

# CRASH DATA



## FATAL AND SERIOUS INJURY (F/SI) CRASHES BY EMPHASIS AREA



Intersections (29%)



Roadway Departure (21%)



Speeding (27%)



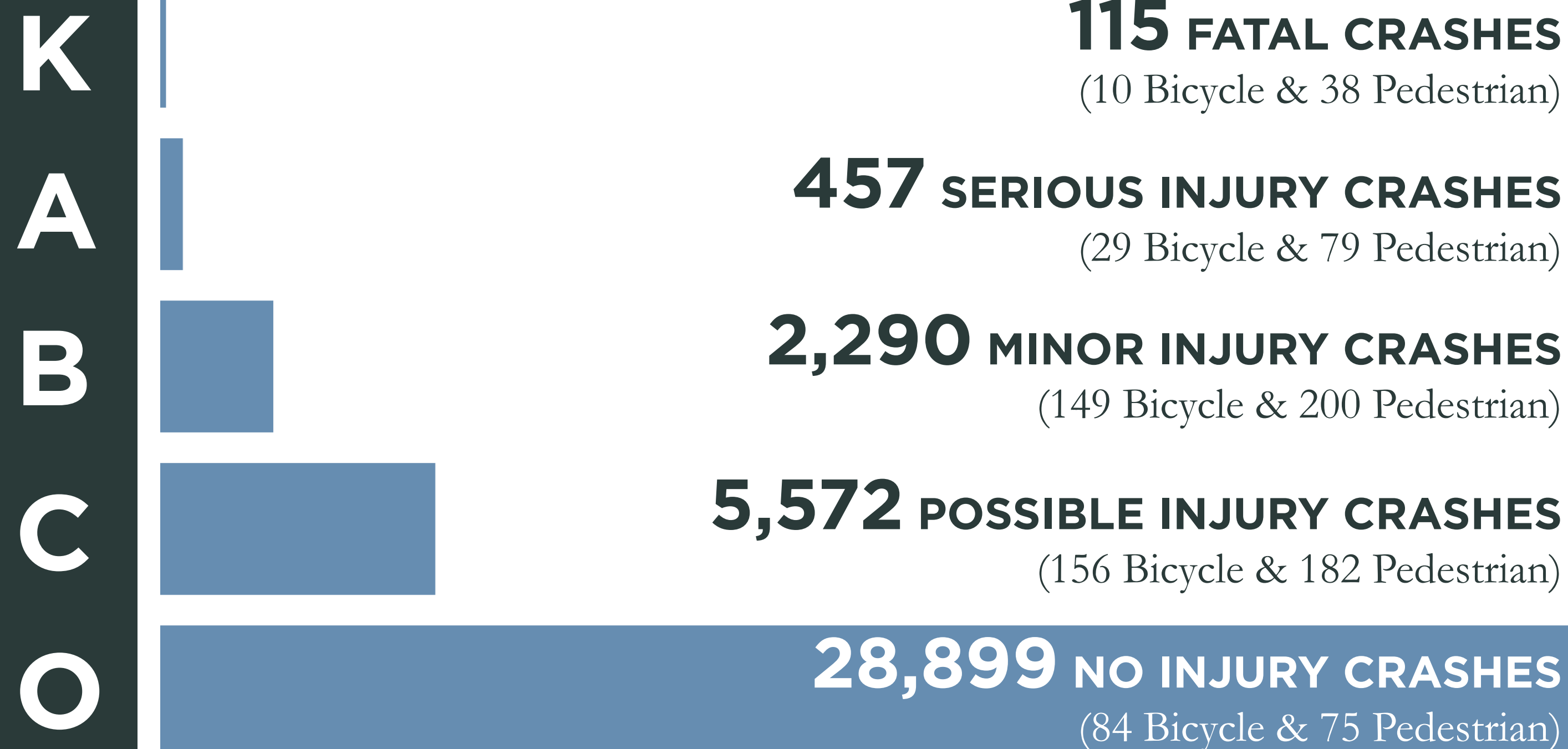
Young Drivers (26%)



Pedestrians (22%)

## FATAL CRASHES

Charleston's Metropolitan Area ranks **#9** for *Smart Growth America's* **Most Dangerous Metropolitan Areas for Pedestrians**. Vulnerable road users constitute just **4%** of all crashes, but **47%** of all Fatal and Serious Injury crashes.

