Benefit-Cost Summary

Total Crash Reduction	Annual Crash Reduction	Annual Safety Benefit	Annualized Cost	B/C Ratio
1	0.1	$12,360	$45,895	0.27

4.0 JOHN YOUNG PARKWAY & DONEGAN AVENUE

4.1 Existing Conditions

4.1.1 Roadway Characteristics and Context

The intersection of John Young Parkway & Donegan Avenue currently operates as a four-leg **signalized intersection**. The context classification of John Young Parkway is **C3C – Suburban Commercial**. The context classification of Donegan Avenue is C3R – Suburban Residential. Adjacent land uses to this intersection are commercial, residential, and institutional healthcare. **Figure 4-1** shows an aerial of this intersection.

John Young Parkway (northbound/southbound), also designated as US 17/US92/SR 600, is a **six-lane divided urban principal arterial**. At the study location, the northbound and southbound approaches operate with an exclusive left-turn lane, two through lanes, and a shared through/right-turn lane. The posted speed limit is **45 miles per hour**. The 2024 AADT was 40,000 vehicles.

Donegan Avenue (eastbound/westbound) is a two-lane undivided roadway. At the study location, the eastbound and westbound approaches operate with an exclusive left-turn lane and a shared through/right-turn. The posted limit is 30 miles per hour eastbound and 35 mph westbound.

The left-turn movements on each approach operate with **protected/permissive phasing** using four-section flashing-yellow arrow signal heads. Based on the signal timings provided by the County, the cycle lengths range from 160 to 220 seconds in coordination along John Young Parkway. The yellow and all-red clearance intervals, as well as the pedestrian Walk and Flashing Don't Walk timings meet TEM and MUTCD minimum standards.

The intersection is marked with a school zone and **school crossings** for Highlands Elementary School, located approximately ¼-mile east on Donegan Avenue. There are existing sidewalks along both sides on all approaches. There are bike lanes along both sides of the east leg and unmarked paved shoulders on the northbound and southbound approaches.

The vehicular and non-vehicular volume data collected on Thursday, October 17, 2024, and Saturday, October 19, 2024, have been summarized in **Figure 4-2** and **Figure 4-3**. These exhibits present the maximum hourly pedestrian and bicycle volumes for each leg of the intersection, along with the total and maximum hourly entering vehicular volume. **The highest volume of non-motorists crossing a single leg of the intersection in a single hour was 115** (related to afternoon school dismissal in the south leg marked school crossing).

Figure 4-1: John Young Parkway & Donegan Avenue – Aerial View

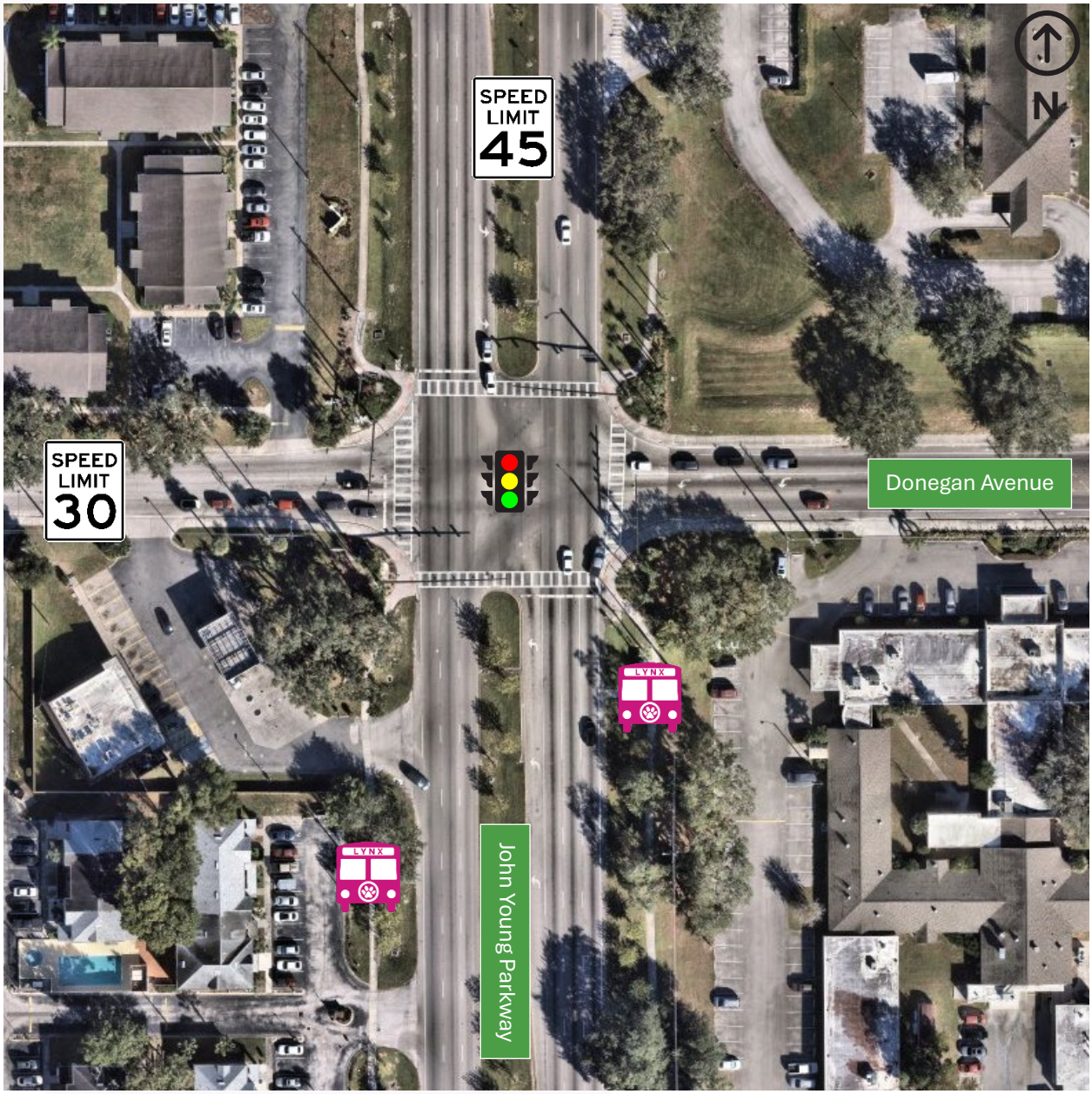


Figure 4-2: John Young Parkway & Donegan Avenue – Thursday Data Collection

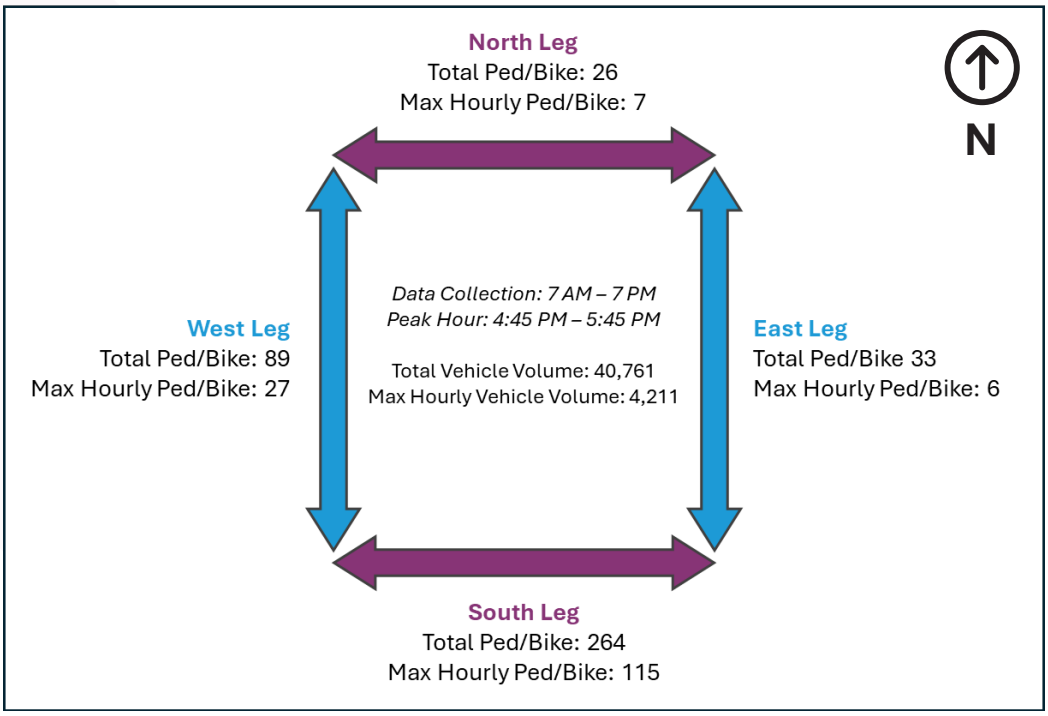
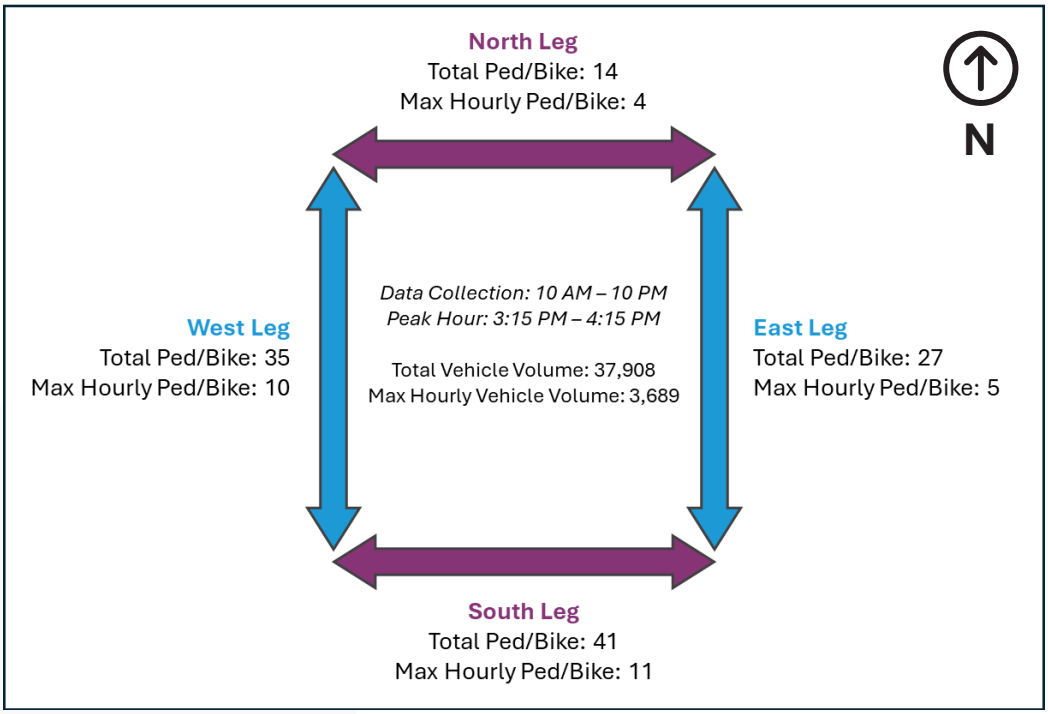


Figure 4-3: John Young Parkway & Donegan Avenue – Saturday Data Collection



4.1.2 Historic Crash Analysis

Five years of historical crash data (from 2018 to 2022) plus additional recent crash data (from 2023 to 2024) was obtained for the intersection of John Young Parkway & Donegan Avenue from *Signal Four Analytics*. A total of 200 crashes occurred during this time. Crash data is provided in **Appendix B**. Summaries of crash statistics related to crash type, severity, and lighting condition are provided in **Table 4-1**, **Table 4-2**, and **Table 4-3**, respectively. **Figure 4-4** and **Figure 4-5** show crash severity by year and crashes by lighting condition, respectively. A diagram of historical crashes at this intersection is provided in **Appendix B**.

There were no fatal crashes and there were five serious injury crashes. The most common crash type was a rear-end crash. Over 26% of the crashes occurred under dark conditions. Additionally, as shown in **Figure 4-6**, there are peaks in crash frequency at 8AM, 1PM, and 4PM.

Table 4-1: John Young Parkway & Donegan Avenue – Crashes by Type

Crash Type	# of Crashes	% of Crashes
Rear End	99	50%
Left Turn	51	26%
Sideswipe	15	8%
Other	11	6%
Angle	6	3%
Bicycle	5	3%
Rollover	4	2%
Pedestrian	3	2%
Right Turn	3	2%
Unknown	2	1%
Total	**200**	**100%**

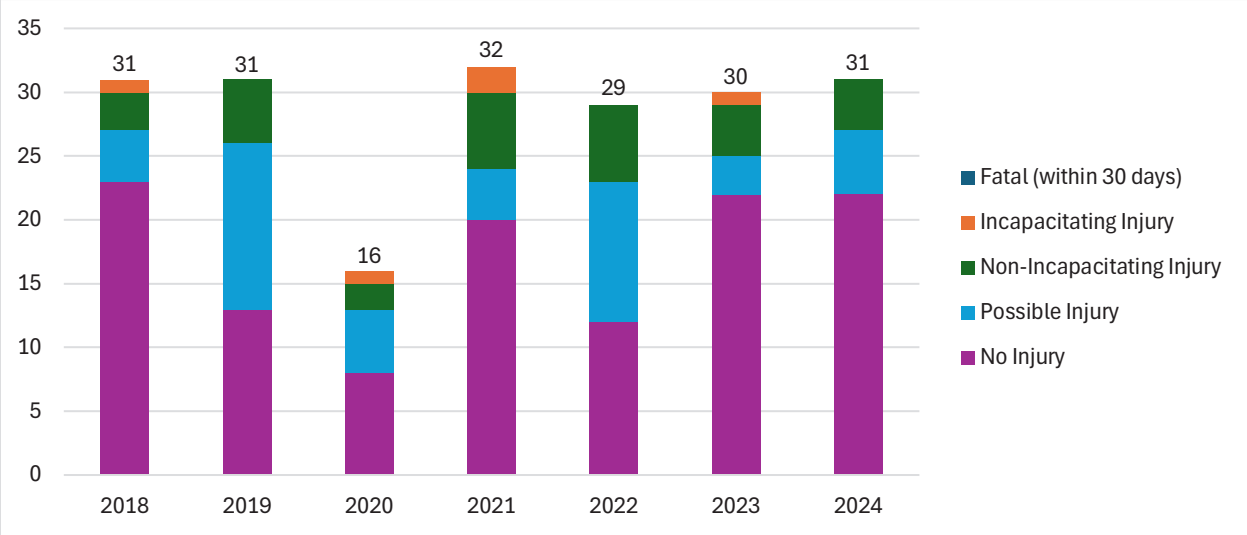
Source: Signal Four Analytics 2018 to 2024

Table 4-2: John Young Parkway & Donegan Avenue – Crashes by Severity

Severity	# of Crashes	% of Crashes
K – Fatality	0	-
A – Incapacitating Injury	5	3%
B – Non-Incapacitating Injury	30	15%
C – Possible Injury	45	23%
O – No Injury	120	60%

Source: Signal Four Analytics 2018 to 2024

Figure 4-4: John Young Parkway & Donegan Avenue – Crash Severity by Year



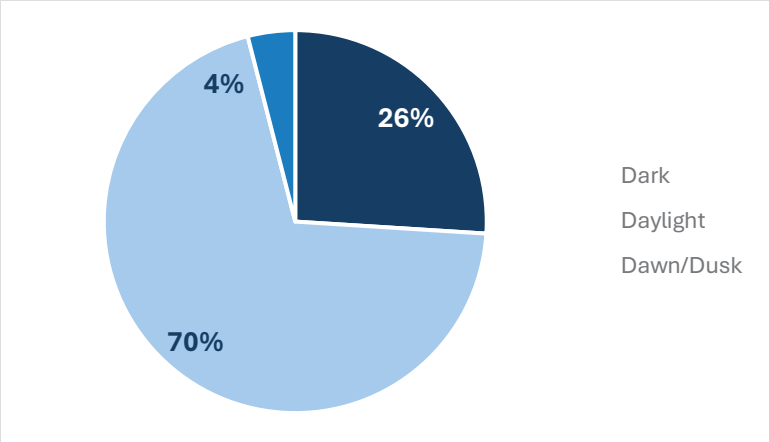
Source: Signal Four Analytics 2018 to 2024

Table 4-3: John Young Parkway & Donegan Avenue – Crashes by Lighting Condition

Lighting Condition	# of Crashes	% of Crashes
Daylight	140	70%
Dark - Lighted	47	24%
Dawn/Dusk	8	4%
Dark - Not Lighted	5	2%

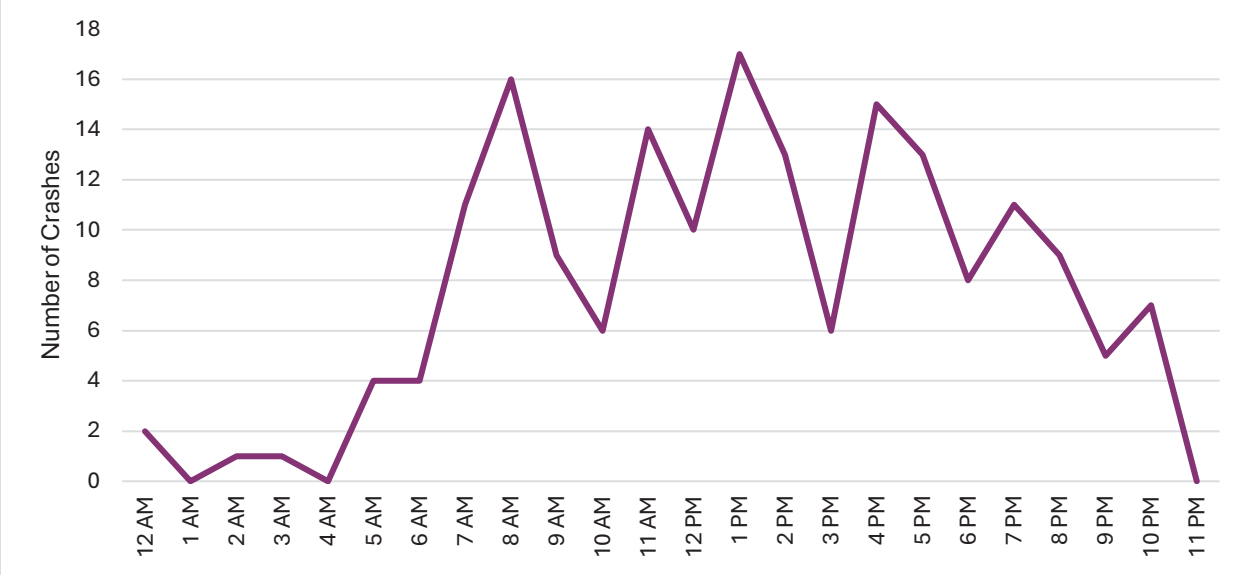
Source: Signal Four Analytics 2018 to 2024

Figure 4-5: John Young Parkway & Donegan Avenue – Crashes by Lighting Condition



Source: Signal Four Analytics 2018 to 2024

Figure 4-6: John Young Parkway & Donegan Avenue – Crashes by Time of Day



Source: Signal Four Analytics 2018 to 2024

4.1.2.1 Non-Motorist Crashes

The pedestrian and bicycle crash report narratives were reviewed to assess the contributing circumstances surrounding each crash involving a non-motorist. There were five bicycle crashes and three pedestrian crashes. It was noted that two crashes involved **bicyclists with hearing impairments** and four crashes involved **hit-and-run vehicles**. Overall, there was a trend of both at-fault and not-at-fault parties declining to provide personal information to law enforcement or receive

medical treatment at the scene. The following bullets describe the key takeaways of each crash and are further summarized in **Table 4-4**:

1. Westbound left-turning vehicle struck a **bicyclist** walking a dog in the south leg crosswalk during the permissive phase. Daylight. Incapacitating injury.
2. Northbound vehicle struck a **pedestrian** in the south leg crosswalk. Dark conditions. Injury.
3. Northbound vehicle struck a **pedestrian** in the south leg crosswalk who was crossing against the signal. Daylight. Injury.
4. Westbound vehicle struck a **bicyclist** (who is deaf) traveling northbound in the east leg crosswalk on a red signal indication. Dark conditions. Injury. **Hit and run**.
5. Northbound vehicle struck a **pedestrian** crossing John Young Parkway south of the signalized intersection outside of the marked crosswalk. Dark conditions. Injury. **Hit and run**.
6. Eastbound right-turning vehicle struck a **bicyclist** in the west leg crosswalk who was riding against traffic (unknown signal indications). Dark conditions. Injury.
7. Northbound vehicle struck two **bicyclists** (who are both deaf and mute) crossing John Young Parkway north of the signalized intersection outside of the marked crosswalk. **Dark** conditions. Injury. **Hit and run**.
8. Westbound vehicle struck a **bicyclist** traveling southbound in the east leg crosswalk with conflicting accounts of signal indications. Daylight. No injury. **Hit and run**.

