



BERKELEY-CHARLESTON-DORCHESTER
COUNCIL OF GOVERNMENTS

PLANNING, PARTNERSHIP & PROSPERITY

CHATS Safety Improvements Committee

Committee Kick-Off Meeting

July 10, 2018

Agenda

Introductions and Committee Overview

Regional Traffic Collision Snapshot

Walk Bike BCD – Coordination & Implementation

Performance Measures and Target Setting

Feedback

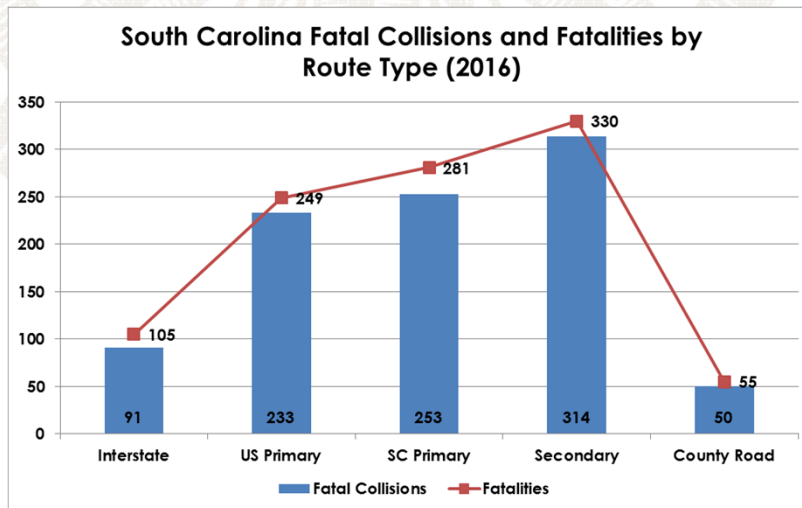
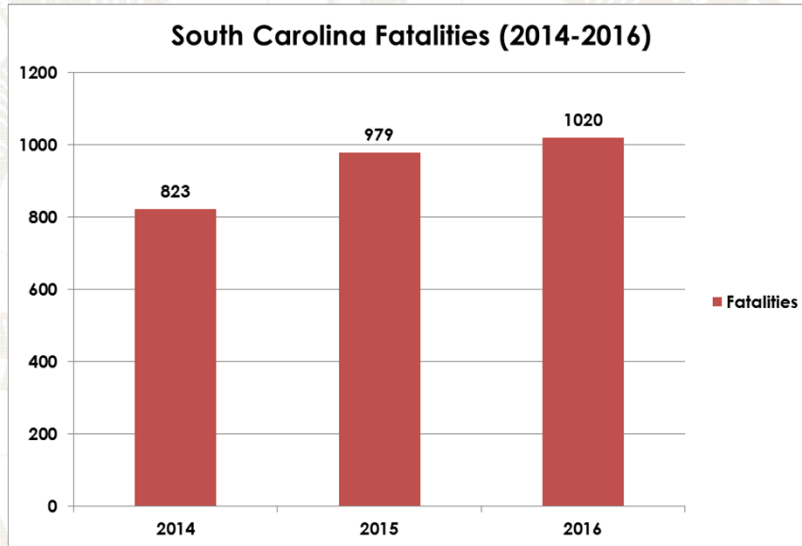
Next Steps

Safety Improvements Committee Overview

- Role – The CHATS Safety Improvements Committee is intended to provide support and guidance on safety related issues, plans, policies and initiatives to help improve transportation safety throughout the BDC region.
- Identify and address areas of concern for fatalities and serious injuries within the BCD region for all system users (motorized and non-motorized);
- Identify opportunities to advance the State's SHSP "Target Zero";
- Integrate the safety goals, objectives, performance measures and associated targets described in State safety transportation plans and processes into local planning efforts including the LRTP;
- Ensure that regional and local safety efforts are advancing the safety targets set by the region's LRTP and the State;
- Work to improve the quality of safety data collection and access to safety data;
- Monitor the effectiveness of safety improvement plans, programs, projects or initiatives progress toward achieving safety targets.

