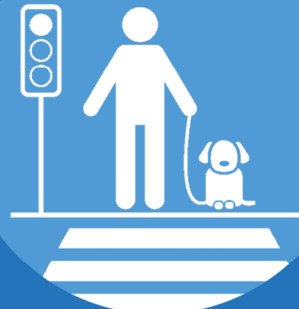




PALM BEACH
Transportation Planning Agency

VISION ZERO

ACTION PLAN



PALM BEACH TRANSPORTATION PLANNING AGENCY

Prepared by:
KITTELSON & ASSOCIATES
200 SW First Ave, Ste 1070
Ft Lauderdale, FL 33301
(954) 828-1730

Project No. 1920511

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<https://commons.wikimedia.org/w/index.php?curid=164728>

In Palm Beach County, there were 6,760 fatal and serious injury crashes from 2011 through 2017. *These crashes resulted in over 1,000 people dying and almost 7,200 people suffering from serious injuries.* Each of these people had family, friends, coworkers and communities who were also impacted.


INTRODUCTION

The Palm Beach Transportation Planning Agency (TPA) has committed to establishing a regional safety vision to eliminate traffic fatalities and serious injuries. Vision Zero, Road to Zero, and Toward Zero Deaths are three safety planning initiatives within this framework at the national, state, and local levels focused on eliminating traffic-related fatalities and serious injuries. The initiatives are built on the fundamentals of a safe systems approach. Under the safe systems approach, all parts of the transportation system must be strengthened in order to save lives. Actions and responsibilities are more heavily attributed to the roadway system designers, including engineers, public health professionals, policymakers, and law enforcement; however, individuals still have a significant responsibility to abide by laws and regulations.

Orlando, Fort Lauderdale, and most recently, West Palm Beach have adopted Vision Zero as their goal.



Metropolitan planning organizations, like the Palm Beach TPA, are uniquely suited to take on a leadership role as they are positioned to identify regional actions and policies that local governments, the Florida Department of Transportation (FDOT), and other regional partners can implement to reach zero traffic-related deaths and serious injuries for people walking, bicycling and driving. The TPA is already required by the Federal Highway Administration (FHWA) to track five safety performance measures and set annual targets, in collaboration with FDOT, as noted below:

FEDERAL SAFETY PERFORMANCE TARGETS	TPA ADOPTED TARGETS
1 Number of fatalities	
2 Rate of fatalities per 100 million vehicle miles traveled (VMT)	
3 Number of serious injuries	
4 Rate of serious injuries per 100 million VMT	
5 Number of non-motorized fatalities and non-motorized serious injuries	

The TPA also provides funding for long-range transportation plans, serves as a regional nexus for crash data and performance measures, and can stimulate a collaborative process to address issues that no single jurisdiction can tackle alone.

The purpose of this plan is to use a data-driven approach to establish safety priorities and identify achievable strategies with the best potential to reduce, and ultimately eliminate, fatalities and serious injuries for all roadway users.

The Palm Beach TPA engaged a team of stakeholders from state and local agencies to review fatal and serious injury crash trends in Palm Beach County and to establish a consistent and cohesive vision for reaching zero deaths and serious injuries countywide. The Vision Zero Stakeholder Team (VZST) met twice over the course of the Vision Zero Action Plan development and provided feedback on the Plan's countermeasures and action items. Stakeholders included the FDOT Safety Office, Palm Beach County Engineering, and municipal and public health partners. The VZST provides the basis for future stakeholder efforts that will help implement and monitor the Vision Zero Action Plan.

Vision Zero is a culture change, from accepting needless deaths and life-altering injuries as the cost of doing business to recognizing that they are preventable and therefore unacceptable. **For Vision Zero to succeed, we need everyone's help.** By taking action to prioritize safety, we can create a new culture where everyone has a choice to walk, bike, drive, use transit, or ride a motorcycle and feel safer and more comfortable travelling throughout Southeast Florida.



CRASH ANALYSIS

This report summarizes the findings from an analysis of vehicle, pedestrian and bicycle crashes in Palm Beach County. **For the purpose of this analysis, only fatal and serious injury crashes were evaluated.** Crash data was obtained from the FDOT's Crash Analysis Reporting System (CARS) for the years 2011 through 2017. The FDOT collects crash statistics for state and local roadways from the Department of Highway Safety and Motor Vehicles (DHSMV) and adds geospatial and roadway characteristics to create the CARS.¹ The DHSMV crash data for all fatal and serious injury crashes originates from a Long Form crash report (HSMV 90010S), which is completed by a law enforcement officer, typically at the scene of the crash. A wide range of information regarding the crash is requested by the form, many of which can require personal interpretation of the crash scene by the reporting officer. The personal nature of completing the crash report can also lead to infrequent instances of human error, with incomplete or missing data fields. As a result, in performing this crash analysis, there are cases where data was missing for a specific variable. These occurrences were negligible in comparison to the data that was available, and do not have a substantial impact on the overall resulting trends.

The roadway characteristics, such as functional classification, posted speed limit and geometric data, are sourced from the FDOT Roadway Characteristics Inventory (RCI), and are only available for state-maintained roadways. As a result, roughly 45% of the fatal and serious injury crashes do not have full roadway attributes assigned to them. The TPA's Centerline GIS file was used to obtain posted speed and number of lanes on non-state facilities, but some attributes (e.g., functional classification, geometric roadway data) were not available for non-state facilities. This data limitation is noted in other parts of the report where it impacts crash analysis. Appendix A includes a detailed description of the methodology applied to calculate the different types of fatal and serious injury crashes in the county.

¹ FDOT's Safety Office, Crash Data FAQs, <http://www.fdot.gov/safety/11A-SafetyEngineering/crash%20data/Frequently%20Asked%20Questions.pdf>

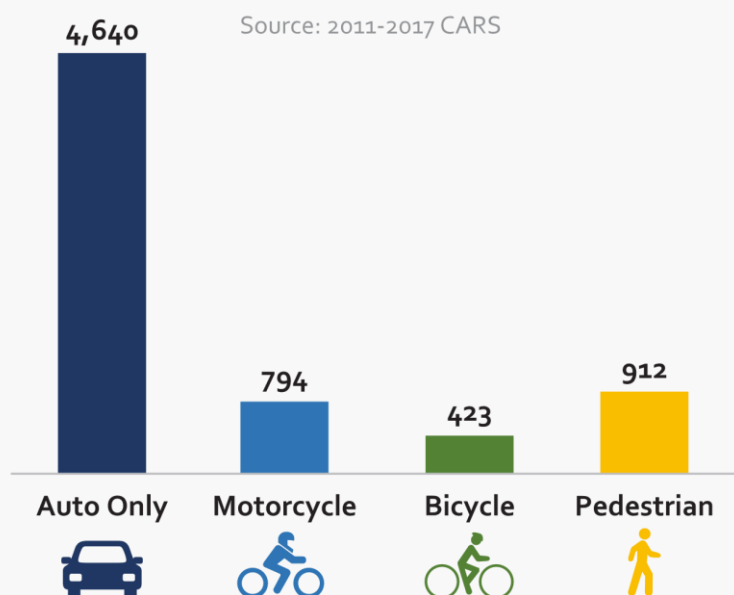


By lapersonalattorney - Own work, CC BY-SA 4.0, https://commons.wikimedia.org/wiki/File:Bike_%26_Car_Accident_-_Personal_Injury.jpg

THE BIG PICTURE

People are at greatest risk walking, bicycling or riding a motorcycle. Palm Beach County experienced a nearly **9% jump in pedestrian fatalities and serious injuries** in 2016, according to the Florida Department of Highway Safety and Motor Vehicles.





FATAL AND SERIOUS INJURY CRASHES BY MODE





Vulnerable users (motorcyclists, bicyclists, and pedestrians) accounted for less than 3% of the commute mode share in the county, however, they accounted for more than 30% of all fatal and serious injury crashes.

TOTAL FATAL & SERIOUS INJURY CRASHES IN PALM BEACH COUNTY: **6,760**

Mode	Commute Mode Share*	% of Total Fatal & Serious Injury Crashes
	87.7%	69%
	0.2%	12%
	0.6%	6%
	1.5%	13%

Sources: 2011-2017 FDOT CARs
2012-2016 ACS

*The percentages shown do not reflect all the commute modes included in the ACS dataset

Special attention should be devoted to developing countermeasures for crashes involving bicyclists and pedestrians. Proven countermeasures and their application have been extensively researched by multiple agencies including FHWA's Proven Safety Countermeasures, which is updated approximately every five years¹.

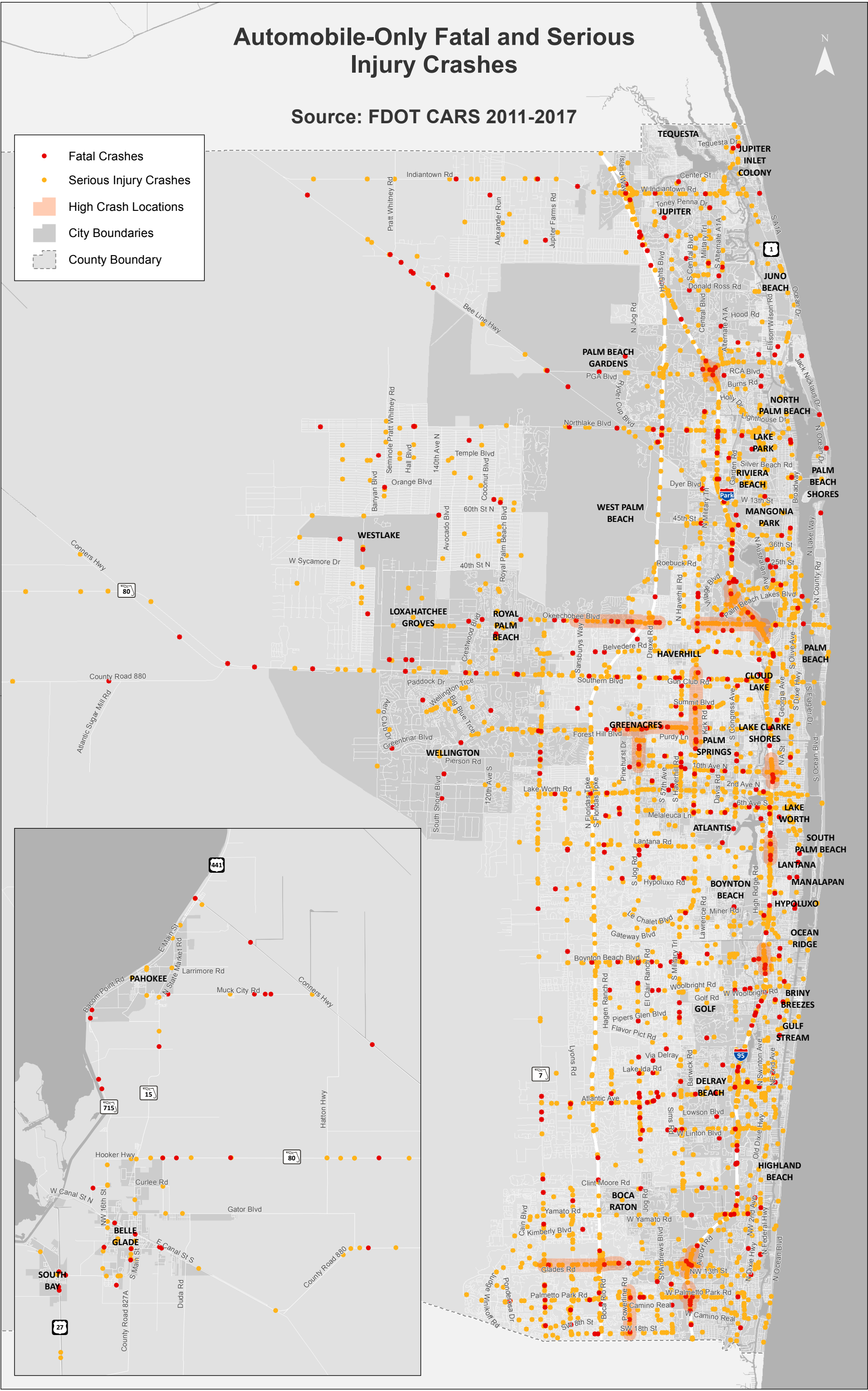
The following maps illustrate the distribution of the fatal and serious injury crashes for each of the four modes.