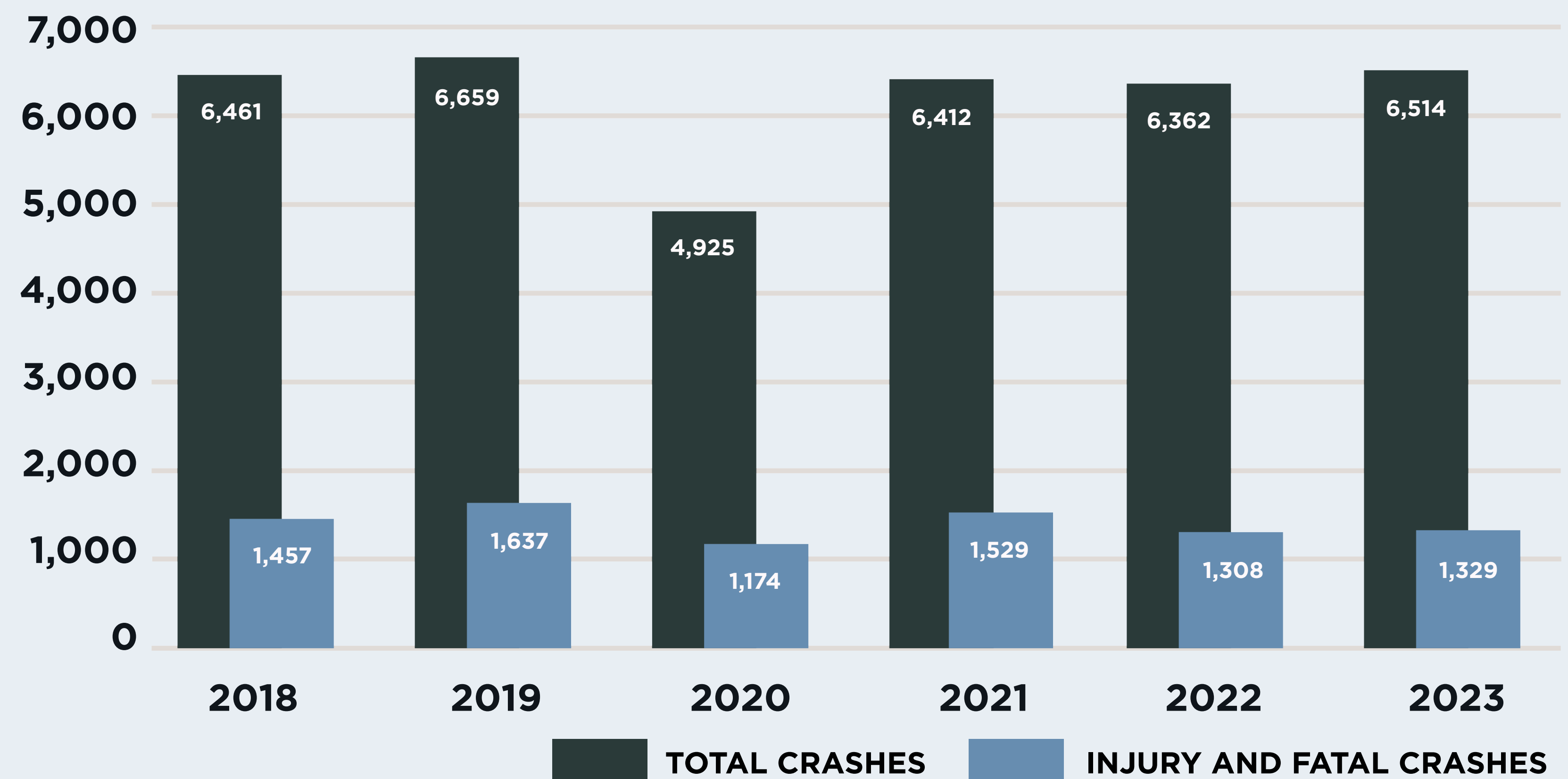


The KABCO scale is how the federal government classifies crash severity.

- Over 20% of Pedestrian crashes resulted in serious injury or death
- Of the 37,333 total crashes that occurred 22.6% of all crashes resulted in injury or death

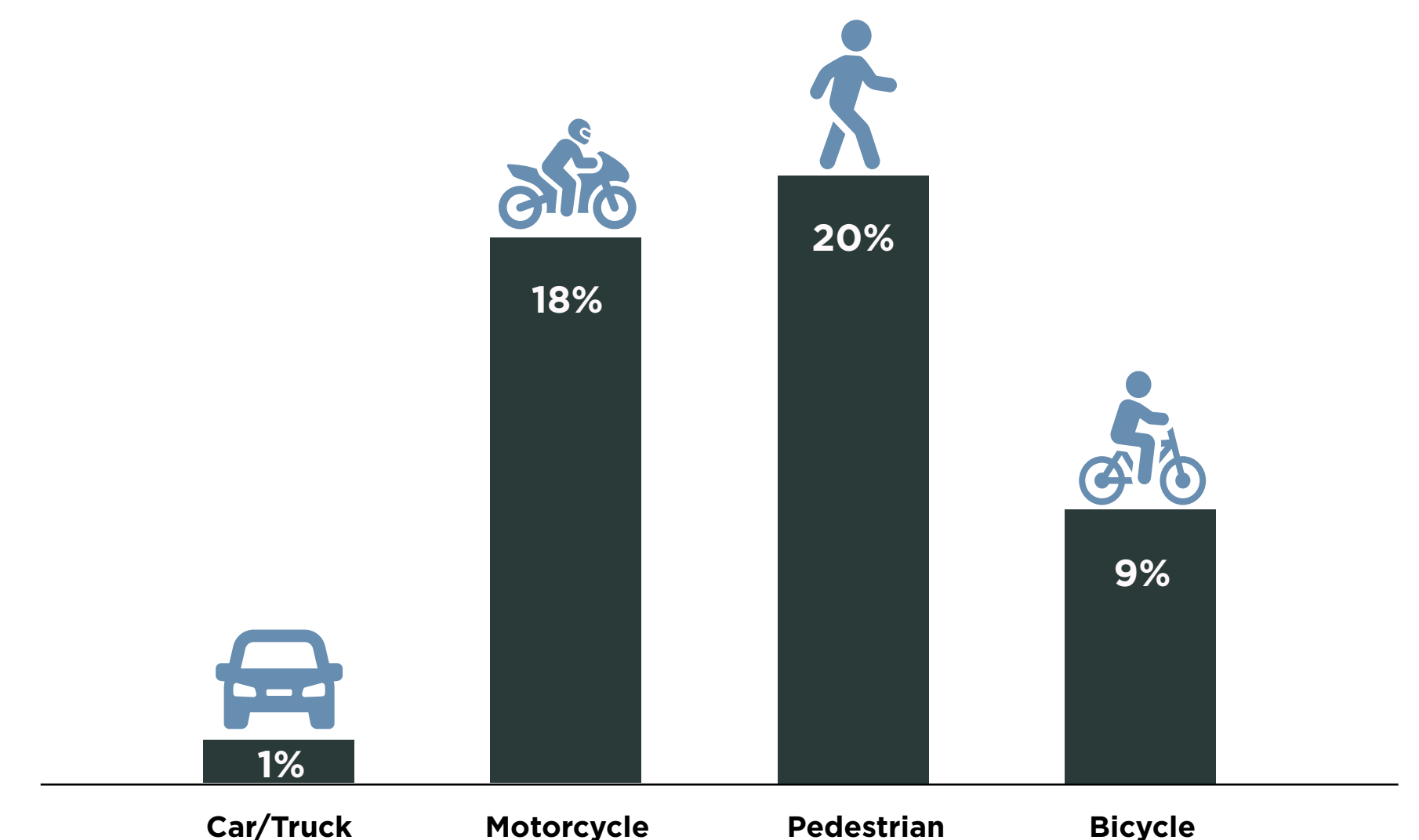
## CRASH HISTORY

Overall, with the exception of 2020 due to the impacts of the COVID-19 pandemic on traffic volumes, the number of crashes per year have remained nearly flat, though the number of crashes resulting in injury or fatality have steadily decreased.