Regional Traffic Collision Snapshot

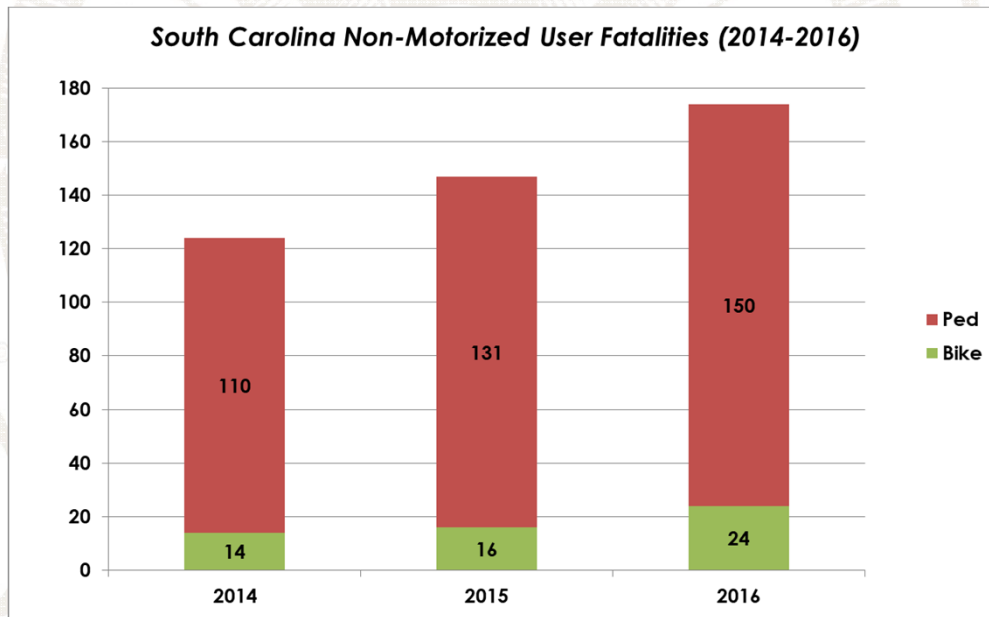
SC Crash Data Summary



Source: Traffic Collision Fact Book (2014, 2015, 2016); SC Department of Public Safety

- In 2016 South Carolina had 1020 reported traffic fatalities, up 4.2% from 979 fatalities in 2015.
- 45% of fatal crashes was a result of a road departure. The leading factor in road departure fatalities was vehicles striking a fixed object.
- State secondary roads accounted for the most fatal collisions (314 or 33.4%) and fatalities (330 or 32.4%) than on any other route category.