Automobile-Only Fatal and Serious Injury Crashes

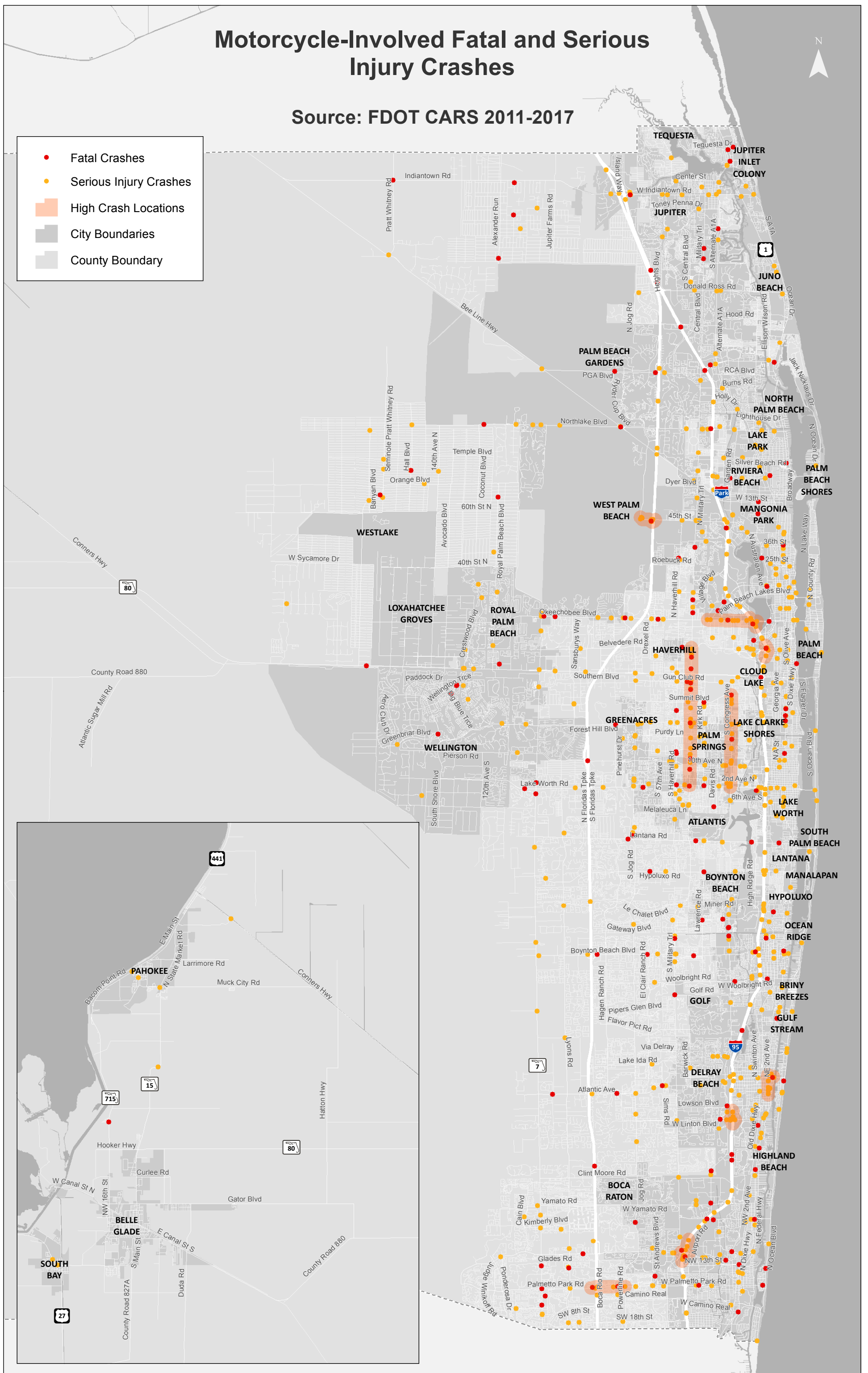
Source: FDOT CARS 2011-2017



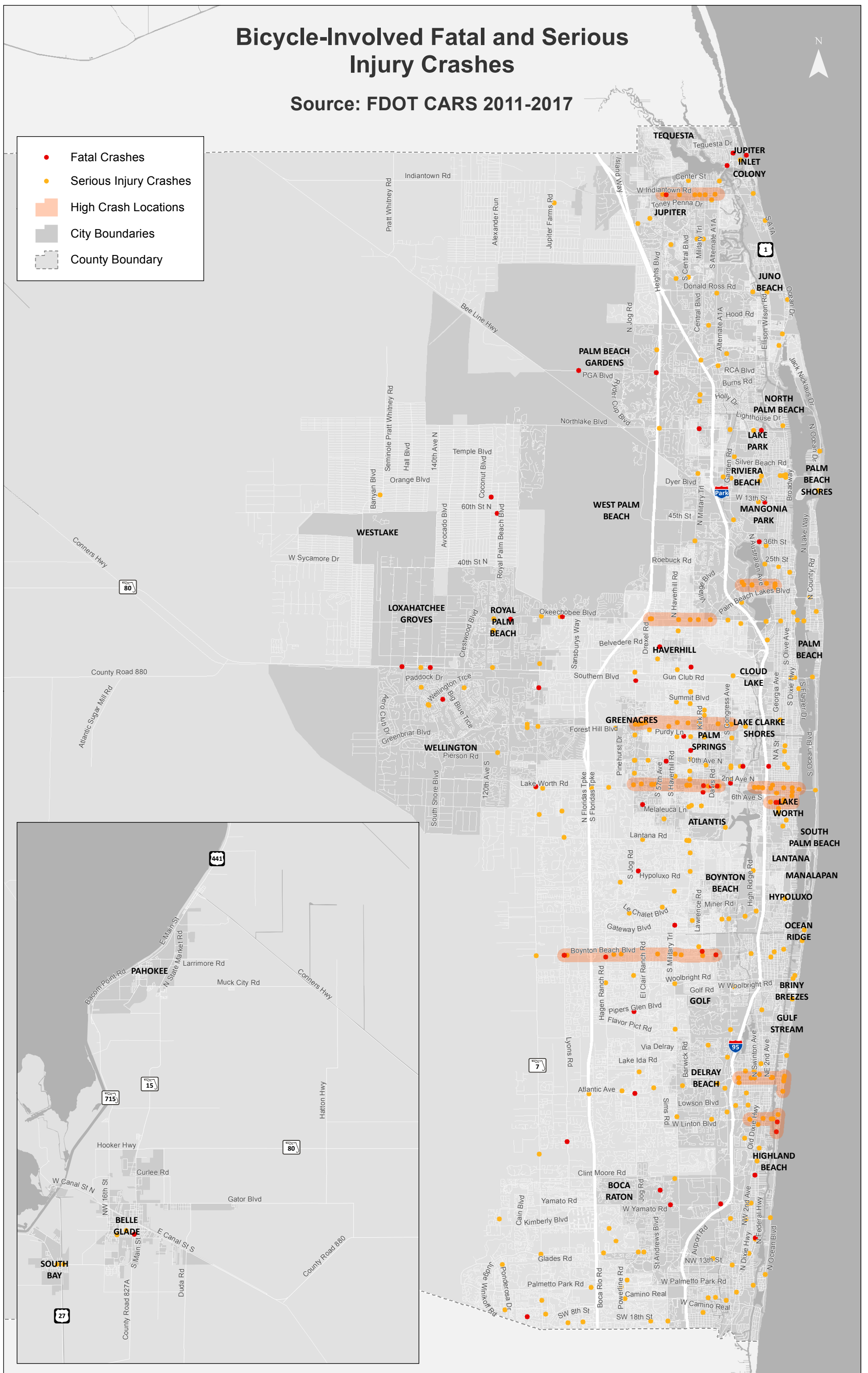
- Fatal Crashes
- Serious Injury Crashes
- High Crash Locations
- City Boundaries
- County Boundary



- Fatal Crashes
- Serious Injury Crashes
- High Crash Locations
- City Boundaries
- County Boundary



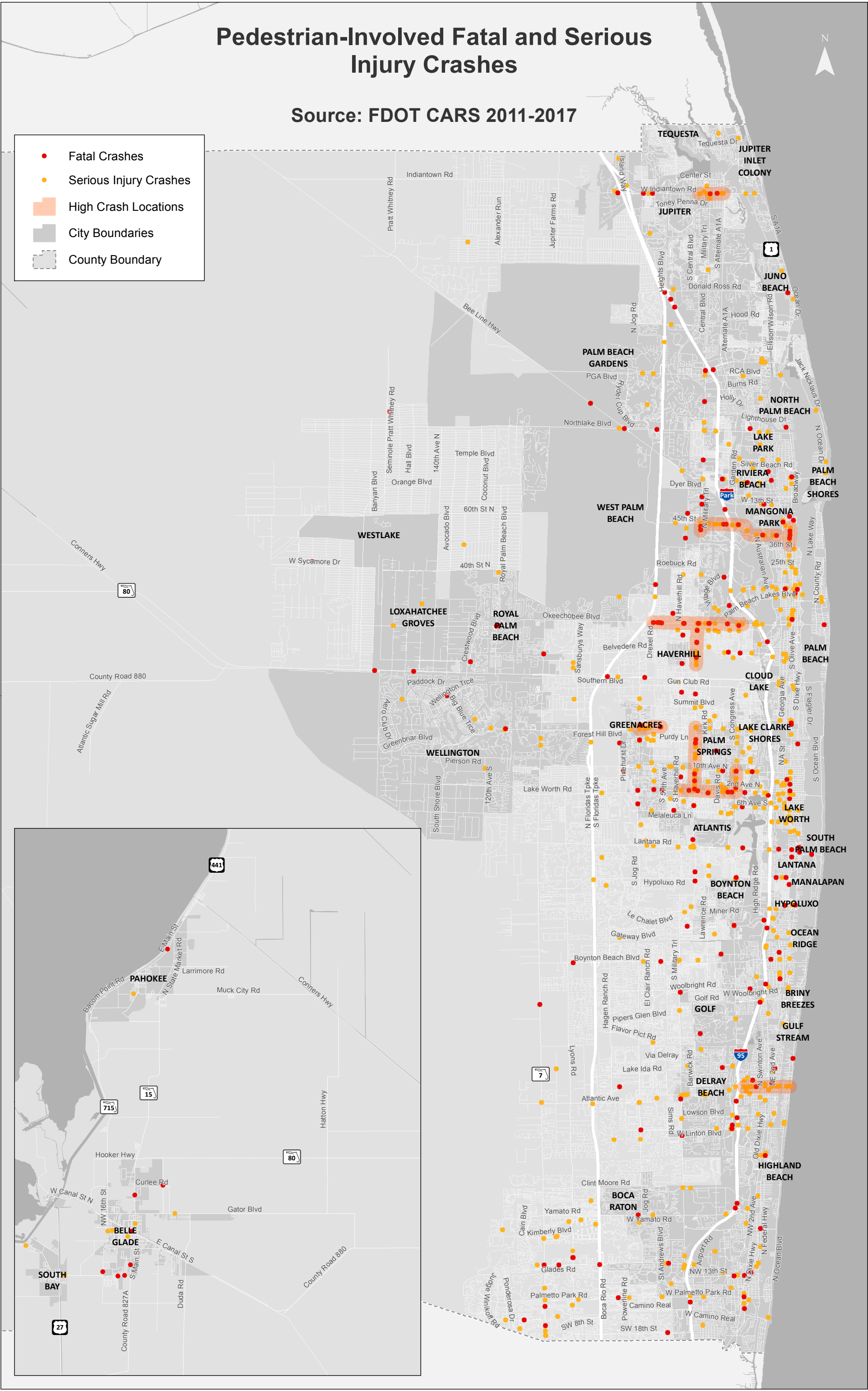
- Fatal Crashes
- Serious Injury Crashes
- High Crash Locations
- City Boundaries
- County Boundary



Pedestrian-Involved Fatal and Serious Injury Crashes

Source: FDOT CARS 2011-2017

- Fatal Crashes
- Serious Injury Crashes
- High Crash Locations
- City Boundaries
- County Boundary





DIGGING DEEPER INTO THE DATA

High Crash Locations

Vision Zero communities have found that identifying high crash locations strengthens multi-departmental collaboration and builds an understanding among decision-makers, including elected officials, of what's needed and where, so that funds can be invested in the areas that are most impacted by death and injury.²

To identify the high crash locations for each mode, a consistent “cellular” network consisting of a 0.25-mile wide hexagonal grid was geospatially overlaid on the mapped fatal and serious injury crashes. This method was used to find the densest crash clusters, regardless of whether they were corridor segments or intersections, and identify locations within the TPA that have the highest frequency of fatal and serious injury crashes. Specifically, an individual location for each mode represents either an intersection, a roadway segment, or a small network of parallel streets that exhibited a significant number of crashes within close proximity. The cut-off point for each mode-specific list was not restricted to a set number but was based on natural data drop-off points of the crash frequencies observed by the hexagonal clusters. Locations that exhibited the highest crash frequencies of fatal and serious injury crashes in Palm Beach County were mapped by mode and are summarized below. The full list of high crash locations for each mode can be found in Appendix B.

Automobile Fatal and Serious Injury High Crash Locations

I-95 Interchanges (crash occurring both on I-95 and the intersecting cross-street)	Other High Crash Locations
PGA Blvd	Okeechobee Blvd from Military Trail to I-95
From Palm Beach Lakes Blvd through Okeechobee Blvd	Okeechobee Blvd from Sansbury Way to Meridian Rd
10 th Ave N	Forest Hill Blvd from Pinehurst Dr to Military Trail
Lantana Rd	Glades Rd from US 441 to Encina Ln
Boynton Beach Blvd	Powerline Rd from Palmetto Cir to SW 18 th St
Glades Rd	Jog Rd from Purdy Ln to 10 th Ave N
Palmetto Park Rd	

² <https://visionzeronetwork.org/hin-for-the-win/>



Motorcycle Fatal and Serious Injury High Crash Locations

I-95 Interchanges (as vehicles entered/ exited the freeway)	Other High Crash Locations
Okeechobee Blvd	Okeechobee Blvd from Indian Rd to I-95
Belvedere Rd	Military Trail from Belvedere Rd to Lake Worth Rd
Linton Blvd	Congress Ave from Summit Blvd to Lake Worth Rd
Glades Rd	SE 5 th Ave from SE 6 th St to Atlantic Ave and Atlantic Ave from SE 5 th Ave to the Gulf Stream Bridge
	Palmetto Park Rd from Mizner Way to Powerline Rd
	45 th St from N Jog Rd to Premier Park Dr

Bicycle and Pedestrian Fatal and Serious Injury High Crash Locations

Bicycle	Pedestrian
Indiantown Rd from Center St to Old Dixie Highway	Indiantown Rd from Whitney Dr to Old Dixie Highway
Palm Beach Lakes Blvd from Congress Ave to N Tamarind Ave	Military Trail from Shiloh Dr to 45 th St and 45 th St from Military Trail to N Terrace Dr
Okeechobee Blvd from FL Turnpike Ramps to Palm Beach Lakes Blvd	Broadway Ave from 51 st St to 39 th St
Lake Worth Rd from Jog Rd to Davis Rd	Okeechobee Blvd from FL Turnpike Ramps to Manor Ave
Forest Hill Blvd from Jog Rd to S Congress Ave	Military Trail from Golf St to Okeechobee Blvd
Downtown Lake Worth, including: 6 th Ave S from S A St to Federal Hwy, Federal Hwy from 6 th Ave S to Lucerne Ave, and Lake Worth Rd/Lake Ave/Lucerne Ave from Lake Osborne Dr to Federal Hwy	Palm Springs, including: Military Trail from Lake Worth Rd to Forest Hill Blvd, Lake Worth Rd from Haverhill Rd to Congress Ave, and Congress Ave from Lake Worth Rd to 10 th Ave N
Boynton Beach Blvd from Lyons Rd to Knuth Rd	Forest Hill Blvd from Jog Rd to Kudza Rd
Atlantic Ave from SW 12 th Ave to Ocean Blvd and Ocean Blvd north and south of Atlantic Ave	Atlantic Ave from SW 12 th Ave to Ocean Blvd
Linton Blvd from Lavers Ave to Ocean Blvd and Ocean Blvd north and south of Linton Blvd	



Roadway features were analyzed to determine if high rates of fatal and serious injury crashes could be correlated to certain design elements, such as posted speed, roadway width, turn lanes, or intersection signalization.