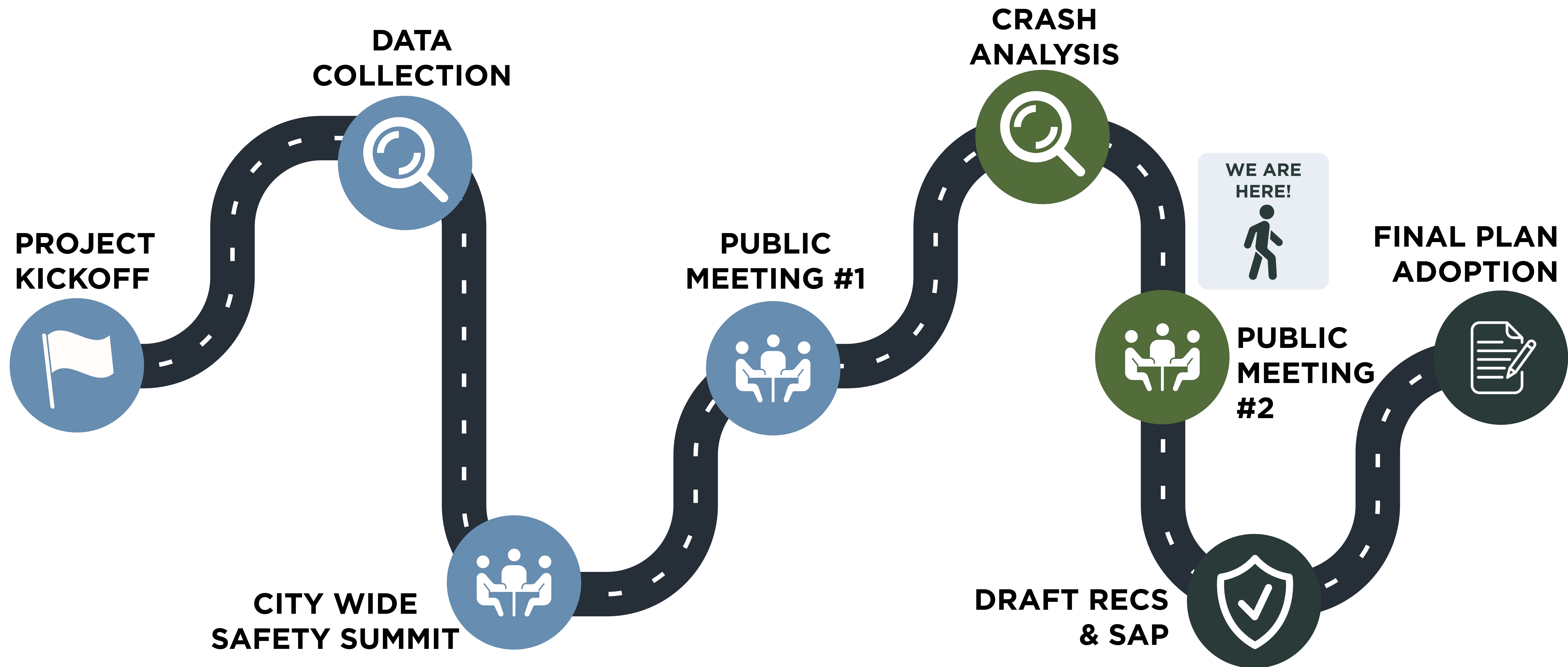


## LIKELIHOOD OF F/SI CRASH, BY MODE

Crashes involving vulnerable road users are up to 20 times more likely to result in a fatality or serious injury than those between two motor vehicles.



# PROJECT OVERVIEW



**WINTER '24/'25**

**SPRING '25**

**SUMMER '25**

## KEEP IN TOUCH!

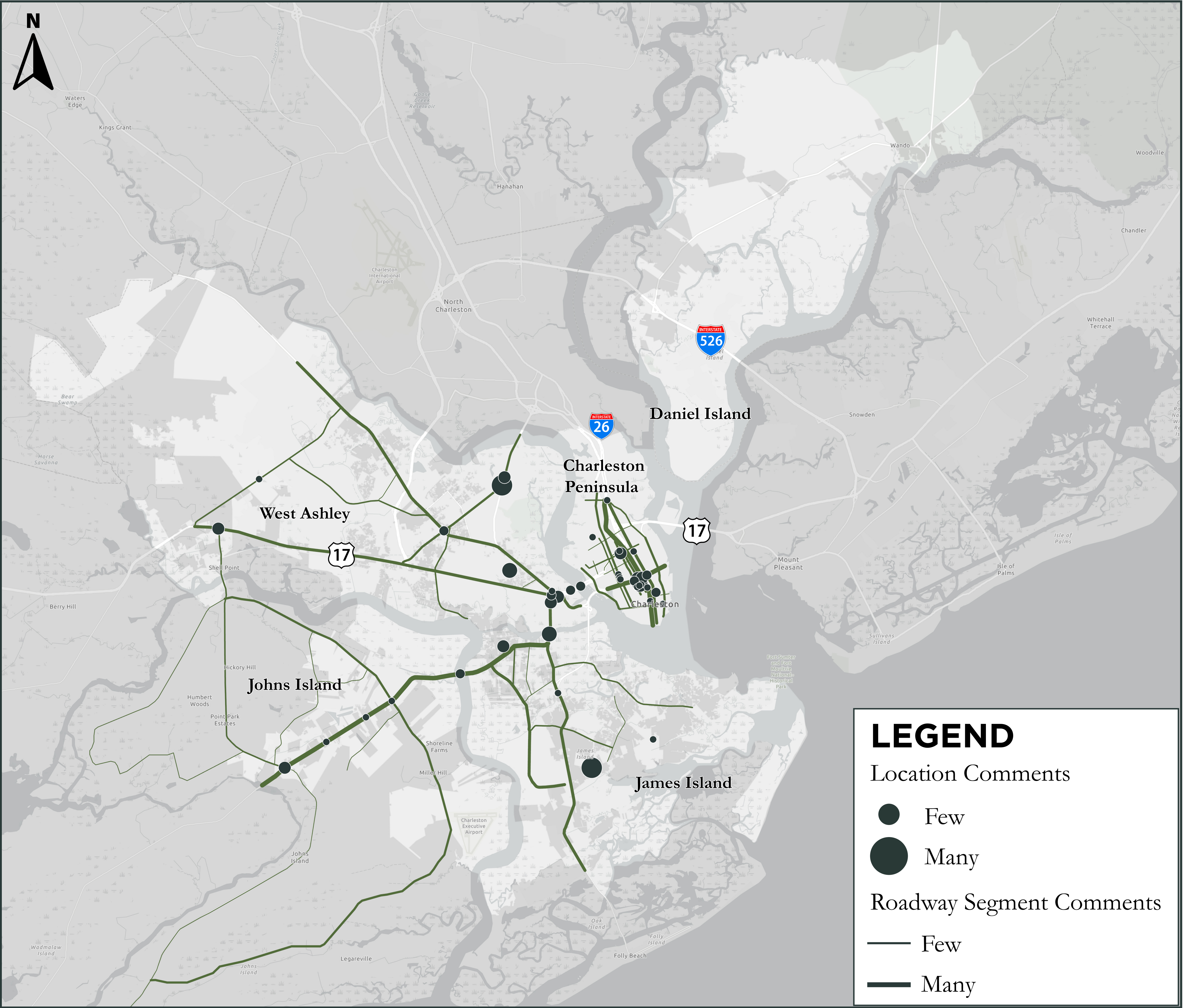
Thank you for your continued participation in the City of Charleston Safety Action Plan!

