
South Carolina
STRATEGIC HIGHWAY
SAFETY PLAN
TARGET
ZERO
2020–2024

Dear Highway Safety Partner:

The South Carolina Department of Public Safety (SCDPS) and the South Carolina Department of Transportation (SCDOT) are pleased to present the 2020–2024 South Carolina Strategic Highway Safety Plan (SHSP). **The goal of the 2020–2024 SHSP is to reduce fatalities and serious injuries on all public roadways during this period, with the vision of eliminating both at some point in the years that follow.** This goal and vision can be realized if all citizens would adopt a "target zero" mindset for themselves, as well as their families and friends.

An update of the plan is an opportunity to reflect on the progress the state has made to date and what can be improved in data analysis, collaboration, stakeholder outreach, partner engagement, implementation, and evaluation. A diverse group of safety stakeholders provided their ideas and thoughts on how South Carolina can make meaningful reductions in traffic deaths and injuries. This collaboration involved consultation with the appropriate federal partners and state agency heads, as well as representatives of SCDPS, SCDOT, metropolitan planning organizations, select cities and counties, state and local law enforcement agencies, and those involved in highway safety education and engineering efforts.

The SHSP establishes statewide priorities and identifies critical emphasis areas based on a detailed analysis of statewide crash data and input from a wide array of safety stakeholders. Evidence-based recommendations for appropriate strategies and countermeasures were selected with a view toward reducing and, one day eliminating, traffic fatalities and serious injuries on South Carolina's roads. Strategies were explored from the perspective of the "4 Es" of highway safety: Engineering, Enforcement, Education, and Emergency Medical Services. The plan covers a five year period, from 2020 to 2024, and will be evaluated on a biannual basis. Implementation planning for strategies and countermeasures proposed in the SHSP will be ongoing as appropriate resources are identified.

Thank you for being a part of South Carolina's transportation and traffic safety team and making the South Carolina SHSP a reality. We are proud to unite with a dedicated group of safety partners and continue our efforts to positively impact the safety of South Carolina's roadways for both our citizens and visitors.

Sincerely,

Christy A. Hall
Secretary of Transportation
South Carolina Department of Transportation

Robert G. Woods, IV
Director
South Carolina Department of Public Safety

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

From 2008 to 2018, traffic-related fatalities increased 13% and serious injuries declined 25% in South Carolina. Target Zero Traffic Deaths was first announced in 2011 by the Director of the South Carolina Department of Public Safety (SCDPS), who also serves as the Governor's Representative for Highway Safety in South Carolina. The state adopted Target Zero as its main goal, and umbrella campaign, to address traffic-related deaths when the 2014–2018 Strategic Highway Safety Plan (SHSP) was adopted. SCDPS, the South Carolina Department of Transportation (SCDOT), and their safety partners remain committed to furthering the Target Zero initiative.

South Carolina's 2020–2024 SHSP is a statewide, comprehensive safety plan that provides a coordinated framework aimed at eliminating traffic deaths and reducing serious injuries on South Carolina's public roads. The SHSP establishes statewide priorities and identifies critical emphasis areas based on a detailed analysis of statewide crash data and input from a wide array of safety stakeholders. In accordance with the Moving Ahead for Progress in the 21st Century (MAP-21) Act and the Fixing America's Surface Transportation (FAST) Act, federal, state, and local partners were consulted during the SHSP update to ensure coordination with other state, regional, local, and Tribal transportation and highway safety plans.

Overhead message sign displaying safety messaging.