- While arterials represent only 15% of total centerline miles in the county (and 41% of the total VMT), they accounted for the following percentages of fatal and serious injury crashes:
 - Auto - 31%
 - Motorcycle - 37%
 - Bicycle - 43%
 - Pedestrian – 36%
- Roadways with six or more travel lanes (all modes)
- Speed limits 45 MPH or higher (all modes)
- Near I-95 interchanges (autos and motorcycles)
- Roadways with high numbers of driveway openings³ (pedestrians and bicyclists only)



³ Methodology: all High Crash locations were visually inspected and each site qualitatively marked as low/medium/high driveway use based both on the number of driveways present near the site and the frequency of use those driveways would expect (i.e., a few residential driveways are much less active than a few restaurant/shopping center driveways). Two-thirds of the locations fell into the medium or high categories.



When are Fatal and Serious Injury Crashes Happening?

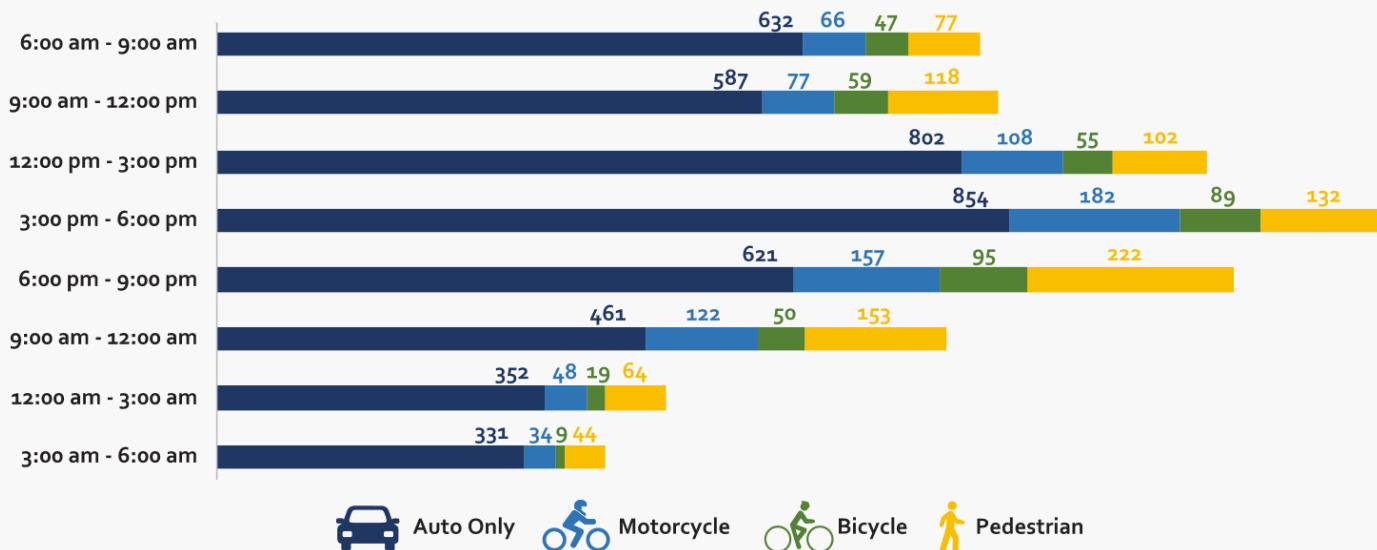
By Time of Day

Most fatal and serious injuries occur between 3:00 PM and 9:00 PM for all modes.

As traffic volumes increase during the PM peak hours, the greater exposure increases the likelihood of crashes. Additionally, the higher traffic volumes that lead to traffic congestion may provoke aggressive driver behavior⁴, which, as national trends have shown, is a major contributor to vehicular crashes. Congestion management strategies, incident management, and the safety countermeasures proposed in this Action Plan should be considered collectively to alleviate the frequency of fatal and serious injury crashes during high traffic volume times of the day.

FATAL & SERIOUS INJURY CRASHES BY TIME OF DAY

Source: 2011-2017 CARS



⁴ People Saving People: On the Road to a Healthier Future", NHTSA 2020 Report.



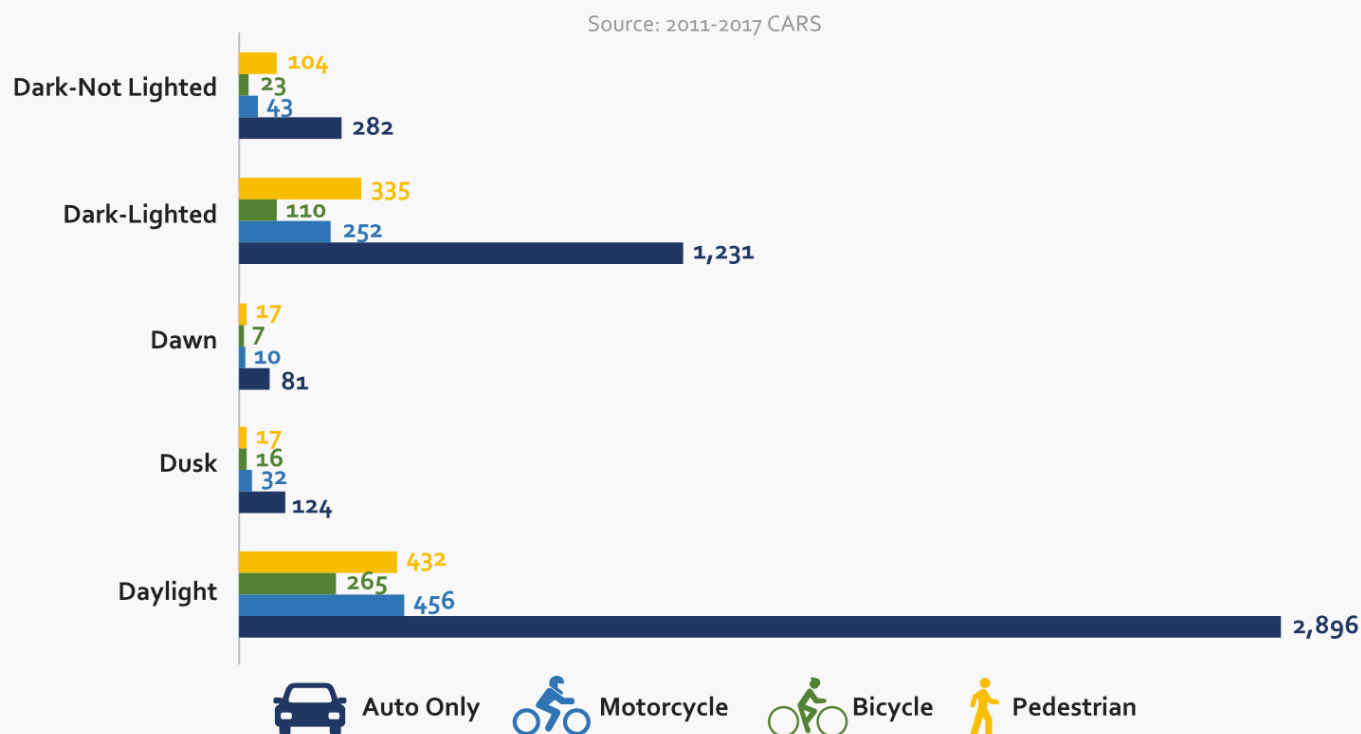
Lighting Conditions

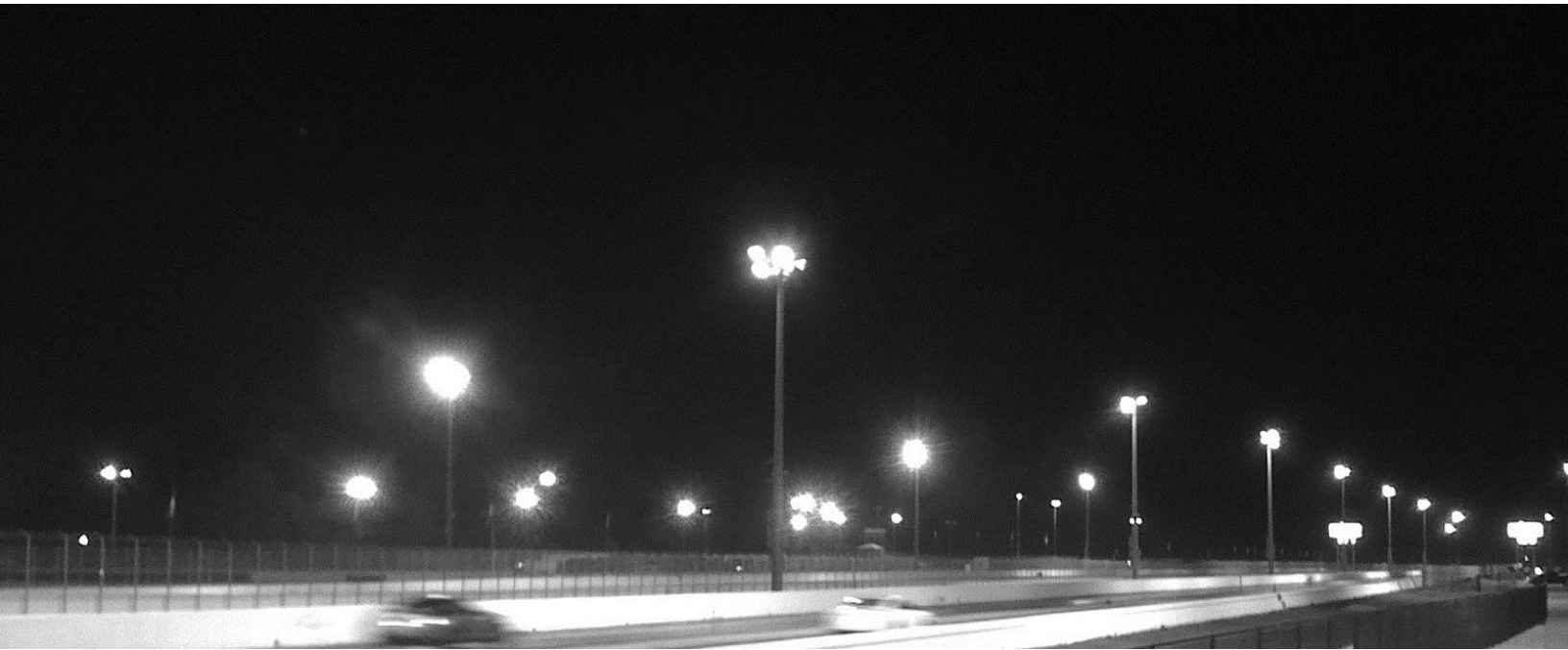
Fatal and serious injury crashes involving pedestrians occur primarily in dark conditions.

Over 25% of all fatal and serious injury crashes occurred during dark-lighted conditions.

- The proportion of non-daylight auto and motorcycle fatal and serious injury crashes were higher on freeways than non-freeways (8 % higher for autos, 7 % for motorcycles).
- Of the total auto head-on crashes, 44% occurred during non-daylight conditions.
- Of the auto crashes that occurred in dark-unlit conditions, 45% were rear-end crashes (compared to 37% during daylight and dark-lit conditions)
- 11% of pedestrian fatal and serious injury crashes occurred during dark-unlit conditions (bicycles were only 5%).

FATAL & SERIOUS INJURY CRASHES BY LIGHTING CONDITIONS





Source: By William "Patrick" Ma..., CC BY-SA 3.0, [Wikimedia Commons](#)

DARK-UNLIT CONDITION FATAL AND SERIOUS INJURY CRASHES

Crash locations were mapped to better understand where fatal and serious injury crashes occurred under dark-unlit conditions. These locations should be considered for lighting justification as well as other improvements:

- Downtown Belle Glade
- SR 80/Southern Blvd at Sugarhouse Rd
- SR 80/Southern Blvd between Seminole Whitney Rd and Flying Cow Rd
- Glades Rd between Boca Rio Rd and the Turnpike
- The Turnpike at Glades Rd
- Beeline Hwy at the Turnpike
- I-95 at Donald Ross Rd
- The Turnpike at Hood Rd, and Hood Rd at Golden Eagle Circle
- Military Trail at 45th St

Fatal and Serious Injury Crashes That Occurred During Dark, Unlit Conditions

Source: FDOT CARS 2011-2017

Dark Unlit Crashes

Pedestrian Involved

Bicycle Involved

Motorcycle Involved

Automobile Involved

City Boundaries

County Boundary

This map displays the locations of fatal and serious injury crashes that occurred during dark, unlit conditions in Palm Beach County, Florida, from 2011 to 2017. The data is sourced from FDOT CARS. The map includes city boundaries and county boundaries. The legend indicates the following categories:

- Pedestrian Involved (Yellow dot)
- Bicycle Involved (Green dot)
- Motorcycle Involved (Blue dot)
- Automobile Involved (Dark Blue dot)
- City Boundaries (Gray shaded area)
- County Boundary (Dashed line)

The map shows a high concentration of crashes along major thoroughfares, particularly in the central and southern parts of the county. Key areas with high crash density include the central corridor (I-95 corridor) and the southern corridor (US-1 corridor). The map also shows a significant number of crashes in the northern part of the county, particularly in the area around Jupiter and Tequesta.

Major roads shown include:

- US-1 (South Florida Expressway)
- US-15 (Boca Raton Expressway)
- US-441 (Jupiter Inlet Expressway)
- US-7 (Jupiter Inlet Expressway)
- US-78 (Jupiter Inlet Expressway)
- US-80 (Jupiter Inlet Expressway)
- US-880 (Jupiter Inlet Expressway)
- US-95 (Jupiter Inlet Expressway)
- US-101 (Jupiter Inlet Expressway)
- US-102 (Jupiter Inlet Expressway)
- US-103 (Jupiter Inlet Expressway)
- US-104 (Jupiter Inlet Expressway)
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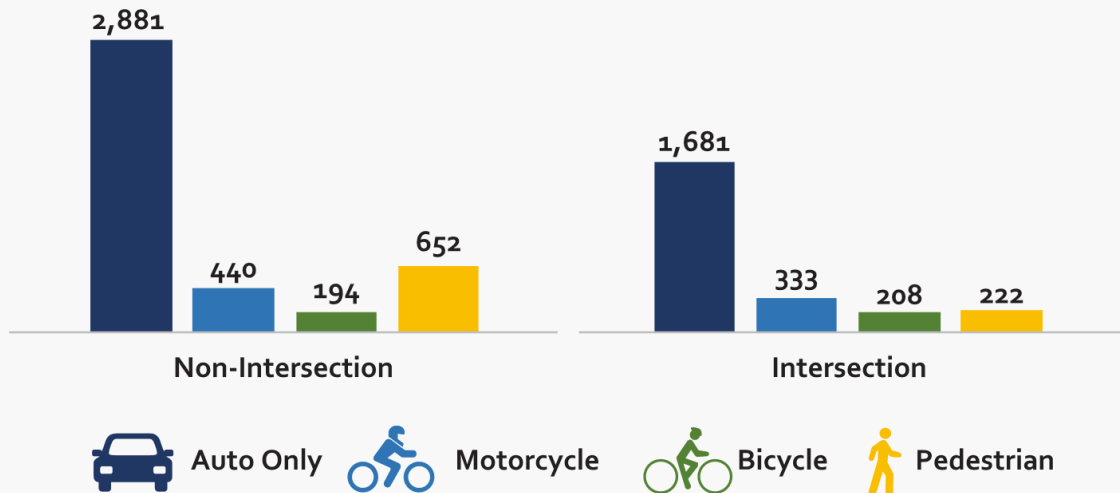


Where are Fatal and Serious Injury Crashes Happening?