Take our survey by scanning the QR Code or by using the following link [https://www.surveymonkey.com/r/Charleston\\_SAP2](https://www.surveymonkey.com/r/Charleston_SAP2) Thank you if you have already participated!



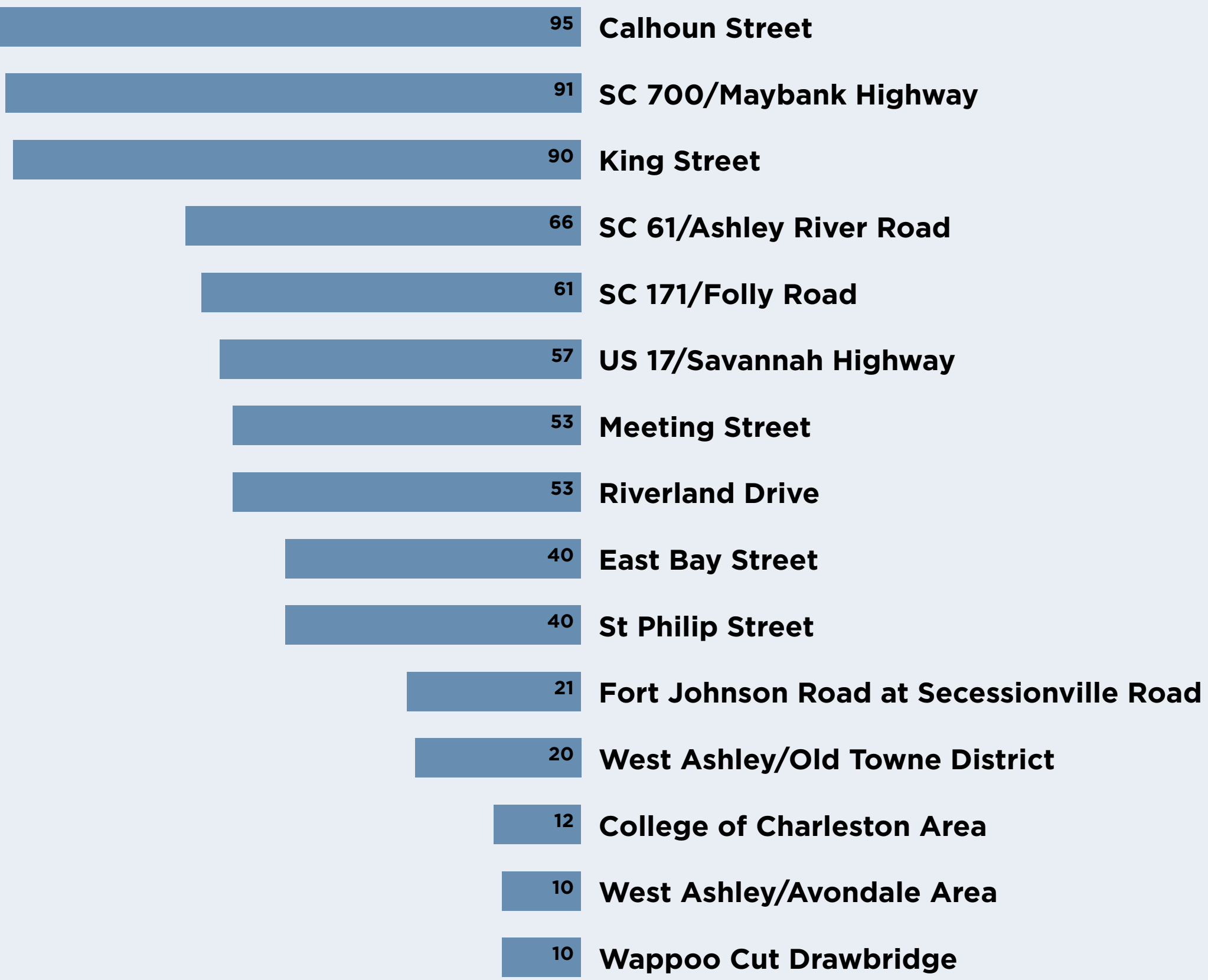


# ROUND 1 FEEDBACK



## TOP LOCATIONS

The following locations received the most comments during the first round of engagement:



## KEY THEMES

The following key themes received the most comments during the first round of engagement:

### Improve Non-Motorist Facilities (48%)



### Address Driving Behavior (33%)



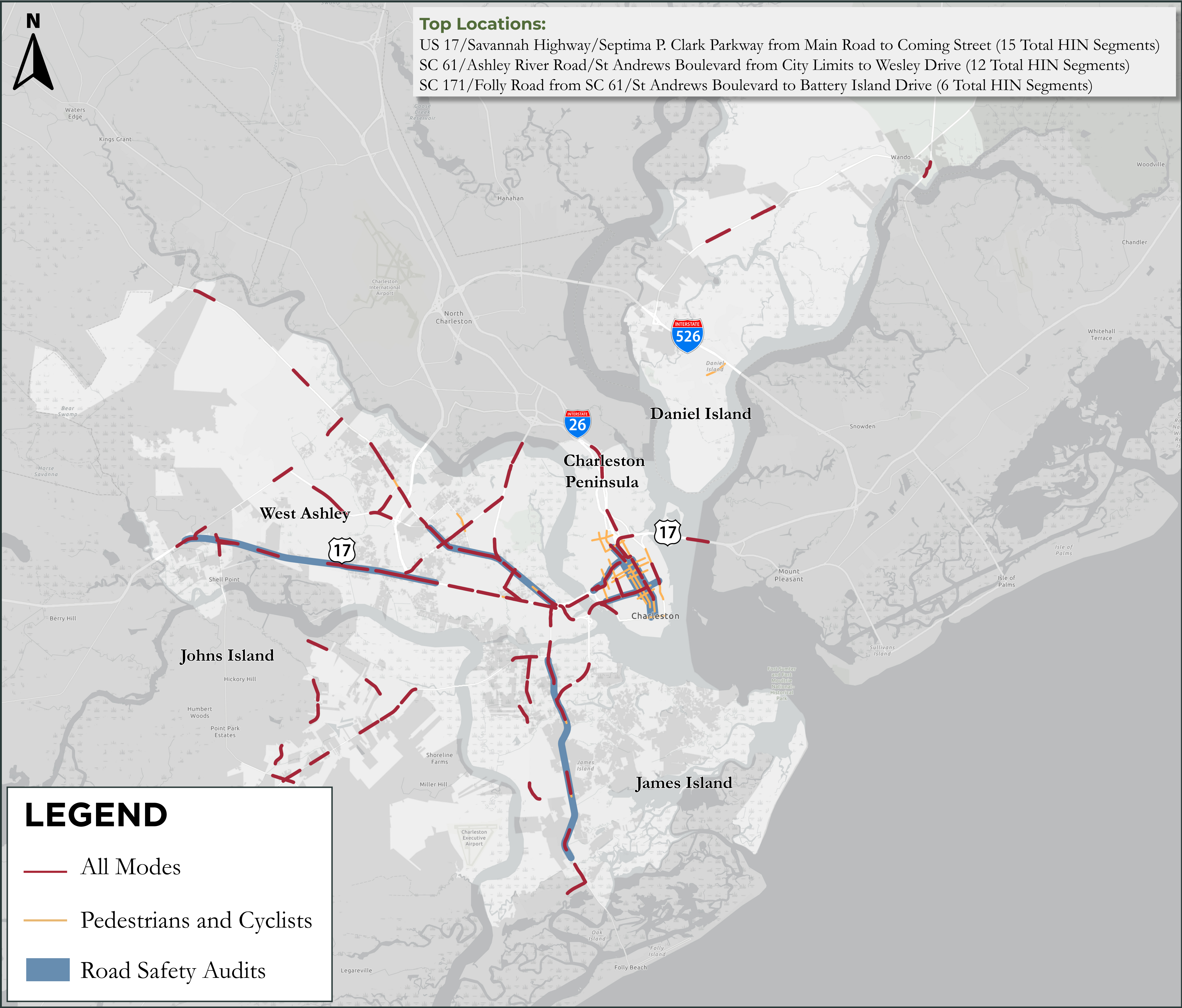
### Improve Roadway Infrastructure (17%)





