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# PEDESTRIAN & BICYCLE QUARTERLY CRASH REPORT



2023

# Quarter 4 (Q4) Crash Analysis

The Palm Beach Transportation Planning Agency (TPA) has adopted Vision Zero – a goal to eliminate all traffic-related fatalities and serious injuries (also referred to as "Incapacitating Injuries") in Palm Beach County. One emphasis area of the Vision Zero Action Plan places emphasis on some of the most vulnerable and disproportionately impacted roadway users: pedestrians and bicyclists.

The TPA's Vision Zero Action Plan (VZAP) Culture Action 3.1 requires the agency to create a quarterly summary of crashes involving a pedestrian or bicyclist to provide understandable information to the public and stakeholders. This policy requires the TPA to provide observations and actions related to fatal crashes within the planning area.

An annual report is published in June of every year providing an overview of the progress towards the goal of zero fatalities and serious injuries on our roadways by 2030. The annual report includes information related to crash trends, research, and feedback for future analysis by stakeholders and partners.

#### Crash Trends to Watch

- 53 people were seriously injured or killed from October 1 to December 31 (Q4) in 2023 while walking or bicycling, five more than the same period in 2022.
- 7 people were killed or seriously injured at railroad crossings.
- 85% of crashes were on roads with posted speed limits of 35 mph or above.
- 65% of crashes occurred on arterial roads, 22% on collector roads, 13% on local roads.
- Crashes involving pedestrians occurring at mid-block were 69%, similar to the same quarter of the previous year.
- 13% of crashes involved ageing drivers, which is lower than previous quarters (21%).
- 39% of the mapped crashes were on the Palm Beach TPA's High Injury Network (HIN).
- 66% of crashes were within the medium to very high range of the Traditionally Underserved Index in Palm Beach County.



#### Report Alignment

#### A. FDOT Strategic Highway Safety Plan (SHSP)

The SHSP is a statewide safety plan developed by FDOT and its safety partners as a framework for eliminating fatalities and serious injuries on all public roads. This framework is the guide for how Florida's traffic safety partners will move toward the vision of a fatality-free transportation system during the next five years. To achieve this vision, this SHSP affirms the target of zero traffic fatalities and serious injuries.

#### B. FDOT Pedestrian and Bicycle Safety Plan

This Pedestrian and Bicycle Strategic Safety Plan (PBSSP) advances this safety vision by supporting the safety of people walking and biking and aligning with the principles set forth by the Pedestrian and Bicyclist Emphasis Area of the Strategic Highway Safety Plan (SHSP). The PBSSP is charged with implementing this plan and consists of federal, state and local safety partners, stakeholders, and safety advocates.

#### C. Palm Beach County Local Road Safety Plan and Municipal Safety Plans

The Palm Beach County Local Road Safety Plan (LRSP) is a comprehensive plan that provides a framework for reducing the number of fatalities and serious injuries associated with crashes that occur on Palm Beach County's (hereafter, "the County's") roadway system. The information in this LRSP draws on best practices in safety planning from documents prepared by the Federal Highway Administration (FHWA), the American Association of State Highway and Transportation Officials, the National Cooperative Highway Research Program, the National Highway Traffic Safety Administration, as well as state and local safety partners. The LRSP supports statewide goals and priorities established in the Florida Strategic Highway Safety Plan (SHSP), including Florida's vision of "A Fatality Free Roadway System".