Table 4-4: John Young Parkway & Donegan Avenue – Non-Motorist Crash Details

#	Month/Year	Severity	Non Motorist Type	In Crosswalk	Vehicle Direction	Vehicle Movement	Lighting Condition	Hit and Run
1	Jan 2018	A	Bicycle	South Leg	WB	Left	Daylight	-
2	Sep 2018	C	Pedestrian	South Leg	NB	Through	Dark	-
3	Jul 2019	C	Pedestrian	South Leg	NB	Through	Daylight	-
4	Sep 2019	C	Bicycle	East Leg	WB	Left	Dark	Yes
5	Jan 2020	B	Pedestrian	Outside	NB	Through	Dark	Yes
6	Apr 2020	C	Bicycle	West Leg	EB	Right	Dark	-
7	Oct 2022	C	Bicycle	Outside	NB	Through	Dark	Yes
8	Apr 2024	O	Bicycle	East Leg	WB	Through	Daylight	Yes

Source: Signal Four Analytics 2018 to 2024

4.1.3 Transit Routes and Ridership

Access to existing transit facilities at the intersection of John Young Parkway & Donegan Avenue was evaluated for accessibility, ADA compliance, and ridership. **Figure 4-7** and **Figure 4-8** provide a visual of the bus stops.

The intersection features bus stops on the southwest and southeast sides along John Young Parkway that serve LYNX Route 57, which provides several stops between Kissimmee Intermodal Station and the Washington Shores Superstop. The service hours for Route 57 are 5:30 AM to approximately 8 PM during weekdays and Saturdays. No service is provided on Sundays. The scheduled headway for Route 57 is approximately one hour. The route map is included in **Appendix C**.

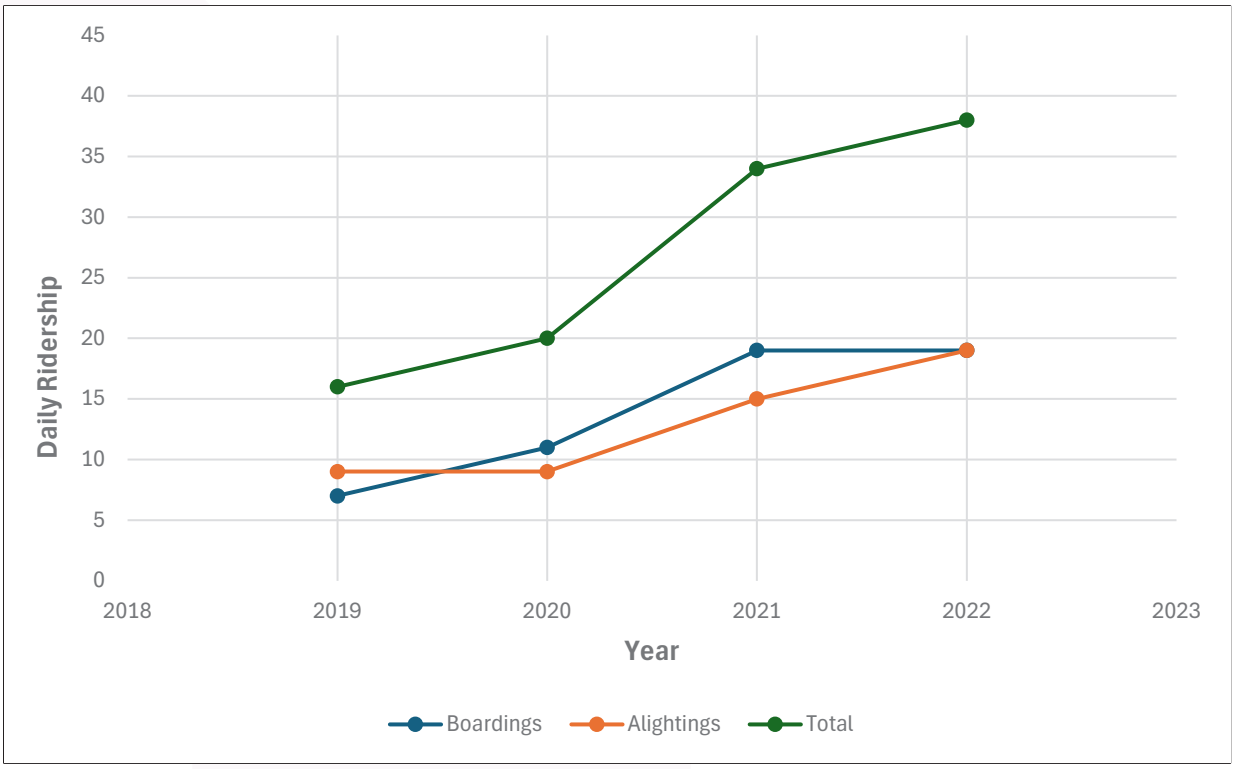
Figure 4-7: John Young Parkway & Donegan Avenue – LYNX Stop (SB)

Figure 4-8: John Young Parkway & Donegan Avenue – LYNX Stop (NB)

Both bus stops feature transit shelters and are accessible via sidewalk. However, John Young Parkway near Donegan Avenue is not a curbed section and, therefore, the concrete sidewalk that serves as a boarding and alighting area for both stops is flush with the asphalt roadway.

Ridership data between 2019 and 2022 was provided by the Central Florida Regional Transit Authority (LYNX) and evaluated for trends. The ridership data is provided in **Appendix C**. A summary of boarding (onboards) and alighting (offboards) data for the bus stops at the intersection of John Young Parkway & Donegan Avenue is provided in **Figure 4-9**.

Figure 4-9: John Young Parkway & Donegan Avenue – LYNX Ridership Data Summary



As shown, ridership at the intersection of John Young Parkway & Donegan Avenue has steadily increased from 2019 to 2022, with a total ridership nearing 40 total per day in 2022.

4.1.4 Speed Profiles

As reported in the previously mentioned Vision Zero Action Plan, the 85th and 50th percentile speed data was determined for each intersection cross street, if available. The speed data reported was:

John Young Parkway

Posted Speed	50th Percentile	85th Percentile
	37 mph	59 mph

Donegan Avenue

Posted Speed	50th Percentile	85th Percentile
	45 mph	51 mph

4.2 Qualitative Assessment

A professional engineer visited the site to observe traffic patterns, non-motorist activity, adjacent land uses, and design constraints that could influence the recommended improvements. The observation period occurred on Thursday, November 15th, 2024 from 2:45-4:00 PM.

4.2.1 Existing Infrastructure

- Based on historic Google street view, the signal was reconstructed between January 2021 and August 2022. The mast arms are new, the left-turn phasing was upgraded from five-section clusters to four-section flashing yellow arrows, and backplates were added.
- The existing signal has video detection and protected-permissive left-turn phasing on all approaches.
- The school pavement markings appear worn but the crosswalks are in good condition.
- The school sign on the southwest corner is tilted and obscured.
- The pushbuttons on the northwest corner are not optimally located and one detector is missing the associated pushbutton sign.
- The detectable warning mats on the southeast corner for the east leg are detached.
- The bench on the southwest corner of the intersection was run over and is now missing with exposed metal base hardware protruding from the ground.
- Luminaires labeled 250 W HPS share the overhead electric poles to the south. There do not appear to be luminaires present to properly light the westbound or southbound crosswalks. There are luminaires on the mast arms angled on the diagonal labeled 278 W LED.

Northbound John Young Pkwy Approach

Southbound John Young Pkwy Approach

Eastbound Donegan Avenue Approach

Westbound Donegan Avenue Approach

Northbound School Signing and Marking

Southbound School Signing and Marking

Crosswalk Marking Typical Condition

Intersection Corner Typical Condition

4.2.2 Pedestrian and Bicyclist Activity

- Crossing guards arrive at 2:45 PM in preparation for a 3:00 PM shift and stay until 4:30 PM. They position themselves on both corners of the south leg crosswalk, but also shift to the east or west leg crosswalks as needed for pedestrians.
- High numbers of students and parents were observed crossing the intersection, mostly on the south leg. Many students had scooters and bicycles. Parents with strollers for younger siblings were observed.

Students Crossing South Leg

Students Crossing West Leg

4.2.3 Transit Activity

- A southbound LYNX bus was observed loading and unloading once during the review.

4.2.4 Intersection Operations

- Red-light running was observed, heavy in the westbound left-turn movement. The crossing guards stated that many permissive left turns and right turns on red attempt to proceed while the crossing guards are stationed with paddles up in the south leg, and they have frequent conflicts.
- High speeds, honking, and reckless driving were observed in the traffic on John Young Pkwy.
- A school bus stopped on the westbound departure and created a queue through the intersection during a green interval.
- A motorcycle was observed passing the westbound queue in the bicycle lane to complete a westbound right turn.

Westbound Departure Queue from School Bus

Eastbound Approach Queue

4.2.5 Design Constraints

- Overhead electric runs along the east side of John Young Pkwy south of the intersection; along the west side to the north of the intersection; and along the south side east and west of the intersection. Crown Castle (newly installed), CenturyLink, AT&T, sanitary sewer, and water facilities were observed.

Electric on the Southwest Corner

Newly Trenched Crown Castle Fiber

4.3 Engineering Analysis

4.3.1 Site-Specific Recommendations

Based on the traffic counts, pedestrian and bicyclist activity, and field review, the following improvements are recommended and are illustrated in **Figure 4-10** (note that recommendations listed to "consider" are not included on the concept plans or in the subsequent cost estimates):

1. **Global Signal Timing Adjustments.** Several global signal timing adjustments are recommended for incorporation to ensure adequate protection of pedestrians and separation of conflicting movements:
    a. Confirm that the flashing yellow arrow overlaps are inhibited with pedestrian movements at all times of day to reduce occurrences of left-turn/pedestrian conflicts.
    b. Consider implementing protected-only left-turn phasing based on the following guidance from TEM Section 3.2.2:
        i. The opposing traffic speed limit is higher than 45 mph.
        ii. Left-turning traffic must cross three or more lanes of opposing through traffic.
        iii. A protected/permissive mode is in use, and there are more than six left-turn angle crashes caused by left-turning drivers on the approach within a 12-month period.
        iv. Unusual intersection geometry, such as restricted sight distance, makes permissive left turning confusing or hazardous.

    Based on the TEM considerations, this intersection lies on the cusp of several criteria. The posted speed is 45 mph; the left-turning traffic on the northbound and southbound approaches of John Young Parkway must cross three lanes; the crash history reflects an average of six crashes per year susceptible to correction by protected-only phasing; and the northbound and southbound left-turn lanes have a significant negative offset which restricts sight distance to oncoming traffic if there is an opposing left-turning vehicle.

    The signal was reconstructed in 2021, which falls within the crash history period for this analysis. The upgrade included converting from five-section clusters to four-section flashing yellow arrow signal heads for the left-turn movements. The crash history reflects 8 left-turn crashes at-fault in the northbound direction and 32 left-turn crashes at fault in the southbound direction. The left-turn crash frequency appears to be trending downward since construction, with only one left-turn crash occurring in each direction in 2024, but crashes should continue to be monitored. It is recommended to perform an engineering study for consideration of protected-only phasing by time of day during high-conflict periods.

2. **School-Specific Time-of-Day Signal Timing Plan.** A special time-of-day plan should be considered for implementation during afternoon school egress to better accommodate high-volume pedestrian activity. The current 220-second cycle length can lead to excessive delay, which may also contribute to increases in non-complaint driver behavior. Free operation should

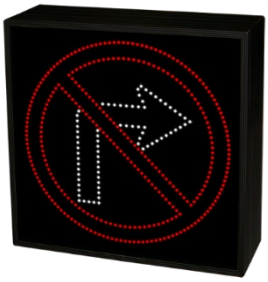
be considered for this plan to minimize user delay, better respond to actuated demand, and reduce vehicle speeds along the corridor. If it is determined that vehicular progression along John Young parkway must be maintained (through coordination with FDOT), then a 100-second half cycle may be considered. Additional timing recommendations during this school egress plan are:

a. Operate the left turn phases in protected-only mode.
b. Implement a leading pedestrian interval (LPI) for the east-west pedestrian crossings. TEM Section 3.11 stipulates that LPIs may be considered for implementation at marked school crossings at the discretion of the FDOT District Traffic Operations Engineer.
c. Modify the phasing sequence to lag the east-west left turns, to help reduce the conflicts between the observed east-west red-light running left-turning vehicles and pedestrians.
d. Extend the duration of the pedestrian intervals by creating a Timing Plan 2 and referencing it to the school plan. Increase the walk time for all movements to 10 seconds to accommodate larger platoons of pedestrians. Modify the pedestrian clearance calculations to assume a slower crossing speed of 3.0 feet per second rather than the typical 3.5 feet per second. An example of the recommended timings is shown below:

Approach	Existing Walk	Existing Ped Clear (Flashing Don't Walk)	Proposed Walk	Proposed Ped Clear (Flashing Don't Walk)
NB	7	26	10	30
SB	7	26	10	30
EB	7	34	10	40
WB	7	34	10	40

3. **Replace Regulatory Signs with Dual-Message Actuated Blank-Out Signs.** There are existing overhead-mounted regulatory panels on each approach stating, "No Turn on Red When Pedestrians Present". Static sign panels have limited visibility, and drivers tend to become accustomed to them without regarding them when the signs are tied to an "if" situation such as the presence of pedestrians. A more effective signing treatment for conditional responsiveness is a pushbutton-actuated blank-out sign that only illuminates when the condition is present. It is recommended to replace the existing regulatory signs with dual-message blank-out signs to warn right-turning vehicles of the immediate presence of conflicting pedestrians.

   Blank-out signs can be configured to show two possible messages and remain dark when no call is placed. The messages to display would be a right turn prohibition in one operation, and a message for right turning vehicle to stop for pedestrians in the second operation.



To allow for independent operation of the sign messages, each sign should be wired to a separate unused output in the signal cabinet. All of the descriptions below can be programmed using the native Logic Processor in the EOS Controller and tied to time-of-day functions as needed. Each sign would be configured to be activated during the following conditions:

Message 1: R3-1 "No Right Turn"
The right-turn prohibition should be indicated during the LPI for the east-west pedestrian crossings, and continue to be indicated throughout the duration of the pedestrian clearance interval during the times that the LPI is active. For the eastbound and westbound approaches, the message should be indicated in advance of the LPI, ideally during the Phase Next interval in the controller timing. For the northbound and southbound approaches, the message should be indicated at the beginning of the all-red interval.

Message 2: R10-15a "Turning Vehicles STOP for Pedestrians"
This message should be indicated whenever the right turn path would cross an active pedestrian phase (Walk or Pedestrian Clearance) unless the sign is currently activating the "No Right Turn".

BLANK
If the activation of the sign is not warranted based on the above conditions, the signs should remain blank. This will help to maximize the effectiveness of the blank-out by limiting the overexposure of the blank-out messages, which can reduce the driver's recognition of the changing conditions.

It is recommended to install these signs at all four approaches over the outside lane. The optimal location is overhead mounted on the mast arms; however, a structural evaluation may be needed to ensure the structural capacity is sufficient to accommodate the additional loading. The removal of the static panels should help offset the load. If the blank-out signs cannot be overhead mounted, they can be post-mounted on the right shoulder of the nearside approach.

4. **Extend Median Noses for Pedestrian Refuge and Add Skip Striping.** The pedestrian crossing distances for the crosswalks on the north and south legs of the intersection both exceed 115 feet, leaving pedestrians exposed within the travelway for long periods. An AutoTURN analysis was conducted using a WB-62FL design vehicle to determine if any median modifications can be accommodated to provide protection to pedestrians crossing the north and south legs. It is recommended to extend the existing median noses beyond the crosswalks for pedestrian refuge.

It is also recommended to add 2'-4' dotted guide center lines to each approach to guide drivers to the appropriate receiving lanes since the turning distances exceed 60 feet per FDOT Design Manual Exhibit 230-8.

5. **Upgrade Pedestrian Signals with Accessible Features.** The existing pedestrian pushbutton detectors at the intersection are functional and meet standard criteria. However, the crash history recorded multiple crashes involving hearing-impaired pedestrians and bicyclists whose unique accessibility needs are not fully served by standard equipment. It is recommended to upgrade the pedestrian detection at the intersection to accessible pedestrian detectors, that provide feedback to users via audible, visual, and tactile cues.

6. **Establish a Reduced Speed School Zone with Overhead Flashing Beacons.** The existing school signing and pavement marking along John Young Parkway includes post-mounted School crossing signs and SCHOOL pavement messages; however, there is no overhead signing and no reduction in speed during school arrival and dismissal hours. Per the FDOT *Speed Zoning Manual for Highways, Roads, and Streets in Florida (SZM)*, the SCHOOL pavement messages are to be used in conjunction with a reduced speed school zone. The factors for consideration in establishment of a school zone include: age of children, approach speed of traffic, sight distance, traffic volumes, width of street, traffic control devices, and presence of crossing guards. Given the high 85th percentile speeds on John Young Parkway, the large cross section, and the observed intersection conflicts between vehicles and students, it is recommended to coordinate with FDOT to conduct an engineering study and evaluate the establishment of a 20-mph reduced speed school zone. If approved, mast arms would be required in the northbound and southbound directions to overhead mount the School Zone 20 MPH When Flashing (FTP 31-06) with flashing beacon and the Speeding Fines Doubled (FTP 39-06) signs, as is the preference for multilane facilities. The End School Zone (FTP32-06) signs may be overhead mounted on mast arms or may be dual-indicated in the median and on the shoulder with post-mounted signs for cost efficiency. See **Figure 4-11** for an example of reduced speed school zone signing for a multilane facility excerpted from the SZM.

7. **Consider Transit Stop Improvements.** It is understood that it is LYNX's preference in the design of new or relocated bus stops that they be located on the far side, or departure, of major intersections to avoid pedestrians crossing in front of the bus and to allow vehicles to see these crossing pedestrians. Therefore, it is recommended that Stop 751 on the northbound side of John Young Parkway be relocated to the far side of the study intersection. It is also recommended that both stops, 751 (NB) and 744 (SB), are improved to accommodate an ADA-compliant boarding and alighting area for a rural setting in accordance with guidance provided in FDOT's 2022 *Accessing Transit Design Handbook*. This includes a raised Type E curb along the boarding and alighting areas and curb flare downs to the existing grade. This design would allow an increased buffer between motorists and transit riders and enhanced accessibility on and off the bus, especially for those with disabilities.