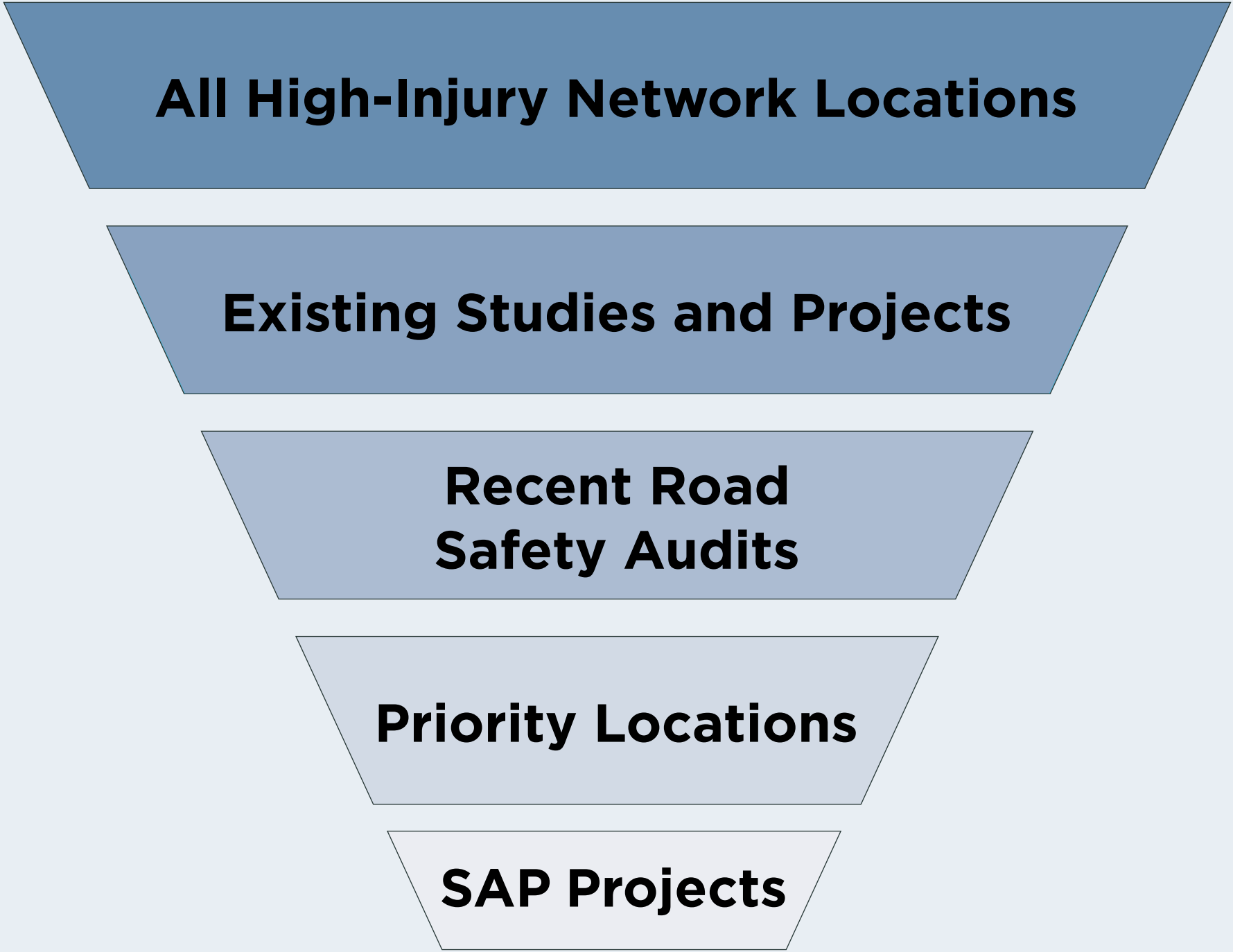
# HIGH-INJURY NETWORK





**WHAT IS THE HIGH-INJURY NETWORK?**  
Charleston’s High-Injury Network (HIN) was developed by subdividing the City’s nearly 500-mile roadway system into half-mile segments ranked based on the most recent five years of crash data. **The HIN constitutes just 9% of the City’s overall roadway network but accounts for 62% of all fatal and serious injury crashes experienced over this period.** Charleston’s Safety Action Plan prioritizes investments on these corridors.

**HIGH-INJURY NETWORK FILTERING**



- Priority Locations**
- » **Charleston Peninsula:** Various roadways in Eastside, East Central, and North Central neighborhoods (9 Total HIN Segments)
  - » **James Island:** SC 30/James Island Expressway, Fleming Road, and Various Segments of Riverland Drive (7 Total HIN Segments)
  - » **Johns Island:** Various segments of SC 700/Maybank Highway, Brownswood Road, and River Road (9 Total HIN Segments)
  - » **West Ashely:** US 17/Savannah Highway from Wappoo Road to Wesley Drive and Magwood Drive/Paul Cantrell Boulevard near Ashley Crossing (6 Total HIN Segments)



COUNTERMEASURE HIGHLIGHTS

City of Charleston

SAFETY ACTION PLAN

INTERSECTIONS


Nearly 30% of all F/SI crashes occurred at intersections between 2018 and 2023. Of these, approximately two-thirds occurred at signalized intersections.

**Access Management**


Nearly 40% of crashes resulting in fatalities or serious injuries within the City of Charleston between 2018 and 2023 occurred on multilane undivided roadways. Access management strategies, including raised medians and driveway density reduction, reduce conflicts between turning vehicles, improve mainline traffic flow, and provide opportunities to better accommodate pedestrians and cyclists. Research indicates that these strategies can reduce the frequency of fatal and serious injury crashes by 25% or more on urban and suburban arterial roadways.

**Signalized Intersection Upgrades**

Approximately one in five crashes resulting in fatalities or serious injuries within the City of Charleston between 2018 and 2023 occurred at signalized intersections. Signalized intersection upgrades, including modifications to signal timing and phasing; installation of backplates with retroreflective borders and/or flashing yellow arrows; and new or improved turn lanes are beneficial for both safety and traffic flow. Research indicates that these strategies can reduce crashes by 15% or more at signalized intersections.



Coleman Boulevard in Mount Pleasant includes 4-lane divided sections that employ access management strategies and include bike lanes.



SC 171/Folly Road at Rivers Point Road is a signalized intersection recently upgraded to include high-visibility crosswalks and retroreflective backplates on each of the assembly's signal heads.

PEDESTRIANS AND CYCLISTS


Approximately 30% of all F/SI crashes occurring in the City of Charleston involve a pedestrian or cyclist. Of these, approximately 30% occur at intersections.

**Crosswalk Visibility Enhancements**


Pedestrian crossing enhancements, including upgrades to signage, markings, and lighting improve access and comfort for pedestrians and cyclists and visibility of non-motorists to oncoming traffic. Where possible, curb extensions (or “bulb-outs”) can further improve crossing safety by reducing crossing distances and vehicular travel speeds. Research indicates that these strategies can reduce non-motorist-involved crash frequency by up to 42%.