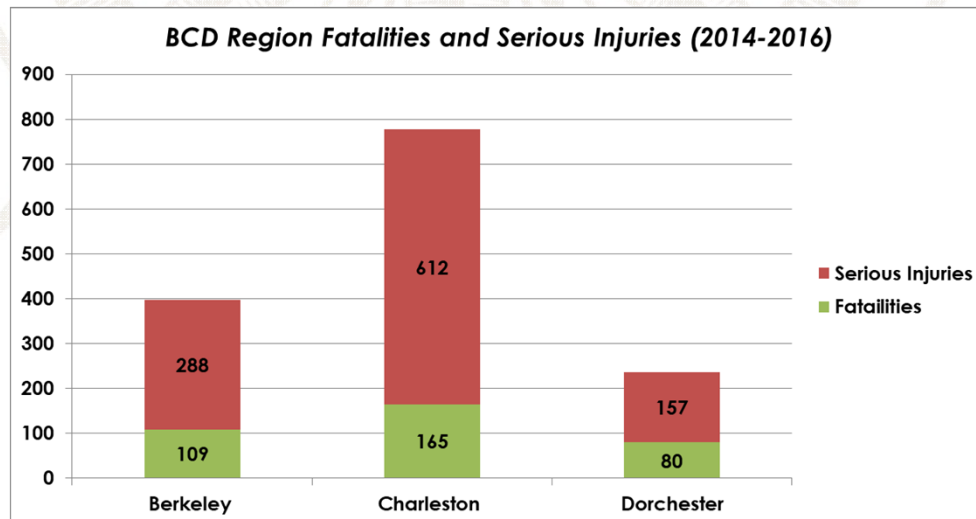
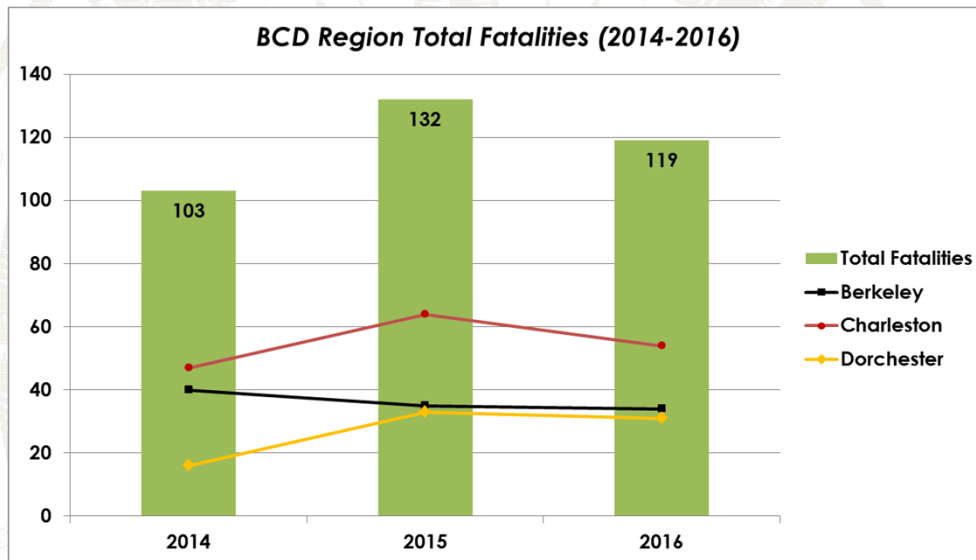
SC Crash Data Summary



Source: Traffic Collision Fact Book (2014, 2015, 2016); SC Department of Public Safety

- Charleston County ranked number 1 in the state for the county with the most traffic collisions, injury collisions and non-fatal injuries.
- There were 150 pedestrians killed in 2016. Pedestrian fatalities accounted for 13.1% of all pedestrian involved traffic crashes during the year.
- Less than 1% of persons wearing a seat belt at the time of collision were severely injured or killed, compared to roughly 17% of persons not wearing a seat belt at the time of collision.

BCD Region Crash Data Summary



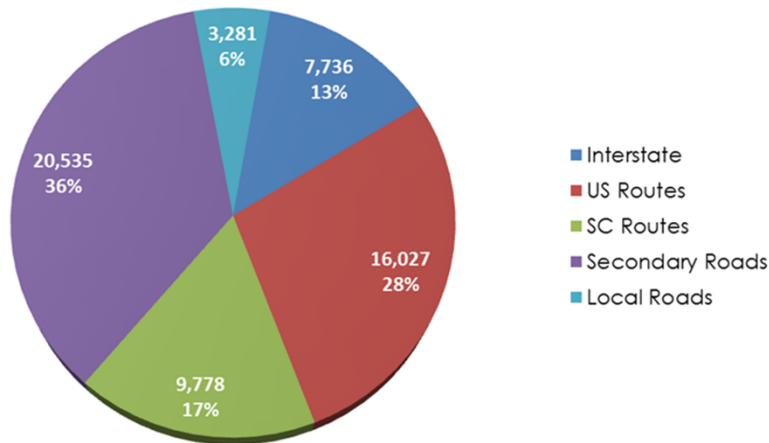
Source: Berkeley, Charleston, Dorchester Crash Summary Sheets (SCDOT, 2018)

Note: Counts obtained from max injury collision summaries. Serious injury counts may be understated due to reporting limitations.