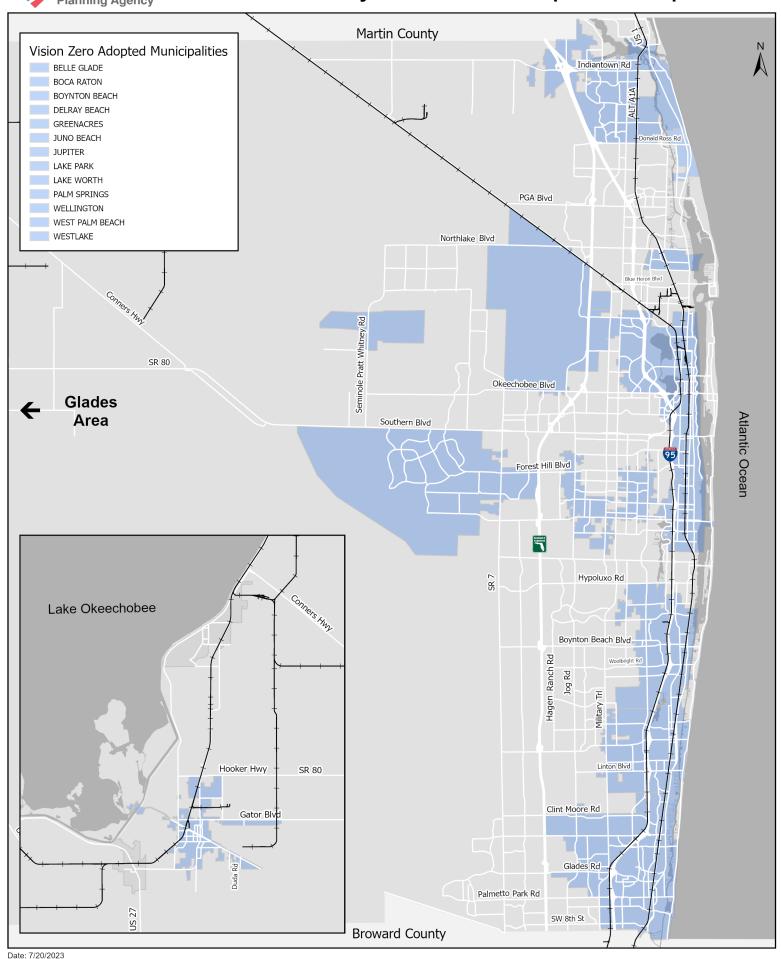
#### D. Local Governments

To date, 13 municipalities have adopted a Vision Zero Goal, including a target date to eliminate traffic fatalities and serious injuries. The map below indicates the agencies with an adopted Vision Zero Goal in Palm Beach County.





### Palm Beach County - Vision Zero Adopted Municipalities



### Summary Table of Q4 Crashes

This table displays crashes occurring in Q4 of 2023. During this time,19% of crashes took place in unincorporated areas of the county, whereas 81% of crashes occurred in incorporated areas.

	Pedestrian		Bicyclist					
Crash Report #	Jurisdiction	Crash Severity	Crash Report #	Jurisdiction	Crash Severity			
25184563	Boynton Beach	Serious Injury	25902516	Boca Raton	Serious Injury			
26052370	Unincorporated	Fatality	26066943	West Palm Beach	Serious Injury			
26085528	Delray Beach	Serious Injury	25157923	Palm Beach Gardens	Serious Injury			
26053481	Unincorporated	Serious Injury	26052617	Lake Worth	Fatality			
26053665	Royal Palm Beach	Serious Injury	26056101	Unincorporated	Serious Injury			
26053786	Unincorporated	Serious Injury	26052279	Lake Worth	Serious Injury			
26053831	Unincorporated	Serious Injury	25158145	Palm Beach Gardens	Serious Injury			
26067334	West Palm Beach	Serious Injury	26055165	Greenacres	Serious Injury			
26067225	West Palm Beach	Serious Injury	82218964	Ocean Ridge	Serious Injury			
26191983	Boynton Beach	Serious Injury	25157976	Palm Beach Gardens	Serious Injury			
26253610	Palm Springs	Serious Injury	26230882	Unincorporated	Serious Injury			
26231790	Greenacres	Fatality	26053082	West Palm Beach	Serious Injury			
89754010	South Bay	Fatality	26231836	Royal Palm Beach	Serious Injury			
26055296	West Palm Beach	Fatality	Total Mapped/ Unmapped	13/0				
88968858	Lantana	Serious Injury						
26053014	Unincorporated	Fatality						
25045049	Delray Beach	Fatality						
26066961	West Palm Beach	Serious Injury						