**Traffic Control Device Upgrades**

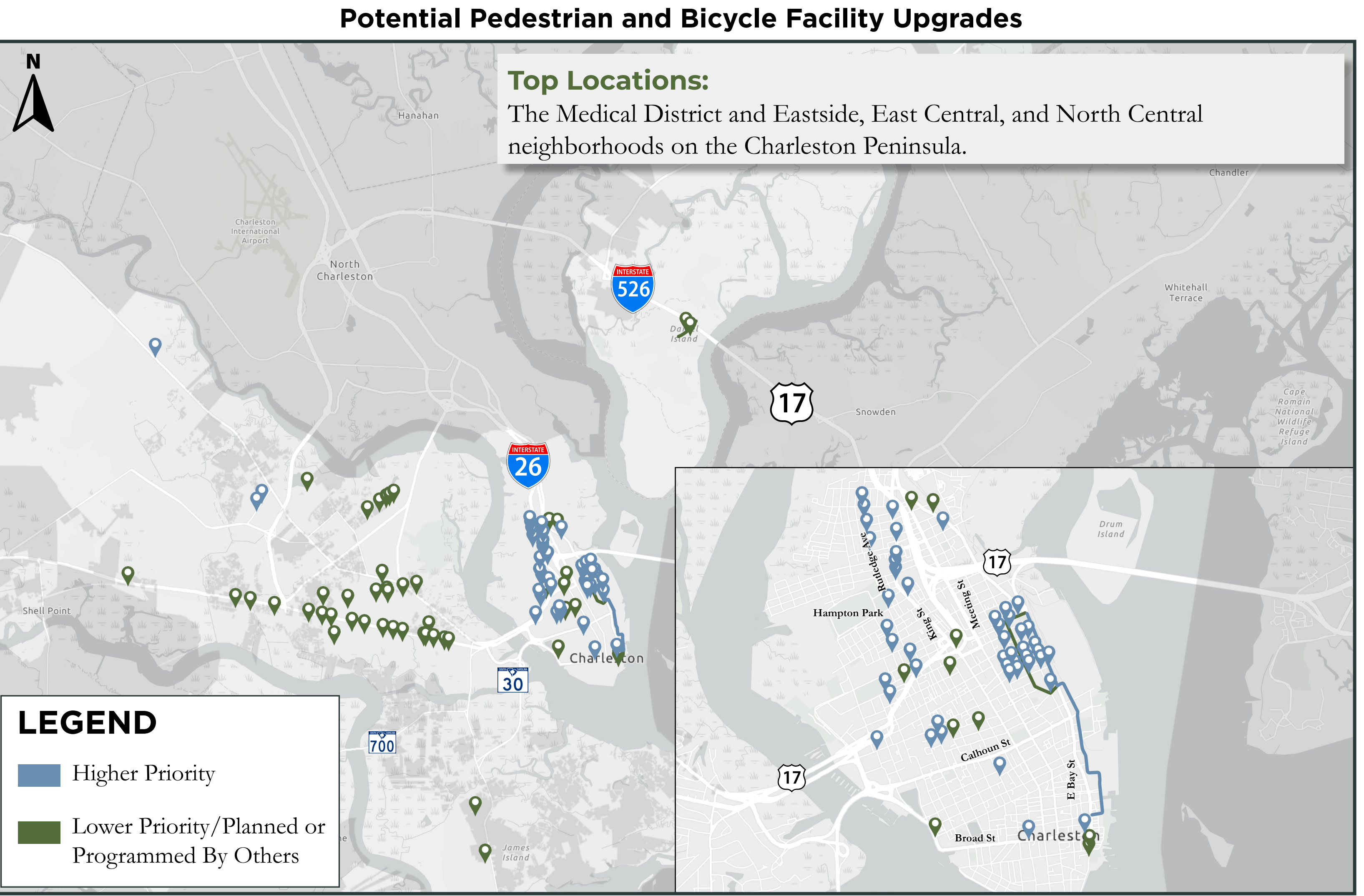
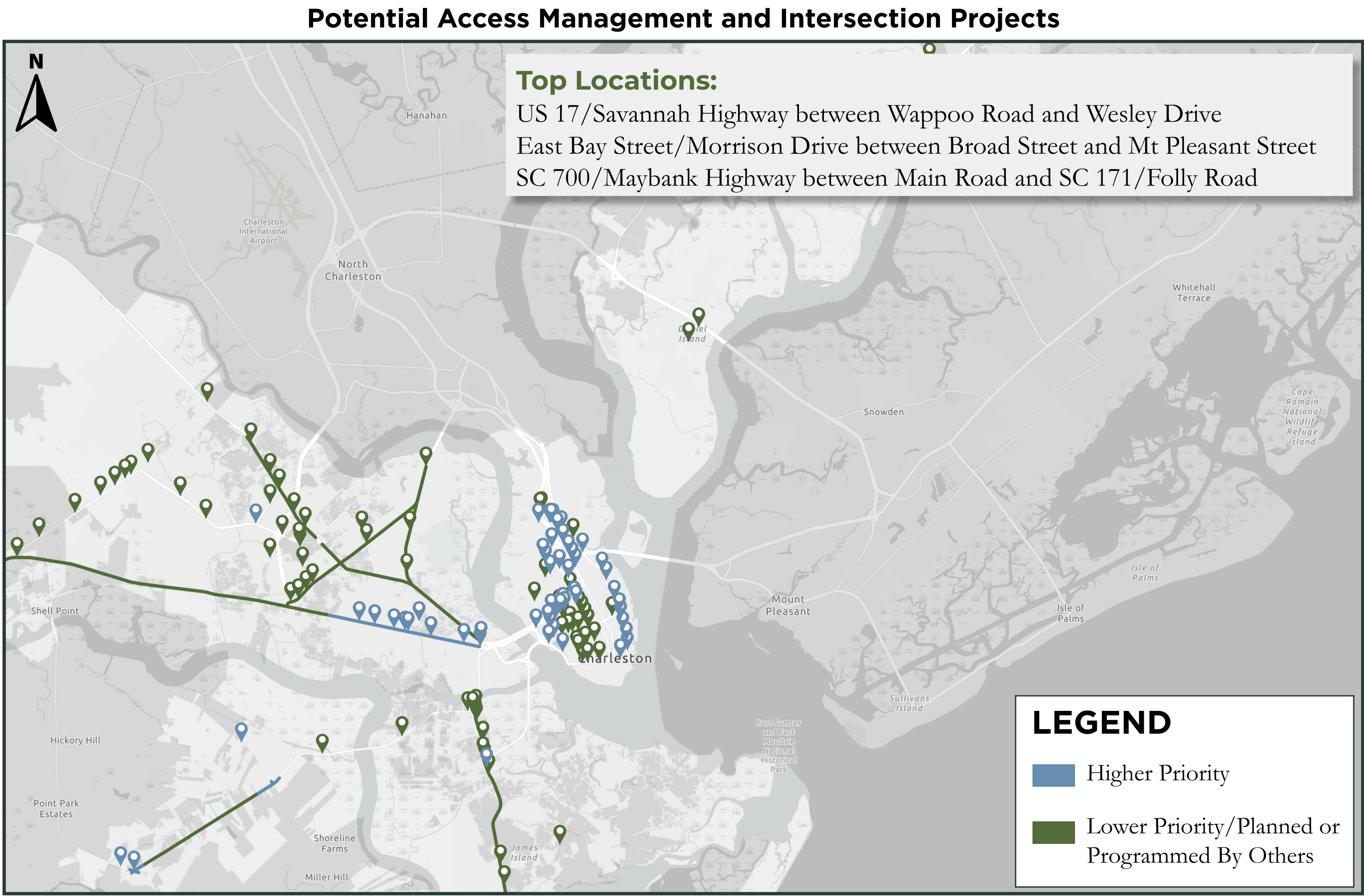
Rectangular rapid flashing beacons (RRFBs; at uncontrolled crossings) and pedestrian hybrid beacons (PHBs; for signalized crossings) enhance pedestrian conspicuity and increase driver awareness and compliance. When applied appropriately at locations with high pedestrian and cyclist demand, these countermeasures can reduce non-motorist-involved crash frequency by more than 50%.



The intersection of Meeting Street with Brigade Street provides enhanced signage, markings, and lighting along with reduced crossing distances for pedestrian and cyclists.