More than 60% of fatal and serious injury crashes occurred at non-intersection locations, including a 3:1 ratio for pedestrian-involved crashes.

FATAL & SERIOUS INJURY CRASHES NON-INTERSECTIONS & INTERSECTIONS

Source: 2011-2017 CARS



Intersections – Turning Movements

The following percentages show the proportions of each turning movement by mode at the time of the crash.

Left Turning Movements

- Auto: 15%
- Motorcycle: 23%
- Bicycle: 12%
- Pedestrian: 10%

Right Turning Movements

- Auto: 2%
- Motorcycle: 4%
- Bicyclists: 21%
- Pedestrians: 5%

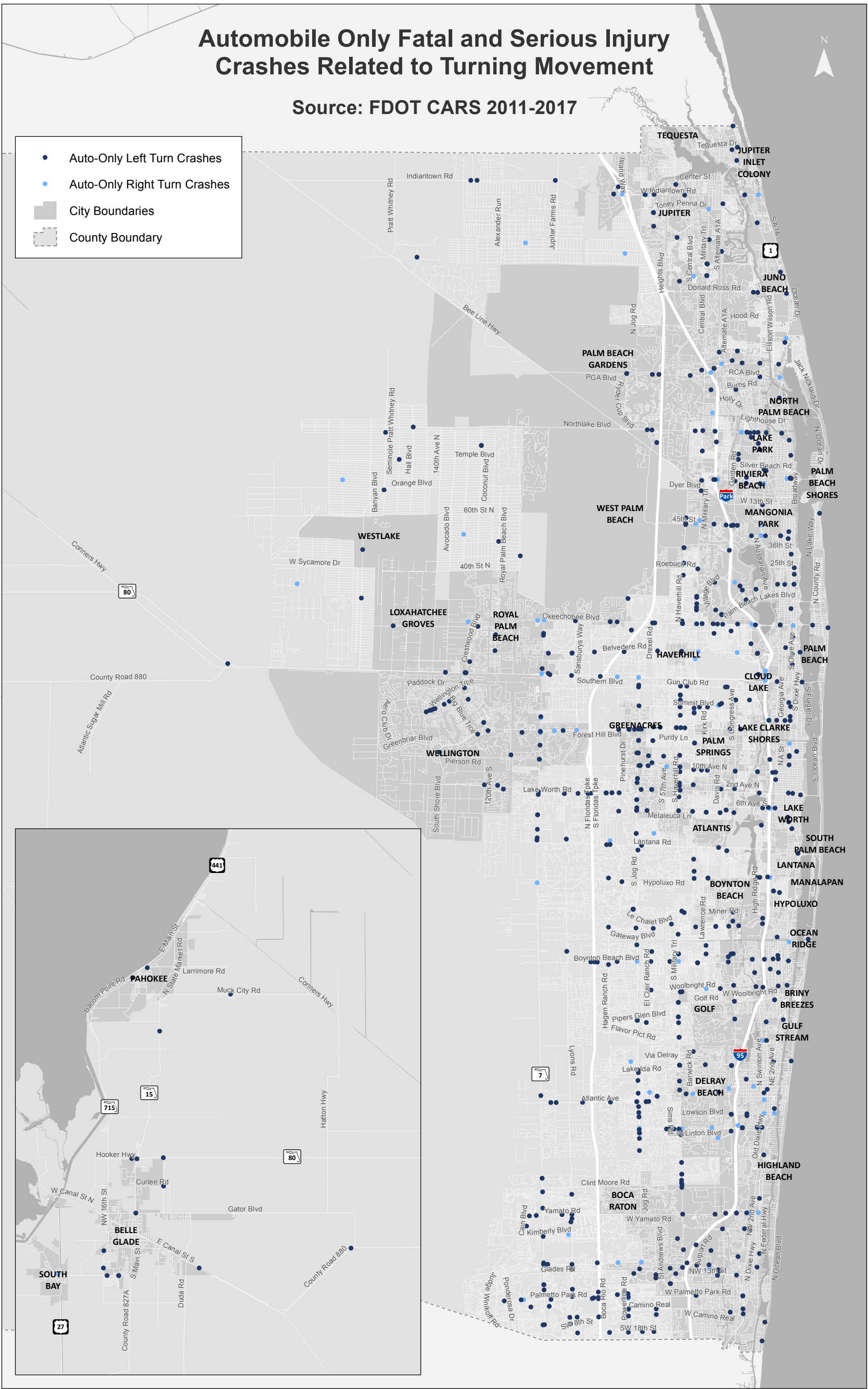
Given that fatal and serious injury crashes that involved left- and/or right-turning movement varied by mode, they were mapped to better understand the distribution and trends.

Automobile Only Fatal and Serious Injury Crashes Related to Turning Movement

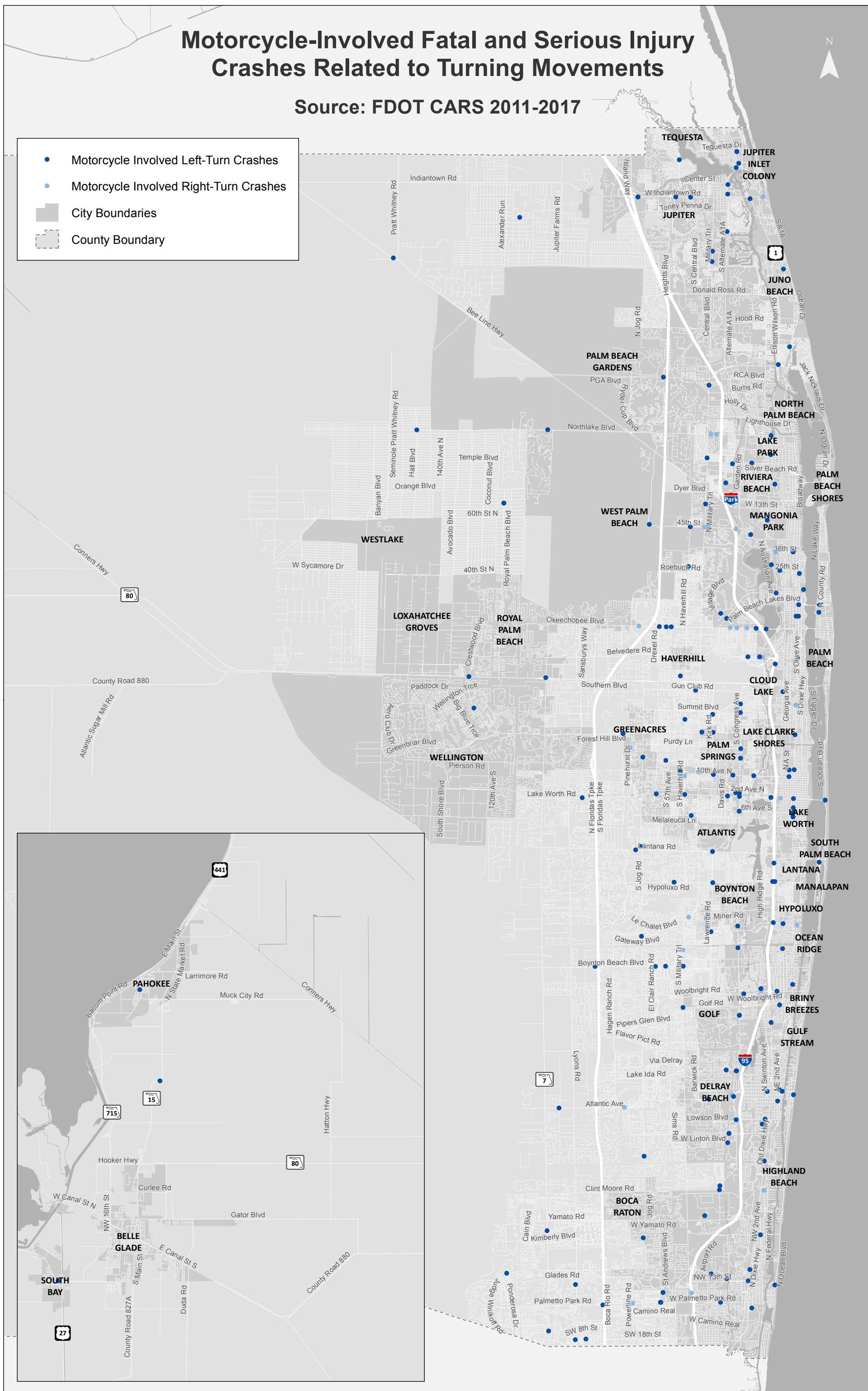
Source: FDOT CARS 2011-2017



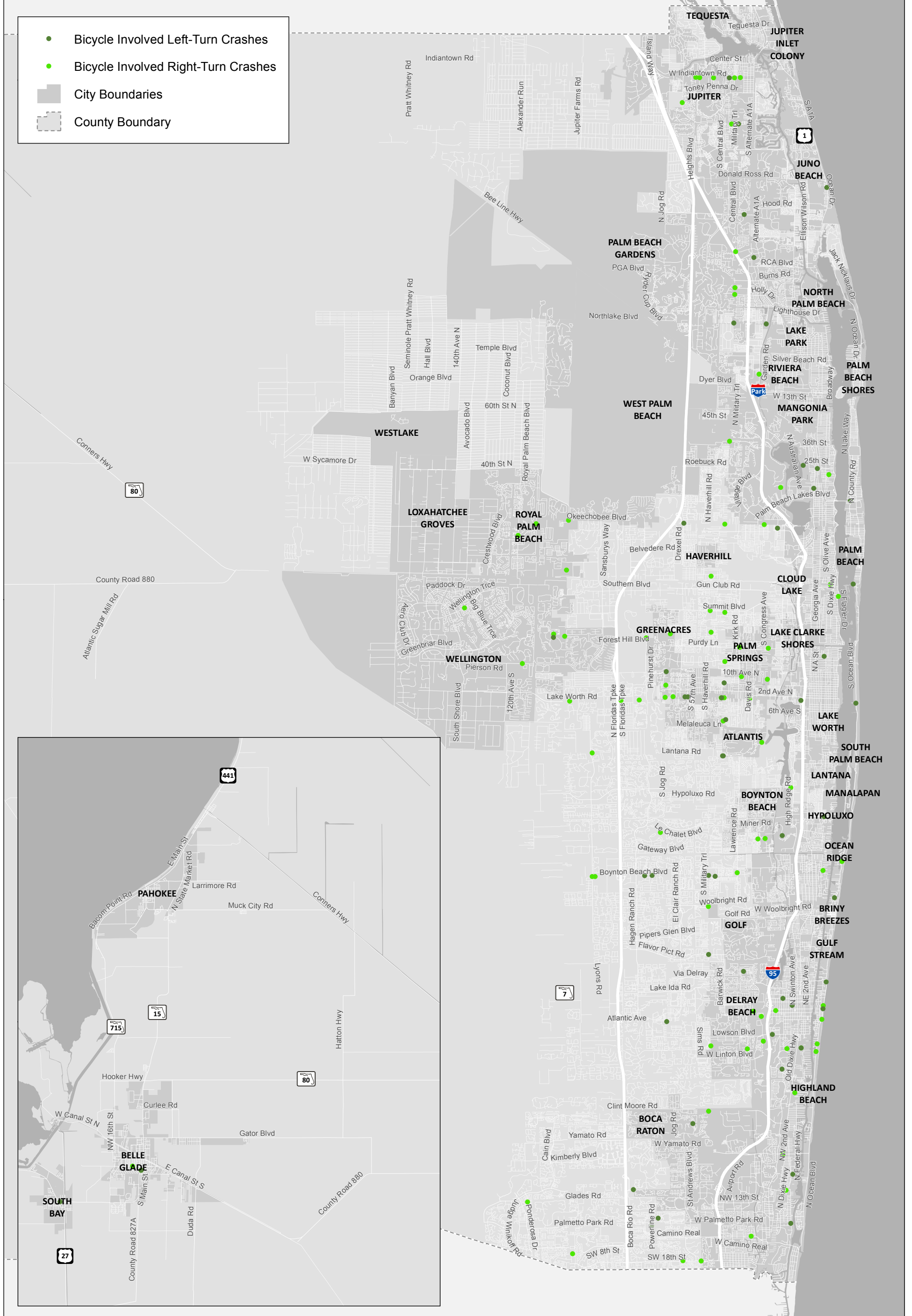
- Auto-Only Left Turn Crashes
- Auto-Only Right Turn Crashes
- City Boundaries
- County Boundary