Total Mapped/ Unmapped	39/1	
T43111023	Tequesta/FEC	Fatality
20233643	Boynton Beach/FEC	Fatality
12082023	Boca Raton/SFRC	Fatality
20233762	Boca Raton/FEC	Serious Injury
20233780	West Palm Beach/FEC	Fatality
20233832	Lake Worth Beach/FEC	Serious Injury
12312023	West Palm Beach/SFRC	Fatality
26253602	Palm Springs	Serious Injury
26231536	Lake Worth	Fatality
26066628	West Palm Beach	Fatality
26230526	Unincorporated	Serious Injury
26055775	Mangonia Park	Serious Injury
26054852	Unincorporated	Fatality
26054612	Royal Palm Beach	Serious Injury
26066773	West Palm Beach	Serious Injury
26085750	Delray Beach	Fatality
26066752	West Palm Beach	Fatality
26066791	West Palm Beach	Serious Injury
89720359	Belle Glade	Fatality
26088943	Jupiter	Fatality
26054610	South Palm Beach	Fatality
26053957	Unincorporated	Fatality

<sup>\*</sup>Crash data retrieved 03/05/2024



## **Crash Trends Deep Dive**

This deep dive aligns the FDOT's Florida Strategic Highway Safety Plan (SHSP) Emphasis Areas for crashes and the TPA's High Injury Network (HIN) considerations, and other trending topics to summarize the conditions in table. This information is useful when looking at long term crash trends to better determine when crash modification factors may necessitate changes to roadways.

The consecutive pages provide an analysis of Q4's crash conditions with the following three maps:

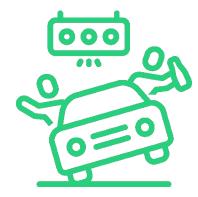
- **Pedestrian and Bicycle Crashes:** An overall analysis of the pedestrian and bicycle crashes that occurred during the second quarter, broken down by crash severity.
- Crashes on the High Injury Network within Palm Beach County: An overlay of the crashes on the HIN within PBC. The corridors on the HIN are based on the roads with the most fatal and serious injuries, as identified on the TPA's 2021 Vision Zero Action Plan. The TPA's HIN has 20 identified intersections and approximately 50 corridors.
- Crashes on the Traditionally Underserved Index: An overlay of the crashes on the
  Traditionally Underserved Index. To maintain consistency with the TPA's 2021 Vision Zero
  Action Plan, an equity component was analyzed by prioritizing our traditionally underserved
  communities on areas where residents likely lack transportation access due to demographic
  conditions, low income, or a historical lack of services.

Moreover, FDOT conducted a review of Florida's traffic safety resources and analysis of crash data to identify the preeminent crash factors by emphasis area. The five emphasis areas identified on FDOT's SHSP are the following: Roadways, Road Users, User Behavior, Traffic Records and Information Systems, and Evolving emphasis areas. This report only includes the top three emphasis areas organized as such: Roadway, Human Behavior, and Socioeconomic Conditions. The TPA's determination for this selection was based on crash frequency and data availability.

