# Commitment to Zero 2024 Annual Safety Summary Report 2019 - 2023

August 2024







# **Commitment to Zero Pledge**

We recognize that crashes are preventable, and our choices matter to our lives and the lives of others.

We pledge to make safety a priority, to focus on driving, to slow down, be aware of our surroundings, walk, ride, or roll in a safe and predictable manner, and to set an example for those around us.





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# **INTRODUCTION**

Transportation Safety is one of the primary emphasis areas of the Federal Highway Administration (FHWA), the Florida Department of Transportation (FDOT), and the Ocala Marion Transportation Planning Organization (TPO). In November 2022, the TPO Board adopted Commitment to Zero: An Action Plan for Safer Streets in Ocala Marion. Commitment to Zero is the TPO's call to action to eliminate traffic fatalities and serious injuries from the county's transportation system. It is not just a slogan, plan, or effort isolated to the TPO. Commitment to Zero is a community-wide shift in how the region talks about, approaches, and addresses traffic safety (https://ocalamariontpo.org/safety-plan/).

The TPO's commitment to safety includes the obligation of meeting federal reporting requirements mandating annual monitoring and performance-based planning. This process represents a robust outcome-driven program that can be tracked transparently and adjusted as necessary. The Commitment to Zero Annual Safety Summary report includes a five-year snapshot of safety outcomes in Marion County and is intended to be a resource for citizens, elected leaders, and public agencies with an interest in transportation safety trends. This report is supplemented by an executive summary and the Commitment to Zero Dashboard located on the TPO's website

(https://experience.arcgis.com/experience/00fd59b069bf46c5b203a3bb09870f6a/)





#### Methodology

The source of the data used in this report is from Signal 4 Analytics and FDOT Public Road Mileage and Travel (DVMT) Report. The TPO used the FDOT Safety Crash Data Guidance<sup>1</sup> when gathering and cleaning the data for this report. The first step was to download the five-year crash data from Signal 4 Analytics<sup>2</sup>. For this report we are using the five-year period from 2019 to 2023<sup>3</sup>. The second step was to clean the data. The last step was to use the data to run analysis to produce the information in this report. For a detailed breakdown on cleaning the data see Appendix B.

# **BACKGROUND ON COUNTYWIDE DEMAND GROWTH (VMT)**

The number, type, and results of crashes that have occurred in Marion County over the past five years are statistics that can be misleading, if assessed in isolation. Vehicle miles traveled (VMT) is a measure of the level of traffic and distance traveled by motorists in the county that is used to normalize crash data. Reviewing VMT supports a better understanding of the relationship between increased and/or decreased driving and impacts on crashes. Figure 2 shows the VMT (in 100 million) on public roads in Marion County from 2019 to 2023. There was an upward trend in VMT from 2019 to 2023 despite the drop in 2020, which was the result of the COVID-19 pandemic.





<sup>1</sup> https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/safety/11a-safetyengineering/crashdata/25998\_crash-data-process\_v18.pdf?sfvrsn=b50e9f4e\_2

<sup>2</sup> Data for this report was downloaded on June 24, 2024.

<sup>3</sup> Some crash records from 2023 are still being verified and could potentially be updated after this report has been published.

# **MULTIMODAL SAFETY**

#### **Safety Performance Measures**

The safety performance measures tracked by the TPO are consistent with federally defined safety performance measures, also known as PM1. Table 1, lists the statistics for those measures from 2019 to 2023. As shown, the total annual fatality rate has increased in the past five years, and while the 2020 pandemic year featured the lowest total crash rate, it also saw the highest fatality rate across the five years, in terms of total fatalities per 100 million VMT.