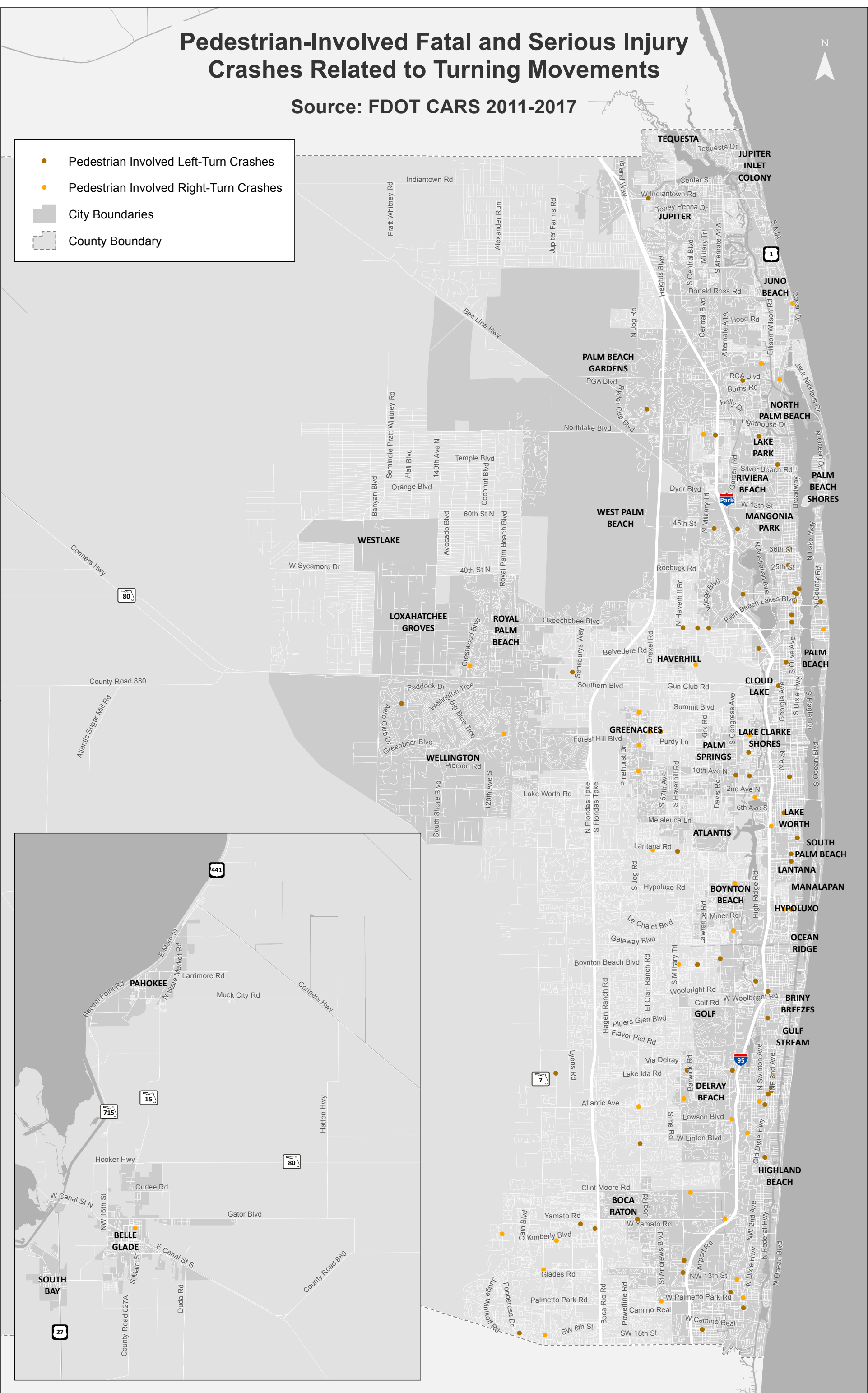


- Motorcycle Involved Left-Turn Crashes
- Motorcycle Involved Right-Turn Crashes
- City Boundaries
- County Boundary



- Bicycle Involved Left-Turn Crashes
- Bicycle Involved Right-Turn Crashes
- City Boundaries
- County Boundary







TURNING MOVEMENT HIGH CRASH LOCATIONS

Automobile Fatal and Serious Injury Turning Movement High Crash Locations

Wellington Trace between Corporate Center Way and Greenview Shores Blvd (Wellington)
Glades Rd at SR 7
Lake Worth Rd at Lucerne Lakes Blvd
Palmetto Park Rd at Powerline Rd
Linton Blvd at Military Trail (Delray Beach)
45 th St at Haverhill Rd (West Palm Beach)
PGA Blvd at I-95 (Palm Beach Gardens)
Broadway at Blue Heron Blvd (Riviera Beach)

Motorcycle Fatal and Serious Injury Turning Movement High Crash Locations

Royal Palm Beach Blvd at Tangerine Blvd	Congress Ave at 2 nd Ave N (Palm Springs)
Palmetto Park Rd at Powerline Rd	A1A at East Riverside Dr (Jupiter)
I-95 at Indiantown Rd (Jupiter)	Atlantic Ave at Congress Ave (Delray Beach)
Okeechobee Blvd between Drexel Rd and East Drive/Meridian Rd	Lake Ida Rd at Congress Ave (Delray Beach)
Palmetto Park Rd between St. Andrews Blvd and Boca Del Mar Dr	Congress Ave at SW 27 th Ave (Boynton Beach)
10 th Ave N between Swain Ave and Haverhill Rd (Greenacres)	Australian Ave at Florida Mango Rd
45 th St at Military Trail (West Palm Beach)	Belvedere Rd at Florida Mango Rd
Northlake Blvd between Dania Dr and I-95	Woolbright Rd at SW 18 th St
Palm Beach Lakes Blvd between Spencer Ave and Village Blvd (West Palm Beach)	Hypoluxo Rd at I-95 (Lantana)
Linton Blvd at Catherine Dr (Delray Beach)	Federal Hwy at 6 th Ave N (Lake Worth)



Bicycle Fatal and Serious Injury Turning Movement High Crash Locations

S Main St at SE F Ave (Belle Glade)

Forest Hill Blvd at SR 7, Ring Rd at Hunter Dr (Wellington)

Boynton Beach Blvd at Lyons Rd

Palmetto Park Rd at Powerline Rd

Lake Worth Rd at Sherwood Forest Blvd (Greenacres)

Indiantown Rd between Center St and Maplewood Dr, Thelma Ave at Center St (Jupiter)

Military Trail at Lantana Rd

Military Trail at Lake Worth Rd (Greenacres)

Whitney Dr at W Indiantown Rd (Jupiter)

S Federal Hwy at Linton Blvd (Delray Beach)

Pedestrian Fatal and Serious Injury Turning Movement High Crash Locations

Swinton Ave between SE 3rd St and SE 4th St (Delray Beach)

Atlantic Ave between NE 4th Ave and Intracoastal Way (Delray Beach)

Banyan Blvd between Dixie Hwy and Quadrille Blvd (West Palm Beach)

Dixie Hwy between 8th St and 10th St (West Palm Beach)

Palm Beach Lakes Blvd at Madeira Ct (West Palm Beach)



Non-Intersection

Except for bicyclist crashes, over half of all fatal and serious injury crashes occurred at non-intersection locations.

Non Intersection fatal and serious injuries

- Auto: 62%
- Motorcycle: 55%
- Bicycle: 46%
- Pedestrian: 71%

Driveway- and alley-related crashes:

- Auto: 2%
- Motorcycle: 5%
- Bicycle: 9%
- Pedestrian: 5%

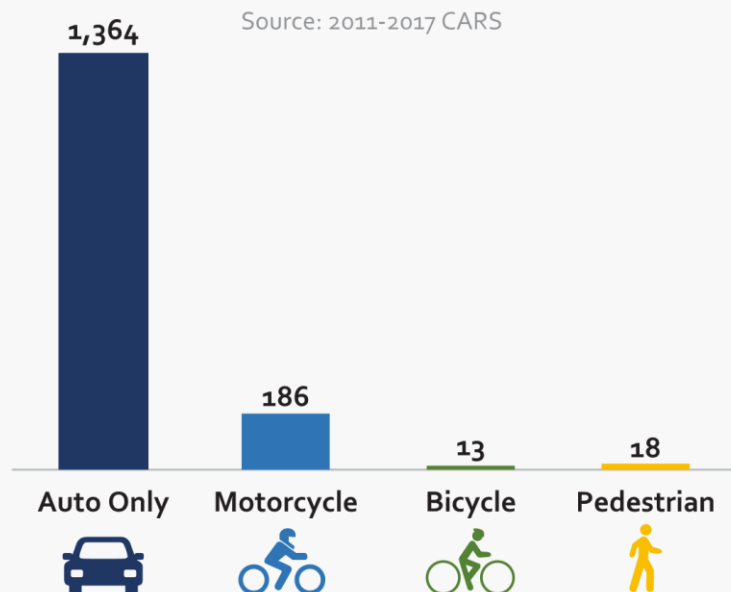


Lane Departures

Lane-departure crashes involve running off the road, head on crashes or a sideswipe collision⁵. They accounted for almost 33% of auto and 25% of motorcycle fatal and serious injury crashes.

- 29% were on freeways
- 23% involved drugs/alcohol
- 48% occurred during non-daylight conditions

FATAL & SERIOUS INJURY LANE-DEPARTURE CRASHES



The locations with the highest frequencies of lane departure fatal and serious injury crashes include:

- I-95 at Glades Rd
- I-95 at PGA Blvd
- I-95 at Blue Heron Blvd
- I-95 at Yamato Rd
- I-95 at Okeechobee Blvd
- 10th Ave N at I-95 and at Barnett Dr
- I-95 at Belvedere Rd

The map on the following page illustrates the locations of lane-departure fatal and serious injury crashes.

⁵ State Safety Office, Lane Departure Crashes, <http://www.fdot.gov/Safety/SHSP2012/SHSP-LaneDepartureCrashes.shtm>

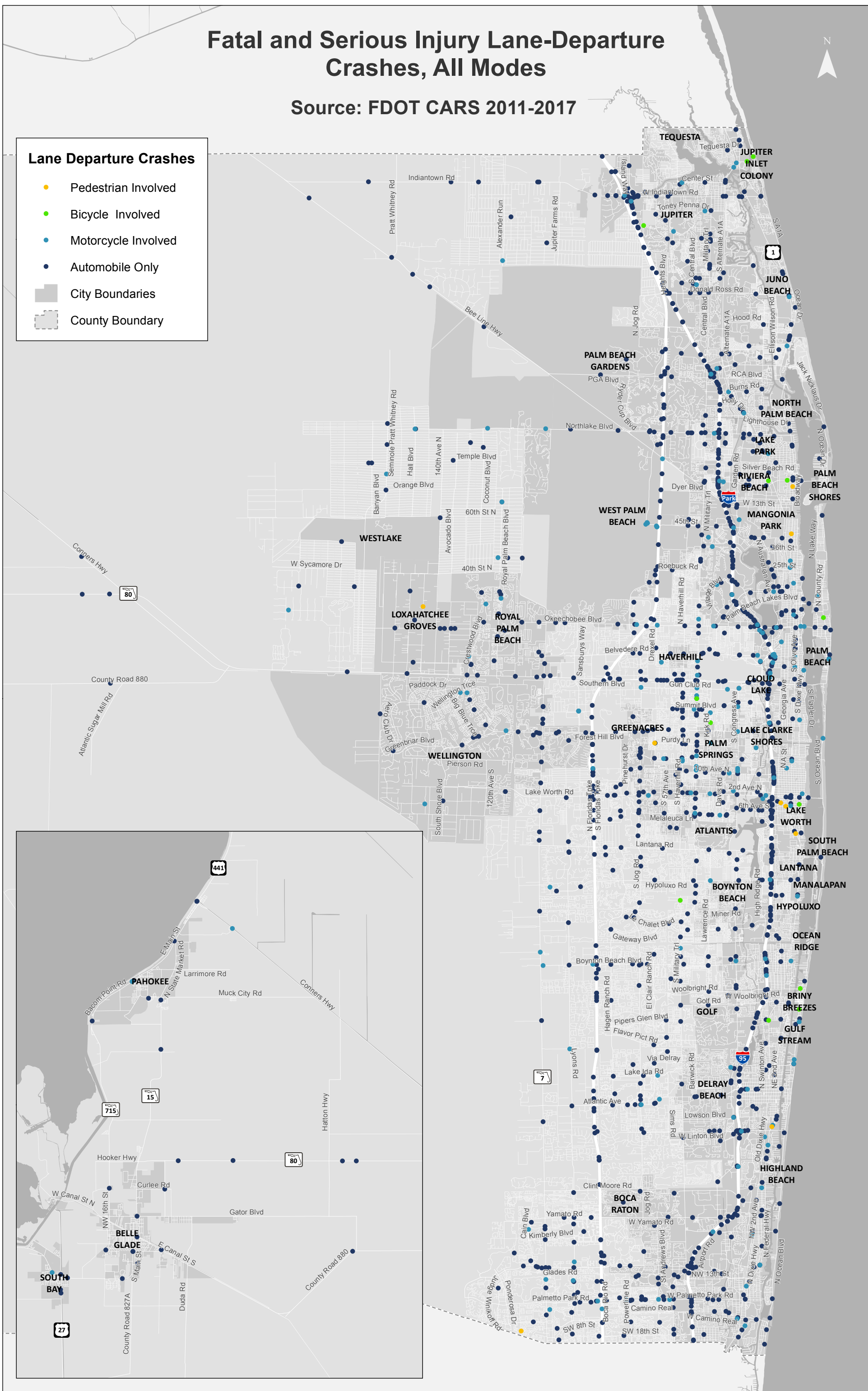
Fatal and Serious Injury Lane-Departure Crashes, All Modes

Source: FDOT CARS 2011-2017

Lane Departure Crashes

- Pedestrian Involved
- Bicycle Involved
- Motorcycle Involved
- Automobile Only

- City Boundaries
- County Boundary





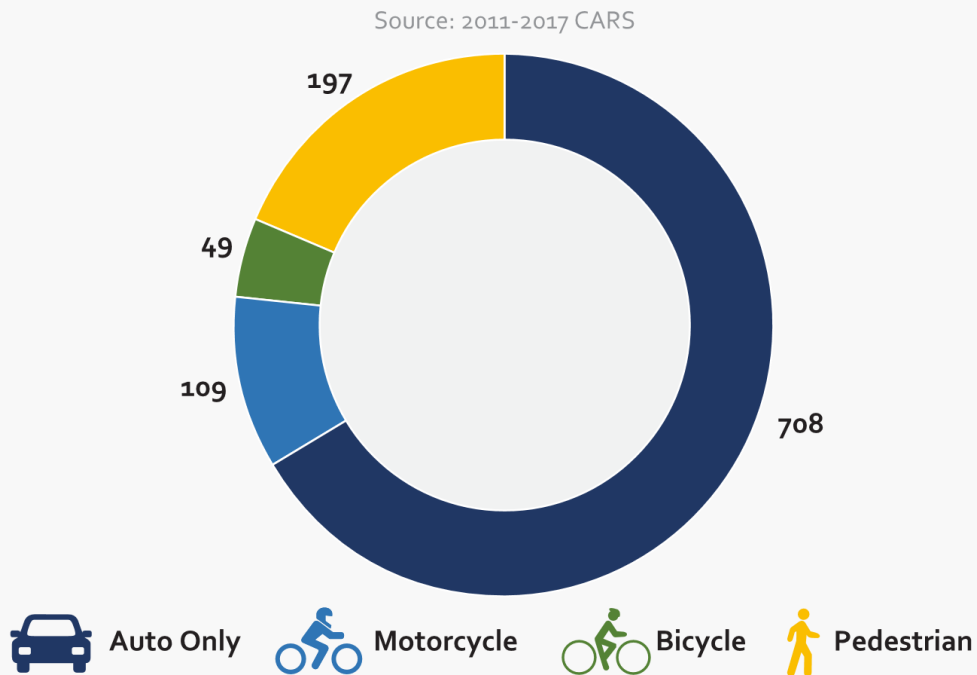
Driver Behavior

Nationally, driver behavior-related crashes are more difficult to document than those linked to physical conditions. As a result, they are often underreported. In Palm Beach County, this is also true for speeding-related crashes and distracted and aggressive driving-related crashes.