This uncontrolled pedestrian crossing on Seven Farms Drive near Credit One Stadium includes RRFBs, high-visibility crosswalks, and curb extensions.





# COUNTERMEASURE HIGHLIGHTS



## ROADWAY DEPARTURES

Approximately one in five crashes resulting in fatalities or serious injuries within the City of Charleston between 2018 and 2023 involved a vehicle leaving the roadway. These crashes highlight the hazardous roadside environment that exists along many of the City’s roadways.

### Systemic Application of Roadway Departure Countermeasures

Upgrades to warning signage and markings; installation of wider shoulders and/or rumble strips; and removal, relocation, or enhanced delineation of roadside hazards such as trees and ditches can all offer significant safety benefits. **Research indicates that these strategies can reduce the frequency of fatal and serious injury crashes by up to 64%.**



Edge treatments recently installed on SC 64 in Colleton County include wider shoulders, wider edge lines, and edge line and/or centerline rumble strips.

## HIGH-RISK BEHAVIORS

High-risk behaviors such as distracted driving, impaired driving, speeding, and driving while unrestrained collectively comprise 65% of all fatal and serious injury crashes occurring across the City between 2018 and 2023.

### Traffic Control Device Upgrades

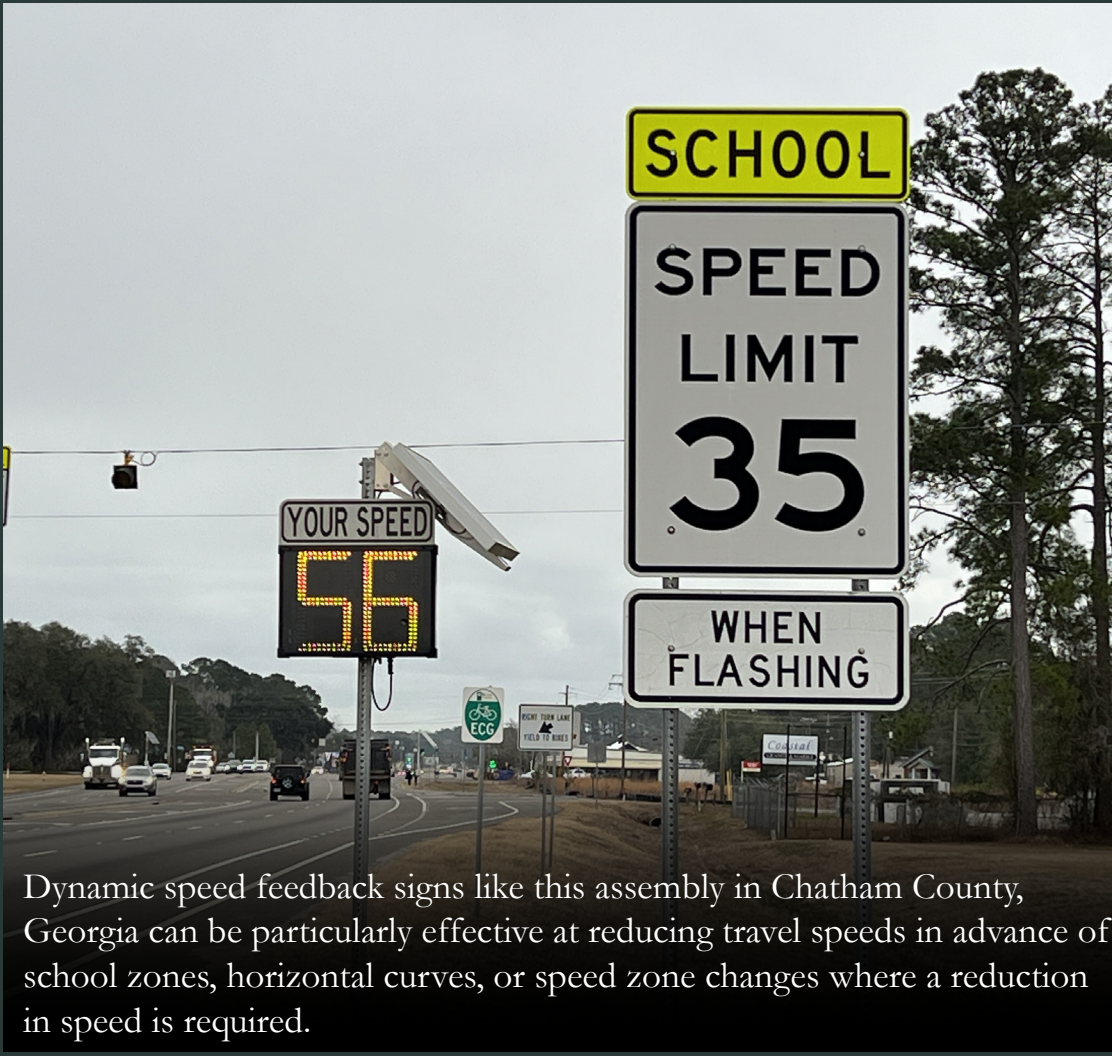
Traffic control devices (TCD) include signs, signals, or markings used to regulate, guide, and warn traffic. Upgrades to traffic control devices include, but are not limited to: speed management devices such as dynamic speed feedback signs; new or upgraded signage warning drivers of the need to reduce speed through curves or upstream of signalized intersections; and new or upgraded guide signage to direct drivers along their route. Upgrades to all three categories of devices can help to mitigate severe injury crashes by reducing travel speeds, improving traffic flow and lane utilization, and preventing run-off-road crashes.

### Education, Enforcement, Policy, and Partnership

Non-engineering countermeasures raise public awareness and create a “culture of safety” that promotes safety-focused policy decisions and collaboration between neighboring jurisdictions. The City of Charleston’s Safety Action Plan is one of several in development across the region; accordingly, implementation success is a shared responsibility.

Key actions promoted through this Safety Action Plan include, but are not limited to:

- » Awareness Campaigns
- » Community Partnerships
- » Evaluation and Monitoring



Dynamic speed feedback signs like this assembly in Chatham County, Georgia can be particularly effective at reducing travel speeds in advance of school zones, horizontal curves, or speed zone changes where a reduction in speed is required.



Education and enforcement efforts should be continually refined based on trends in crash data across the City and lessons learned from previous efforts and neighboring jurisdictions.