- The BCD region accounted for 13% of the State's total fatalities (2014-2016)
- Approximately 30% of all fatal collisions in the region occurred between 10 PM and 3 AM.
- While the State saw a 4.2% increase in fatalities between 2015 and 2016, the region experienced a 10% drop in fatalities during the same period.

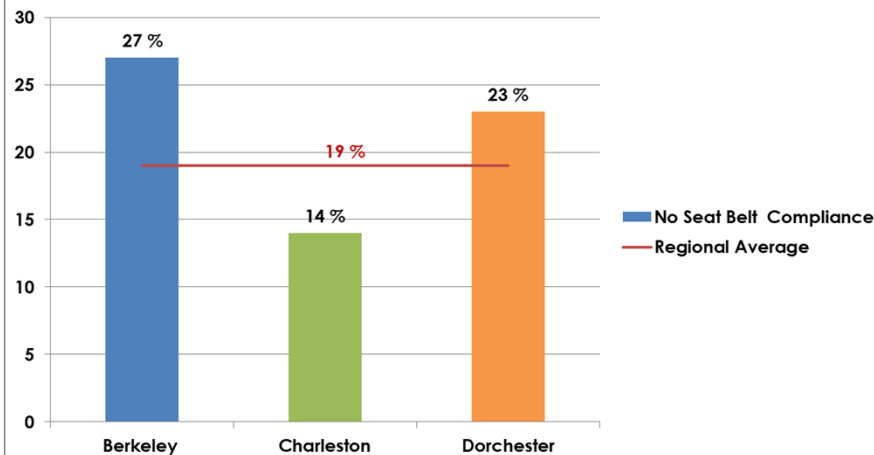
BCD Region Crash Data Summary

BCD Region Crashes by Facility Type (2014-2016)



- Region wide, 19% of all collisions resulting in a fatality or serious injury involved non-compliance with the state seat belt law.
- Region wide, alcohol was a contributing factor in 13% of all collisions resulting in a fatality or serious injury.
- Charleston County had the lowest proportion of fatal and serious injury collisions involving alcohol (9%), while Berkeley County had the highest (20%).

Fatalities and Serious Injuries -No Seat Belt Compliance (2014-2016)