ROADWAY CONDITIONS

HUMAN BEHAVIOR SOCIOECONOMIC CONDITIONS

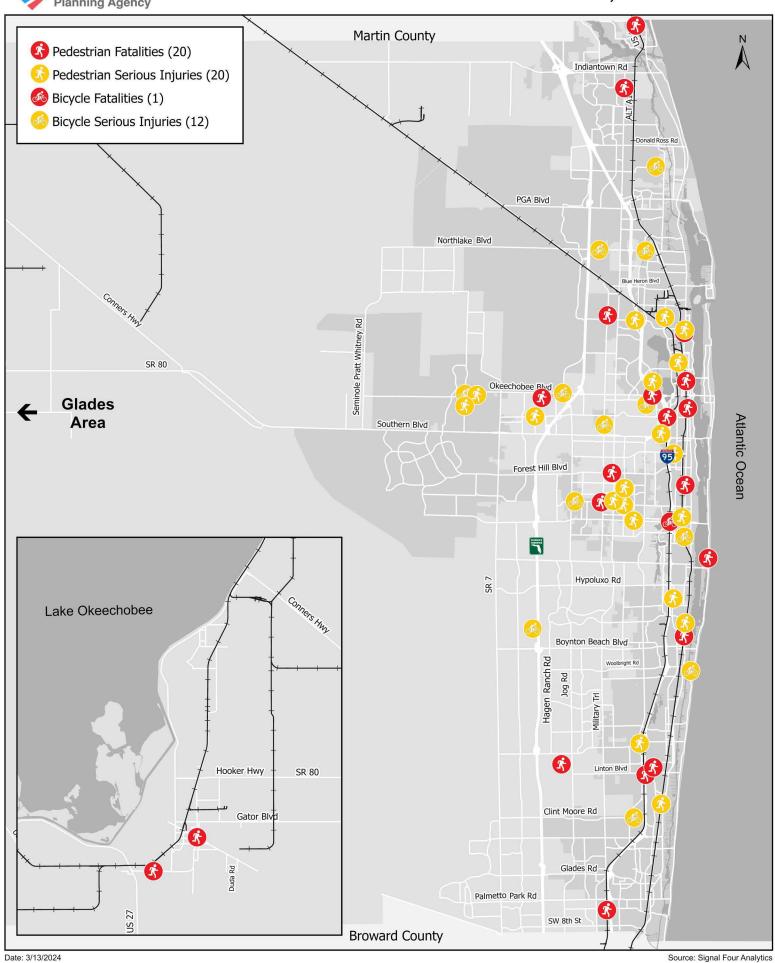








#### Ped/Bike Crashes - October 1 to December 31, 2023



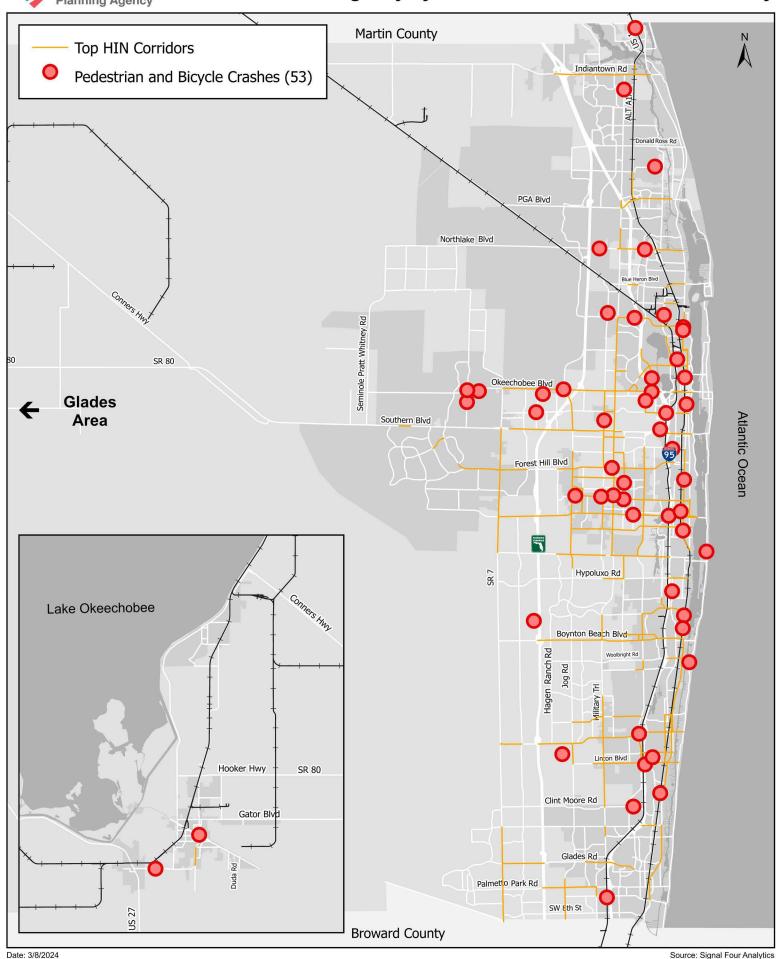
1 Unmapped Pedestrian Fatality\*

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#### Crashes on the High Injury Network within Palm Beach County