Impaired Driving

Palm Beach County currently ranks 7th (top 25%) in Florida for impaired driving-related fatalities and serious injuries. Impaired driving accounted for 16% of all fatal and serious injury crashes in the county.

IMPAIRED DRIVER-RELATED FATAL & SERIOUS INJURY CRASHES





Speeding and Aggressive Driving

Speeding and aggressive driving in Palm Beach County ranks 3rd in Florida for this crash category compared to peer population counties (200,000 people and over).⁶

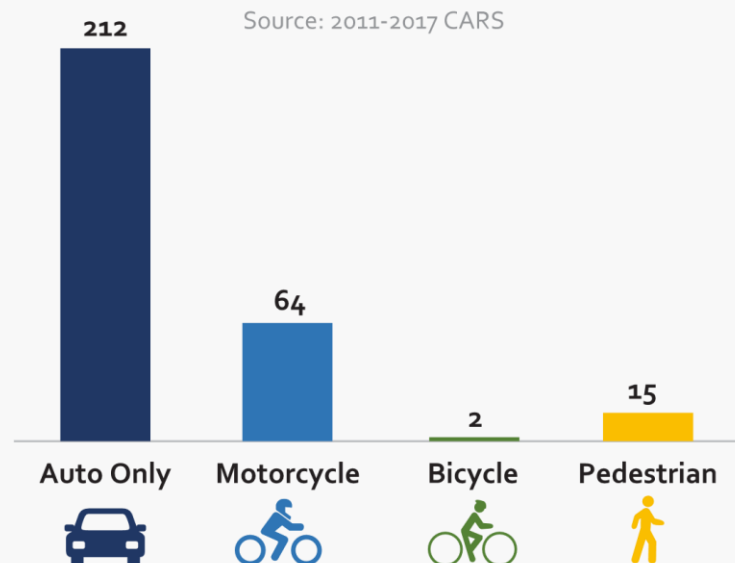
Based on responding officer responses recorded on crash report forms, 4% of all fatal and serious injury crashes were attributed to speeding. Of these crashes:

- 72% were auto
- 22% involved motorcyclists
- 5% involved pedestrians
- The largest proportion of speeding related crashes occurred on roads with speed limits of 35 mph (27 % at 35 mph and 42 % at 35 mph and less)

Drivers under 20 years old were overrepresented in speeding-related fatal and serious injury crashes, they accounted for the following proportions of speeding related crashes for each mode:

- Auto – 17%
- Motorcycle – 16%
- Pedestrian – 20%

SPEEDING-RELATED FATAL & SERIOUS INJURY CRASHES



⁶ FDOT Safety Office, 2019 Highway Safety Matrix, <http://www.fdot.gov/safety/3-Grants/2019Matrix/FY2019CountyMatrix.pdf>



More than 10,000 people lose their lives each year in speeding-related crashes, accounting for one third of all traffic crashes across the United States.

Vision Zero Network

The crash data regarding aggressive driving is limited; however, red light running is an example of aggressive driving and it contributed to 6% of fatal and serious injury crashes in Palm Beach County. Additionally, 1.5% of fatal and serious injury crashes were due to running stop signs. While enforcement plays a key role in managing vehicular speeds and aggressive driving, a multi-faceted strategy that includes enforcement, education, and design should be implemented to address speeding and aggressive driving.

WHAT IS AGGRESSIVE DRIVING?

The National Highway Traffic Safety Administration (NHTSA) defines aggressive driving as, "when individuals commit a combination of moving traffic offenses so as to endanger other persons or property." Aggressive driving occurs when a driver has committed two or more of the following actions: speeding, failure to yield right-of-way, improper or unsafe lane changes, improper passing, following too closely, or failure to obey traffic control devices (stop signs, yield signs, traffic signals, railroad grade cross signals, etc.).

Distracted Driving

National statistics show that on average, nine people are killed every day in the United States due to distracted driving; however, distracted driving is underreported because it is challenging for law enforcement to observe, and the same is true for Palm Beach County. While over 84% of people recognize the danger of using cell phones while driving, over a third admitted to texting while driving. Teenagers make up an estimated half of all distracted drivers.⁷ Improved data collection and strategies should include targeted education as well as policy changes. Effective roadway design and operation practices such as rumble strips and stripes and flashing beacons with warning signs can be implemented to mitigate lane departures, speeding, and other symptoms of distracted driving.






⁷ AAA Foundation for Traffic Safety



Equity

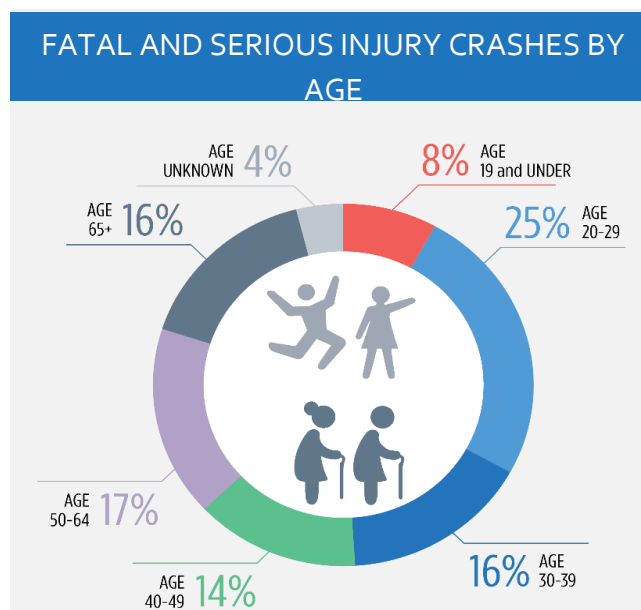
National statistics have shown that a disproportionate share of traffic-related deaths impact low-income and minority people and neighborhoods (also referred to as traditionally underserved communities/population). For example, pedestrian deaths are twice as high in low-income neighborhoods⁸ and African Americans are twice as likely as others to get killed while walking and Latinos are 40% more likely.⁹

	POPULATION 	ALL FATAL AND SERIOUS INJURY CRASHES 	PEDESTRIAN/BICYCLE FATAL AND SERIOUS INJURY CRASHES 
Traditionally Underserved Census Tracts	14.3%	16.2%	21.2%
Low Income Census Tracts	12.6%	19.0%	24.8%

In Palm Beach County, 16.2% of all fatal and serious injury crashes and 21.2% of pedestrian/bicycle crashes occurred within traditionally underserved census tracts even though these census tracts only comprise 14.3% of the population (based on a traditionally underserved index value that encompasses race, English proficiency, disability, vehicle ownership, and age). Additionally, 19% of all fatal and serious injury crashes and 24.8% of pedestrian/bicycle crashes occurred within low-income census tracts (median income is less than 60% of countywide median income), even though these census tracts only comprise 12.6% of the population. Maps are provided to show the locations of fatal and serious injury crashes within traditionally underserved areas and low-income areas.

National trends also show that aging populations are disproportionately impacted. In Palm Beach County 16% of the County's population is 65 or older, yet they were involved in 19% of all bicycle and 23% of all auto fatal and serious injury crashes.

Consistent with the TPA's mission to collaboratively plan, prioritize, and fund the transportation system, each Action resulting from this plan must consider all users. By engaging the traditionally underserved communities in a meaningful way, as outlined in the TPA's Public Participation Plan, adequate transportation facilities will be provided for all users.

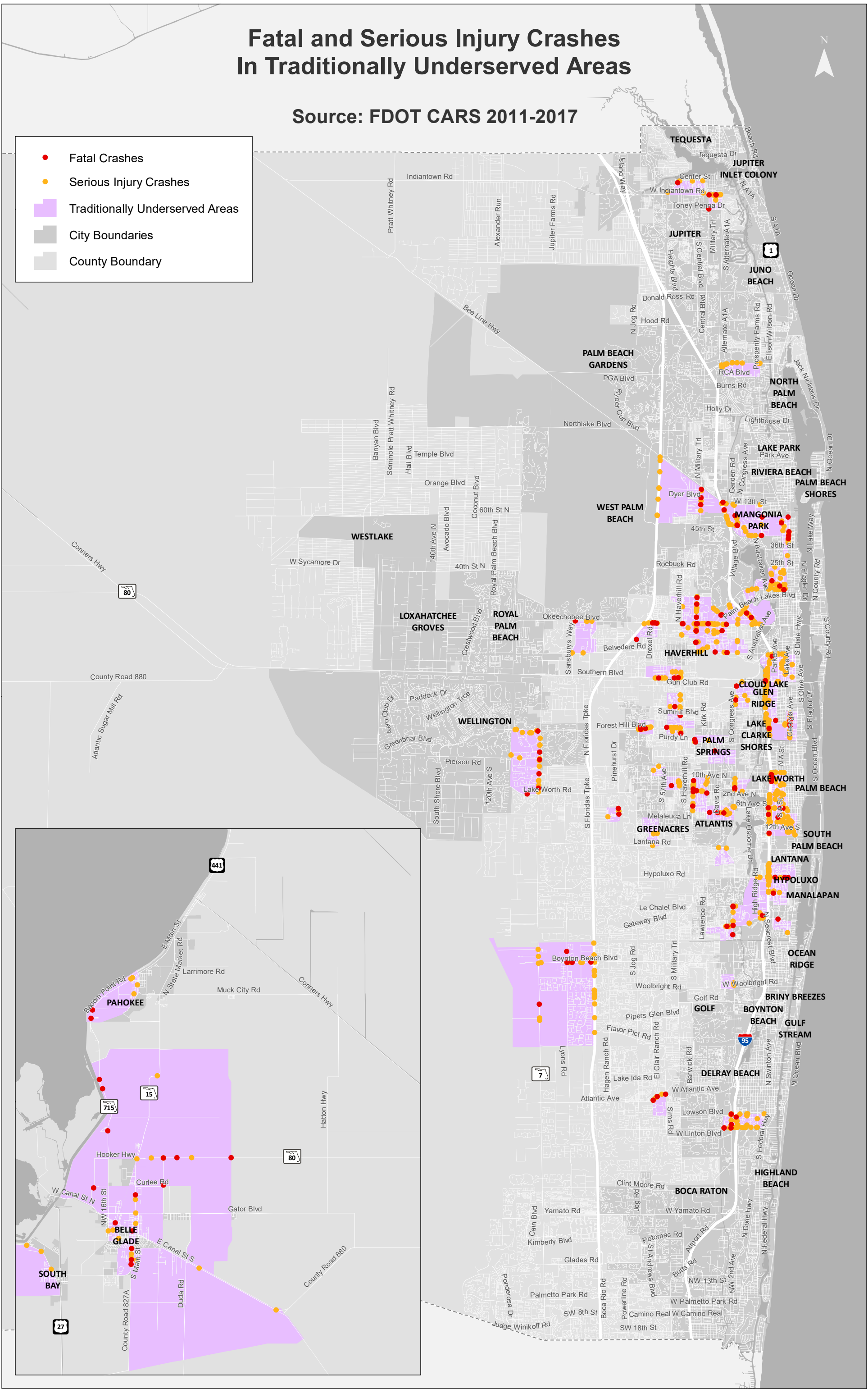
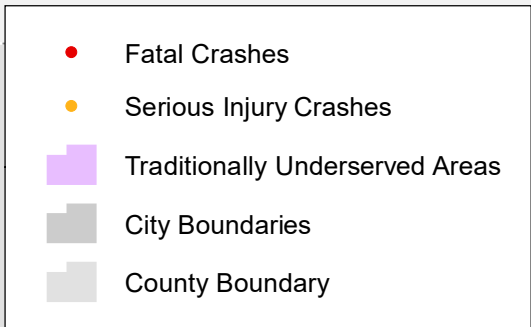


⁸ StreetsBlog USA, <https://usa.streetsblog.org/2014/08/05/study-people-in-low-income-areas-more-likely-to-be-killed-while-walking/>

⁹ Smart Growth America

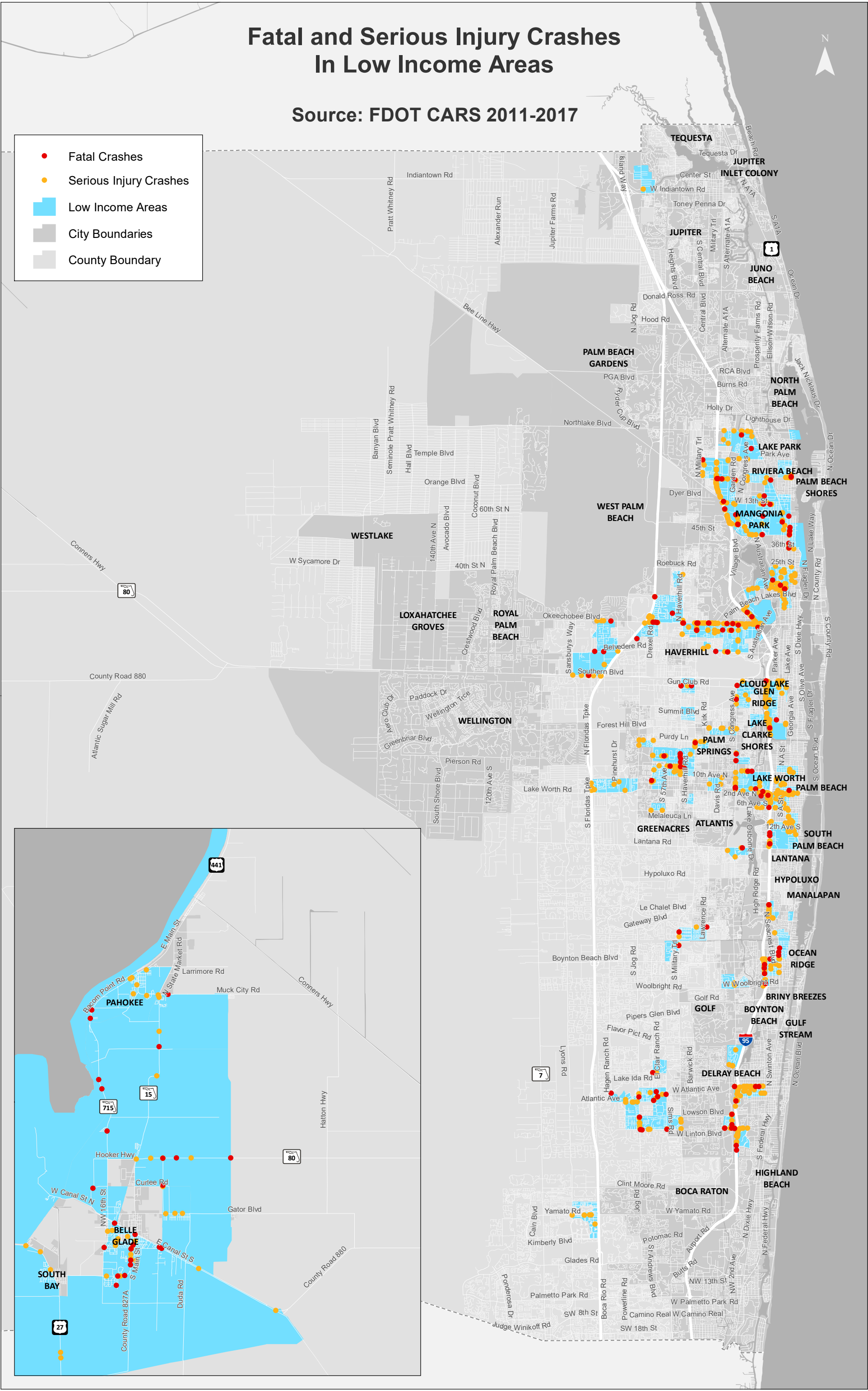
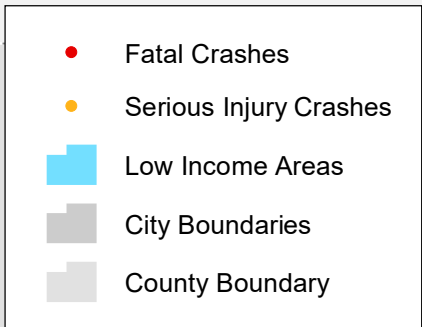
Fatal and Serious Injury Crashes In Traditionally Underserved Areas