Safety Performance Measure	2019-2023	2019	2020	2021	2022	2023
Annual Total Crashes	44,938	8,896	7,865	9,299	9,354	9,524
Annual Total Crash Rate (Per 100 million VMT)	191.51	189.36	175.13	203.70	196.43	192.91
Annual Fatalities <sup>5</sup>	491	88	104	92	108	99
Annual Fatality Rate (Per 100 million VMT)	2.10	1.87	2.32	2.02	2.27	2.01
Annual Serious Injuries	1,857	419	295	250	472	421
Annual Serious Injury Rate (Per 100 million VMT)	7.88	8.92	6.57	5.48	9.91	8.53
# of Pedestrian Fatalities	90	20	22	18	17	13
Pedestrian Fatality Rate (Per 100 million VMT)	0.39	0.43	0.49	0.39	0.36	0.26
# of Pedestrian Serious Injuries	100	24	16	16	16	28
Pedestrian Serious Injury Rate (Per 100 million VMT)	0.42	0.51	0.36	0.35	0.34	0.57
# of Bicycle Fatalities	15	1	2	3	5	4
Bicycle Fatality Rate (Per 100 million VMT)	0.06	0.02	0.04	0.07	0.10	0.08
# of Bicycle Serious Injuries	51	8	12	8	14	9
Bicycle Serious Injury Rate (Per 100 million VMT)	0.22	0.17	0.27	0.18	0.29	0.18

<sup>&</sup>lt;sup>4</sup> As of June 24, 2024

<sup>&</sup>lt;sup>5</sup> Based on definitions provided by the Federal Highway Administration (FHWA), a crash is classified as **Fatal** if an injury sustained during the crash results in death within a 30-day period after the crash occurred.

Serious/incapacitating injuries resulting from a crash have catastrophic impacts such as permanent disability, lost productivity and wages, and ongoing healthcare costs. A **Serious Injury** crash includes: broken or fractured bones; dislocated or distorted limbs; severe lacerations resulting in exposure of organs or tissue or resulting in significant loss of blood; severe burns (second- or third-degree over 10 percent or more of the body); skull, spinal, chest, or abdominal injuries; and unconsciousness at or when taken from the crash scene.

#### **All Crash Frequency Analysis**

#### Rolling Five Years Summary

The frequency of crashes was analyzed for the 2019 to 2023 period and two preceding five-year periods (2017-2021 and 2018-2022), based on a rolling five-year average.

As shown in Figure 3, there has been a slight increase in total crashes in the most recent fiveyear period but a decrease in the total number of crashes from the 2017-2021 five-year period.





#### Annual Summary (2019-2023)

From 2019 to 2023, just under 45,000 crashes occurred in Marion County (44,938). Figures 4 illustrates the total annual number of crashes in Marion County per year. Annual total crashes have been increasing every year with the exception of 2020 due to the COVID-19 Pandemic.



Figure 4: Annual Countywide Crashes

#### Top Crash Frequency Areas – County region roadways

The 2019 to 2023 crash data were compiled for Marion County. Figure 5 displays all crashes in Marion County displayed on a heat map. The heat map shows that crashes are more frequent in the City of Ocala and Central Marion County, also along the major routes of SR 200, SR 40, and US 27/US 301/ US 441. Figures 7 and 8 display a heat map for fatalities and serious injuries.





Figure 6: Zoomed in Figure 5 Heat Map to the City of Ocala/Central Marion County





Figure 7: Fatalities Heat Map of all Countywide Crashes from 2019 to 2023

Figure 8: Serious Injuries Heat Map of all Countywide Crashes from 2019 to 2023



Table 2 is a list of the Top 10 Crash Intersections and Roadways in Marion County. The list is based on total crashes.

Top 10 Crash Intersections
County Road 484 at SW SB I-75 Ramp
State Road 326 at NW NB I-75 Ramp
SE 58th Avenue at SE Maricamp Road
State Road 200 at SW 60th Avenue
County Road 484 at SW NB I-75 Ramp
SR 500 (US 27/441) at CR 42
SR 40 at NW 80th Avenue
US 301/US 441 at 10th Street
US 301/US 441 at 17th Street
SE Highway 42 at S US Highway 301

Table 2: List of the Top 10 (	Crash Intersection Locations	and Road Segments
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Top 10 Roadways				
I-75				
State Road 200				
State Road 40				
County Road 484				
US 27/US 301/US 441				
SW 27th Avenue				
SE 58th Avenue				
County Road 464				
State Road 326				
SW 60th Avenue				