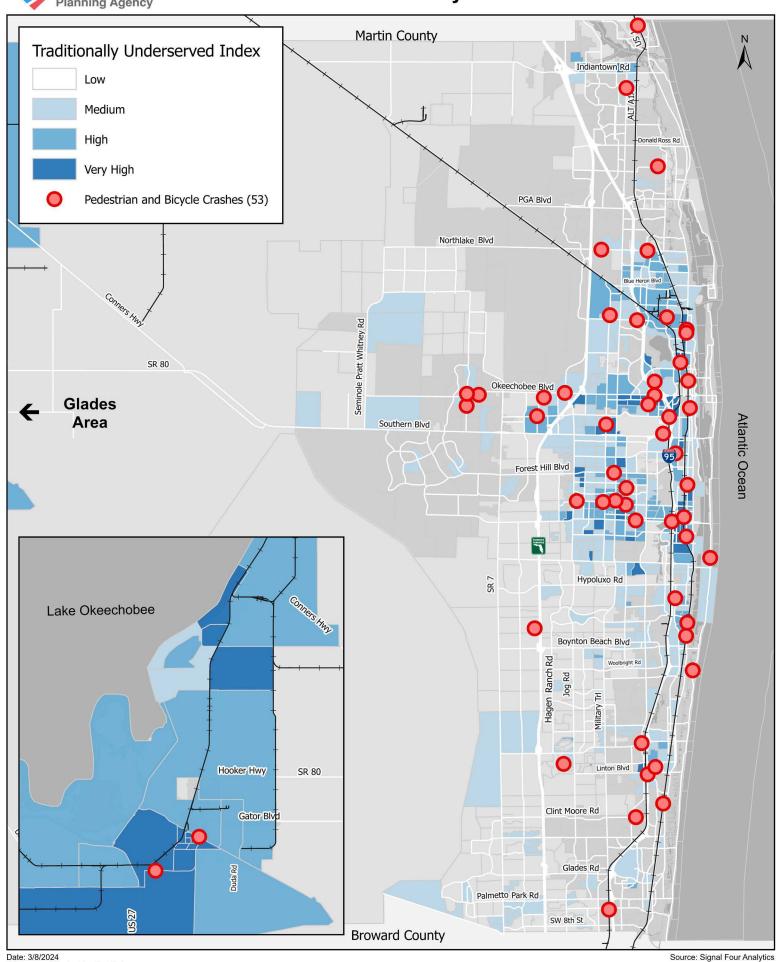
1 Unmapped Pedestrian Fatality\*

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Source: Signal Four Analytics
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#### **Crashes on the Traditionally Underserved Index**



1 Unmapped Pedestrian Fatality\*

# Roadway, Human Behavior, & Socioeconomic Conditions Analysis

	Quart	ter 1	Quarte	er 2	Quart	er 3	Quarte	er 4	
	Pedestrian	Bicyclist	Pedestrian	Bicyclist	Pedestrian	Bicyclist	Pedestrian	Bicyclist	
Total Crashes	47	22	37	9	39	9	40	13	
Fatalities	15	5	14	3	13	2	20	1	
Serious Injuries	32	17	23	6	26	7	20	12	
Roadway Conditions									
Posted Speed Limit									
<30	14	9	11	4	11	1	6	1	
35-40	13	11	14	1	9	3	20	7	
45<	13	2	10	4	12	5	7	5	
Intersections									
Mid-Block	34	9	24	5	22	7	23	7	
Intersection	13	13	10	4	10	2	10	6	
Number of Lanes									
2 Lane	18	12	11	5	17	1	16	4	
3-4 Lane	14	7	9	4	4	4	7	6	
5< Lane	8	3	15	0	11	4	10	3	
Functional Classi									
Major Arterial	9	3	16	3	10	0	9	4	
Minor Arterial	14	6	7	1	6	7	12	5	
Major Collector	6	7	1	1	5	2	3	2	
Minor Collector	5	3	0	1	1	0	4	1	
Local Road	6	3	10	3	10	0	5	1	
Lane Departure									
Crashes	5	0	2	1	1	2	3	0	
Surface Condition				ľ		ľ			
Wet Road	9	0	8	1	3	2	4	0	
Dry Road	38	22	26	8	29	7	29	13	
Lighting Condition									
Daytime	27	18	15	6	11	5	13	8	
Nighttime	20	4	19	3	21	4	20	5	
Rail Crossings				· -			_		
Trespassers	7	0	3	0	7	0	7	0	
				n Behaviors		<u> </u>			
Impaired	0	0	1	0	2	0	2	0	
Driving									
Distracted	1	1	1	0	1	1	1	0	
Driving					•				
Speeding and	2	2	1	0	0	0	0	1	
Aggressive									
Driving									
			Socioecon	omic Condi	tions				
Aging Driver	7	4	7	4	8	3	3	3	
Teen Driver	2	3	2	0	0	0	2	1	