Figure 4-10: John Young Parkway & Donegan Avenue – Conceptual Plan

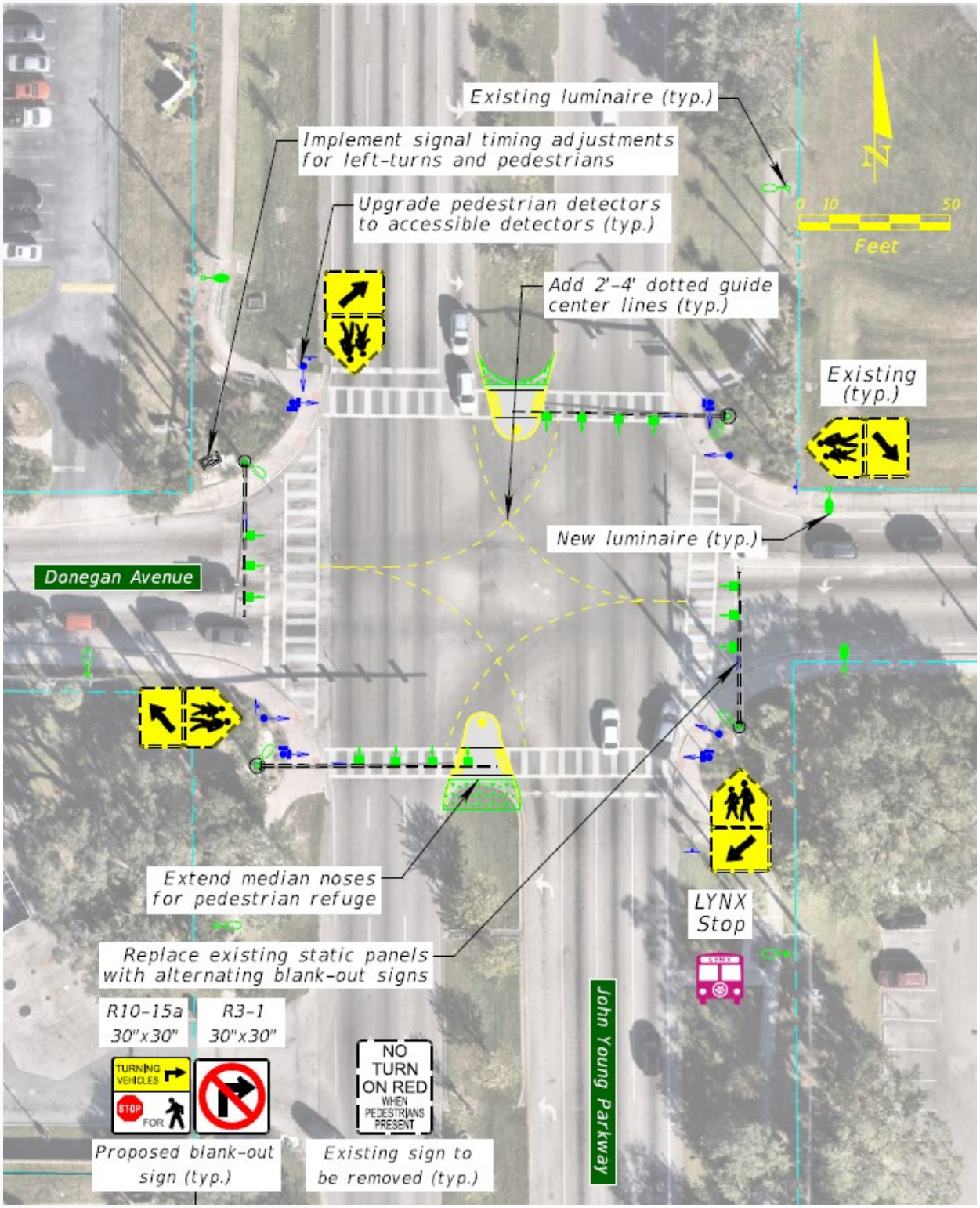
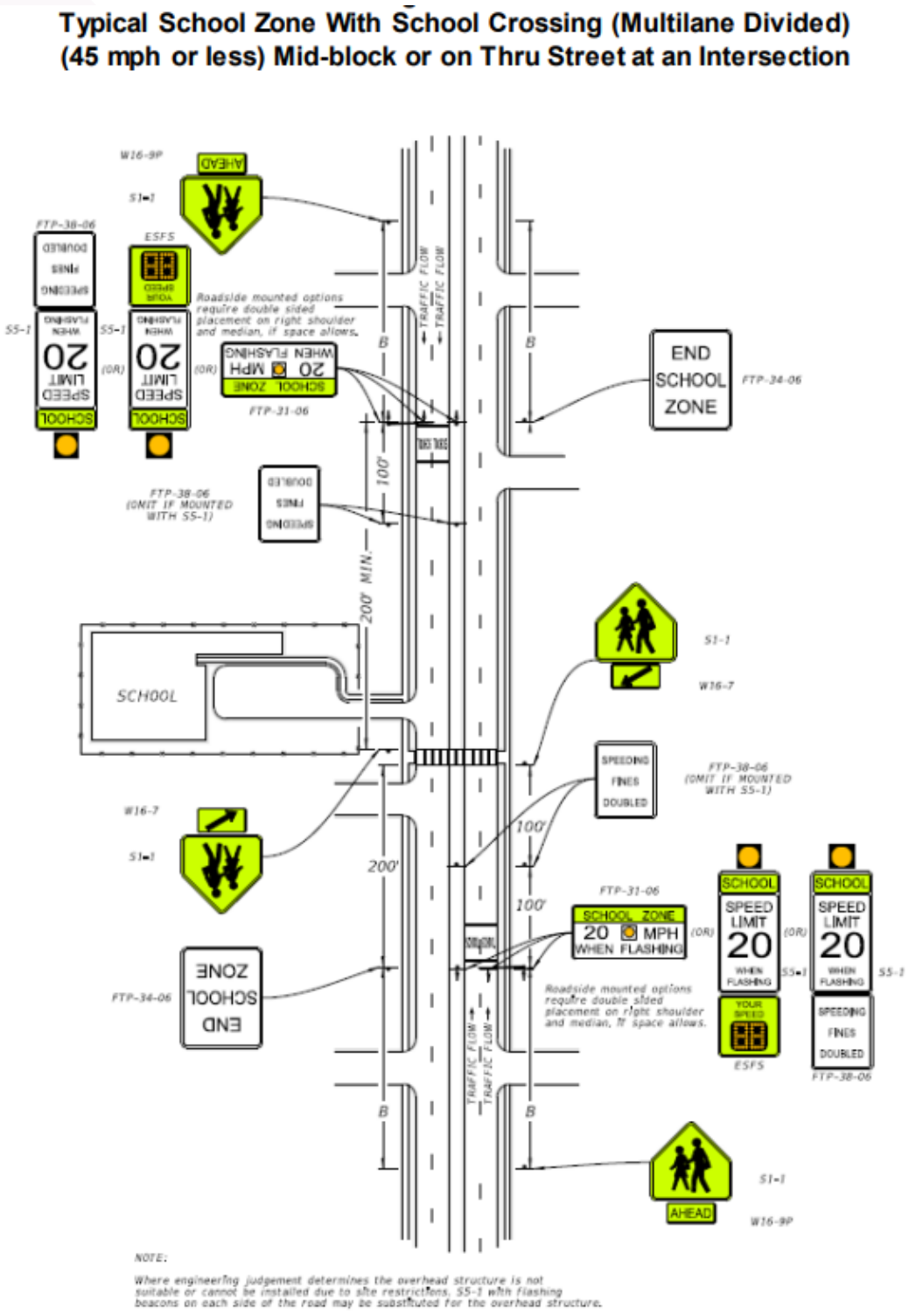


Figure 4-11: John Young Parkway & Donegan Avenue – Example School Zone Signing



4.3.2 Systematic Applications of Similar Treatments

The characteristics observed at this intersection are similar to other locations throughout the County. Similar treatments, including signal timing/phasing adjustments, LPIs, blank-out signs, and school zones, can be applied to other locations meeting the following screening criteria:

1. Locations to evaluate for **protected-only left-turn phasing**:
    - Signalized intersections with permissive left-turn phasing where there are:
        - Negatively offset left-turn lanes
        - Posted 45 mph or higher
        - Crossing three or more opposing through lanes
        - Left-turn crash frequency of six or more per year
2. Locations to evaluate for **signalized intersection pedestrian protections** (including timing/phasing adjustments, LPIs, and blank-out signs):
    - Signalized intersections with marked school crossings
    - Signalized intersections with historic vehicle-pedestrian crashes involving left- or right-turning vehicles
3. Locations to evaluate for **reduced speed school zones**:
    - Elementary or middle school crossings with 50th or 85th percentile speeds exceeding the posted speed limit by more than 10 mph
    - Elementary or middle school crossings staffed with crossing guards who have experienced continued non-compliance by drivers passing through the school crossing

4.3.3 Benefit-Cost Analysis

To obtain a quantitative measure of the benefits expected to be received from the recommended improvements of **signal enhancements and a reduced speed school zone**, a safety benefit-cost analysis was prepared using anticipated crash reduction benefits and a preliminary cost estimate.

The following CMF Clearinghouse entries were deemed applicable to the recommended improvements:

- 0.87 CMF for pedestrian/bicyclist crashes for leading pedestrian interval
- 0.734 CMF for pedestrian/bicyclist crashes for implementing a Safe Routes to School program for ages 5-12
- 0.50 CMF for pedestrian/bicyclist crashes for optimizing signal cycles for pedestrians

For an urban 6-lane divided roadway, the FDOT average crash cost was reported as $123,598 per crash. The total estimated annual safety benefit resulting from the elimination of correctable crashes is approximately $111,238.

An opinion of probable construction cost (OPCC) was prepared using the FDOT Historical Costs. Allocations of 10 percent each for mobilization and MOT were added plus 25 percent for P.E. & C.E.I. and 25 percent for contingency. The improvements were broken up into separate subtotals for the signalization enhancements and the reduced speed school zone since these may be completed separately. It should be noted that an additional $30,000 placeholder was included for transit stop relocation based on engineering judgment and familiarity with historic bids. The total design and construction cost is approximately $675,615.

Using the annual safety benefits and the estimated costs annualized over the expected service life at a 4% interest rate, the benefit-cost ratio calculated is 1.93. The benefit-cost analysis is summarized in **Table 4-5.** The detailed conceptual plan and the OPCC are provided in **Appendix F** and the benefit-cost calculations are provided in **Appendix G**.

Table 4-5: John Young Parkway & Donegan Avenue – Benefit-Cost Summary

Total Crash Reduction	Annual Crash Reduction	Annual Safety Benefit	Annualized Cost	B/C Ratio
6.0	0.9	$111,238	$57,596	1.93

5.0 FORTUNE ROAD & LAKESIDE DRIVE

5.1 Existing Conditions

5.1.1 Roadway Characteristics and Context

The intersection of Fortune Road & Lakeside Drive currently operates as a **signalized T-intersection**. The context classification of Fortune Road is **C3R – Suburban Residential**. The context classification of Lakeside Drive is C3R – Suburban Residential. Adjacent land uses to this intersection are commercial and residential. **Figure 5-1** shows an aerial of this intersection.

Fortune Road (eastbound/westbound) is a **four-lane undivided urban major collector**. At the study location, the eastbound approach operates with an exclusive left-turn lane and two through lanes. The westbound approach operates with a through lane and a shared through/right-turn lane. The posted speed limit is **45 miles per hour**. The 2024 AADT was 29,000 vehicles.

Lakeside Drive (northbound/southbound) is a four-lane divided roadway north of Fortune Road. At the study location, the southbound approach operates with an exclusive left-turn lane and an exclusive right-turn lane. The posted speed limit is 40 miles per hour.

The nearest school to this intersection is Cypress Elementary School, located approximately ½-mile to the north on Lakeside Drive. There are existing sidewalks along both sides of Lakeside Drive and along the north side of Fortune Road. There is a 10-foot shared used path along the south side of Fortune Road.

The vehicular and non-vehicular volume data collected on Thursday, October 17, 2024, and Tuesday, October 22, 2024, have been summarized in **Figure 5-2** and **Figure 5-3**. These exhibits present the maximum hourly pedestrian and bicycle volumes for each leg of the intersection, along with the total and maximum hourly entering vehicular volume. **The highest volume of uncontrolled non-motorist crossings in a single hour was 3.**

5.1.1.1 Related Programmed Projects and Planning Studies

The segment of Fortune Road from just east of Lakeside Drive to La Fortuna Boulevard is undergoing construction to include additional turn lanes and safety improvements at the intersection with Simpson Road. The improvements extend to the east side of the intersection with Lakeside Drive but do not include the intersection. However, the newly constructed transit stop located on the northeast corner of the intersection has been temporarily removed and will be reinstalled once the drainage improvements related to the Fortune Road project are completed.

Figure 5-1: Fortune Road & Lakeside Drive – Aerial View

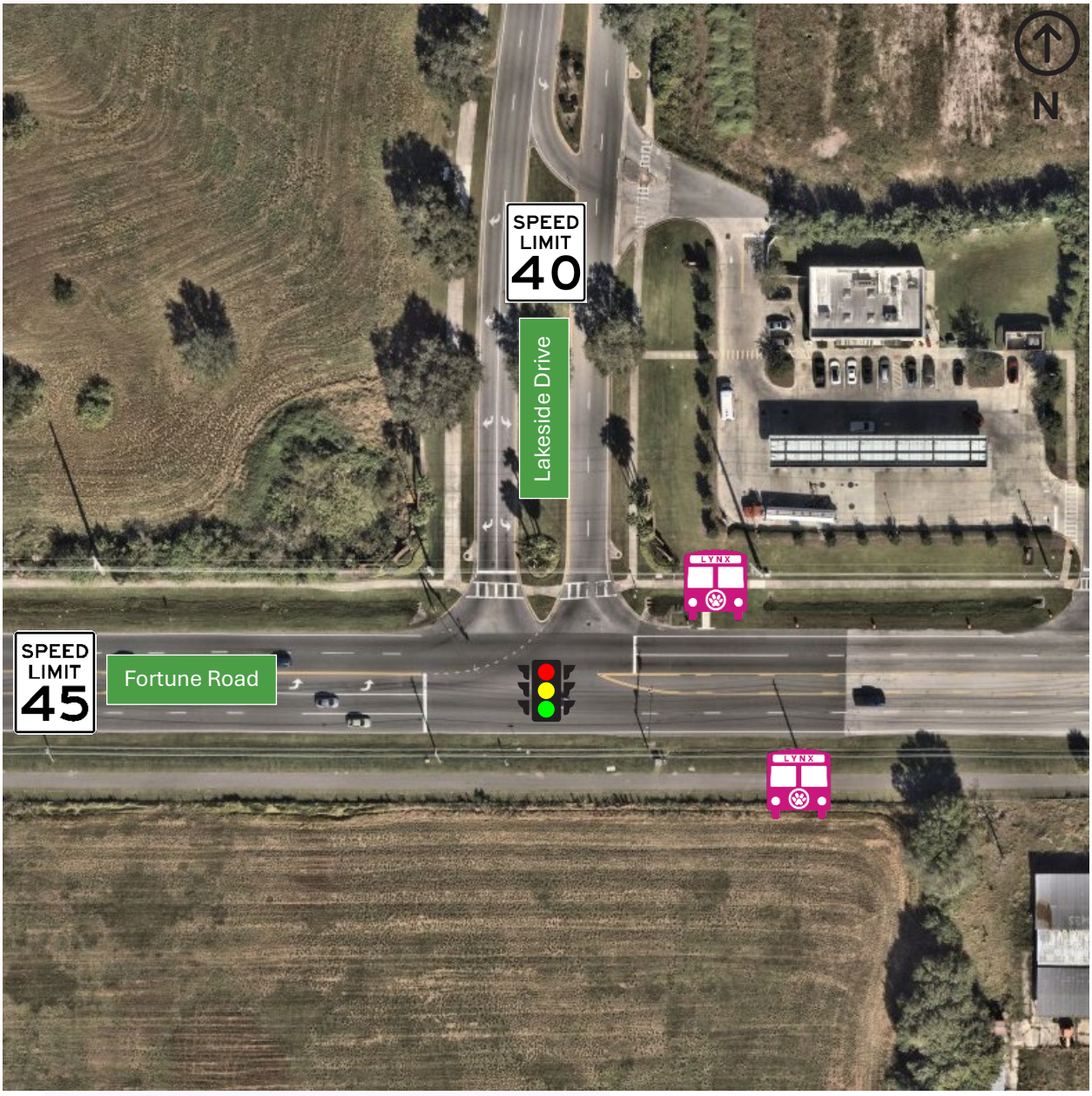


Figure 5-2: Fortune Road & Lakeside Drive – Thursday Data Collection

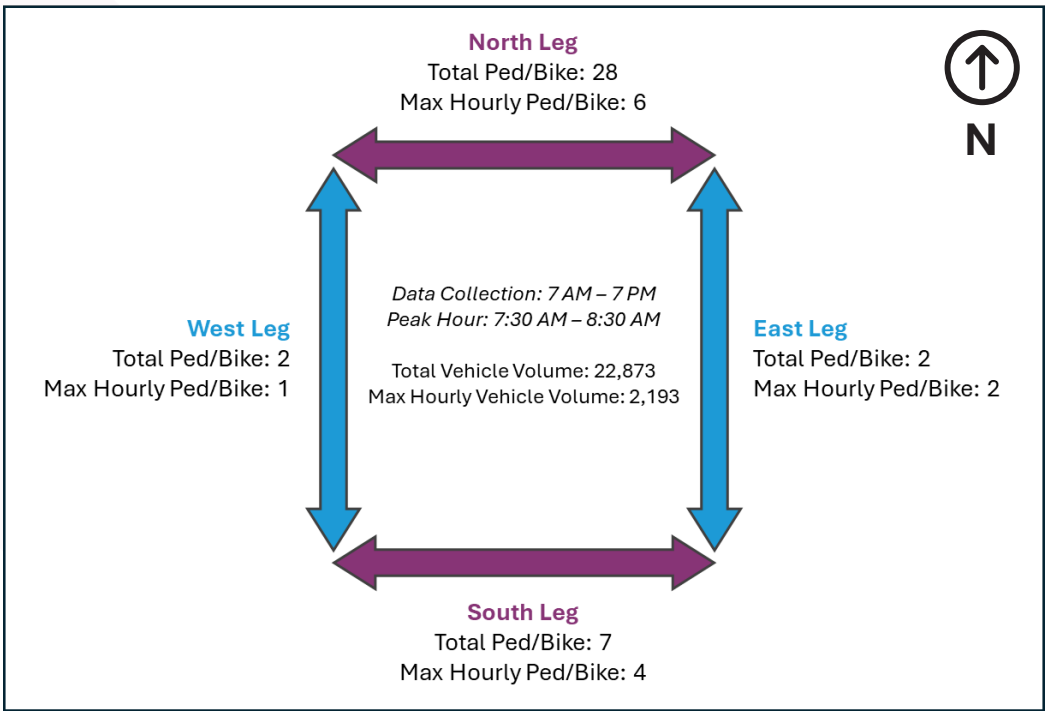
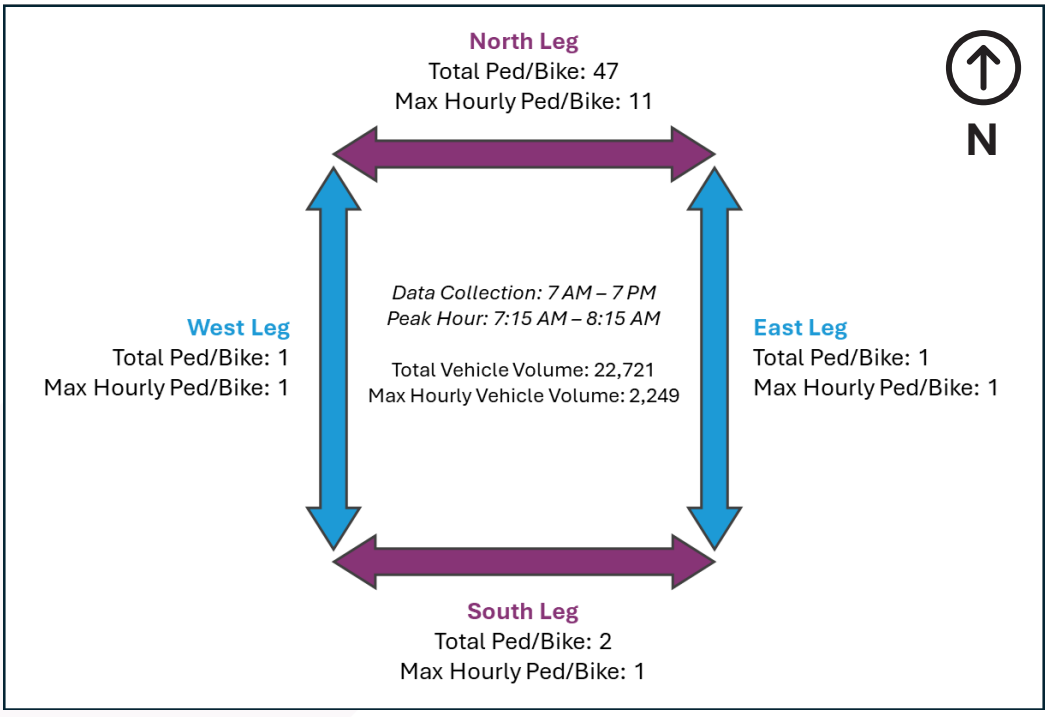


Figure 5-3: Fortune Road & Lakeside Drive – Tuesday Data Collection



5.1.2 Historic Crash Analysis

Five years of historical crash data (from 2018 to 2022) plus additional recent crash data (from 2023 to 2024) was obtained for the intersection of Fortune Road & Lakeside Drive from *Signal Four Analytics*. A total of 86 crashes occurred during this time. Crash data is provided in **Appendix B**. Summaries of crash statistics related to crash type, severity, and lighting condition are provided in **Table 5-1**, **Table 5-2**, and **Table 5-3**, respectively.