#### **High Injury Network Analysis**

As part of the TPO's Commitment to Zero Safety Action Plan, a High Injury Roadway Network (HIN) was created. This network, shown in Figure 9, identifies where fatal and serious injury crashes occurred most often for all road users, Table 3 shows the limits of the HIN segments, their lengths and the maintaining jurisdictions. Crashes that occurred on this network from 2019 to 2023 were grouped based on road user type and severity of crash. Tracked over time, these statistics, shown in Figure 10 to Figure 12, help determine the success of strategies outlined in the Safety Action Plan in minimizing fatal and serious injury crashes on the HIN. There were 17,165 crashes (38.2% of all crashes) on the high injury network in the five-year time period between 2019 and 2023. Of those 17,165 crashes, 612 crashes were either fatal (7.1% of all fatal and serious injury crashes) or serious injury (25.8% of all fatal and serious injury crashes) crashes.

Total fatal and serious injury crashes on the high injury network have been on a downward trend since 2019. The year 2020 saw the highest number of pedestrian crashes on the HIN. Bicycle crashes on the HIN have been increasing since 2019.

17,165 Total Crashes on the HIN 132 Fatal Crashes on the HIN 480 Serious Injury Crashes on the HIN



Figure 9: Marion County High Injury Network

Table 3: Commitment to Zero High Injury Network Segments

ID	On	From	То
1	SR 200/College Rd	I-75	S Pine Ave
2	SR 40/Silver Springs Blvd	25th Ave	36th Ave
3	SR 40/Silver Springs Blvd	Pine Ave	25th Ave
4	US 27/301/441/S Pine Ave	SE 17th St	SR 40/Silver Springs Blvd
5	SR 200/College Rd	SE 60th Ave	I-75
6	SR 40	NW 113th Cir	I-75
7	SR 464/SE 17th St	S Pine Ave	SE 25th Ave
8	SE HWY 42	S HWY 25	Lake County Line
9	US 441	NE 35th St	N of 77th St
10	SR 464/Maircamp Rd	SE 58th Ave	Emerald Rd
11	US 27/Blitchton Rd	W of NW 60th Ave	NW 34th Ave
12	SR 40/Silver Springs Blvd	I-75	NW Martin L King Ave

ID	On	From	То
13	SR 464/Maircamp Rd	SE 25th Ave	SE 58th Ave
14	US 27/301/441/S Pine Ave	SE 32nd St	SE 17th St
15	SR 200/College Rd	SW Hwy 484	SW 80th Ave
16	SR 464/SW 17th St	SR 200/College Rd	S Pine Ave
17	SR 326/NE 70th St	US 441	NE 36th Avenue Rd
18	US 27/301/441/N Pine Ave	SR 40/Silver Springs Blvd	NW 10th St
19	SE Hwy 42	US 441	S Hwy 25
20	SE Hwy 484/SE 132nd Street Rd	SE 36th Ave	US 301
21	US 27/301/441/S Pine Ave	SE 92nd Place Rd	SE 52nd St
22	US 301	S. of 151st St	SE 132 Street Rd
23	US 441	Marion/Sumter County Line	SE Hwy 42
24	SR 40	S Hwy 314A	196th Ter
25	NE 35th St	US 441	NE 36th Ave
26	US 27/301/441/SE Abshier Blvd	SE 62nd Ave	SE 92nd Place Rd
27	SR 200/College Rd	SW 80th Ave	SW 60th Ave
28	US 41/Williams St	Marion/Citrus County Line	SR 40
29	SW Hwy 484	SW 104th Ave	SR 200/College Rd
30	SW 27th Ave	SW 42nd St	SR 200/College Rd
31	US 27/301/441/S Pine Ave	SE 52nd St	SE 32nd St
32	NE 25th Ave	NE 14th St	NE 35th St
33	SR 40/Silver Springs Blvd	NE 35th Ave	E Hwy 326
34	20th St/Jacksonville Rd/Hwy 200A and NE 24th St	US 441/301/N Pine Ave	NE 10th Ct
35	US 441	NW 214th Ln	NW 230th St
36	NE 28th St	US 441/301/N Pine Ave	Jacksonville Rd
37	SW 32nd St	SW 7th Ave	SE Lake Weir Ave
38	NW 7th St	NW Old Blitchton Rd	NW 6th Ter