# **TPA Reporting**

To track the progress made since updating the TPA's 2021 Vision Zero Action Plan, the following actions were taken by stakeholders during the fourth quarter to help reach our Vision Zero goal:

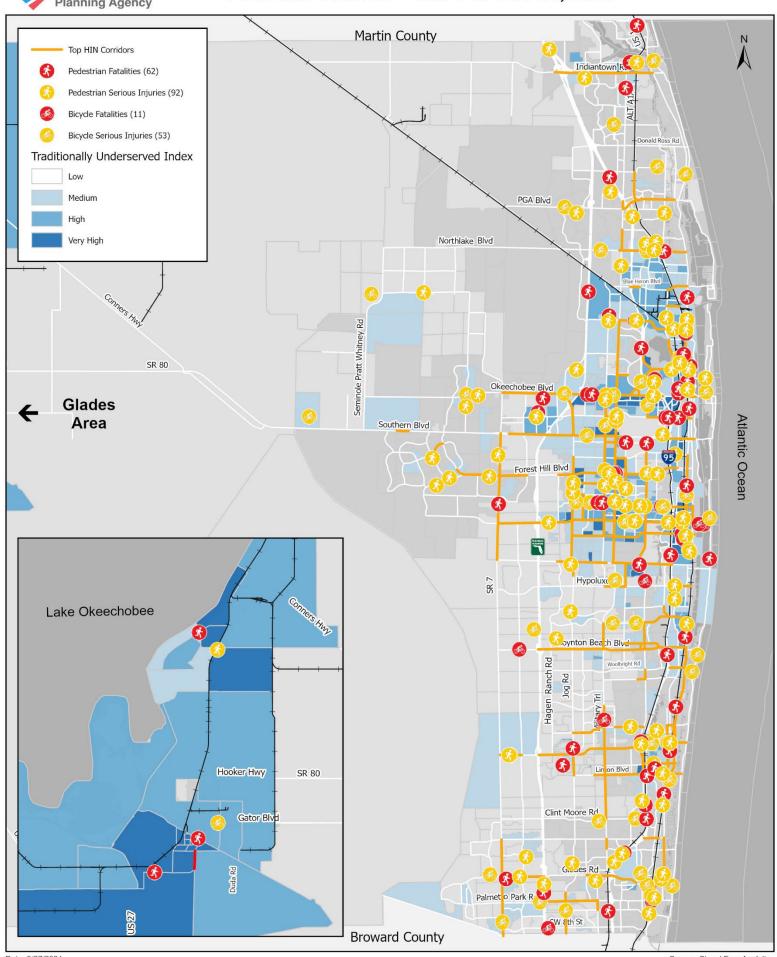
- Supported the adoption of the City of Boca Raton's Complete Streets Policy to establish a
  commitment of using a holistic, context-sensitive, and multimodal approach when
  designing and planning for transportation infrastructure.
- Hosted a Ribbon Cutting event for the newly constructed Dillman Trail in the City of Greenacres funded by the TPA's Transportation Alternatives (TA) Program.
- Participated in FDOT's Mobility Week and partnered with the City of West Palm Beach to host a bicycle ride and provide resources for multimodal transportation options.
  - TPA staff participated in FDOT's Ride, Roll, Stroll Challenge and received the award for the #1 Small Organization to log the most transit, bicycling, walking, and carpool trips. With the TPA's 17,934 total trips recorded, approximately 2,704 miles were reduced and 2,344 CO2 pounds were reduced.
- Hosted a series of the TPA's Mobility Vision Workshops at varying locations throughout
  Palm Beach County to discuss the future of its transportation system and collected
  feedback from the public, local governments, elected officials, and other stakeholders on
  ways to improve walking, bicycling, and transit access in the region.
- TPA staff met with the Florida Department of Transportation (FDOT) to discuss providing multimodal accommodations for the upcoming Tight Urban Diamond Interchange (TUDI) at the 45<sup>th</sup> Street and I-95 interchange in the City of West Palm Beach.
- TPA staff attended the Federal Highway Administration's (FHWA) Bikeway Training hosted by the Miami-Dade TPO to learn about the latest bicycle design best practices nationwide.
- TPA staff attended Florida's Pedestrian and Bicycle Safety Coalition stay current on the latest pedestrian and bicycle laws, data reporting, and statewide Vision Zero efforts.
- TPA staff participated in FDOT D4's Community Traffic Safety Team to help solve local traffic safety concerns and promote public awareness of traffic safety best practices.