Source: FDOT CARS 2011-2017



Fatal and Serious Injury Crashes In Low Income Areas

Source: FDOT CARS 2011-2017





ACTIONS - WELL-INFORMED AND DATA DRIVEN

Vision Zero promotes a culture of safety that prioritizes human life and wellness for all people, regardless of mode and is grounded in six key principals.

- Traffic-related deaths and serious injuries are preventable and unacceptable.
- Human life takes priority over mobility.
- Human error is inevitable, so the transportation system should allow for it to happen without death or serious injury.
- A systems-level approach to safety should be adopted to effect change.
- Safe human behaviors, education, and enforcement are essential contributors to a safe system.
- High speed is a primary cause of traffic death and serious injury; it should be managed with sensitivity to vulnerable road users.

A multi-disciplinary approach involving policy, funding and culture can move the TPA toward zero fatalities and serious injuries by addressing the following key crash trends.

Arterials – Arterial roadways accounted for between 31% and 43% of all crashes by each mode. On arterials, intersection and non-intersection crashes were split approximately evenly for each mode, with the exception of pedestrian-involved crashes, which occurred predominantly at non-intersections (69%).

Dark Unlit and Lighted Conditions – Crash analysis suggests that high crash locations with an increased frequency of dark-unlit crashes are areas where improved lighting conditions could have a significant impact. The high number of crashes occurring under dark-lighted conditions suggests that lighting guidelines may need to be further investigated to ensure that lit areas have sufficient lighting coverage.

Driver Behavior – While driver behavior relating to the cause of a crash can be difficult to quantify, the crash analysis identified several behavior-related issues. Drug or alcohol involved crashes accounted for 16% of fatal and serious injury crashes. Speeding was the primary contributing factor in 4% of crashes, predominantly occurring on roads with posted speed limits of 35 mph or less. Younger drivers were also overrepresented in speeding-related crashes.

Vulnerable Road Users – Vulnerable road users, both by mode and age, were disproportionately represented in fatal and serious injury crashes. Motorcyclists, bicyclists, and pedestrians account for less than 3% of the mode share, but over 30% of the fatal and serious injury crashes.



The actions presented in this plan are based on national best practices gleaned from cities that have implemented Vision Zero initiatives and regional strategic safety plans and tailored specifically to the Palm Beach TPA in direct response to the fatal and serious injury crash data. Action items are categorized under the following themes:

Policy: Adopting a data-driven approach is the crux of establishing a successful Vision Zero action plan and sharing that data sends powerful messages to politicians, stakeholders, and the public to influence policy changes.

Funding: The current funding programs administered by the TPA for various projects annually can be revised to reflect the findings of the Vision Zero Action Plan and implement action items and needed infrastructure improvements to ensure safety for all users. Opportunities will exist to obtain additional funding and assist other agencies in obtaining safety funding. These activities work together with the Transportation Plan, the TIP and other TPA plans and programs to provide a complete transportation system for all users.

Culture: Inducing a cultural shift towards safer streets includes establishing ongoing and improved data collection and reporting, prioritizing vulnerable road users, and institutionalizing Vision Zero principles. Addressing these issues requires a strong coalition of stakeholders. Through its public outreach efforts, the TPA already has a venue to provide information on the Vision Zero goals and elements to local communities, homeowner associations, community events and the general public.

Through the Action Items and Performance Measures identified in the following tables, the TPA can take the lead and foster development and implementation of Vision Zero efforts in Palm Beach County and Southeast Florida.



Policy Related Actions

Priority	Action	Measure	Target
1	Adopt Vision Zero Resolution affirming commitment and endorsing the Vision Zero Action Plan.	Resolution	April 18, 2019
2	Produce annual Vision Zero report to track progress and update actions.	Report	Annually in February
3	<p>Advocate for change to state and/or federal law:</p> <ul style="list-style-type: none"> a) Require knowledge of pedestrian, bicycle and motorcycle laws to obtain driver's license and renew every 5 years. b) Regulate distracted driving as primary offense. c) Regulate failure to obey crossing guard as moving violation. d) Allow automated speed enforcement/citations. e) Require helmets for all bicyclists, scooters and motorcyclists. f) Require adaptive cruise control, lane assistance, and collision avoidance systems on all new cars by 2025. 	Signed Law(s)	2022
4	<p>Work with School District of Palm Beach County to require:</p> <ul style="list-style-type: none"> a) Safe walking and biking curriculum annually in Elementary and Middle Schools. b) Driver Education Curriculum in High School. 	New Regulations	2020
5	<p>Propose revisions to Florida Design Manual (state roads) and Florida Greenbook (county and municipal roads):</p> <ul style="list-style-type: none"> a) Require setting a target speed based on context classification, not existing speeds. b) Require local roadway design based on context classification. c) Clarify where separated bike lanes are permitted and how to design them. d) Revise criteria for installation of vehicle or pedestrian crossing treatments at mid-block and unsignalized locations. 	Modified Standards	2020
6	Review state, county and city roadway lighting policies and recommend modifications to enhance safety for all users.	Lighting Recommendations	2020
7	Assist cities to establish Enhanced Penalty Zones at speeding-related crash locations pursuant to s. 316.1893, F.S.	Cities Assisted	2 per year
8	Create historic and predictive crash analysis methodology to evaluate transportation projects.	Crash Analysis Methodology Created	January 1, 2020
9	Perform historic and predictive crash analysis during PDE/PE phases for all TPA TIP and LRTP Cost Feasible projects (Strategic Intermodal System, Turnpike, and TPA Priority Projects).	Crash Analysis Completed	Project Based



Funding Related Actions

Priority	Action	Measure	Target
1	<p>Increase funding for safety projects:</p> <ul style="list-style-type: none"> a) Establish a safety priority list for projects to be funded with Federal Highway Safety Program funds. b) Conduct Highway Safety Plan workshop to assist local staff with identification and evaluation of projects eligible for Federal HSP funds. c) Prioritize TPA funding for roadway and/or pedestrian scale lighting in high crash dark/unlit locations. d) Create process with FDOT for quick-trigger safety projects. 	<ul style="list-style-type: none"> a) New Priority List b) Workshop c) Points for Lighting on TPA Scoring d) Expedited Process 	<p>Annually (a-b) January 1, 2020 (c-d)</p>
2	<p>Work with signal maintaining agencies to implement the following:</p> <ul style="list-style-type: none"> a) Enhanced crosswalks, audible pedestrian devices and countdown to walk indicators at high pedestrian crash intersections. b) Bicycle detection at high bicycle crash intersections. c) Time-based Right Turn on Red Prohibitions or Flashing Yellow Arrow turn signals at high right-turn crash intersections. d) Flashing Yellow Arrow or protected-only left turn phases at high left-turn crash intersections. 	Intersections Modified	As Needed
3	Share Vision Zero and safety funding opportunities via TPA website and newsletter, including High Visibility Enforcement Funding.	Newsletter Content	On-going
4	Create standard template to report performance measures for TPA funded projects.	Template Created	January 1, 2020
5	Complete performance measure template for TPA funded projects within one year of construction completion.	Completed Projects	As needed
6	Collect pedestrian/bicycle activity data in high crash locations, including pedestrian push button calls from Palm Beach County and Boca Raton signals.	Weekly Counts	20 locations per year
7	Formalize process to integrate pedestrian and bicycle counts into FDOT count website.	Process Formalized	2020
8	Evaluate newly programmed resurfacing projects annually for Complete Streets and other safety opportunities.	Projects Evaluated with Complete Streets Elements	Annually



Cultural Related Actions

Priority	Action	Measure	Target
1	Create interactive map to share vision zero content and solicit safety concerns.	Online Map	2020
2	Encourage the County and Cities to adopt Vision Zero.	Vision Zero Adoptions	5 per year
3	Create "Pledge to Slow Down" and obtain constituent signatures.	50,000 Signatures	2020
4	<ul style="list-style-type: none"> a) Host Vision Zero Workshop for TPA Elected Officials, Stakeholders and Staff. b) Conduct peer exchange event for TPA staff and other Vision Zero MPO(s). 	Workshop and Peer Event	1 per year
5	<ul style="list-style-type: none"> a) Distribute content from Safe Mobility for Life at high elderly crash locations. b) Distribute content from Florida Motorcycle Safety Coalition at high motorcycle crash locations. 	Content Distributed	Annually
6	<ul style="list-style-type: none"> a) Establish MPOAC membership on the Florida Pedestrian and Bicycle Safety Coalition to improve coordination between FDOT and MPOs. b) Establish MPOAC membership on the Florida Traffic Records Coordinating Committee (TRCC) to improve traffic and crash data collection, reporting, and decision-making. 	MPOAC Member assigned	2021
7	Collaborate with partners to create greater consistency between multiple crash databases, including those owned by PBC, Signal Four Analytics, FDOT, and DHSMV.	Streamlined Data Base	2021
8	Participate in Vision Zero and other local transportation safety events and encourage events to be held in traditionally underserved and low-income communities.	Participation in Safety Events	1 per year

APPENDIX A

Methodology



METHODOLOGY

Crash Data Collection

The methodology for the analysis performed in support of the Palm Beach Vision Zero Action Plan centers on two primary tasks: historical crash analysis and priority location identification. Both tasks utilized crash data extracted from FDOT's Crash Analysis Reporting System (CARS). Two crash database files were extracted from the CARS system, a crash level extract containing one row per crash and a non-motorist extract containing one row for each non-motorist involved in a crash. Both files were extracted for all of Palm Beach County for the years 2011 through 2017.

Building the Palm Beach County Vision Zero Crash Database

For the purposes of this plan, crashes including a highest-recorded severity of serious injury or fatality were identified for use in this analysis. The crash level CARS system extract file is filtered to include only crashes with a serious injury or fatality (excluding non-traffic fatalities). In the CARS system extract, these crashes are identified using the field "ACCISEV" with values of four and five for incapacitating injury crashes (serious injury crashes) and fatal crashes. The complete list of possible codes for this field are shown in Figure 1.

Figure 1. Crash Severity Field Codes.

Injury Severity (INJ)	
1	None
2	Possible
3	Non-Incapacitating
4	Incapacitating
5	Fatal (within 30 days)
6	Non-Traffic Fatality

With the subset of serious injury and fatal crashes identified, the non-motorist CARS system extract file was used to identify which crashes were bicycle- or pedestrian-involved. In the non-motorist CARS system extract file, the variable field "NON_MOTR_TYP_CD" was used, identifying pedestrians given a value of one or two and bicyclists given a value of three or four. The complete list of possible codes for this field are shown in Figure 2. The crash level extract file contains a unique crash number for each crash (each row of the dataset), which is used to link to the non-motorist extract file and identify which crashes involved pedestrians or bicyclists by adding columns to the filtered crash level extract file.

Figure 2. Non-Motorist Description Codes.



Non-Motorist Description	
1	Pedestrian
2	Other Pedestrian (Wheelchair, Person in a Building, Skater, Pedestrian Conveyance, etc.)
3	Bicyclist
4	Other Cyclist
5	Occupant of Vehicle Not in Transport (parked, etc.)
6	Occupant of Non-Motor Vehicle Transportation Device
7	Unknown Type of Motorist
8	Unknown Type of Non-Motorist

In addition to pedestrian and bicycle crashes, motorcycle-involved crashes were also evaluated in the analysis. Motorcycle crashes are identified using the vehicle body type data attribute. This attribute is found in the crash level dataset under the columns labeled "V1_VHCL_BDY_TYP_CD" and "V2_VHCL_BDY_TYP_CD" for vehicles one and two, respectively. Using this element, a code of 11 indicates that the given vehicle is a motorcycle. The complete list of possible codes for this field is displayed in Figure 3. All remaining crashes that were not identified as pedestrian, bicycle, or motorcycle crashes were categorized as automobile crashes.

Figure 3. Vehicle Body Type Codes.

Vehicle Body Type	
1	Passenger Car
2	Passenger Van
3	Pickup
7	Motor Home
8	Bus
11	Motorcycle
12	Moped
13	All-Terrain Vehicle (ATV)
15	Low Speed Vehicle
16	(Sport) Utility Vehicle
17	Cargo Van (10,000 lbs* or less)
18	Motor Coach
19	Other Light Trucks (10,000 lbs* or less)
20	Medium/Heavy Trucks (more than 10,000 lbs*)
21	Farm Labor Vehicle
77	Other, Explain in Narrative
88	Unknown

*4,536 kg



Data Analysis Methodology

In order to analyze and summarize the status and trends of serious injury and fatal crashes, several variables and crash attributes are selected for analysis. These crash characteristics are analyzed by mode (pedestrian, bicycle, motorcycle, automobile) and for all crashes. The selected crash attributes include the following elements: traffic control device (intersection or not), driver's action at the time of crash, vehicle maneuver at the time of crash, lighting conditions, road surface conditions, weather conditions, lane-departure crashes, functional classification, alcohol and/or drug involved crashes, and posted speed limit. The variables associated with each of these attributes are their associated names, codes, and descriptions within the dataset are discussed in this section.