Figure 5-4 and **Figure 5-5** show crash severity by year and crashes by lighting condition, respectively. A diagram of historical crashes at this intersection is provided in **Appendix B**.

There were no fatal crashes and there was one serious injury crash. The most common crash type was a rear-end crash. Over 26% of the crashes occurred under dark conditions. Additionally, as shown in **Figure 5-6**, there is a peak in crash frequency at 5 PM.

Table 5-1: Fortune Road & Lakeside Drive – Crashes by Type

Crash Type	# of Crashes	% of Crashes
Rear End	41	47%
Left Turn	18	21%
Sideswipe	12	14%
Other	8	9%
Off Road	3	3%
Head On	2	2%
Bicycle	2	2%
Pedestrian	1	1%
Total	87	100%

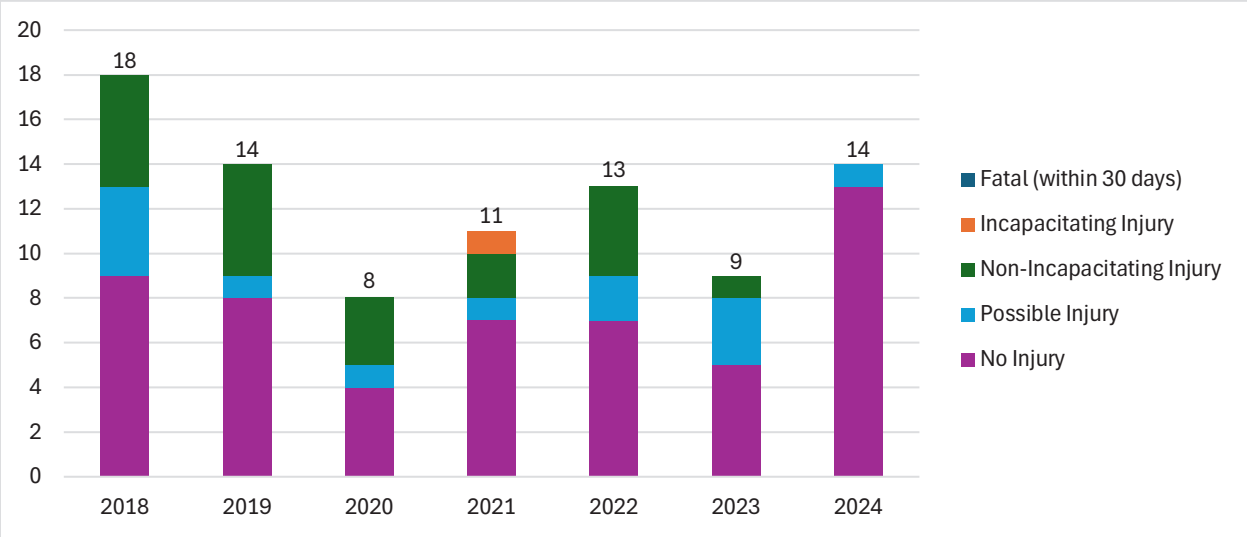
Source: Signal Four Analytics 2018 to 2024

Table 5-2: Fortune Road & Lakeside Drive – Crashes by Severity

Severity	# of Crashes	% of Crashes
K – Fatality	0	-
A – Incapacitating Injury	1	1%
B – Non-Incapacitating Injury	20	23%
C – Possible Injury	13	15%
O – No Injury	53	61%

Source: Signal Four Analytics 2018 to 2024

Figure 5-4: Fortune Road & Lakeside Drive – Crash Severity by Year



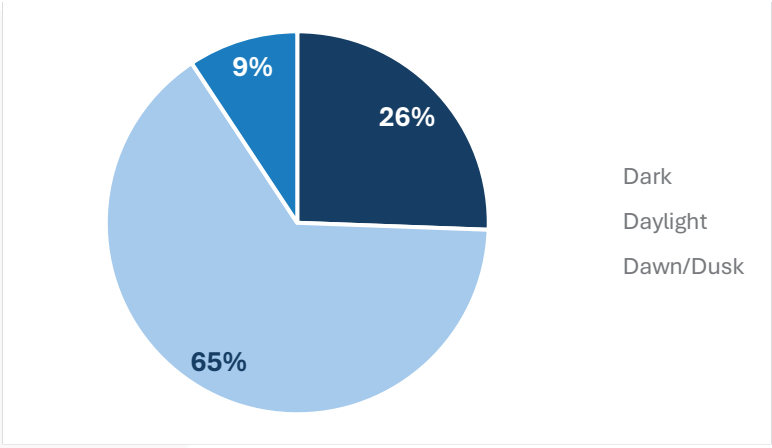
Source: Signal Four Analytics 2018 to 2024

Table 5-3: Fortune Road & Lakeside Drive – Crashes by Lighting Condition

Lighting Condition	# of Crashes	% of Crashes
Daylight	56	65%
Dark - Lighted	16	19%
Dark - Not Lighted	6	7%
Dawn/Dusk	8	9%

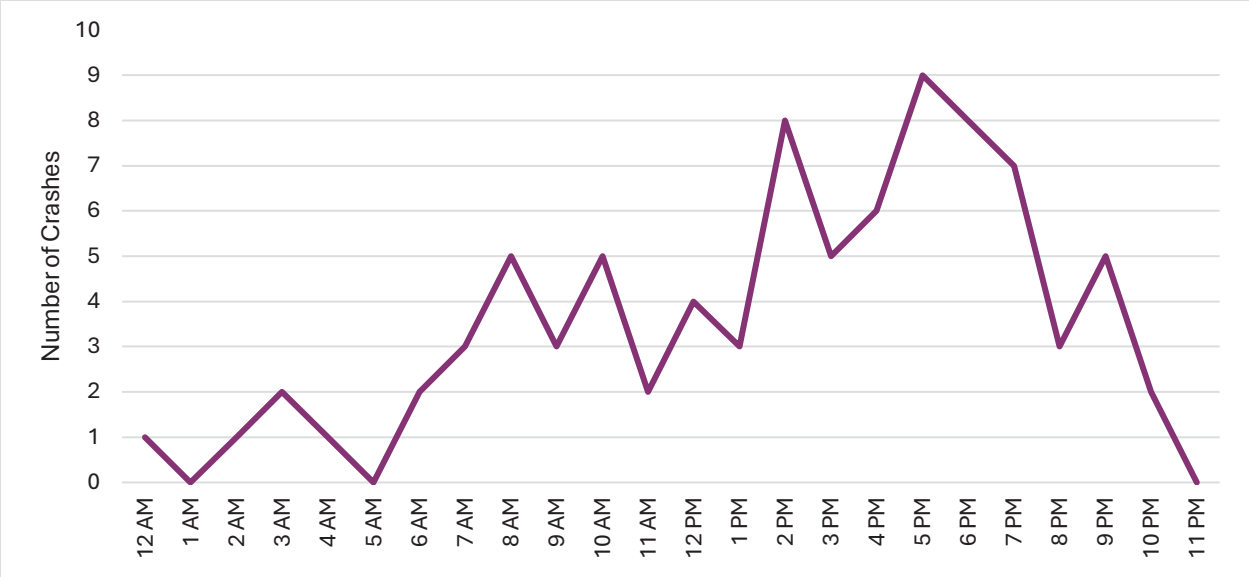
Source: Signal Four Analytics 2018 to 2024

Figure 5-5: Fortune Road & Lakeside Drive – Crashes by Lighting Condition



Source: Signal Four Analytics 2018 to 2024

Figure 5-6: Fortune Road & Lakeside Drive – Crashes by Time of Day



Source: Signal Four Analytics 2018 to 2024

5.1.2.1 Non-Motorist Crashes

The pedestrian and bicycle crash report narratives were reviewed to assess the contributing circumstances surrounding each crash involving a non-motorist. There were two bicycle crashes and one pedestrian crash. The following bullets describe the key takeaways of each crash:

1. June 2021: Westbound right-turning vehicle struck a **bicyclist** in the marked crosswalk on the north leg. Dawn. No injury.
2. March 2022: Northbound right-turning vehicle on Lakeside Drive struck a **bicyclist** crossing the driveway into the 7-Eleven. Daylight. Injury.
3. November 2022: Southbound left-turning vehicle struck a **pedestrian** in the marked crosswalk on the north leg as the signal turned green. Daylight. Injury.

5.1.3 Transit Routes and Ridership

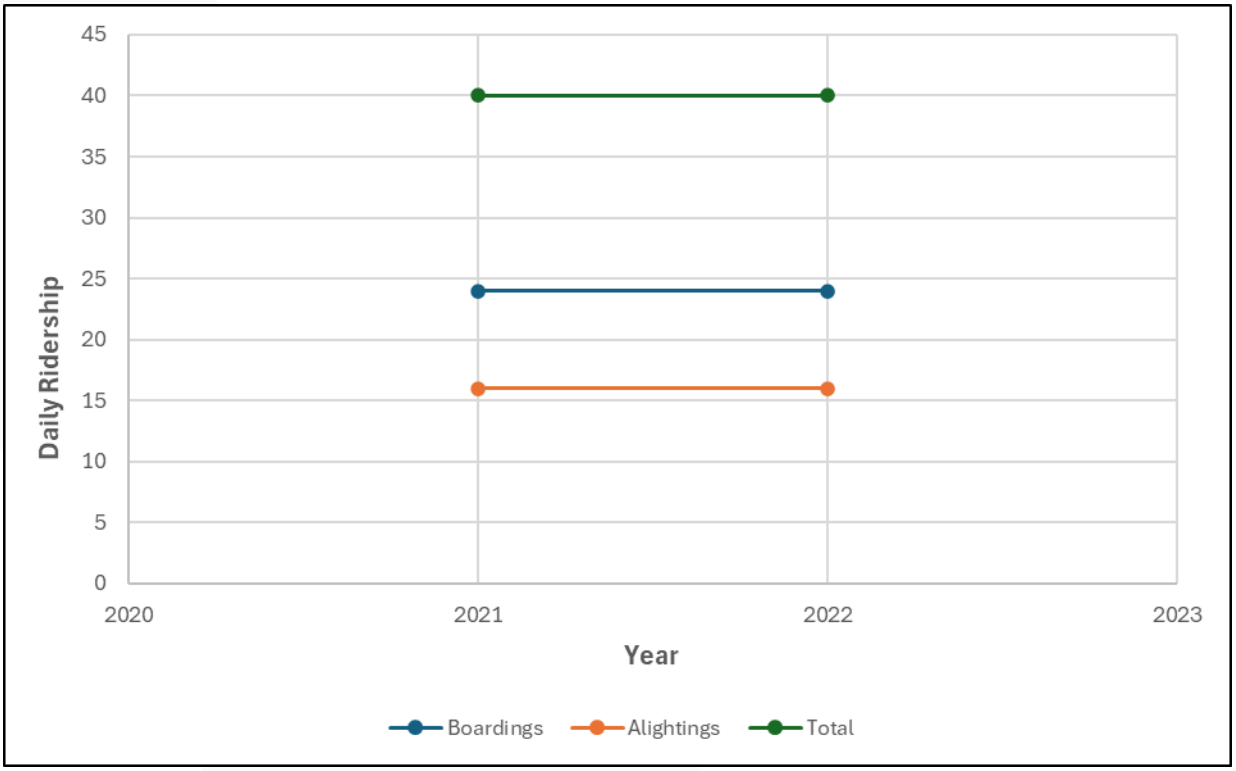
Access to existing transit facilities at the intersection of Fortune Road & Lakeside Drive was evaluated for accessibility, ADA compliance, and ridership. As previously noted, transit stop located on the northeast corner of the intersection has been temporarily removed and will be reinstalled once the drainage improvements related to the Fortune Road project are completed. **Figure 5-7** provides a visual of the bus stop prior to its removal.

The bus stop at the intersection of Fortune Road & Lakeside Drive serves LYNX Route 10 (E US 192 / St. Cloud), which provides several stops between Kissimmee Intermodal Station and the intersection of US 192 and Live Oak Boulevard. The service hours for Route 10 are 4 AM to approximately 10 PM during weekdays and Saturdays, while the service hours on Sunday are from 5 AM to approximately 10 PM. The scheduled headway for Route 10 is approximately 30 minutes. The route map is included in **Appendix C**.

Figure 5-7: Fortune Road & Lakeside Drive – LYNX Stop Photo (WB) (Prior to Construction)

Ridership data for 2021 and 2022 was provided by the Central Florida Regional Transit Authority (LYNX) and evaluated for trends. Note that no data was available for 2019 and 2020. The ridership data is provided in **Appendix C**. A summary of boarding (onboards) and alighting (offboards) data for these bus stops is provided in **Figure 5-8**.

Figure 5-8: Fortune Road & Lakeside Drive – LYNX Ridership Data Summary



As shown, ridership at this stop has remained steady from 2021 and 2022, with an average of approximately 40 total boardings and alightings per day.

5.1.4 Speed Data

As reported in the previously mentioned Vision Zero Action Plan, the 85th and 50th percentile speed data was determined for each intersection cross street, if available. The speed data reported was:

Fortune Road

Posted Speed	50th Percentile	85th Percentile
	45 mph	55 mph

Lakeside Drive

Posted Speed	50th Percentile	85th Percentile
	41 mph	47 mph

5.2 Qualitative Assessment

A professional engineer visited the site to observe traffic patterns, non-motorist activity, adjacent land uses, and design constraints that could influence the recommended improvements. The observation period occurred on Thursday, November 15th, 2024 from 11:45 AM-12:15 PM.

5.2.1 Existing Infrastructure

- The mast arm on the south side of Fortune Road is stabilized by guy wires and appears to be leaning towards the roadway.
- The signal head visibility for the southbound direction is poor; one overhead signal on the diagonal mast arm (right-turn movement) and one post-mounted signal head on the south leg (left-turn movement).
- The southbound Lakeside Drive approach is separated by a very wide median. There are Do Not Enter signs posted on the departure to discourage wrong-way driving.
- Sidewalk is present on both sides of Lakeside Drive, along the north side of Fortune Road, and a shared-use path is present along the south side of Fortune Road.
- One luminaire is present in the median on the north leg labeled 250 W.

Eastbound Fortune Road Approach

Westbound Fortune Road Approach

Southbound Lakeside Drive Approach

Southbound Signal Head Visibility

5.2.2 Pedestrian and Bicyclist Activity

- One bicycle was observed crossing the north leg without using the pushbutton detector. A scooter was observed riding eastbound through the intersection on the shoulder.

Northwest Corner Detector Station

Bicycle in North Leg Crosswalk

5.2.3 Transit Activity

- No LYNX bus service was observed during the hour.

5.2.4 Intersection Operations

- Fortune Rd is under construction for the Simpson Rd intersection improvements. The northeast corner of the intersection has been demolished with no pedestrian ADA route and inadequate MOT signing to direct pedestrians to alternate routes. The eastbound lanes shift through the intersection, yet the signal heads were not adjusted to align with the temporary receiving lanes on the departure. Significant ponding was observed on the south shoulder between the road and the shared-use path affected by construction.

- A queue of 15 southbound vehicles was observed during one cycle where a right-turning vehicle waited for a green indication before proceeding, despite adequate gaps in traffic.

Northeast Corner Under Construction

North Leg Crosswalk Blocked and Worn

Damaged Mast Arm with Guy Wires

Flooding Along South Side of Fortune Road

Westbound Departure and Temporary LYNX

Eastbound Departure and Temporary LYNX

5.2.5 Design Constraints

- There is a ditch along the north side of Fortune Road with culverts on the northwest and northeast corners of the intersection.
- Overhead electric runs along the north and south sides of Fortune Road, including distribution lines on both sides and transmission lines on the north side. AT&T and Crown Castle pull boxes were observed on the northeast corner along with sanitary sewer.