*Figure 10: Countywide Fatal and Serious Injury Crashes on High Injury Network* 

Figure 11: Pedestrian Involved Crashes on the High Injury Network



Figure 12: Bicycle Crashes on the High Injury Network



### **Crash Severity Analysis: Fatal and Serious Injuries**

The most severe crashes were isolated and summarized separately for the 2019 to 2023 period. Crashes included in the crash severity summary are crashes resulting in fatalities or serious injuries.

#### Rolling Five Years Summary

Figure 13 shows the average annual number of fatal and serious injury crashes in the last 3 fiveyear periods. There was a 1.6% decrease in total fatal and serious injury crashes from the 2017 to 2021 period to the 2019 to 2023 period, with the largest difference in the number of serious injury crashes. Fatal crashes increased by 7.2% during the same period.



Figure 13: Countywide Fatal and Serious Injury Crashes (Rolling Five-Years Average)

#### Annual Summary (2019-2023)

Figure 14 illustrates the number of crashes by severity for countywide total crashes. Several notable trends for fatal and serious injury crashes identified in the data include:

- 2021 had the greatest number of crashes resulting in an injury or fatality
- 2022 had the greatest number of serious injury and fatal crashes

**Fatal Crashes** 

• While 2020 had the least amount of crashes resulting in an injury, 2020 had the second highest number of fatal crashes

**Injury Crashes** 



Figure 14: Annual Countywide Crashes by Injury Severity

#### **Crash Trends by Mode: Fatal and Serious Injury Crashes**

#### Annual Summary (2019-2023)

The 2019 - 2023 crashes that occurred in Marion County were analyzed by mode, distinguishing crashes involving motorized vehicles only from those involving bicyclists and/or pedestrians. Figure 15 to Figure 17 illustrate the annual number of fatal and serious injury crashes involving these three modes in Marion County.

Several notable trends identified in the data include:

- 90 pedestrian fatalities and 100 pedestrian serious injuries resulting from 194 pedestrian involved fatal and serious injury crashes
- Crashes involving a pedestrian was on a downward trend between 2019 and 2022
- 15 bicycle fatalities and 51 bicycle serious injuries from 65 bicycle involved fatal and serious injury crashes

190 Pedestrian Fatalities and Serious Injuries 66 Bicycle Fatalities and Serious



Figure 15: Annual Pedestrian Involved Fatal and Serious Injury Crashes in Marion County

Figure 16: Annual Bicycle Involved Fatal and Serious Injury Crashes in Marion County



Figure 17: Annual Vehicle Fatal and Serious Injury Crashes in Marion County



#### **Countywide Safety Metrics**

The crash history from 2019 to 2023 is summarized by month in this section. The crash data summarized below represents an aggregate of the five years for each crash statistic. Appendix A includes the same analysis for each individual year from 2019-2023.

#### Crashes by Month

#### **Total Crashes**

Figures 18 and 19 show the total number of crashes and the average number of crashes by month, respectively in the period between 2019 and 2023. December and March have the highest five-year total crashes by month and average number of crashes by month. July has the lowest total number of crashes by month.





Figure 19: Five-Year Average Number of Crashes by Month



#### **Fatalities**

There were a total of 447 fatal crashes resulting in 491 fatalities in the five-year period between 2019 to 2023. Figures 20 and 21 represent the fatal crashes in terms of number of fatalities by month and average number of fatalities by month. During this five-year period, October and November had the most fatalities while July and February had the least amount of fatalities per month.