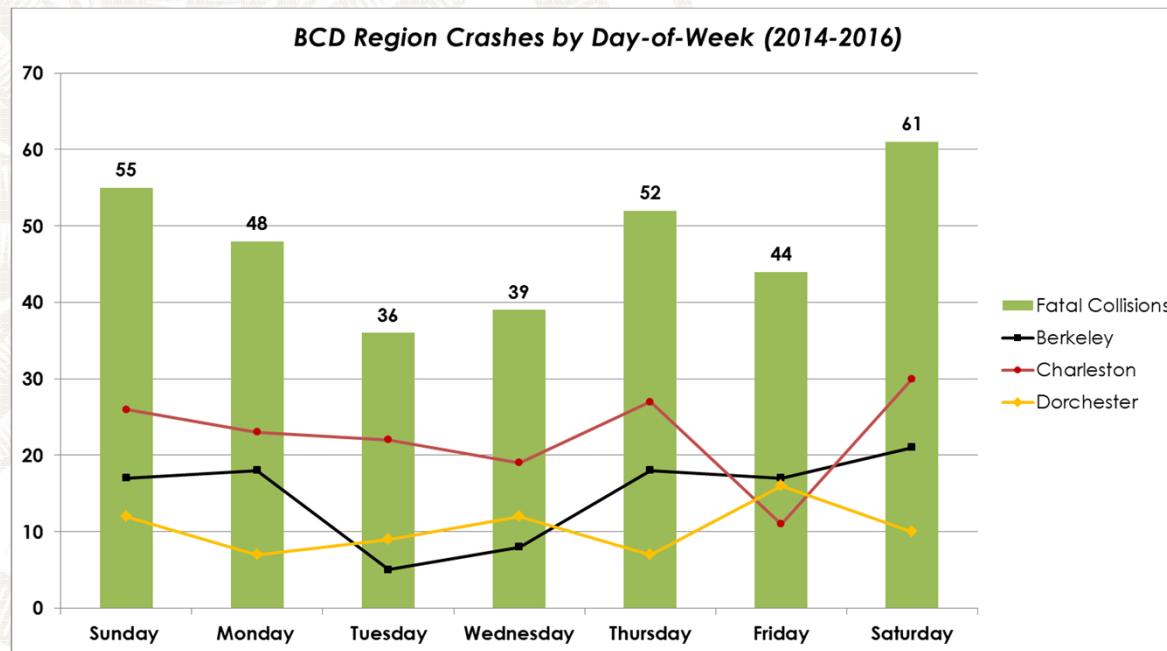


Source: Berkeley, Charleston, Dorchester Crash Summary Sheets (SCDOT, 2018)

Note: Counts obtained from max injury collision summaries. Serious injury counts may be understated due to reporting limitations.

BCD Region Crash Data Summary

- The most fatal collisions occurred on the weekends (average of 58 on both days)



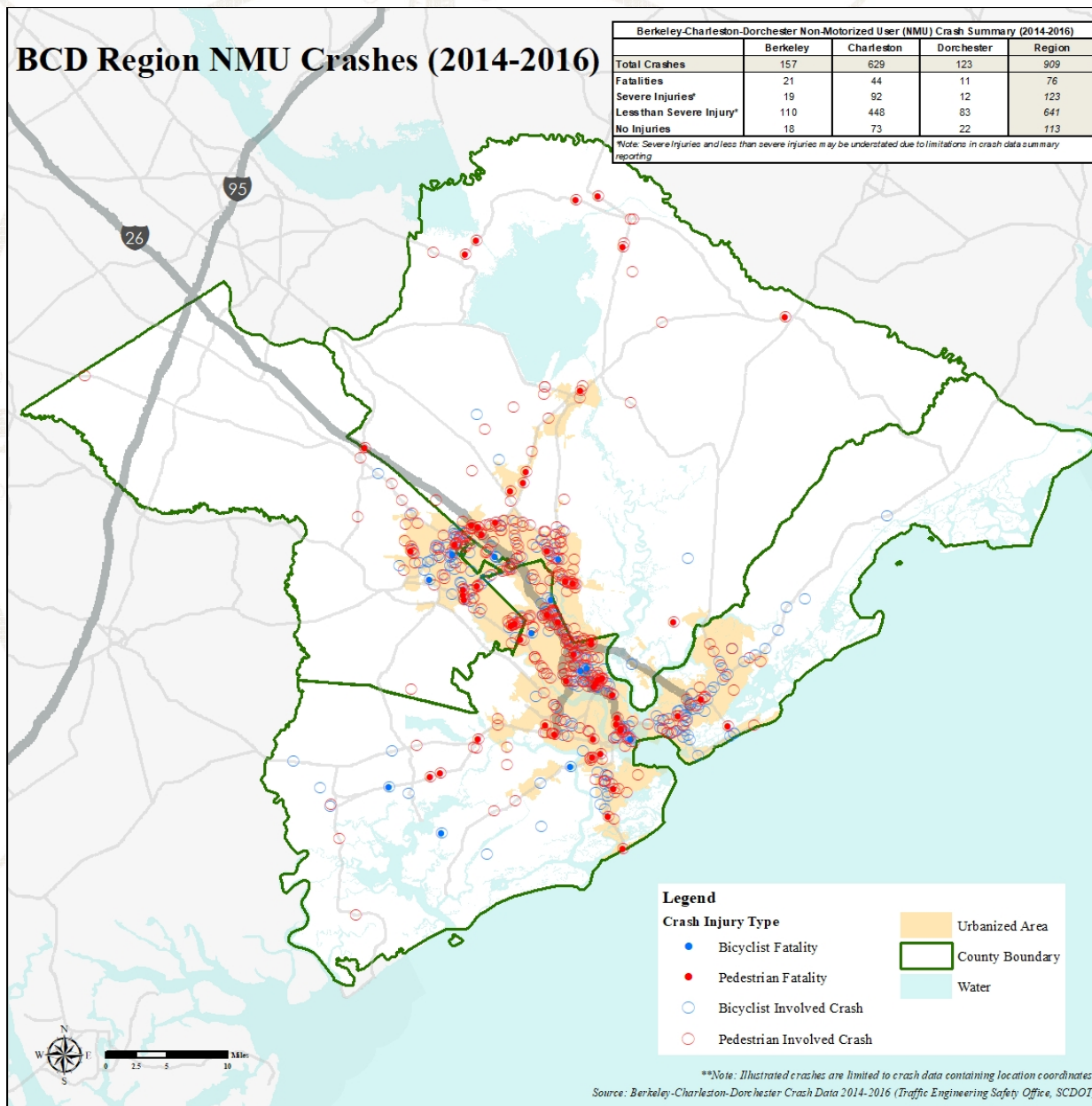
Source: Berkeley, Charleston, Dorchester Crash Summary Sheets (SCDOT, 2018)