Ditch on Northwest Corner

Utilities on Northeast Corner

5.3 Engineering Analysis

5.3.1 Site-Specific Recommendations

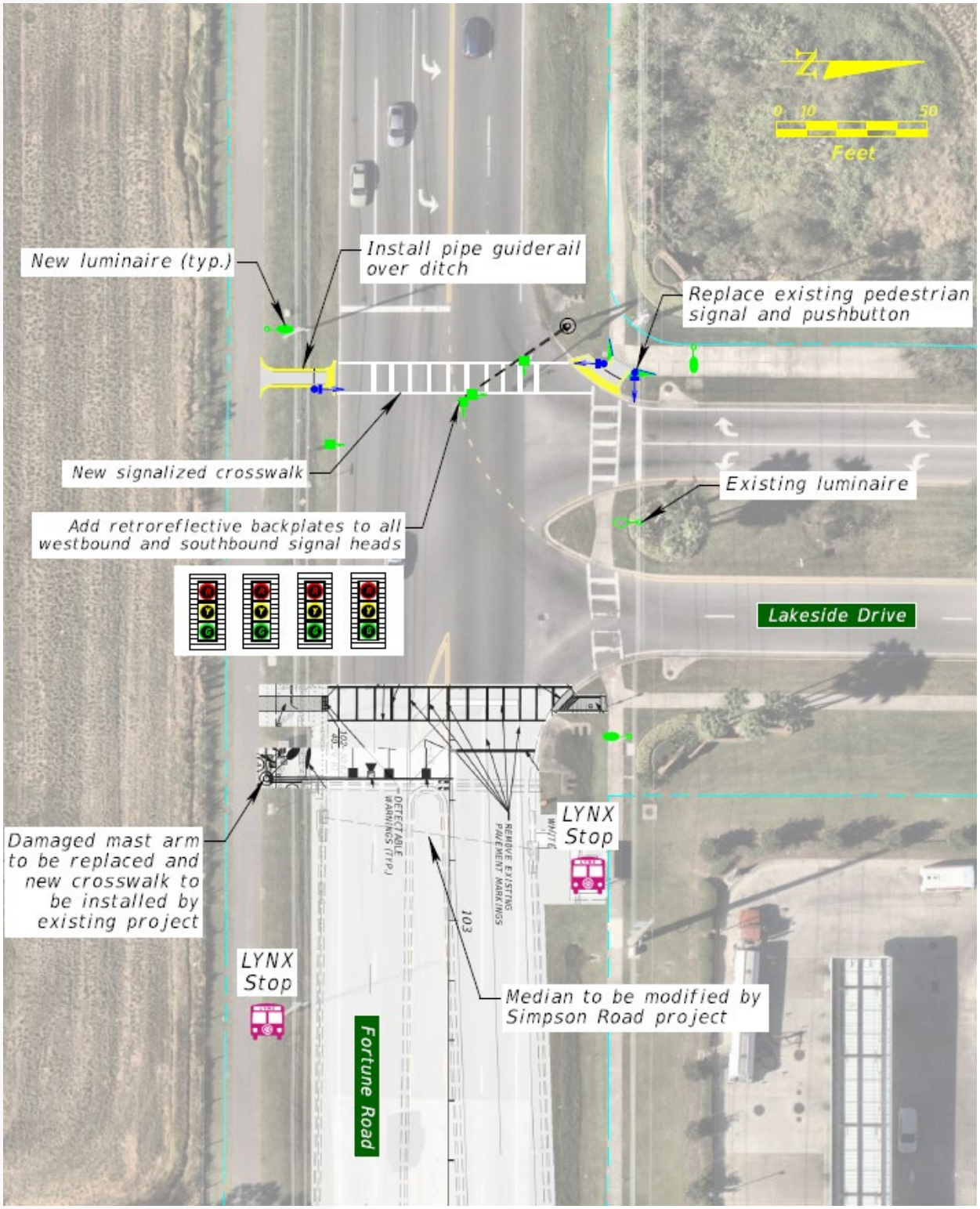
Based on the traffic counts, pedestrian and bicyclist activity, and field review, the following improvements are recommended and are illustrated in **Figure 5-9** (note that recommendations listed to "consider" are not included on the concept plans or in the subsequent cost estimates):

1. **Add New Signalized Crosswalk to West Leg.** There are currently no crosswalks across Fortune Road, despite the presence of a shared-use path along the south side and sidewalk to the north along Lakeside Drive. During the course of this study, it was determined that **the County would be adding a signalized crosswalk to the east leg** of the intersection as part of the Fortune Road improvements with the replacement of the damaged mast arm on the southeast corner of the intersection. It is recommended to construct a signalized crosswalk on the west leg of the intersection as well to provide full pedestrian and bicyclist connectivity. As a part of this addition, it is recommended to replace the existing pedestrian signal and pushbutton on the northwest corner for the north leg crosswalk to better position it for accessibility with the modified ramp configuration.

2. **Add Flexible Retroreflective Backplates to Westbound and Southbound Approaches.** The existing signal structures do not have backplates on any approach. The mast arm replacement on the south side of Fortune Road will include backplates and a conversion to a four-section flashing yellow arrow eastbound left-turn signal head. It is recommended to retrofit flexible backplates with retroreflective borders to the existing mast arm-mounted and post-mounted signal heads for the westbound and southbound approaches. Flexible backplates can be added to existing structures without requiring structural analysis for the change in wind loading and backplates offer a low-cost enhancement for signal head visibility.

3. **Consider Construction of a New Mast Arm for the Southbound Approach.** The southbound approach is currently controlled by one overhead signal head and one far-side post-mounted signal head. The layout does not provide ideal visibility for southbound vehicles. In addition, the diagonal orientation of the mast arm requires two directions of travel to be closed or shifted for any maintenance work to occur on the signal heads. Since one of the two existing mast arms is already undergoing replacement, it is recommended to program replacement of the second existing mast arm in the future to complete the full intersection upgrade. It may be possible to accommodate both westbound and southbound directions on a single dual-arm assembly or it may be the most cost-effective to utilize two single mast arms depending on needed length. It is recommended to consider any future development plans for the south leg of this intersection in the design and timeline for the mast arm replacement. (This consideration is not included on the concept plan or in the cost estimate.)

Figure 5-9: Fortune Road & Lakeside Drive – Conceptual Plan



5.3.2 Systematic Applications of Similar Treatments

The characteristics observed at this intersection are similar to other locations throughout the County. Similar treatments, including additional crosswalks at existing signalized intersections, can be applied to other locations meeting the following screening criteria:

1. Locations to evaluate for **additional crosswalks at existing signalized intersections**:
    - Signalized intersections with adjacent sidewalks that are missing crosswalks on one or more legs of the intersection
    - Signalized intersections with adjacent transit stops and no crosswalks between stops
    - Signalized intersections adjacent to trails or shared-use paths
2. Locations to evaluate for **flexible retroreflective backplates**:
    - Signalized intersections with historic angle and rear-end crashes
    - Signalized intersections with observed red-light running

5.3.3 Benefit-Cost Analysis

To obtain a quantitative measure of the benefits expected to be received from **the recommended improvements of additional signalized crosswalks and backplates**, a safety benefit-cost analysis was prepared using anticipated crash reduction benefits and a preliminary cost estimate.

The following CMF Clearinghouse entries were deemed applicable to the recommended improvements:

- 0.60 CMF for pedestrian/bicyclist crashes for high-visibility crosswalk
- 0.85 CMF for all crashes for retroreflective backplates (northbound and southbound)

For an urban 4-lane divided roadway, the FDOT average crash cost was reported as $123,406 per crash. The total estimated annual safety benefit resulting from the elimination of correctable crashes is approximately $86,384.

An opinion of probable construction cost (OPCC) was prepared using the FDOT Historical Costs. Allocations of 10 percent each for mobilization and MOT were added plus 25 percent for P.E. & C.E.I. and 25 percent for contingency. The total design and construction cost is approximately $142,486.

Using the annual safety benefits and the estimated costs annualized over the expected service life at a 4% interest rate, the benefit-cost ratio calculated is 7.41. The benefit-cost analysis is summarized in **Table 5-4.** The detailed conceptual plan and the OPCC are provided in **Appendix F** and the benefit-cost calculations are provided in **Appendix G**.

Table 5-4: Fortune Road & Lakeside Drive – Benefit-Cost Summary

Total Crash Reduction	Annual Crash Reduction	Annual Safety Benefit	Annualized Cost	B/C Ratio
5.1	0.7	$86,384	$11,726	7.41

Near-Miss Monitoring Demonstration Activity

Date: July 31st, 2025

To: MetroPlan Orlando, Seminole County

From: HDR

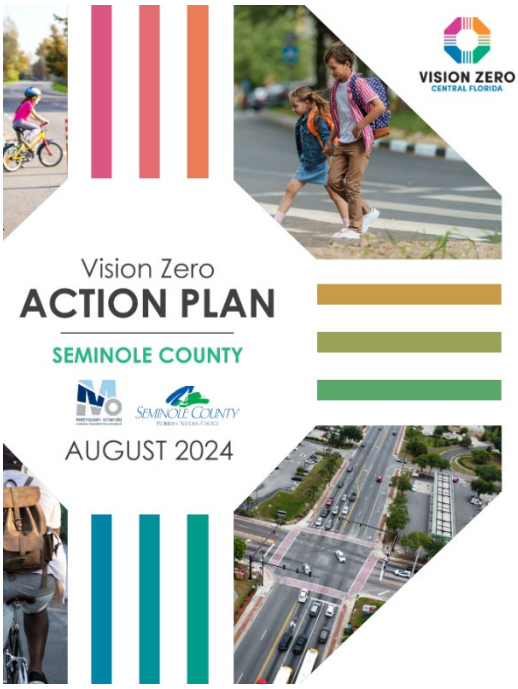
Subject: **Activity Description, Findings, and Future Recommendations**

Appendix: A. Near-Miss Platform, B. Monthly Near-Miss Reports, C. Platform Issues Encountered

1. Introduction

Every week, 5 people are killed and 35 are seriously injured in Central Florida crashes. Vision Zero is an international movement to eliminate all traffic deaths and serious injuries through a set of strategies, with the effect of increasing safety for all roadway users. Vision Zero Central Florida's goal is simple: saving lives.

Vision Zero in Seminole County



The Seminole County Vision Zero Action Plan was adopted on August 27th, 2024. The Action Plan was developed from a coordinated planning effort between MetroPlan Orlando, Seminole County, its incorporated cities, and the Florida Department of Transportation (FDOT). The plan was funded by a Safe Streets and Roads for All (SS4A) federal grant award. The plan details high priority projects along high injury networks, transportation disadvantaged focus areas, outreach conducted during plan development, and a set of recommended actions to be implemented over a five-year period.

Actions in the plan were organized around the safe system approach: safer roads, safer speeds, safer road users, safer vehicles, and post-crash care. One of the actions in the plan was to "Deploy Near-Miss Camera Technology". This demonstration activity also supports the data, transparency, and accountability core element of the Regional Vision Zero Action Plan.

The deployment of near-miss camera technology will support both testing new safety strategies in the region and conducting before and after studies The testing of and results from the before and after studies helped to provide a better understanding on whether near-miss monitoring software contributes to eliminating deaths and serious injuries.

Demonstration Activity Requirements per the United States Department of Transportation (USDOT)

In order to satisfy the requirements for the program, an organization must include data collection and analysis to measure a demonstration project's success and impact on the community's Safety Action Plan. Data collection and analysis is required in order to demonstrate the effectiveness of each project. The demonstration activities are expected to include an overview of the activities, a before and after study of the effectiveness of the activities, and an updated Action Plan that incorporates the findings. The final deliverable from the organization is expected to include a written product that connects to, showcases and enhances an Action Plan.

Memo Organization

This memo is organized into the following sections:

1. Introduction

2. Overview of Demonstration Activity

- Intersection Performance Measures
- Cost of Deployment
- Signal Timing Changes Implemented

3. Near-Miss Monitoring Results

4. Experienced Platform Issues

5. Demonstration Activity Effectiveness

- Opportunities Revealed
- Challenges Encountered

6. Conclusion and Recommendations

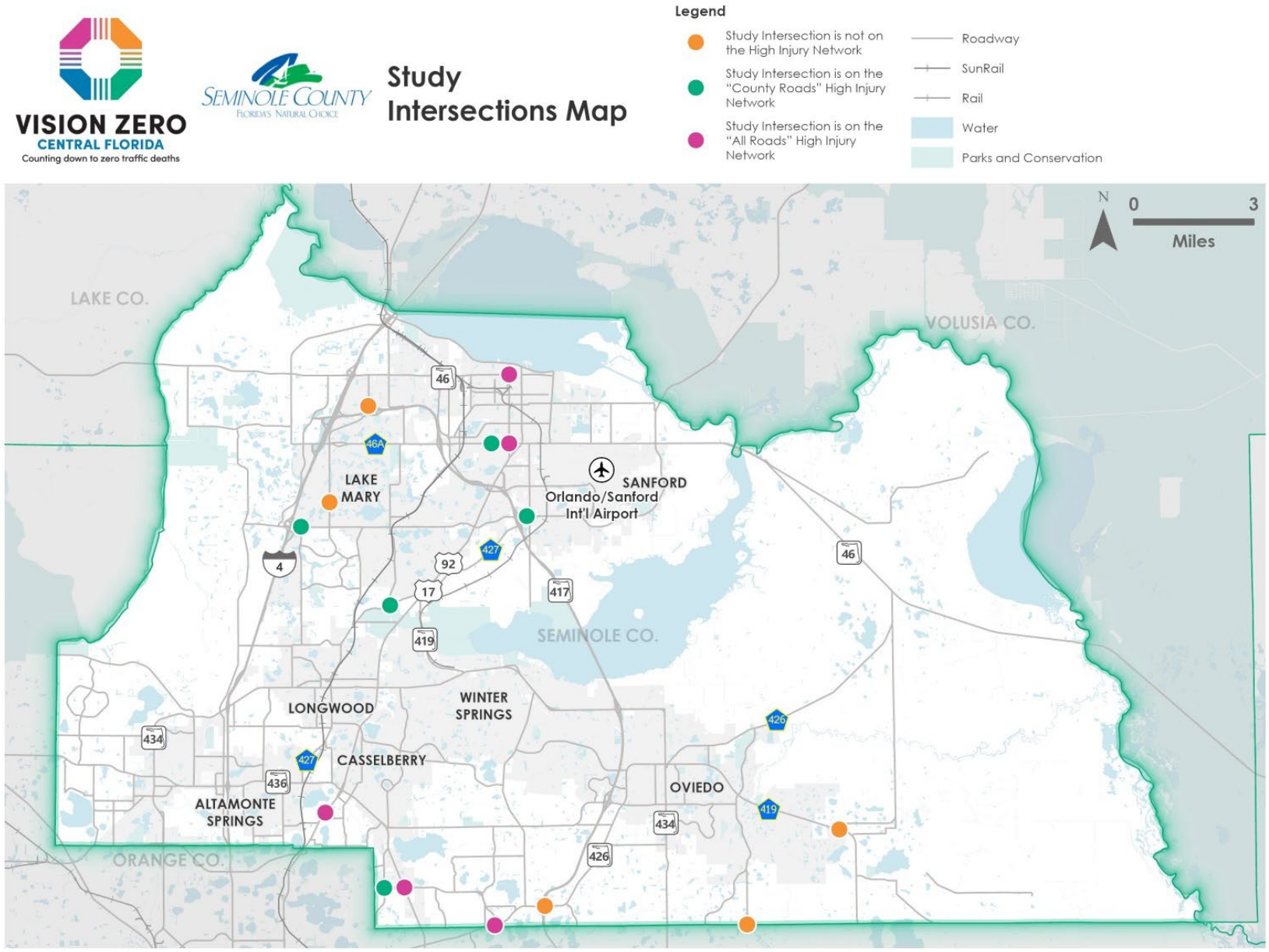
- Future Deployments
- Signal Technology and Safety Projects
- Action Plan Updates

2. Overview of Demonstration Activity

Seminole County partnered with GridMatrix to conduct near-miss monitoring for the 15 intersections listed below and shown in **Figure 1**. The bolded intersections are on the High Injury Network, the other intersections were selected by Seminole County based on local safety knowledge and citizen concerns.

1. **US 17/92 @ SR 46 (1st)**
2. **US 17/92 @ 25th St**
3. **SR 436 @ Howell Branch Rd**
4. **SR 426 @ Howell Branch Rd**
5. **CR 427 @ Country Club**
6. **Lake Mary Blvd @ CR 427**
7. Rinehart Rd @ Primera Blvd
8. Rinehart Rd @ SR 417 NB (WP Ball)
9. Tanner Rd @ McCulloch Rd
10. **Howell Branch Rd @ Lake Howell Rd**
11. **HE Thomas Pkwy @ Hartwell Ave**
12. CR 419 @ Snow Hill Rd
13. **Lake Mary Blvd @ Lake Emma Rd**
14. **US 17/92 @ Lake of the Woods Blvd**
15. SR 426 @ SR 417 NB Ramp

Figure 1. Study Intersection Map



This project provided a path to demonstrate the effectiveness of using near-miss information to address fatal and serious injury crashes. The program was implemented through a partnership with GridMatrix who developed the software dashboard. The dashboard provided by GridMatrix provides additional data captured by county-owned intersection cameras. This collected data is then layered into the software allowing for more in-depth analysis regarding traffic safety; additionally, the software uses machine learning to identify near-misses. The dashboard provided daily updates for each high conflict intersection showing the locations with the highest numbers of near misses. The dashboard provided by GridMatrix is fully shown in **Appendix A.** Potential hazards/deficiencies found using this data may be able to be addressed through design or operational improvements.

While the platform is capable of utilizing a variety of tracking metrics, the following metrics were used to evaluate platform feasibility and are the focus of this project:

- Overall intersection near-misses per month – numeric and heatmap tracking
- Number of near-misses by mode-to-mode conflict (vehicle-vehicle, vehicle-pedestrian, vehicle-bicycle, vehicle-motorcycle, etc.)
- Left-turn near-misses at five specific intersections with left-turn crash history or signal timing modifications (Note: Left-turn queue length was originally planned to be tracked. However, the platform experienced queue length calculation errors and therefore left-turn near-misses were used in lieu of queue length).

Post-Encroachment Time (PET), the time in seconds defining a near-miss, was originally anticipated to be explored and modified based on local data. However, due to focus on the previous metrics identified and limitations in changing the PET, a standard 2.5 seconds was assumed for all near-misses throughout this study.

Intersection Performance Measures

Using the online platform, the study team compiled monthly data into a comprehensive spreadsheet to display the information in a straightforward and insightful manner. A sample of the data (first two pages of the monthly report) is shown in **Figure 2.** All monthly near-miss reports from October 2024 through April 2025 are included in **Appendix B**.

The study team created several additional metrics, such as the near-miss rate and the vulnerable user near-miss proportion, in addition to the raw data output available from the GridMatrix platform. These metrics were post-processed calculations which compared the number of near misses to the average traffic volume.

Figure 2. Example of Monthly Report Template

Monthly Near Miss Report | Seminole County SS4A Demonstration Project

December 2024

Purpose *This project is a next step of the adopted 2024 Seminole County Vision Zero Safety Action Plan.*
Outcome *Evaluate Near-Miss software insight for eliminating fatal and serious injury crashes.*
Vision Zero Web Links *www.VisionZeroCFL.gov*
www.seminolecountyfl.gov/departments-services/public-works/engineering-division/projects/vision-zero.stml

VISION ZERO CENTRAL FLORIDA
Counting down to zero traffic deaths

Table 1. Near-Miss Data Summary

#	Intersection Name	2018-2022		December 2024								
		Total # of Deadly and Serious Injury Crashes		Annual Average Daily Entering Traffic Volume	Total # Near-Misses	Near-Miss Rate	Total # Near-Misses by Mode Conflict					Vulnerable User Near-Miss Proportion
		Vehicle	Vulnerable Users (ped, bike, motorcycle)				Veh-Veh	Veh-Ped	Veh-Bike	Veh-Motorcycle	Other*	
1	US 17/92 @ SR 46 (1st)	0	3	Camera Inactive								
2	US 17/92 @ 25th St	2	4	48,250	12,422	0.26	12,401	8	0	13		0.17%
3	SR 436 @ Howell Br Rd	0	2									
4	SR 426 @ Howell Br Rd	0	2	58,750	10,709	0.18	10,677	4	0	28		0.30%
5	CR 427 @ Country Club	2	1	22,600	399	0.02	399	0	0	0		0.00%
6	Lake Mary Blvd @ CR 427	5	1	42,200	8,525	0.20	8,370	24	0	131		1.82%
7	Rinehart Rd @ Primera Blvd	0	0	23,750	9,721	0.41	9,714	6	0	1		0.07%
8	Rinehart Rd @ SR 417 NB (WP Ball)	1	0									
9	Tanner Rd @ McCulloch Rd	2	0	36,200	1,383	0.04	1,378	0	0	5		0.36%
10	Howell Br Rd @ Lake Howell Rd	2	1	40,950	5,703	0.14	5,692	10	0	1		0.19%
11	HE Thomas Pkwy @ Hartwell Ave	1	3	25,500	763	0.03	752	11	0	0		1.44%
12	CR 419 @ Snow Hill Rd	2	0									
13	Lake Mary Blvd @ Lake Emma Rd	0	1	31,400	20,173	0.64	20,154	16	0	3		0.09%
14	US 17/92 @ Lake of the Woods Blvd	3	3	59,700	33,721	0.56	33,672	7	0	42		0.15%
15	SR 426 @ SR 417 NB Ramp	0	1	39,300	3,025	0.08	2,960	61	0	4		2.15%

Notes:
Annual Average Daily Entering Traffic Volume sourced from FDOT Florida Traffic Online (FTO)
Near-Miss Rate = Total # of Near-Misses / Average Annual Daily Entering Traffic Volume;
Vulnerable User Near-Miss Proportion = Sum of Vulnerable User Near-Misses / Total # Near-Misses
**Non-Motorized conflicts summarized here*

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SEMINOLE COUNTY
FLORIDA'S NATURAL CHOICE

Monthly Near Miss Report | Seminole County SS4A Demonstration Project

December 2024

Near-Miss Heat Map (December 2024) and Actual Crash Data (2018-2022)

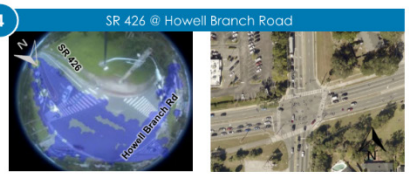
1 US 17/92 @ SR 46 (1st) - Camera Inactive

2 US 17/92 @ 25th St

Legend
KSI Collisions
Non-KSI Collisions
KSI = Killed or Seriously Injured

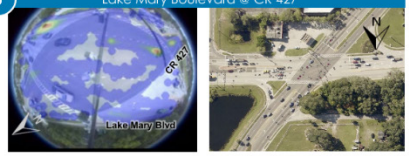
3 SR 436 @ Howell Branch Road

4 SR 426 @ Howell Branch Road



5 CR 427 @ Country Club Road

6 Lake Mary Boulevard @ CR 427



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SEMINOLE COUNTY
FLORIDA'S NATURAL CHOICE

Cost of Deployment

The vendor cost of the 15-intersection deployment totaled roughly $85,000 for a 12-month study period where 7-months included real-time data collection. On a per intersection basis this results in under $6,000 per intersection. This cost also included deployment set up, ongoing vendor support and training. Recurring contracts or yearly cost structures should be discussed with vendors.