Figure 20: Five-Year Total Number of Fatalities by Month

Figure 21: Five-Year Average Number of Fatalities by Month



#### Serious Injuries

There were a total of 1,412 serious injury crashes resulting in 1,734 serious injuries. Another 123 serious injuries resulted from a fatal crash. Within the five-year period between 2019 and 2023 there were a total of 1,857 serious injuries resulting from fatal and serious injury crashes. Figures 22 and 23 represent the serious injuries by month and average number of serious injuries by month. During this five-year period March had the highest number of serious injuries and August had the least amount of serious injuries.





Figure 23: Five-Year Average Number of Serious Injuries by Month



#### Top Crash Types

#### Top 5 Overall Crash Types

Analysis of all crashes by crash type indicates that just over 1/3 of crashes were Rear End crashes. Table 4 summarizes the top five crash types and their respective percentages among all crashes from 2019-2023 in Marion County.

Crash Type	Number of Crashes	Percentage
Rear End	16,509	36.7%
Fixed-Object/Off Road	4,936	11.0%
Same Direction Sideswipe	4,205	9.4%
Right Angle	3,624	8.1%
Left Entering	3,264	7.3%

Table 4:	Top 5	Crash	Types	in	Marion	Countv
	100 3	crush	rypes		Widnion	county

#### **Top 3 Fatal Crash Types**

The top three fatal crash types from 2019-2023 are Fixed Object/Run-Off Road, Pedestrian, and Head On. Table 5 shows the number of fatal crashes by the top three crash types and their respective percentages among all fatal crashes from 2019-2023.

Crash Type	Number of Crashes	Percentage
Fixed Object/Run-Off Road	93	20.8%
Pedestrian	80	17.9%
Head On	48	10.7%

#### Top 3 Serious Injury Crash Types

The top three serious injury crash types from 2019-2023 are Rear End, Fixed Object/Run-Off Road, and Right Angle. Table 6 shows the number of serious injury crashes by the top three crash types and their respective percentages among all serious injury crashes from 2019-2023.

Table 6: Top 3 Serious Injury Crash Types in Marion County

Crash Type	Number of Crashes	Percentage
Rear End	259	18.3%
Fixed Object/ Run-Off Road	235	16.6%
Right Angle	149	10.6%

#### Fatal and Serious Injury Crash Summary

A summary of the 1,859 fatal and serious injury crashes by age of driver, weather conditions, lighting conditions, and several other factors can help illuminate contributing factors. Crashes under different conditions, including these and others are summarized below.

#### By Age Group

Figures 24 and 25 summarize fatal and serious injury crashes by age groups for drivers involved in fatal and serious injury crashes from 2019-2023. Drivers 60+ years old (23.23%) followed by drivers 19-29 (23.20%) were the top two highest ages groups involved in a fatal or serious injury crash. Drivers 60+ years old had the highest number of fatalities and serious injuries. Marion County's 60+ years old age group is 35.6%<sup>6</sup> of the total population in the county. They are the highest population age group in the county.



Figure 24: Combines Drivers Ages in Fatal and Serious Injury Crashes

Figure 25: Drivers Age by Severity in Fatal and Serious Injury Crashes



<sup>&</sup>lt;sup>6</sup> U.S. Census Bureau's American Community Survey 5-year estimate data from 2018-2022 estimates

Figures 26 and 27 summarize fatal and serious injury crashes by age groups for passengers involved in fatal and serious injury crashes from 2019-2023. Passengers under 14 years old is the age group that has the most passengers involved in fatal and serious injury crashes. Passengers over 60 years old had the most fatalities and serious injuries, followed by passengers under 14 years old.





Figure 27: Passenger Ages by Severity in Fatal and Serious Injury Crashes



#### By Driver's License Registration Location

Figure 28 summarizes license registration location for drivers involved in fatal and serious injury crashes from 2019-2023. Almost 2/3<sup>rds</sup> of the drivers were from Marion County. Drivers from another county in FL were the second highest location for driver's license registered. The top 3 counties were Volusia County, Alachua County, and Orange County.



Figure 28: Driver's License Registered Location for Fatal and Serious Injury Crashes

#### By Road Type

Figure 29 depicts the distribution of road types where fatal and serious injury occurred from 2019-2023. Local roadways have the most fatal and serious injury crashes, with 53% of the total, followed by state roads (22%).