The TPA will continue to encourage agencies to develop comprehensive roadway safety action plans and utilize resources and grants available to develop such materials.





#### Ped/Bike Crashes - Jan 1 to Dec 31, 2023



Date: 3/27/2024
\*Due to inconsistencies within Signal4 reporting total numbers may not match tables. The numbers within this map are the most accurate record as of March 8, 2023.

Document Path: C:\TPA\Palm Beach TPA\GIS - Documents\Projects\Safety\Vision Zero\Quartertly Ped Bike Crashes\2023\2023 Ped Bike Crashes.aprx

Source: Signal Four Analytics
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Miles

The following table displays crash data from 2019-2023, crash type, severity, and the past two five-year averages. Compared to the previous 5-year average (2014-2018), there has been a **23% average** *increase* in pedestrian and bicycle fatalities over the current period. The number of all crashes resulting in death reached a 5-year low in 2023, despite some pedestrian and bicycle severe and fatal crashes five-year average remained relatively flat.

	5-Year A	verages	5-Year Summary Crashes					Total
	2014- 2018	2019- 2023	2019	2020	2021	2022	2023	2019- 2023
Bicycle Fatalities and Serious Injuries	63	57	52	68	46	54	64	284
Pedestrian Fatalities and Serious Injuries	142	142	157	127	134	158	133	709
Vehicle and Motorcycle Crashes	53,232	49,553	55,387	42,126	49,100	49,584	51,566	247,763
Total Fatalities for Pedestrians and Bicyclists	47	58	47	56	56	70	58	287
Total Fatalities for All Crashes	157	196	174	186	215	217	168	960
Total Crashes of All Types	54,679	50,946	56,655	43,205	50,286	51,212	53,376	254,734

The table below displays the total fatalities for pedestrians and bicyclists from 2019-2023 based on roadway condition, human behavior, and socioeconomic conditions. Within the past 5 years, aging drivers have been the leading age group to be involved in a pedestrian or bicycle fatality. In the 2023-year, pedestrian and bicycle fatalities occurring at intersections had the highest deaths within the 5-year timeframe.

**Total Fatalities for Pedestrians and Bicyclists 2019-2023** 

Roadway Conditions								
	2019	2020	2021	2022	2023	Total		
Lane Departures	5	9	5	10	10	39		
Intersection-Related	7	20	11	15	17	70		
Rail Crossings	14	8	5	11	15	52		
Human Behavior								
Impaired Driving	2	7	3	4	3	18		
Speeding and Aggressive Driving	1	4	1	2	4	11		
Distracted Driving	2	1	4	1	2	10		
Socioeconomic Conditions								
Aging Drivers	7	4	10	5	10	36		
Teen Drivers	1	2	3	3	4	13		



#### **Data Notes**

The information contained within this report was downloaded from Signal Four Analytics – University of Florida GeoPlan and the Federal Railroad Administration Office of Safety Analysis data portal and reformatted for this analysis.

- Signal 4 Analytics: This web-based interactive tool allows government employees and
  consultants working on behalf of government agencies the ability to view crash reports,
  produce maps, and interact with data to analyze area trends. <u>Signal4Analytics.com</u> Data
  for this quarter was retrieved March 8, 2024.\*
  - Posted Speed Limit: Posted speed limit data not included in Signal 4 Analytics. Data was obtained through individual crash reports.
  - Functional Classification: Functional Classification data not included in Signal 4
     Analytics. Additional spatial analysis was performed to obtain this data.
  - Intersection Mid-Block Crossing: data not included in Signal 4 Analytics. Data was obtained through individual crash reports and further review of conditions.
- US Department of Transportation: Federal Railroad Administration: This site shares
  railroad safety information including accident, incident, inventory, and highway-rail
  crossing data with the public. <u>FRA Safety Data & Reporting | FRA (dot.gov)</u> Data for this
  quarter was retrieved March 8, 2024.

\*Disclaimer: Every effort has been made to provide data that is current and accurate. 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. The following data was not included in Signal 4 Analytics and was obtained through other means.

#### Important Safety Contacts

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