Signal Timing Changes Implemented

Seminole County made several signal timing adjustments during the monitoring period, such as converting permitted left-turn movements with flashing yellow arrows (FYA) to protected-only movements and adding leading pedestrian intervals (LPIs), in order to study the impact of those timing changes on near-miss occurrences. Changes were implemented in February and March and monitored through April 2025. The full list of signal adjustments are shown in **Table 1**. The County has observed minimal impact to intersection traffic operations and received a low number of citizen concerns associated with these changes. As of June 2025, the signal timing changes were still active in the County.

Table 1. Signal Timing Changes Implemented During Demonstration Activity

#	Intersection	Signal Timing Change Implemented	Date Implemented
2	US 17/92 @ 25th St	Converted the protected-permitted left-turns (FYAs) for NB and SB to protected-only. Note: The EB and WB left-turns typically run protected-permitted as well, however due to construction they were running protected-only throughout the monitoring period.	2/19/2025 Active from 6am - 9pm
8	Rinehart Rd @ SR 417 NB (WP Ball)	Converted the EB protected-permitted left-turn to protected-only. This required swapping out a 5-section head with a 4-section head. The westbound (SR417) approach 5-section head was swapped out with a 4-section FYA. The eastbound (W.P. Ball) approach added a 4-section FYA and swapped the 5-section head to be a 3-section head. The eastbound and westbound pedestrian movements crossing Rinehart Rd were also protected by shutting off the FYA for during those ped calls.	3/31/2025 Active from 6am - 9pm
10	Howell Branch Rd @ Lake Howell Rd	Converted the protected-permitted left-turns (FYAs) for all directions (NB, SB, EB, WB) to protected-only.	2/19/2025 Active from 6am - 9pm
11	HE Thomas Pkwy @ Hartwell Ave	Added LPIs to the NB and SB phases to provide pedestrians with a 5-second head-start before the concurrent vehicular phase begins.	2/19/2025 Active 24-hours
15	SR 426 @ SR 417 NB Ramp	Converted the EB protected-permitted left-turn (FYA) to protected-only.	2/19/2025 Active from 6am - 9pm

3. Near-Miss Monitoring Results

While intersection performance measures were monitored monthly (included within **Appendix B**), this section summarizes the trends that emerged over the 7-month tracking period. It is noted that the monitoring software experienced some outages. The "up-time"[1] for each intersection is shown in **Table 2** and the data results presented in this section are based on the data from online days.

Table 2. Near-Miss Software Up-Time by Days per Month

#	Intersection Name	Oct	Nov	Dec	Jan	Feb	Mar	Apr	% Overall Up Time
1	US 17/92 @ SR 46 (1st)								0%
2	US 17/92 @ 25th St	13		15	30	25	27	29	66%
3	SR 436 @ Howell Br Rd	13							6%
4	SR 426 @ Howell Br Rd	13		15	30	22	27	30	65%
5	CR 427 @ Country Club	24	25	23	30	24	28	23	84%
6	Lake Mary Blvd @ CR 427	24	25	23	30	24	28	30	87%
7	Rinehart Rd @ Primera Blvd	15	26	23	30	24	28	30	83%
8	Rinehart Rd @ SR 417 NB (WP Ball)	13							6%
9	Tanner Rd @ McCulloch Rd	13		12		12	28	29	45%
10	Howell Br Rd @ Lake Howell Rd	13		15	30	25	27	30	66%
11	HE Thomas Pkwy @ Hartwell Ave	13	26	19	1	11	28	30	61%
12	CR 419 @ Snow Hill Rd								0%
13	Lake Mary Blvd @ Lake Emma Rd	24	26	23	30	25	28	30	88%
14	US 17/92 @ Lk of the Woods Blvd	12		15	30	25	27	28	65%
15	SR 426 @ SR 417 NB Ramp	13		15	30	20	25	8	53%

Upon the conclusion of the technical monitoring period, there was a need to convey the information in a user-friendly and digestible manner. To do this, the near-miss data for the 7-month monitoring period was normalized for the number of days online and then converted to a daily average. Finally, this daily average was converted into the "average number of near-misses for every vehicle of traffic

[1] Defined as the percentage of time each intersection camera actively collected data per month

volume that passes through the intersection". FDOT Florida Traffic Online (FTO) was used to estimate an Annual Average Intersection Entering Volume for each intersection. This value was kept consistent throughout all months. It is noted that while the platform provides a traffic volume output, some intersections varied considerably with values as high as 90% different from the FDOT FTO estimate. Therefore, the FDOT historical data was used in lieu of the platform output. The results of the near-miss normalization is shown in **Table 3** and in **Figure 4**.

Table 3. Near-Miss Summary – Quick Look

#	Intersection Name	How many near-misses happen each day?	How often is that?	Which intersection has the most near-misses?	Which intersection had the most deadly and serious crashes?[2]
1	US 17/92 @ SR 46 (1st)	-	-	-	4th
2	US 17/92 @ 25th St	668	Once every 72 vehicles	4th	1st (Most, Tie)
3	SR 436 @ Howell Br Rd	538	Once every 142 vehicles	8th	7th
4	SR 426 @ Howell Br Rd	483	Once every 122 vehicles	6th	8th
5	CR 427 @ Country Club	18	Once every 1269 vehicles	13th (Least)	4th
6	Lake Mary Blvd @ CR 427	322	Once every 131 vehicles	7th	1st (Most, Tie)
7	Rinehart Rd @ Primera Blvd	348	Once every 68 vehicles	3rd	15th (Least)
8	Rinehart Rd @ SR 417 NB (WP Ball)	648	Once every 97 vehicles	5th	12th
9	Tanner Rd @ McCulloch Rd	86	Once every 420 vehicles	11th	8th
10	Howell Br Rd @ Lake Howell Rd	269	Once every 152 vehicles	9th	7th
11	HE Thomas Pkwy @ Hartwell Ave	37	Once every 695 vehicles	12th	4th
12	CR 419 @ Snow Hill Rd	-	-	-	12th
13	Lake Mary Blvd @ Lake Emma Rd	828	Once every 38 vehicles	2nd	8th
14	US 17/92 @ Lk of the Woods Blvd	1,759	Once every 34 vehicles	1st (Most)	1st (Most, Tie)
15	SR 426 @ SR 417 NB Ramp	148	Once every 265 vehicles	10th	12th

[2] This data is from a Vision Zero crash analysis between 2018 to 2022

Figure 3. Near-Miss Map

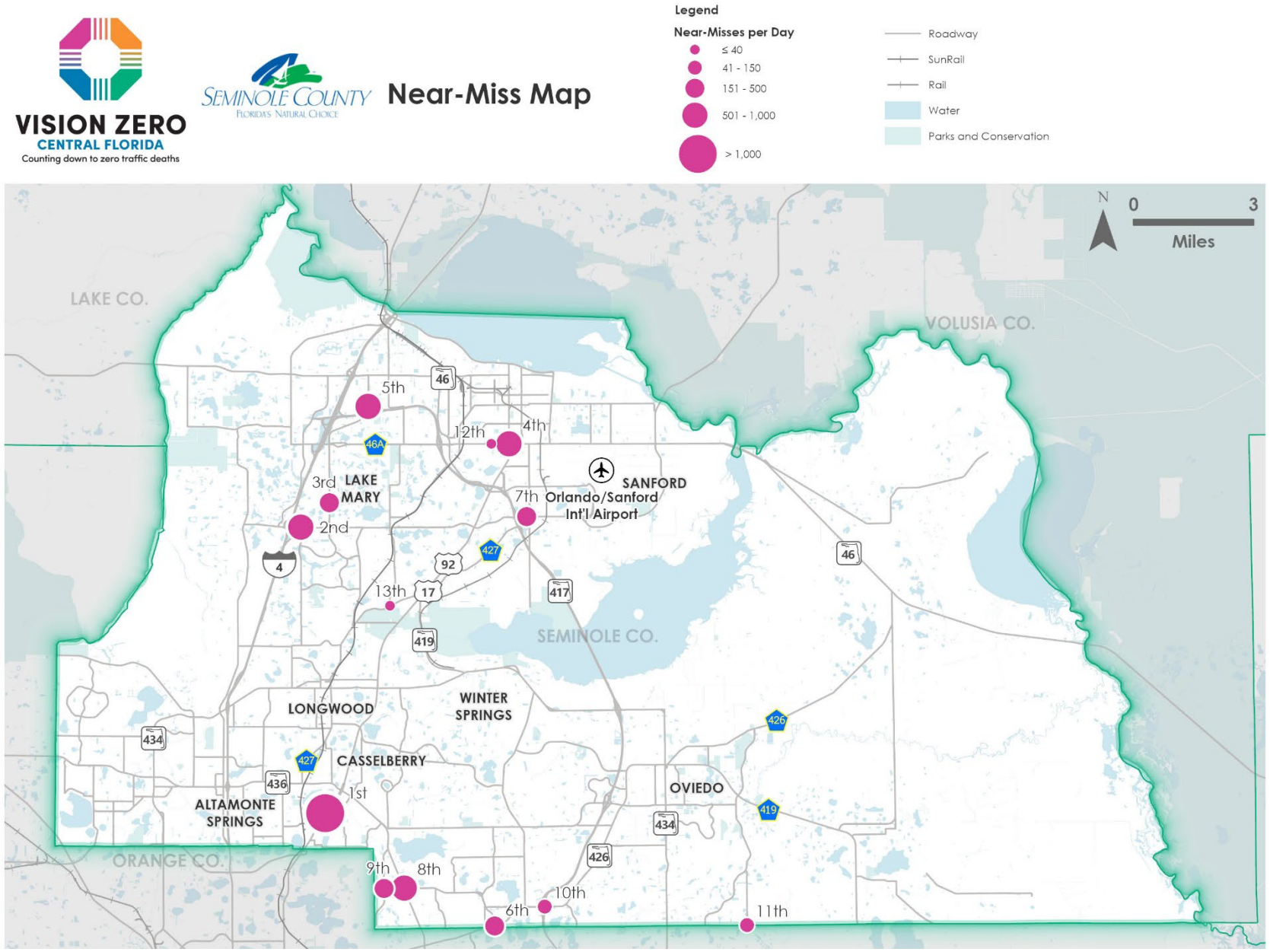
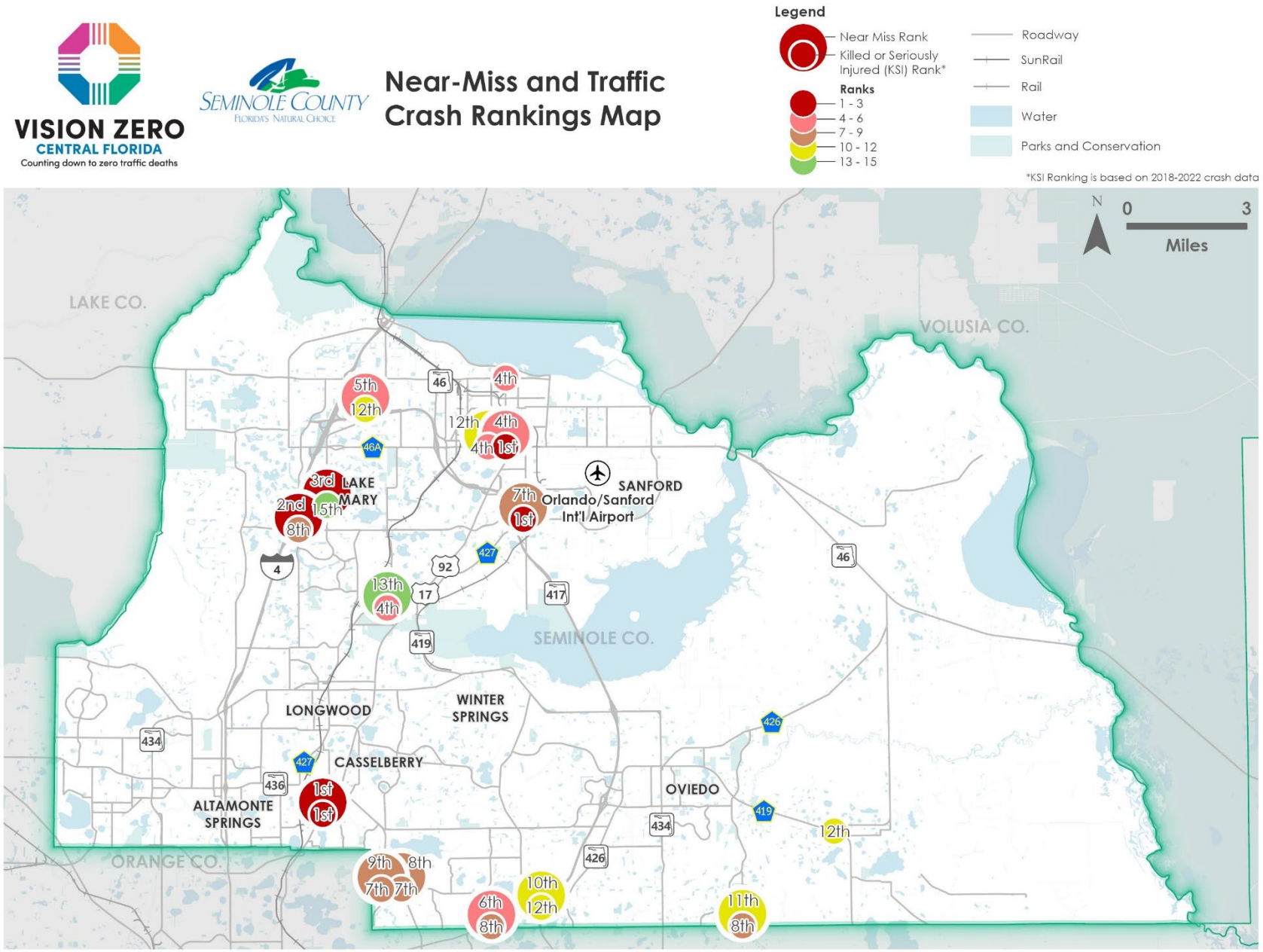


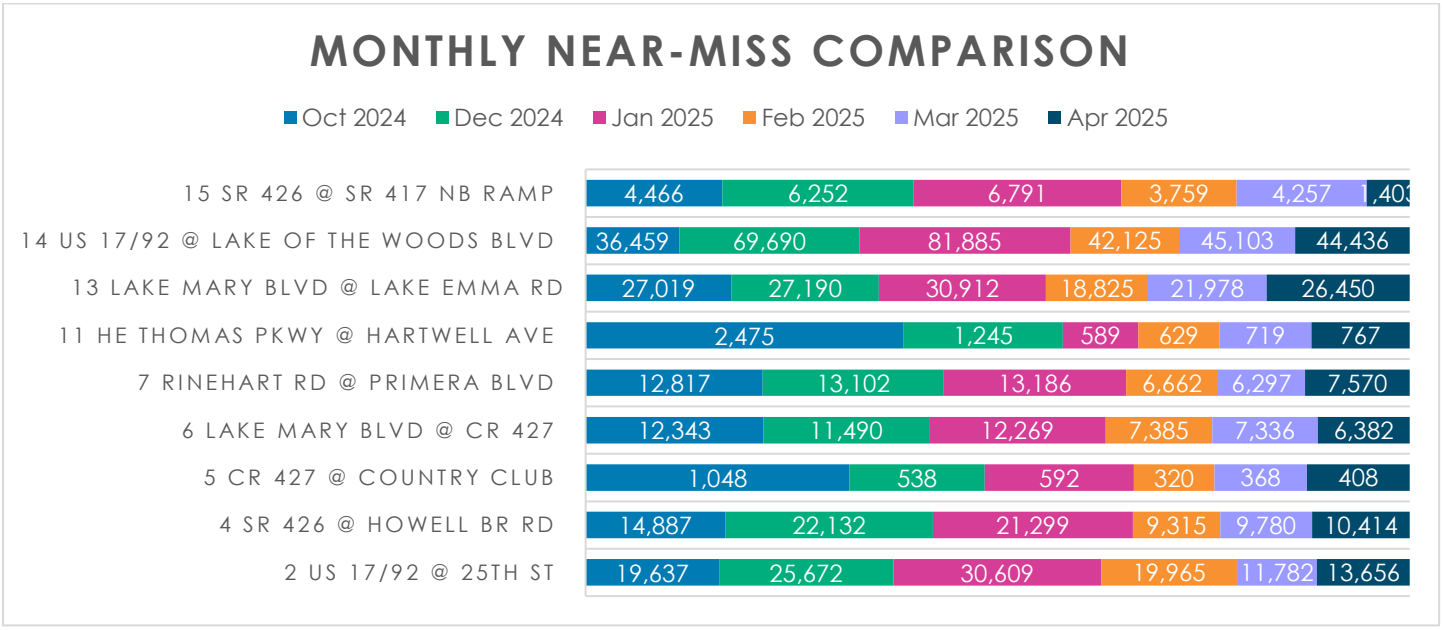
Figure 4. Near-Miss and Traffic Crash Rankings Map



A comparison of the near-miss data by month is shown in **Figure 5**. Only intersections and months with complete data are shown in this figure for comparison purposes. The results show that the second half of the monitoring period from February 2025 to April 2025 experienced a lower overall trend in near-misses. This data is already normalized for the number of days the data was available and therefore the decrease is not due to reduced data. The decrease may be related to the below factors:

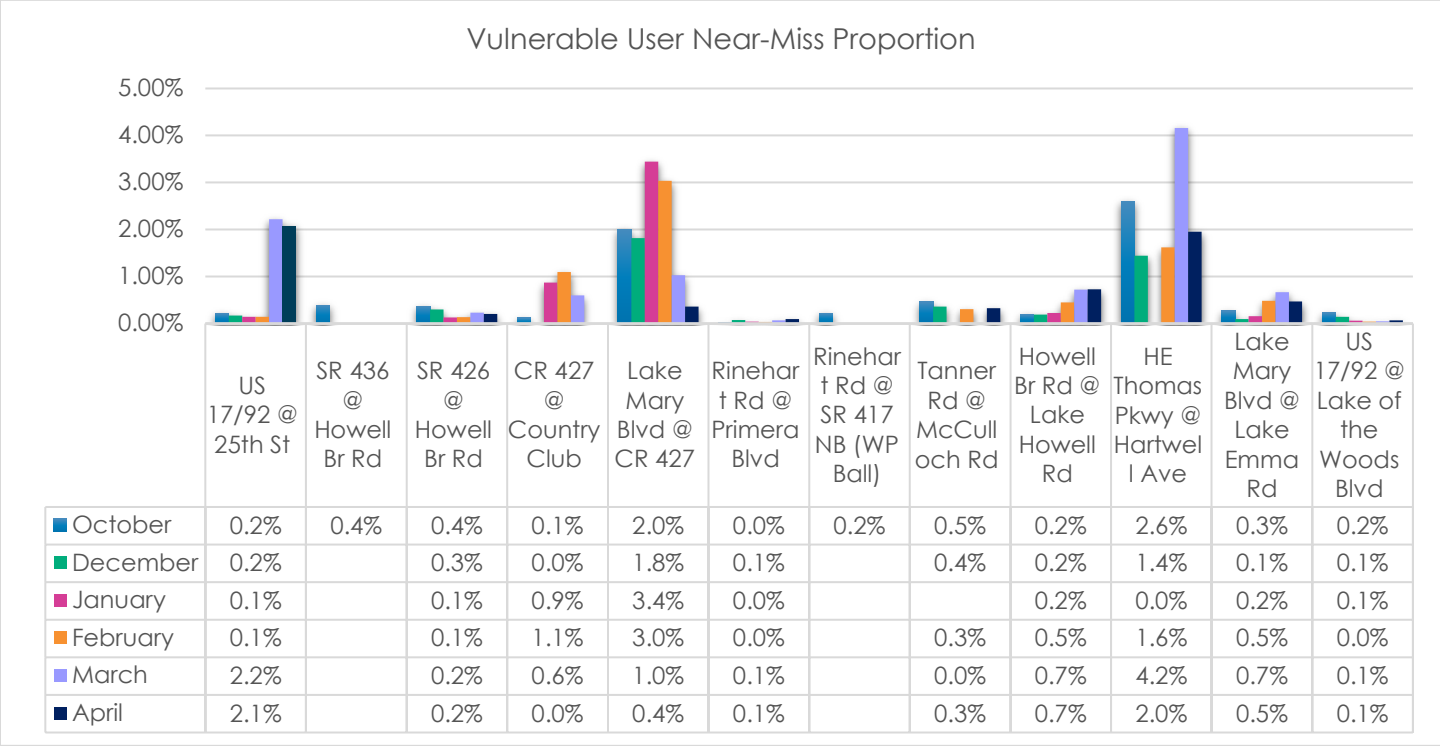
- During the platform demonstration, the study team noted several intersections were picking up adjacent parcel activity such as gas station near-misses. The adjustment of the intersection near-miss capture extent may be the reason for lower near-misses.
- Several signal timing changes were made to select intersections on February 19th, 2025. These changes were intentional to study the impact of potential reduction in near-misses through enhanced safety. The signal timing changes, previously noted in Table 1, included:
    - Intersection #2 – US 17/92 at 25th Street
    - Intersection #10 – Howell Br Rd @ Lake Howell Rd
    - Intersection #11 – HE Thomas Pkwy at Hartwell Ave
    - Intersection #15 – SR 426 at SR 417 NB Ramp

Figure 5. Monthly Near-Miss Comparison



Only intersections and months with complete data are shown in this figure for comparison purposes. The intersections experiencing the highest proportion of vulnerable-user near-misses were Lake Mary Blvd at CR 427 and HE Thomas Pkwy at Hartwell Avenue. It was surprising that US 17/92 at Lake of the Woods Blvd did not show a higher percentage given that the heat map showed several pedestrian near-miss clusters. However, this is likely due to the overall number of near-misses being very high – as high as 81,885 near-misses in January as shown in Figure 5. A comparison of the vulnerable user near-misses as a proportion of total near-misses is shown in **Figure 6**.

Figure 6. Vulnerable User Near-Miss Proportions



	US 17/92 @ 25th St	SR 436 @ Howell Br Rd	SR 426 @ Howell Br Rd	CR 427 @ Country Club	Lake Mary Blvd @ CR 427	Rinehart Rd @ Primera Blvd	Rinehart Rd @ SR 417 NB (WP Ball)	Tanner Rd @ McCulloch Rd	Howell Br Rd @ Lake Howell Rd	HE Thomas Pkwy @ Hartwell Ave	Lake Mary Blvd @ Lake Emma Rd	US 17/92 @ Lake of the Woods Blvd
October	0.2%	0.4%	0.4%	0.1%	2.0%	0.0%	0.2%	0.5%	0.2%	2.6%	0.3%	0.2%
December	0.2%		0.3%	0.0%	1.8%	0.1%		0.4%	0.2%	1.4%	0.1%	0.1%
January	0.1%		0.1%	0.9%	3.4%	0.0%			0.2%	0.0%	0.2%	0.1%
February	0.1%		0.1%	1.1%	3.0%	0.0%		0.3%	0.5%	1.6%	0.5%	0.0%
March	2.2%		0.2%	0.6%	1.0%	0.1%		0.0%	0.7%	4.2%	0.7%	0.1%
April	2.1%		0.2%	0.0%	0.4%	0.1%		0.3%	0.7%	2.0%	0.5%	0.1%

The change in near-misses at intersections with signal timing changes is summarized in **Table 4**. Results show that the signal timing changes reduced the number of near-misses experienced, which is a positive impact. **However, the results should be interpreted with extreme caution given data inconsistencies**– the "after" results are compared to January 2025 and the monthly near-miss comparison in **Figure 5** shows an overall reduction in number of near-misses in 2025 compared to 2024 for *all* intersections, including those *without* signal timing changes.

Table 4. Near-Miss Comparison after Signal Timing Changes

#	Intersection Name	Left-Turn	April 2025 Phasing	January 2025 Phasing	April 2025 % Days Online	April 2025 Normalized # of Near-Misses	January 2025 % Days Online	January 2025 Normalized # of Near-Misses	% Change in Near-Misses***
2	US 17/92 @ 25 St	EBL	Prot (due to CST)	Prot (due to CST)	97%	150	97%	382	-61%
		WBL	Prot (due to CST)	Prot (due to CST)	97%	1191	97%	1202	-1%
		NBL	Prot	Prot/Perm - FYA	97%	454	97%	514	-12%
		SBL	Prot	Prot/Perm - FYA	97%	863	97%	1436	-40%
8	Rinehart Rd @ SR 417 NB (WP Ball Blvd)	EBL	Prot	Prot/Perm	0%	-	0%	-	-
		WBL	Prot/Perm	Prot/Perm	0%	-	0%	-	-
		NBL	Prot	Prot	0%	-	0%	-	-
		SBL	Prot	Prot	0%	-	0%	-	-
10	Howell Br Rd @ Lake Howell Rd	EBL	Prot	Prot/Perm - FYA	100%	2	71%	92	-98%
		WBL	Prot	Prot/Perm - FYA	100%	2	71%	101	-98%
		NBL	Prot	Prot/Perm - FYA	100%	241	71%	595	-59%
		SBL	Prot	Prot/Perm - FYA	100%	5	71%	11	-56%
11	HE Thomas Pkwy @ Hartwell Ave	EBL	Prot/Perm - FYA	Prot/Perm - FYA	100%	49	97%	31	58%
		WBL	Prot/Perm - FYA	Prot/Perm - FYA	100%	39	97%	31	26%
		NBL	Perm Only; LPI NB	Perm Only	100%	7	97%	0	-
		SBL	Perm Only; LPI SB	Perm Only	100%	25	97%	0	-
15	SR 426 @ SR 417 NB Ramp	EBL	Prot	Prot/Perm - FYA	27%	11	3%	16	-30%
		WBL	-	-	27%	-	3%	-	-
		NBL	Prot	Prot	27%	0	3%	0	-
		SBL	-	-	27%	-	3%	-	-

Note: Results should be interpreted with extreme caution given data inconsistencies

4. Experienced Platform Issues

During the runtime of this project, some platform issues were encountered. As this was a demonstration project, some issues were expected. These issues ranged from mild issues to major issues that would in severe cases halt data collection. Below is a list of the issues that were encountered along with screenshots where appropriate. The platform issues are summarized below and further detailed in **Appendix C**:

Low Impact Issues

- **Platform Issue 1 – Mild – Data Inconsistencies:** These issues include the heatmap not showing up for specific vehicle types even though there are counts of near misses that include that vehicle type. An additional issue was found where some of the near misses were being filtered out even though near misses should have been captured in certain instances.

Moderate Impact Issues

- **Platform Issue 2 – Moderate – Filtering Issues:** From time to time there were portions of the dashboard that did not have aligning data even though they were the same limits of data within different filter settings.
- **Platform Issue 3 – Moderate – Movement Path Inconsistencies:** The study team noticed there were near misses showing up within gas stations and driveways even though the intersection movement filter was set to left-turn movement.
- **Platform Issue 4 – Moderate – Beta Platform Empty Video Clips:** A newer version of the GridMatrix platform was shared with the study team. This platform included video clips of flagged near-misses. However, nearly all video clips viewed were erroneous or did not have associated data. It is noted that this feature was a value-added service and not planned as part of the original demonstration activity.
- **Platform Issue 5 – Moderate – Temporary Unavailability of Dashboard**: Towards the end of the demonstration period, the GridMatrix team noted a new dashboard would replace the version available at the start of the demonstration period. This was not part of the original scope for the demonstration, and required additional training to access and use. There were a few weeks when the originally scoped dashboard was unavailable to the project team.

High Impact Issues

- **Platform Issue 6 – Severe – Missing Data:** During various months, there was data completely missing from multiple intersections. The platform would show up empty for all metrics. Missing data is partially attributable to camera connectivity issues and uptime.
- **Platform Issue 7 – Severe – Near-Miss Data Labeling Discrepancy:** The labeling of near-misses was inconsistent throughout the platform. When comparing the near-miss values in the "Additional Safety Metrics" to "Near-Misses Absolute" fields, the data did not match. The "Near-Misses Absolute" field should have been labeled as number of near-misses within a specific PET range.

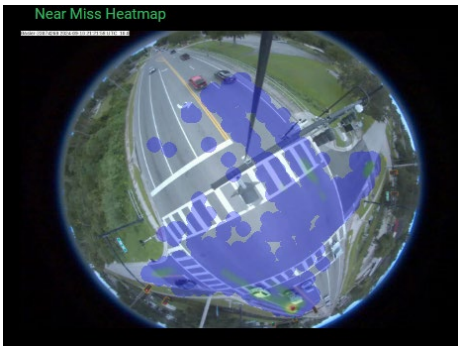
5. Findings in Demonstration Activity

Opportunities Revealed

- **Data Gold Mine** – The data obtained from the GridMatrix dashboard is extremely thorough and gives in depth details on near-misses. This data can be filtered down in various ways including by road user type (Vehicle, Pedestrian, Bicycle, Motorcycle) and by dates.

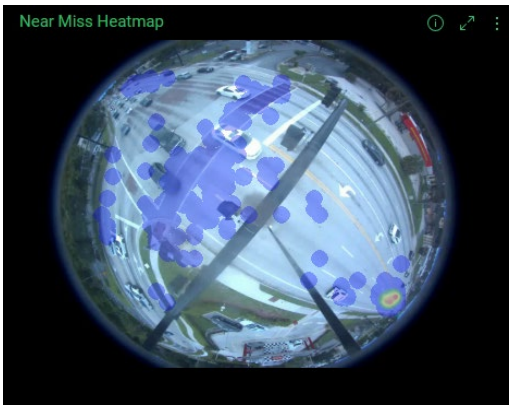
- **Flexible Data Pull** – Different data perspectives were available through various filters including date, hour, mode, and movement. The software also allows isolation of vulnerable user data. This was valuable as vulnerable user volumes are typically not recorded on a continuous basis like vehicle volumes are. Having 24/7 monitoring of vulnerable user data is an advancement in traffic safety.

- **Near-Miss Heat Mapping** – The near-miss heat mapping was a key component of the dashboard and held the most useful data. These maps showcased where the top conflicts were located and gave a visual understanding into the high-conflict areas. This heat map could be cross referenced against deadly and serious injury crash locations.



- **New Safety Focus Areas Identified** – As a result of the platform data, several intersections that did not historically have a high number of deadly or serious injury crashes were flagged as a potential new safety focus areas. For instance, SR 417 at WP Ball (SR 417 Off-Ramp) identified over 50 pedestrian near-misses but the crash history did not show any pedestrian deadly or serious injury crashes. Situations like this may not have been identified otherwise.

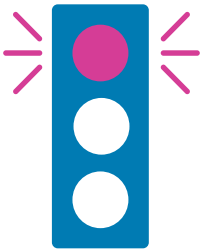
- **Actionable Insights** – Not only was the data extensive, but it proved to have actionable insights that were gleaned through planning and engineering analysis. For instance, the intersection of US 17/92 at Lake of the Woods Blvd (located near a transit stop) was an HIN intersection with several deadly or serious injury crashes involving vulnerable users. The heat map including all vulnerable user near misses is shown on the left. The near-miss data also showed a high proportion of vulnerable user near-misses. Upon isolation of pedestrian near-misses in the heat map, a cluster was revealed on a single corner of the intersection. This trend may not have been easily ascertained from a single field visit or desktop review



alone. An actionable insight would be to evaluate the pedestrian crossing times and right-turn conflicts and adjust if appropriate.

- **Using Existing Infrastructure** – GridMatrix was able to use existing cameras that Seminole County had in place at these 15 intersections. No new infrastructure was required to initiate the near-miss monitoring. With the scale of this deployment including 15 intersections, it was a benefit having the cameras previously set up to minimize budget impacts and to save implementation time. Having to place these cameras at each of the 15 intersections would have added additional project time and cost.

- **Real-time Assessment of Signal Timing Changes** – Part of the evaluation period included Seminole County implementing signal timing changes. With the near-miss data being collected 24/7 it allowed for consistent, real-time analysis. This data can then be used to inform signal timing adjustments, such as increasing pedestrian crossing times or converting left-turn signal phasing.



Challenges Encountered

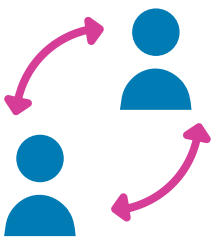
- **Camera Outages (Firewall)** – There were several camera outages throughout the data collection period and two cameras that could not be connected to at all. The highest count of these outages occurred during November 2024. Since there were many outages in November, the data was not fully complete and could not be used. Throughout the other months there were points within the month that had inconsistent data, but the dashboard collected enough data to extrapolate out conditions.

- **Inconsistent Data Shown** – While the various data filtering options were handy, there were several platform bugs existing where the same filter or data tile would display different results. An example is that filtering by selecting months yielded different results than filtering by selecting days, even when all days were within the same month selected. More detail is provided in **Appendix B** This filtering error caused inconsistent comparisons when multiple users were pulling data and the need to conduct rework and quality checking of previously pulled data once the issue was resolved.

- **Fisheye View** – The software deployment used Seminole County's existing traffic monitoring cameras which include fisheye views. For the purpose of near-miss monitoring, the fisheye cameras were not always straightforward to decipher directionality due to the distortion. Even with north arrows and road names included on the fisheye camera perspective, the view was not easily understood. During the evaluation period, GridMatrix attempted to "flatten out" the fisheye image.

- **Field of View** – When working with the fisheye cameras, the images captured showed that the field of view was a major proponent of challenge when trying to figure out the correct perspective that you're looking for when looking straight from the dashboard. This was also a major challenge because the field of view would affect the number of near-misses that would appear within the dashboard. Certain images captured within the data showed that the near-misses were skewed in a way that would not make sense.

- **Software Start Up Time** – In working with the software deployment, the set-up period was anticipated to be 2-3 months. This period was closer to 4-5 months due to network connectivity issue, camera outages, and camera types (MioVision) which were incompatible with the GridMatrix software. Seminole County staff noted that the best way to prevent camera outages would be to host the GridMatrix platform on the County server directly, however the GridMatrix platform runs on its own server.



- **Software Calculation Errors** – During performance metric collection, the study team encountered unrealistic average queue lengths for left-turn movements at each intersection.

Each intersection queue was reported as less than 25-feet (roughly the space one car would take up). This initial calculation error was updated within the GridMatrix algorithm during the analysis period, however, the output from the new algorithm was also lower than expected, possibly due to the fisheye camera views. This is as an outstanding issue as no queue length data was salvageable in this study period. More detail on this issue is provided in **Appendix C**.

- **15 Intersections – Too Many?** – In analyzing the 15 study intersections, it was observed that this number may be too high for in depth analysis every month. While it provided a broad view, there are typically 32 conflict points at a standard 4-leg intersection. Evaluating 32 conflicts for every mode on a consistent basis may become time intensive. It was observed that there are multiple approaches to near-miss monitoring: the broad-brush view such as in this study, or a targeted analysis on fewer intersections for a more in-depth analysis.

- **Potential Scaling Limitations** – Similar to the previous bullet, scaling this deployment up to all signalized intersection in the County may prove to be an intensive effort. Given the field of view issues encountered, such as the cameras picking up adjacent parcel gas stations or incorrect movement paths for left-turns, all intersections would need to undergo a calibration exercise. The study team's assessment is that the software is not ready to be deployed "off-the-shelf" despite the quicker ability to connect to existing cameras and collect data. There needs to be a more extensive set up time for camera calibration and validation.

6. Conclusion and Recommendations

The purpose of this demonstration activity was to assess whether near-miss monitoring technology may be an effective tool for eliminating traffic deaths and serious injuries. The hypothesis is that early identification of safety concerns may lead to a response or remediation in advance of a death occurring. Near-miss monitoring was conducted for 7-months between October 2024 and April 2025. **Based on the evaluation conducted, it is inconclusive whether near-miss monitoring technology is an effective tool for reducing traffic deaths and serious injuries.** The wealth of data is intriguing and actionable; however, a longer study is likely needed to track actual crash data over time along with any safety improvements implemented from the near-miss insights.

Near-miss technology may be more beneficial to study before and after conditions of implemented safety improvements. Using the tool to assess safety improvements in known high-crash areas versus using the tool to identify new areas of safety concern may be a more targeted use case. The technology can be used to more quickly assess change in near-misses relative to change in infrastructure and traffic crashes. As this technology is still in early-stage development, more development time or software options should be explored for functionality.

The following recommendations are organized by future deployments, additional signal technology and safety projects, and safety action plan updates:

Future Deployments

1. Intersection locations and cameras selected for deployment should be confirmed for compatibility with the selected software.
2. A data calibration and validation should be considered as part of the initial scope of work with data collection not starting until defined validation metrics have been met. A phased deployment should be considered where the technology is deployed in batches upon completion of the previous validation and implementation effort. Another option is to conduct the calibration and validation for one intersection as a go-by prior to authorizing the deployment of other intersections.
3. A cost and service comparison should be conducted for at least three vendors. The overall cost of the deployment, plus potential cost of continuing the deployment over time, should be evaluated. A comparison between the cost of the near-miss technology compared to the cost of equivalent field work can also be considered to highlight the potential benefit-cost ratio. The results of this cost analysis may help justify further investment into deployments.

Additional Signal Technology and Safety Projects

1. Signal technology should continue to be explored for implementation; eliminating traffic deaths and serious injuries requires the safe system approach. This demonstration activity was a productive start and initiated traction for further technology approaches. Seminole County and partner agencies such as FDOT District 5 have modern Traffic Management Centers (TMCs) with high-tech capabilities. All available signal technology should be considered for implementation to prepare the roadway network for the next generation, such as:
    a. Roadside Safety Units (RSUs)

b. Closed-Circuit Televisions (CCTVs)
c. Uninterrupted Power Supplys (UPSs)
d. Intersection Movement Count Cameras (IMCs)

The above technology also ties in with other actions in the Seminole County Vision Zero Safety Action Plan, such as refreshing the County fleet with advanced safety features capable of utilizing signal technology.