#### By Intersection vs Non-Intersection

Figure 30 shows the distribution of fatal and serious injury crashes at intersection and nonintersection locations. As shown, 66% of fatal and serious injury crashes occurred at nonintersection locations.





#### Hit and Run

6% of fatal and serious injury crashes are hit and run crashes, as illustrated in Figure 31.

Figure 31: Hit and Run for Fatal and Serious Injury Crashes



#### **Lighting Conditions**

Lighting conditions for fatal and serious injury crashes are shown in Figure 32, with 56% of crashes occurring during daylight hours and 27% in dark-not lighted conditions.



Figure 32: Lighting Conditions for Fatal and Serious Injury Crashes

#### Weather Conditions

Statistics on weather conditions during fatal and serious injury crashes indicate that 68.5% of fatal and serious injury crashes occurred in clear conditions, with the second most common condition being cloudy, with 22.7% of crashes as shown in Figure 33.



Figure 33: Weather Conditions for Fatal and Serious Injury Crashes

#### **Road Surface Condition**

Figure 34 shows that 87% of fatal and serious injury crashes from 2019-2023 occurred on dry road surfaces, and 12% occurred on wet road surfaces.





#### Alcohol and/or Drugs Confirmed

Figure 35 illustrates that 15% of fatal and serious injury crashes from 2019-2023 occurred with at least one driver under the influence of alcohol and/or drugs.



Figure 35: Alcohol and/or Drugs Confirmed for Fatal and Serious Injury Crashes

#### Restrained

Figures 36 and 37 display the incidence of drivers and passengers, respectively, wearing restraint devices or not in fatal and serious injury crashes.



Figure 36: Driver Restrained for Fatal and Serious Injury Crashes

Figure 37: Passenger Restrained for Fatal and Serious Injury Crashes



#### Posted Speed vs Driver Speed

Figure 38 shows that 69% of fatal and serious injury crashes occurred on roadways with a posted speed of between 40-55 miles per hour, with the next highest category of posted speed at 20-35 miles per hour.





Figure 39 shows that 41% of fatal and serious injury crash drivers estimated speed was between 40-55 mph prior to the crash. The second highest category was an estimated speed of 20-35 mph prior to the crash.



Figure 39: Drivers Estimated Speed Prior to Crash for Fatal and Serious Injury Crashes

#### Vehicle Type

A summary of fatal and serious injury crashes by vehicle type in Figure 40 indicates that 37% involved passenger cars, with the next highest category of vehicle type being sport utility vehicles, at 23%.





# **APPENDIX A: ADDITIONAL CRASH STATISTICS**

## **Crash by Month**

All Crashes



# Fatalities







#### Annual Fatalities

### **Serious Injuries**

#### Annual Serious Injury Crashes







# Top Crash Types

Top 5 Overall Crash Types

2019		
Top 5 Crash Types	Number of Crashes	Percentage
Read End	3,520	39.6%
Left Turn	1,070	12.0%
Other Type	971	10.9%
Fixed Object/Off Road	900	10.1%
Sideswipe	813	9.1%

2020

Top 5 Crash Types	Number of Crashes	Percentage
Read End	2,766	35.2%
Left Turn	983	12.5%
Fixed Object/Off Road	950	12.1%
Other Type	915	11.6%
Sideswipe	723	9.2%

#### 2021

Top 5 Crash Types	Number of Crashes	Percentage
Read End	3,472	37.3%
Left Turn	1,143	12.3%
Other Type	1,053	11.3%
Fixed Object/Off Road	1,036	11.1%
Sideswipe	931	10.0%

2022

Top 5 Crash Types	Number of Crashes	Percentage
Read End	3,370	36.0%
Left Turn	1,251	13.4%
Sideswipe	1,029	11.0%
Fixed Object/Off Road	1,008	10.8%
Other Type	988	10.6%

2	0	2	3

Top 5 Crash Types	Number of Crashes	Percentage
Read End	3,381	35.5%
Left Turn	1,269	13.3%
Sideswipe	1,158	12.2%
Fixed Object/Off Road	1,042	10.9%
Other Type	1,034	10.9%