Note: Counts obtained from max injury collision summaries. Serious injury counts may be understated due to reporting limitations.

BCD Region NMU Crashes (2014-2016)

	Berkeley	Charleston	Dorchester	Region
Total Crashes	157	629	123	909
Fatalities	21	44	11	76
Severe Injuries*	19	92	12	123
Less than Severe Injury*	110	448	83	641
No Injuries	18	73	22	113

*Note: Severe injuries and less than severe injuries may be understated due to limitations in crash data summary reporting



- A total of 909 collisions involving a non-motorized user (pedestrian/bicyclist) occurred in the region (2014-2016)
- Of these, 76 resulted in a fatality (8.4% of all NMU collisions) and 123 resulted in a serious injury (13.5%)
- Roughly 25% of all NMU fatal collisions occur outside the urbanized area.

A large, detailed compass rose graphic is positioned on the left side of the slide. It features a central circular hub with concentric rings, from which numerous radial lines extend outwards. The lines are of varying lengths and thicknesses, creating a complex, star-like pattern. The entire graphic is rendered in a light gray color against a dark gray background.

Safety Performance Measures and Safety Targets

Safety Performance Measures

- Through the federal rule making process, SCDOT and MPOs are required to monitor the transportation system using specific performance measures which are associated with the national goal areas prescribed in MAP-21 and the FAST Act.
- The Safety Performance Management Measures regulation requires State DOTs/MPOs to set targets for 5 safety performance measures:
 - Number of fatalities
 - Rate of fatalities (per 100 million VMT)
 - Number of serious injuries
 - Rate of serious injuries (per 100 million VMT)
 - Number of non-motorized fatalities and serious injuries

Safety Performance Measures

- SCDOT has established safety baseline conditions, 10-yr targets and planned average funding levels for Safety.
- Currently awaiting the SCDOT to establish Safety Targets for 2019 (August 31, 2018)
- MPOs establish Safety Targets (February 27, 2019)
 - Adopt State's Targets
 - Develop own Targets
- Safety measures and targets will be integrated into the LRTP 2040 Update
- Target Setting Needs
 - Coordination with stakeholders to share data and review strategies
 - Work together to examine current and planned education, enforcement, and engineering safety initiatives in the region

Walk + Bike BCD



- Completed Fall 2017
- Recommendations
 - Programs and Policies
 - Design Guidelines
 - 6 near-term projects
 - Phased Infrastructure Improvement Recommendations
 - Spot improvements
 - Pedestrian Facilities
 - Bicycle Facilities