In order to determine if the crash was located at an intersection or a non-intersection location, the "Type of Intersection" attribute was used. This attribute is found in the dataset in the column labeled "INT_TYP_CD" and is used by the reporting officer to identify the type of intersection where the crash occurred. The complete list of possible values for this field is provided in Figure 4.

Figure 4. Type of Intersection Codes.

Type of Intersection	
1	Not at Intersection
5	Traffic Circle
2	Four-Way Intersection
6	Roundabout
3	T-Intersection
7	Five-Point or More
4	Y-Intersection
77	Other, Explain in Narrative

The driver action of vehicle 1 at the time of the crash identifies the first action by the driver that may have contributed to the crash. This data element is based on the judgement of the officer investigating the traffic crash. In the crash dataset, this attribute is identified in the column titled "V1_FRST_DR_ACTN." The complete list of available values for this field is provided in Figure 5. For analysis regarding speeding-related crashes, driver action codes of 12 and 17 were used to identify crashes determined to be speeding-related.

The vehicle maneuver of vehicle one at the time of the crash identifies the controlled maneuver for vehicle 1 prior to the beginning of the sequence of events involved in the crash. In the crash dataset, this attribute is identified in the column titled "V1_VHCL_MOVE_CD." The complete list of available values for this field is provided in Figure 6.



Figure 5. Drivers Actions Codes.

Driver's Actions At Time of Crash			
1	No Contributing Action	17	Exceeded Posted Speed
2	Operated MV in Careless, Negligent Manner	21	Wrong Side or Wrong Way
3	Failed to Yield Right-of-Way	25	Failed to Keep in Proper Lane
4	Improper Backing	26	Ran Off Roadway
6	Improper Turn	27	Disregarded Other Traffic Sign
10	Followed Too Closely	28	Disregarded Other Road Markings
11	Ran Red Light	29	Over-Correcting/Over-Steering
12	Drove Too Fast for Conditions	30	Swerved or Avoided due to Wind, Slippery Surface, MV, Object, Non-Motorist in Roadway, etc.
13	Ran Stop Sign	31	Operated MV in Erratic, Reckless or Aggressive Manner
15	Improper Passing	77	Other Contributing Action

Figure 6. Vehicle Maneuver Codes.

Vehicle Maneuver Action			
1	Straight Ahead	13	Stopped in Traffic
3	Turning Left	14	Slowing
4	Backing	15	Negotiating a Curve
5	Turning Right	16	Leaving Traffic Lane
6	Changing Lanes	17	Entering Traffic Lane
8	Parked	77	Other, Explain in Narrative
10	Making U-Turn	88	Unknown
11	Overtaking Passing		



The lighting condition classification is used to determine the daylight presence and street lighting presence at the time of the crash. In the crash dataset, this attribute is identified in the column titled "LGHT_COND_CD." The complete list of available values for this field is provided in Figure 7.

Figure 7. Lighting Condition Codes.

Lighting Condition	
1	Daylight
5	Dark—Not Lighted
2	Dusk
6	Dark—Unknown Lighting
3	Dawn
77	Other, Explain in Narrative
4	Dark-Lighted
88	Unknown

The road surface condition classification is used to determine the surface condition of the street at the time of the crash. In the crash dataset, this attribute is identified in the column titled "RD_SRFC_COND_CD." The complete list of available values for this field is provided in Figure 8.

Figure 8. Road Surface Condition Codes.

Road Surface Condition	
1	Dry
7	Sand
2	Wet
8	Water
4	Ice/Frost
77	Other, Explain in Narrative
5	Oil
88	Unknown
6	Mud, Dirt, Gravel

The weather condition classification is used to determine the presence and type of precipitation or other weather-related conditions at the time of the crash. In the crash dataset, this attribute is identified in the column titled "EVNT_WTHR_COND_CD." The complete list of available values for this field is provided in Figure 9.



Figure 9. Weather Condition Codes.

Weather Condition	
1	Clear
2	Clouds
3	Rain
4	Fog, Smog, Smoke
5	Sleet, Hail, Freezing Rain
6	Blowing Sand, Soil, Dirt
7	Severe Crosswinds
77	Other, Explain in Narrative

Lane departure crashes are identified using a combination of the first harmful event data element, identified in the crash dataset by the column labeled "FRST_HARM_EVNT," and the manner of collision/impact data element, identified in the crash data set by the column labeled "IMPCT_TYP_CD." The first harmful event describes the first injury or damage causing event that characterizes the crash type. The manner of collision/impact variable identifies the manner in which two vehicles first make contact in a crash. Lane departure crashes are identified as run-off-the-road crashes and multi-vehicle crashes that are sideswipe (same or opposite direction) or head-on. Run-off-the-road crashes are identified as crashes with a manner of collision/impact type that is coded as a collision with a fixed object (codes 19 through 39). Multi-vehicle sideswipe and head-on crashes are identified as crashes with a first harmful event recorded as a collision with a motor vehicle in transport (code 14) and a manner of collision/impact of front to front, sideswipe same direction, or sideswipe opposite direction (codes 2, 4, and 5, respectively). Complete lists of the available codes for the first harmful event and manner of collision/impact data elements are provided in Figure 10 and Figure 11.

Figure 10. First Harmful Event Codes.

First Harmful Event	
Non-Collision	
1	Overturn/Rollover
2	Fire/Explosion
3	Immersion
4	Jackknife
5	Cargo/Equipment Loss or Shift
6	Fell/Jumped from Motor Vehicle
7	Thrown or Falling Object
8	Ran into Water/Canal
9	Other Non-Collision



First Harmful Event			
Collision—Non-Fixed Object			
10	Pedestrian	15	Parked Motor Vehicle
11	Pedalcycle	16	Work Zone/Maintenance
12	Railway Vehicle (Train, Engine)	17	Struck by Falling, Shifting Cargo
13	Animal	18	Other Non-Fixed Object
14	Motor Vehicle in Transport		
Collision—Fixed Object			
19	Impact Attenuator/Crash Cushion	30	Concrete Traffic Barrier
20	Bridge Overhead Structure	31	Other Traffic Barrier
21	Bridge Pier or Support	32	Tree (standing)
22	Bridge Rail	33	Utility Pole/Light Support
23	Culvert	34	Traffic Sign Support
24	Curb	35	Traffic Signal Support
25	Ditch	36	Other Post, Pole or Support
26	Embankment	37	Fence
27	Guardrail Face	38	Mailbox
28	Guardrail End	39	Other Fixed Object (Wall, Building, Tunnel, etc.)
29	Cable Barrier		



Figure 11. Manner of Collision/Impact Codes.

Manner of Collision/Impact	
1	Front to Rear
2	Front to Front
3	Angle
4	Sideswipe, Same Direction
5	Sideswipe, Opposite Direction
6	Rear to Side
7	Rear to Rear
77	Other, Explain in Narrative
88	Unknown

Alcohol and drug involved crashes are identified using the field labeled “ALCINVCD” in the crash dataset. This data element identifies if the crash has been indicated by the investigating officer to involve alcohol, drugs, or both. Coded values of one (alcohol), two (drugs), and three (alcohol and drugs) are used to identify alcohol and/or drug related crashes for this analysis.

The posted speed limit for each crash is identified using the dataset column labeled “MAXSPEED.” This variable is added information provided by FDOT in the CARS system, rather than provided by the investigating officer at the time of the crash.

APPENDIX B

High Crash Locations



Auto High Crash Locations

Location	City	Fatal & Serious Injury Crashes
Glades Rd at I-95, between Executive Center Dr & Airport Rd/NW 15 Ave	Boca Raton	33
Palmetto Park Rd at Powerline Rd	Boca Raton	28
PGA Blvd at I-95	Palm Beach Gardens	28
Palmetto Park Rd at I-95	Boca Raton	26
Belvedere Rd at I-95, from Interchange to Parker Ave	West Palm Beach	24
Yamato Rd at I-95	Boca Raton	23
Boynton Beach Blvd at I-95, from Industrial Ave to Interchange	Boynton Beach	23
45th St at I-95, from Interchange to Congress Ave	West Palm Beach	23
Forest Hill Blvd at SR 7, from Wellington's Edge Dr/Hunter Dr to SR 7	Wellington	22
Palm Beach Lakes Blvd at I-95, from Interchange to Congress Ave	West Palm Beach	22
10th Ave N at I-95	Lake Worth	20
Glades Rd from Boca Rio Rd to the Turnpike	Unincorporated (west of Boca Raton)	18
Lantana Rd at I-95	Lantana	17
Lantana Rd at I-95	Lantana	17
Congress Ave between Melaleuca Ave to 6th Ave S	Unincorporated	17
Forest Hill Blvd at I-95	West Palm Beach	16
45th St at I-95, from Interchange to Congress Ave	West Palm Beach	15
Powerline Rd at SW 18th St	Unincorporated (west of Boca Raton)	14
Jog Rd at Lake Ida Rd	Unincorporated	11



Motorcycle High Crash Locations

Location	City	Fatal & Serious Injury Crashes
45th St from Jog Rd to Haverhill Rd	West Palm Beach	7
Hypoluxo Rd at I-95	Lake Worth	5
S 6th Ave at I-95; A St at Lake Worth Ave/Lake Ave; B St at Lake Ave; Erie St at Lake Osborne Dr	Lake Worth	5
Boca Rio Rd at Palmetto Park Rd	Unincorporated (West of Boca Raton)	5
Okeechobee Blvd at I-95	West Palm Beach	5
Boynton Beach Blvd at I-95, from Industrial Ave to Interchange	Boynton Beach	4
Dixie Hwy from 7th Ave S to 5th Ave S; 6th Ave S at S H St; 7th Ave S at S J St	Lake Worth	4
Northlake Blvd at I-95, between Dania Dr and Interchange	Palm Beach Gardens	4
10th Ave N between Congress Ave and Palm Dr	Palm Springs	4
Belvedere Rd at I-95	West Palm Beach	4
Dixie Hwy from Alhambra Pl to Forest Hill Blvd; US 1/S Olive Ave at Maddock St/Beverly Rd	West Palm Beach	4
Belvedere Rd from Clubhouse Dr to N Australian Ave	West Palm Beach/ Unincorporated (near W Palm Beach Airport)	4
W Linton Blvd at Catherine Dr	Delray Beach	3



Bicycle High Crash Locations

Location	City	Fatal & Serious Injury Crashes
Linton Blvd from Dixie Hwy to Intracoastal Waterway US 1/Federal Hwy from Linton Blvd to Banyan Tree Lane	Delray Beach	5
6th Ave S from S E St to East Coast St 10th Ave S from S C St to S F ST S Dixie Hwy at S 8 Ave	Lake Worth	5
Lake Worth Rd from Gulfstream Rd to Congress Ave	Palm Springs	5
Lantana Rd at I-95	Unincorporated	5
S Main St between S F St and S G St	Belle Glade	3
US1/Federal Highway between NW 14th Terrace and NE 28th St	Boca Raton	3
Atlantic Ave from NW 5th Ave to Swinton Ave SW 2nd Ave at SW 2nd St SW 2nd St at Swinton Ave	Delray Beach	3
Forest Hill Blvd at Jog Rd	Greenacres	3
Lake Worth Rd at Sherwood Forest Blvd	Greenacres	3
W Indiantown Rd from Center St to Maplewood Dr	Jupiter	3
W Indiantown Rd from S Pennock Ln to Philadelphia Dr	Jupiter	3
Lucerne Ave from Dixie Hwy to Federal Hwy	Lake Worth	3
Broadway Ave at W Blue Heron Rd	Riviera Beach	3
Boynton Beach Blvd at Lyons Rd	Unincorporated	3
Lake Worth Rd from Kirk Rd to Olsson Terrace	Unincorporated (near Palm Springs)	3
Palmetto Park Rd at Powerline Rd	Unincorporated (west of Boca Raton)	3
Forest Hill Blvd at SR 7, from Wellington's Edge Dr/Hunter Dr to SR 7	Wellington	3
Palm Beach Lakes Blvd from Carver Ave to Sapdilla Ave Tamarind Ave from 10th to 14th St	West Palm Beach	3



Pedestrian High Crash Locations

Location	City	Fatal & Serious Injury Crashes
W Indiantown Rd from Hepburn Ave to Alt A1A	Jupiter	9
Broadway Ave from 42nd St to 48th St	West Palm Beach	8
Southern Blvd at Parker Ave Parker Ave at Briggs Rd Briggs Rd at Georgia Ave Nottingham Blvd at Parker Ave Lake Ave at Conniston Rd	West Palm Beach	7
Military Trail from Lake Worth Rd to Todd St	Greenacres	6
Military Trail from Okeechobee Blvd to Elmhurst Rd Okeechobee Blvd from Military Trail to Biscayne Blvd	Unincorporated	6
Dixie Hwy from Alhambra Place to Forest Hill Blvd	West Palm Beach	6
Linton Blvd between Congress Ave & Dixie Hwy	Delray Beach	5
10th Ave N between Henthorne Dr and Congress Ave	Palm Springs	5
Lake Worth Rd at Davis Rd Lake Worth Rd at Congress Ave 2nd Ave at Miller 2nd Ave at Davis Gulfstream at Lake Worth Rd	Palm Springs	5
10th Ave N from Lynwood Dr to Boutwell Rd	Unincorporated	5
Lantana Rd at Military Trail	Unincorporated	5
Okeechobee Blvd at Haverhill Rd	Unincorporated	5
Forest Hill Blvd from Jog Rd to Sherwood Forest Blvd	Unincorporated (near Greenacres)	5
Dixie Hwy from 8th St to Palm Beach Lakes Blvd Palm Beach Lakes Blvd from Madeira Ct to Dixie Hwy Federal Hwy/US 1 at 9th St	West Palm Beach	5
Military Trail from Shiloh Dr to 45th St	West Palm Beach	5
45th St from Congress Ave to Jeffrey Ave	Mangonia Park	4
Sherwood Forest Blvd from Purdy Lane to Basil Rd Purdy Lane from España Real to Sherwood Forest Blvd	Unincorporated	4
South Quadrille Blvd from Hibiscus St to Datura St Hibiscus St from S Quadrille Blvd to Dixie Hwy	West Palm Beach	4
Atlantic Ave from Palm Square to Gleason St	Delray Beach	3
W Indiantown Trail from Military Trail to Loxahatchee Dr	Jupiter	3



PALM BEACH
Transportation Planning Agency