# Top 3 Fatal Crash Types

	2019	
Top 3 Crash Types	Number of Crashes	Percentage
Pedestrian	17	21.3%
Rear End	11	13.8%
Other Type	11	13.8%

2020
------

Top 3 Crash Types	Number of Crashes	Percentage
Fixed Object/Off Road	25	26.9%
Pedestrian	18	19.4%
Head On	11	11.8%

Top 3 Crash Types	Number of Crashes	Percentage
Fixed Object/Off Road	18	21.7%
Pedestrian	16	19.3%
Left Turn	9	10.8%

Top 3 Crash Types	Number of Crashes	Percentage
Fixed Object/Off Road	24	23.8%
Pedestrian	17	16.8%
Left Turn	16	15.8%

Top 3 Crash Types	Number of Crashes	Percentage
Left Turn	18	20.0%
Fixed Object/Off Road	16	17.8%
Head On and Pedestrian	12	13.3%

# Top 3 Serious Injury Crash Types

2019		
Top 3 Crash Types	Number of Crashes	Percentage
Rear End	67	21.8%
Left Turn	54	17.6%
Fixed Object/Off Road	40	13.0%

วก	20
20	20

Top 3 Crash Types	Number of Crashes	Percentage
Fixed Object/Off Road	46	21.2%
Left Turn	42	19.4%
Rear End	27	12.4%

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Top 3 Crash Types	Number of Crashes	Percentage
Fixed Object/Off Road	41	20.6%
Rear End	37	18.6%
Left Turn	32	16.1%

2022

Top 3 Crash Types	Number of Crashes	Percentage
Rear End	68	18.8%
Fixed Object/Off Road	61	16.9%
Left Turn	52	14.4%

2023

Top 3 Crash Types	Number of Crashes	Percentage
Left Turn	62	19.0%
Rear End	60	18.3%
Fixed Object/Off Road	47	14.4%

#### **Fatal and Serious Injury Crash Metrics**

Age Groups



Driver Age Group by Year

Passenger Age Group by Year





















Intersection vs Non-Intersection







#### Lighting Condition

Weather Condition













#### Restrained





#### Posted Speed





# **APPENDIX B: METHODOLOGY**

On June 24, 2024, the TPO downloaded all crashes from Signal Four Analytics with a location of Marion County from January 1, 2019 to December 31, 2023. The initial download included 48,443 crash records. Upon reviewing the crash records, it was noticed that some records were included in the Marion County downloads even though they occurred outside of Marion County.

The first step was to remove those crashes that occurred outside of Marion County. To do this we filtered by Investigating Agency Name.

- Records kept included
  - Florida Highway Patrol
  - o Ocala Police Department
  - Belleview Police Department
  - Dunnellon Police Department
  - Marion County Sheriff's Office
- Records removed included
  - Clearwater Police Department
  - Hialeah Police Department
  - Lakeland Police Department
  - Miami Gardens Police Department
  - Miami Police Department
  - Sanford Police Department
  - Sarasota County Sheriff's Office
  - Tallahassee Police Department
  - o Tampa Police Department

With removing those Investigating Agencies that were outside of Marion County we removed 155 crash records, leaving 48,288 records to review.

The second step (following the FDOT Safety Crash Data Guidance) was to remove crashes that occurred in parking lots, on forest roads, and on private roadways.

- Records removed included
  - Forest Roads 42 records
  - Parking Lots 2,707 records
  - Private Roadways 601 records

After removing those 3,350 records it left 44,938 records to review for this summary report.

The next step was to re-code crash severities that were left blank or labeled as non-traffic fatality to no injury. Non-traffic fatalities are when the only injury reported in the crash is a

fatality not related to traffic (such as a heart attack). There were 9 crashes between 2019 and 2023 with an initial crash severity of non-traffic fatality that were changed to no injury.

For the serious injury and fatal summary, we filtered the 44,938 total records to a crash severity to only include fatal and serious injury. This resulted in 1,859 crash records.