Walk + Bike BCD



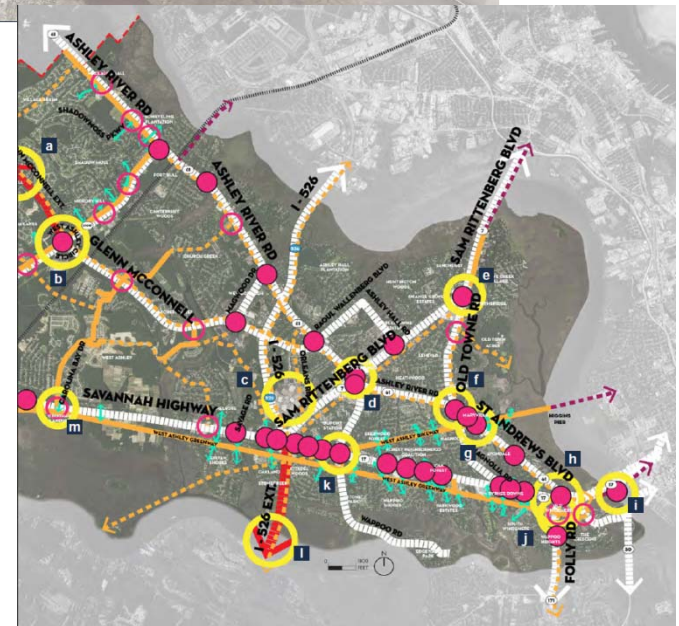
➤ Infrastructure Improvement Recommendations:

- 42 Spot Improvements
- Shared-Use Path – 546 miles
- Separated Bike Lanes – 25 miles
- Buffered Bike Lanes – 22 miles
- Bike Lanes – 55 miles
- Paved Shoulders – 692 miles
- Bicycle Route/Sharrow – 102 miles
- New Sidewalk – 117 miles
- Existing Sidewalk Improvements - 36 miles

Coordination - Plan West Ashley

- Crosswalk Improvement locations (pedestrian/bicyclist/transit users)
- Short-term recommendations include evaluating the need for midblock pedestrian crossings
- Installing crosswalks at all signalized intersections
- Provide traffic calming (reduced speeds) on facilities with a demonstrated safety problem

PLAN WEST ASHLEY



Coordination – City of Charleston CTP

- Safety Hot Spot (10) and Corridor Concepts (3)
- Concepts provides safety countermeasures such as –
 - Potential roundabouts
 - New signalized intersections
 - Crosswalk installations
 - Pedestrian cross head installations
- Integrates People Pedal Plan –
 - Urban Bikeway System Plan which includes network segment recommendations and intersection improvements throughout the Peninsula

Savannah Highway & Wappoo Road

WEST ASHLEY

Problem Statement: High volume intersection with traffic coming from both directions leading in and out of downtown and residential neighborhoods. Intersection marks the end of the West Ashley Bikeway and lacks safe and visible pedestrian and bike facilities. Problematic free-flow right turn traffic from Southbound Wappoo headed west.

Design Considerations:

- Immediate area is prime for redevelopment
- Free-flow right is extremely dangerous to pedestrians
- Sight angles are adequate
- The DuPont/Wappoo Community Plan recommendations for this intersection

Recommendations:

- Brick paver or stamped crosswalks
- High-visibility crosswalks and pedestrian countdowns
- Remove free-flow right turn while leaving the corner wide enough to accommodate right turn movements of a tractor trailer (Option A)
- Improve access management and driveway consolidation

Probable Construction Cost: \$450K



hot spot concept 1



71 | Recommendations

Feedback

- 
- Committee members
 - General Feedback – Safety related issues or areas of concern
 - Local safety programs/projects/initiatives

Next Steps

- **Regional Crash Report Card (Annual)**
 - Summary of crash data
 - Identification of “hotspot” intersections or corridors and possible countermeasures
- **Project Tracking Resource**
 - Walk Bike BCD project recommendations
 - State and local safety improvement projects (planned/programmed)
- **Safety Performance Measures and Target Setting (Annual)**
- **Next Committee Meeting**
 - October/November 2018 (proposed)



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➤ For more information:

➤ www.walkbikebcd.com

➤ www.sctargetzeroplan.org

➤ www.chats2040.com