2. Safety reviews should be conducted for the following intersections based on the near-miss insights:
    a. **HE Thomas Pkwy @ Hartwell Ave** – Conduct field review of intersection to observe the impact of the LPI on pedestrian conflicts.
    b. **US 17/92 @ Lake of the Woods Blvd** – Safety review to address cluster of pedestrian near-misses on the northeast corner of the intersection.
    c. **SR 426 @ SR 417 NB Ramp** – Conduct field review of intersection to observe whether there is a pedestrian conflict occurring as indicated by the pedestrian heat map. Consider safety improvements to mitigate the conflict.
    d. **Rinehart Rd @ SR 417 NB (WP Ball)** – Conduct field review of intersection to observe whether there is a pedestrian conflict on the north or east leg as indicated by the pedestrian heat map. Consider safety improvements to mitigate the conflict.

Safety Action Plan Updates

1. During a future update to the Seminole County Vision Zero Action Plan, consider including the following actions:
    a. Deploy additional signal technology; performance measure may include number of units installed each year, number of intersections on the high injury network with near-miss monitoring technology, or miles of connected roadway; lead County department is Traffic Engineering
    b. Integrate the near-miss results into the systemic safety project map (Map#7 in the Seminole County VZAP). This map identified corridors with higher-risk factors regardless of inclusion on the HIN or not. The systemic analysis should be updated to consider intersections with a high number of near-misses or a high vulnerable user near-miss proportion. As additional near-miss signal technology is added to all signalized intersections across the County, this digital dashboard, mapping and summarizing the data should continue to be updated annually.
2. The Regional Vision Zero Action plan should be amended to include applicable findings and next steps from this demonstration activity.

Appendices

Appendix A. Near-Miss Platform

Appendix B. Monthly Near-Miss Reports

Appendix C. Platform Issues Encountered

Available upon request

VISION ZERO
CENTRAL FLORIDA
Counting down to zero traffic deaths

Appendix Part 2H: SS4A Action Plan Component Checklist

Safe Streets for All 2024 ***ACTION PLAN COMPONENT CHECKLIST:***

#	DESCRIPTION	HOW THE PLAN ACHIEVES IT
1	Governing body in the jurisdiction publicly committed to an eventual goal of zero road fatalities and serious injuries.	Resolution adopted on September 11, 2024 and included in Appendix.
	Set targets to achieve significant declines in road fatalities and serious injuries.	Regional target set for 2050, as noted in the resolution and on page 4 of the plan.
2	To develop the Action Plan, a committee, task force, implementation group, or similar body established and charged with the plan's development, implementation, and monitoring.	See Chapter 3 for overview of engagement activities and Chapter 7 for implementation and monitoring actions.
3	Analysis of existing conditions and historical trends to baseline the level of crashes involving fatalities and serious injuries across a jurisdiction, locality, Tribe, or region.	See Chapter 2 and Technical Appendix.
	Analysis of systemic and specific safety needs is performed as needed (e.g., high risk).	See Chapter 2 and Technical Appendix.
	Analysis of the location where there are crashes, the severity, as well as contributing factors and crash types.	See Chapter 2 and Technical Appendix.
	A geospatial identification (geographic or locational data using maps) of higher risk locations.	See Chapter 2 and Technical Appendix.
4	Engagement with the public and relevant stakeholders, including the private sector and community groups.	See Chapter 3 for overview of engagement activities.
	Incorporation of information received from the engagement and collaboration into the plan.	See Chapter 3 for overview of engagement activities and how feedback was incorporated into Action Plan.
	Coordination that included inter- and intra-governmental cooperation and collaboration, as appropriate.	See Chapter 3 for overview of level of intergovernmental collaboration.
	Considerations of equity using inclusive and representative processes.	See Chapters 2, 5, 6 and 7 for descriptions of how equity was incorporated into analysis and process.

Safe Streets for All 2024 ***ACTION PLAN COMPONENT CHECKLIST*** *(continued):*

#	DESCRIPTION	HOW THE PLAN ACHIEVES IT
5	Identified underserved communities through data.	See Chapter 2 for description of how underserved communities were identified and incorporated into the analysis.
	Equity analysis in collaboration with appropriate partners, focused on initial equity impact.	See Chapters 2 and 3 for equity analysis and collaboration.
6	The plan development included an assessment of current policies, plans, guidelines, and/or standards to identify opportunities to improve how processes prioritize safety.	See Chapter 6 and technical analysis for policy benchmarking and Action Plan Elements.
	The plan discusses implementation through the adoption of revised or new policies, guidelines, and/or standards.	See Chapter 6 and technical analysis for policy benchmarking and Action Plan Elements.
7	The plan identifies a comprehensive set of projects and strategies to address the safety problems in the Action Plan, time ranges when projects and strategies will be deployed, and explain project prioritization criteria.	See Chapter 5 and Technical Appendix.
8	A description of how progress will be measured over time that includes, at a minimum, outcome data.	See Chapter 7 and Technical Appendix.
	The plan is posted publicly online.	Plan available at: VisionZeroCFL.gov
9	The plan was finalized and/or last updated between 2018 and 2024.	Plan was finalized and adopted in 2024.

APPENDICES PART 2

Appendix Part 2I: Data Management Plan

Memorandum

Date: November 10, 2023

To: Vision Zero Central Florida Partners

From: Mighk Wilson, MetroPlan Orlando
Stephen Spana, Fehr & Peers
PJ Smith, xGeographic

Subject: Vision Zero Central Florida – Data Management Plan

Introduction

This data management plan provides information that will assist MetroPlan Orlando in maintaining the Vision Zero Central Florida hub site on an annual and ongoing basis. Information is provided on critical GIS layers, associated instructional documents, and information on document storage, sources and methods of data management. Updates to crash data on the hub site are expected to occur in the third quarter of each calendar year as data within the Signal Four Analytics (S4) database becomes finalized for the prior calendar year.

Critical GIS Layers

The ArcGIS Hub Site will be refreshed annually with new crash data downloaded from the Signal Four Analytics online tools. As part of the annual process to refresh the crash data, numerous input files are used to transform the raw crash data into a formatted database that can be appended to the existing online layer. The GIS layers that are used to update the S4 database are described in this section of the report along with important metadata and data storage information. The listing below does not include municipality-specific files that were generated in 2023 and 2024.

Layer Listing

Layer	Source	Update Frequency	Next Refresh
Signal 4 Analytics Crashes File Name: S4.gdb	Signal 4 Analytics	Annual	June 2024
MetroPlan Coverage Area File Name: MetroPlan_Area.shp	F.G.D.L.	None	None
MetroPlan Jurisdictions File Name: MetroPlan_Juris.shp	MetroPlan Orlando	Annual	June 2024

Wave Roadways File Name: xWave.shp	xGeographic	Annual	June 2024
Federal Aid Highway System File Name: Federal_Aid_Highway_System_TDA.shp	F.H.W.A.	Annual	June 2024
ETC Indicator File Name: ETC_Indicator.shp	U.S.D.O.T.	Annual	June 2024

Additional Data

Crashes between rail vehicles and non-motorized vehicles are not included within the S4 database. The Florida Department of Transportation (FDOT) District 5 Rail Administration Manager (part of the Modal Development office) maintains a record of incidents that occur along rail lines and at railroad crossings in the region. The incidents from the prior calendar year will need to be requested and geocoded into the database for consideration in crash analysis. This information can also be supplemented by information from the Federal Railroad Administration (https://safetydata.fra.dot.gov/OfficeofSafety/default.aspx).

Data from the Florida Injury Surveillance System (FISS) dataset can be used to document deaths, emergency room visits and hospitalizations for people who were injured while walking and biking, including information for people who were injured or killed while walking or bicycling when a vehicle was not involved. While this information cannot be geocoded to a specific location, the overall trends should be documented.

Metadata

All of the GIS files that are used to generate the final Signal Four Analytics crash file are populated with important metadata. This includes information on how the data was created, what the layer data fields include (including field value descriptions), and update frequency information. The five GIS files described in the Layer Listing are already embedded with this necessary information, so Metadata does not need to be updated on an annual basis.

Data Storage Locations

The Signal Four Analytics crash file is stored on ArcGIS Online with a static geodatabase name of S4.gdb. This file can be downloaded for use from the ArcGIS Online account at any time by project team members and partnering organizations.

Source files, including the MetroPlan Coverage Area, MetroPlan Jurisdictions, Wave Roadways, Federal Aid Highway System and ETC Indicators are maintained by third parties and are stored in various locations. The four source (input) files that are updated annually can be found in the following locations or by contacting the following stakeholders:

- MetroPlan Coverage Area: This file is stored on the MetroPlan Orlando server. This file will not update unless the underlying MetroPlan Orlando coverage area changes in the future.

- MetroPlan Jurisdictions: This file is stored on the MetroPlan Orlando server. This file is updated semi-regularly by MetroPlan Orlando as municipal boundaries change.

- Wave Roadways: This file is stored by xGeographic and is updated four times annually, ensuring that road features, demographic data, and proximity data is as accurate as possible at the time that the crash data cross-reference is made. Contact pjsmith@xgeographic.com to obtain this file.

- Federal Aid Highway System: This file is stored online and is maintained by the Federal Highway Administration. The file can be downloaded by clicking on "Federal Aid Highway System Shapefile" at the following link: https://www.fdot.gov/statistics/fedaid/default.shtm

- ETC Indicator: This file is stored online and is maintained by the U.S. Department of Transportation. The file can be downloaded by following the instructions at the following link: https://experience.arcgis.com/experience/0920984aa80a4362b8778d779b090723/page/Homepage/

Critical Documents

Along with this data management plan, numerous documents are stored on the MetroPlan Orlando server that serve as critical analytical tools and data management files for the project team. These files are explained below.

- Regional Projects Data Directory
    - The regional projects data directory is an excel spreadsheet that provides instructions for municipalities to develop GIS files that can be easily merged to form a regional file. This includes field names and specific field values.

- S4.atbx (GIS Toolbox)
    - This toolbox file is used to generate formatted crash data to be appended to the existing crash data on ArcGIS Online.

- MetroPlan VZ Systemic Matrix
    - The systemic matrix includes detailed crash analytics that are used in official Vision Zero Central Florida plan documents. The project team will review the need to update these statistics in future years.

- Source Layer Information
    - The source layer information document provides more in-depth information in excel format pertaining to the input files used as part of this project.

Signal Four Data Update Procedures

On an annual basis, a GIS analyst will run the S4.atbx ArcGIS toolbox to generate a new set of crash data to be appended to the existing online layer. Steps to set up and run this toolbox are included

below. Note: It is critical that the steps outlined below are followed while running the tool, as certain manual data edits are made while the tool is executed.

Annual Data Integration Steps

1. Log into https://signal4analytics.com/analysis

2. Download the latest full year of crash data
    a. Insert a custom date range (01/01/XXXX through 12/31/XXXX)
    b. Set the geographic boundary to MetroPlan Orlando
    c. Download the Crash Event csv and the GIS Geolocation

3. Conduct QA/QC of crash data:
    a. Map all crash data within the geographic boundary of MetroPlan Orlando to identify crashes that are being mapped outside the region.
    b. A list of crashes that resulted in a fatality or serious injury that are unmapped shall be prepared, and based on data within the crash report, the analyst shall attempt to identify the location for mapping. A list of all crashes in the region that are unmapped shall be prepared for forwarding to the agency for further review.

4. In ArcGIS, run models 1.01-1.03 in the S4 Toolbox (S4.atbx)
    a. Model 1.01 removes crashes located outside of the MetroPlan geographic boundary
        i. The MetroPlan_Area file, which is used to run Model 01.01, can be requested from PJ Smith at pjsmith@xgeographic.com
    b. Model 1.02 removes fields which are unnecessary to the analysis.
    c. Model 1.03 transforms the bicycle and pedestrian typing data from the download into a useable format (i.e., replaces numerical data categories with text descriptions)

5. In ArcGIS, run model 2.01 in the S4 Toolbox (S4.atbx) to join crash event, and bike/ped typing data to the crash locations.

6. In ArcGIS, run model 03.01 in the S4 Toolbox (S4.atbx) to append jurisdictions to the database.
    a. The MetroPlan_Juris file, which is used to run Model 02.01, can be requested from MetroPlan Orlando.
    b. If the Spatial Join is taking a long time to run, temporarily add MetroPlan_Juris to the working GDB file.

7. In ArcGIS, run model 03.02 in the S4 Toolbox (S4.atbx) to remove redundant fields.

8. In ArcGIS, run models 04.01 and 04.02 in the S4 Toolbox (S4.atbx) to tag crashes near the federal aid network.
    a. Crashes selected within 100 feet of the Federal Aid network layer and populated with "Y" if within the radius, and a "N" if not within the radius. Roadways on "Private Road" or "Parking Lot" are provided a value of "N".

9. In ArcGIS, run model 05.01 in the S4 toolbox (S4.atbx). The output file is named S4_Crashes.

10. Run model 06.01 to add the KSI and MODE classifications to the crash data.

11. Run model 07.01. This flags all collisions occurring on Limited Access facilities (i.e., Interstates, Toll Roads) using the ROAD_SYSTEM_IDENTIFIER field in the Signal4 data (where ROAD_SYSTEM_IDENTIFIER = Interstate or Turnpike/Toll). After running this model, manually inspect the collisions where LIMITED_ACCESS_1 = 1, as some will be incorrectly classified as occurring on Interstates or Toll Roads. To do this, query the xGeographic Wave database to show roads where ROAD_TYPE = "FDOT – Limited Access". Change LIMITED_ACCESS_1 = 1 to LIMITED_ACCESS_1 = 0 for any of these cases (estimated time 1-2 hours).

12. Create field called LIMITED_ACCESS_2 (Type: Short Integer). The previous step will NOT capture all collisions occurring on Limited Access facilities, because some occurring on Interstates/Toll Roads are classified using ROAD_SYSTEM_INDENTIFIER = State or US. Since we cannot query Limited Access facility collisions using the State or US ROAD_SYSTEM_IDENTIFIER field (since many state or US roads are not limited access facilities) we need to flag them manually using the LIMITED_ACCESS_2 field. Set a Definition Query of LIMITED_ACCESS_1 = 0 (to view all collisions not deemed to be Limited Access collisions in the previous step) and visually inspect collisions occurring along Interstates/Toll roads. Any collisions occurring along these facilities with the ON_STREET_ROAD_HIGHWAY field representing the facility name (e.g. I-4, Interstate 4, I4, etc.) should be given a value of LIMITED_ACCESS_2 =1.

13. Run model 07.02, which creates a final limited access field, LIMITED_ACCESS_FINAL, showing whether a collision occurs on a limited access facility (if LIMITED_ACCESS_1 = 1 OR LIMITED_ACCESS_2 =1).

14. Run model 08.01, which flags all collisions occurring on private roadways and/or parking lots.

15. Run models 09.01 through 09.17. To obtain the xWave_Major and xWave_Minor files, contact PJ Smith at pjsmith@xgeographic.com. The ETC_Index file should be provided pre-formatted.

16. Create a new GDB titled "S4.gdb" in a folder marked with a year; for example, the folder name for the 2018-2022 data addition is titled "2022", and the folder for the appended 2023 data will be titled "2023". Export S4_Crashes into S4.gdb.

17. Append the S4.gdb file to the existing crash database on ArcGIS Online.

APPENDICES PART 2

Appendix Part 2J: MetroPlan Orlando Vision Zero Resolution

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CERTIFICATION

STATE OF FLORIDA

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COUNTY OF ORANGE

I HEREBY CERTIFY that the foregoing is a true and correct copy of **Resolution No.24-09** approved in a regular meeting of the MetroPlan Orlando Board on **September 11, 2024.** The original copy of this document is on file in the Administrative Offices of MetroPlan Orlando, 250 S. Orange Avenue, Suite 200, Orlando, Florida.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal of the MetroPlan Orlando Board, this **11th day of September 2024.**

By: Lisa Smith

Lisa Smith, Sr. Board Services Coordinator
Board Services and Recording Secretary

APPROVED BY
METROPLAN ORLANDO
A. Smith 9/11/2024

metroplan orlando
A REGIONAL TRANSPORTATION PARTNERSHIP

Resolution No. 24-09

Support for Regional Vision Zero Action Plan

WHEREAS, the Orlando Urbanized Area Metropolitan Planning Organization (MPO), d.b.a. MetroPlan Orlando, is the agency designated to conduct a continuing, coordinated, and comprehensive transportation planning process in Orange, Osceola, and Seminole Counties, Florida; and

WHEREAS, 5 people die and another 35 people suffer life-altering injuries on roads in Orange, Osceola, and Seminole Counties each week (average 2018-2022); and

WHEREAS, fatal and severe crashes are not inevitable, and death and severe injury are not an acceptable cost for using our transportation system; and

WHEREAS, human life and health are paramount and should take priority over mobility and other objectives of the transportation system; and

WHEREAS, roadways have historically been designed to prioritize vehicle throughput at high speeds to the detriment of public health and safety; and

WHEREAS, vehicle speeds and lack of safe facilities for people walking and biking have been identified as major causes of traffic fatalities; and

WHEREAS, it is critical for our local jurisdictions to prioritize individual Vision Zero Action Plans to build complete streets and begin to ensure the safety of our pedestrians, bicyclists and road users of all ages and abilities; and

WHEREAS, people who live in transportation underserved communities are disproportionately impacted by traffic fatalities; and

WHEREAS, the U. S. Department of Transportation has adopted the Safe System approach; and

WHEREAS, the Florida Department of Transportation has adopted a Target Zero Initiative; and

WHEREAS, measures to make streets and roads in the MetroPlan Orlando region safer for all road users, particularly those who are most physically vulnerable, such as seniors, youth, and people with disabilities, will further encourage people of all ages and abilities to walk, bike and take transit; and

WHEREAS, Vision Zero is a data-driven strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all; and

WHEREAS, Vision Zero is founded on a Safe System approach that recognizes that people will make mistakes and transportation systems and policies should be designed to protect them through redundancies and shared responsibilities; and

WHEREAS, there are over 50 Vision Zero cities, counties and MPOs in the United States, a figure that is expected to increase significantly in the coming years; and

WHEREAS, Vision Zero should encourage creating opportunities to invite meaningful input from the community, including residents who are disproportionately burdened by traffic crashes, and historically have been underserved; and

WHEREAS, the foundation of the Vision Zero commitment – that no loss of life on our roads is acceptable – is supported by the 2045 Metropolitan Transportation Plan (MTP) and will be incorporated into the 2050 MTP; and

WHEREAS, MetroPlan Orlando commits to working with our local, regional and state partners to identify and implement projects and programs that reduce the potential for serious traffic injuries and fatalities by taking a safe systems approach;

NOW THEREFORE, BE IT RESOVED that the MetroPlan Orlando Board, in its capacity as the Metropolitan Planning Organization for Orange, Osceola, and Seminole Counties, adopts the Vision Zero goal of eliminating traffic deaths and severe injuries on the National Highway System by 2050, and supporting their local jurisdictions in achieving Vision Zero on their local roads in the time frame specified in their adopted Vision Zero Action Plans and accompanying resolutions.

BE IT FURTHER RESOLVED that a multi-disciplinary Vision Zero Task Force will continue to advise MetroPlan Orlando on implementation of strategies identified in the adopted regional Vision Zero Action Plan and shall be comprised of community-based organizations and agencies with expertise in public health, engineering, education, emergency response, transit, biking, and walking.

BE IT FURTHER RESOLVED that MetroPlan Orlando is committed to reporting progress on Action Plan implementation and crash statistics on an annual basis, and to refine strategies as needed to ultimately eliminate fatal and severe injury crashes in the region.

CERTIFICATE

The undersigned, duly qualified serving in the role as chairman of the MetroPlan Orlando Board, certifies that the foregoing is a true and correct copy of a Resolution adopted at a legally convened meeting of the MetroPlan Orlando Board.

Commissioner Cheryl Grieb, Chairperson

Passed and duly adopted by the MetroPlan Orlando Board at its meeting on: Wednesday, September 11, 2024

ATTEST:

Lisa Smith
Sr. Board Services Coordinator & Recording Secretary