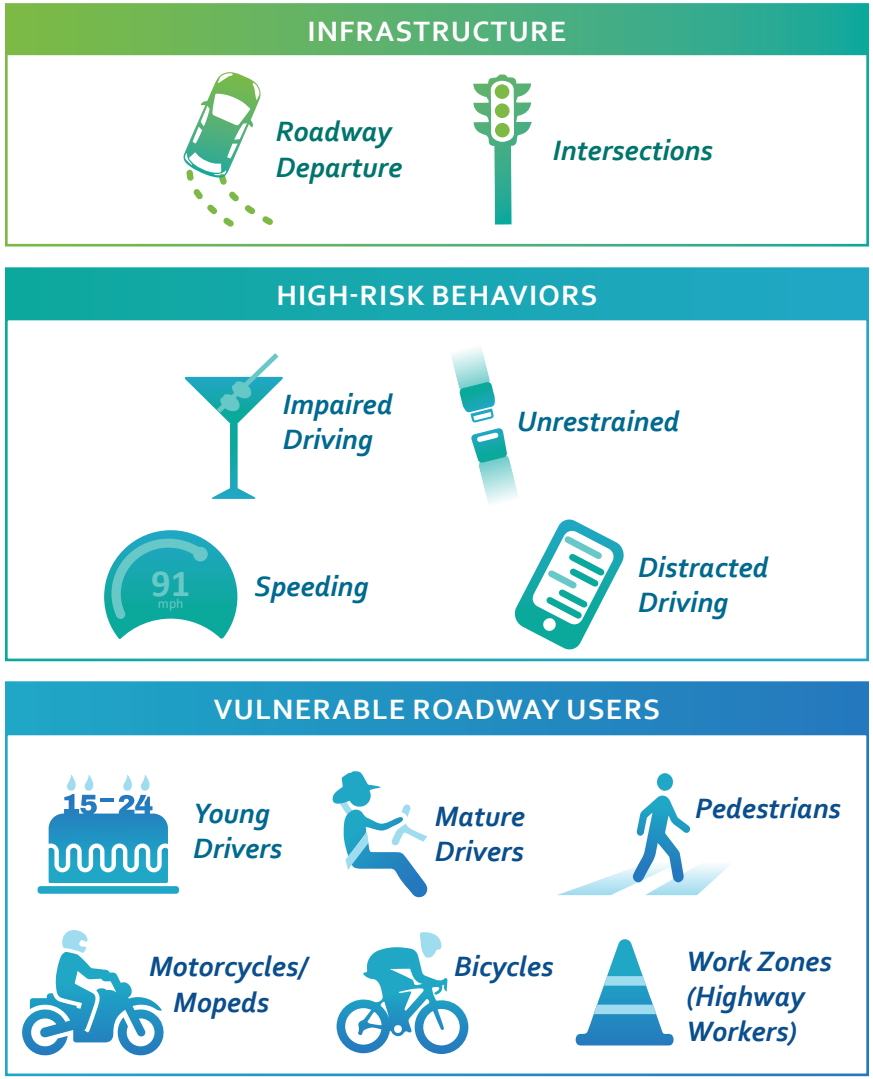
FRAMEWORK TO REDUCE FATALITIES AND SERIOUS INJURIES

The **VISION** of the 2020–2024 SHSP is to **move towards the target of zero deaths** on South Carolina's roadways. **One death is one too many.**

The **GOAL** of the 2020–2024 SHSP is to **reduce fatalities and serious injuries on all public roadways.**

Figure ES.1 shows the 12 emphasis areas that are the primary focus of the 2020–2024 SHSP, arranged by infrastructure, high-risk behaviors, or vulnerable roadway users.

Figure ES.1 2020–2024 SHSP Emphasis Area Structure



The SHSP contains emphasis area sections that define the challenges in South Carolina, summarize performance trends for fatal and serious injury collisions from 2014 to 2018, provide context on national solutions, highlight South Carolina successes, and identify proven effective strategies. The strategies in this plan were selected using a multi-disciplinary approach which addresses engineering, education, enforcement, emergency medical services, and public policy elements of highway safety.

IMPLEMENTATION AND EVALUATION

The 2020–2024 SHSP has an implementation focus grounded in a process that engages stakeholders on a regular basis to ensure all partners are able to implement projects and initiatives that support the SHSP. Biannually, SCDOT and SCDPS will prepare an Implementation Plan designed to guide the SHSP implementation process. The plan will be organized by emphasis area, with a budget that is fiscally constrained, and developed in coordination with other stakeholders. The Implementation Plan will be shared with stakeholders and used to help prioritize activities state and local agencies should engage in to support the SHSP. South Carolina is committed to the process of evaluating the SHSP each time it is updated. This will allow the priorities and initiatives identified in the Implementation Plan to be adjusted based on funding and resources available.

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OVERVIEW

IMPORTANCE OF TRANSPORTATION SAFETY

Every year, thousands of people lose their loved ones in transportation-related collisions in the U.S. This is an important public health issue because traffic fatalities and serious injuries threaten the safety and health of our communities. In 2018 alone, 36,560 people were killed and 2.7 million people were injured in collisions.[1] While the number of fatalities nationwide has decreased 27% since 1966, the first year for which these numbers were recorded by the National Highway Traffic Safety Administration (NHTSA), there has been a 12% increase in fatalities from 2014 to 2018.

South Carolina has experienced a similar trend in traffic deaths, but serious injuries have declined in recent years. From 2008 to 2018, fatalities have increased 13% and serious injuries have declined 25%. **South Carolina believes even one traffic-related death is too many.** The state adopted the *Target Zero* vision as it sought to reduce, and one day eliminate, traffic-related deaths when the 2015–2018 *Target Zero Strategic Highway Safety Plan (SHSP)* was adopted. The South Carolina Departments of Transportation (SCDOT) and Public Safety (SCDPS), and its safety partners continue their Target Zero commitment.

2020–2024 STRATEGIC HIGHWAY SAFETY PLAN

- Identifies emphasis areas South Carolina will prioritize over the 5-year period
- Uses data to identify critical factors in collisions for emphasis areas
- Establishes performance goals for the 5-year period
- Integrates safety goals and strategies from state, regional, and local transportation plans
- Identifies proven strategies and actions to address emphasis areas
- Establishes a process to evaluate performance on an annual basis

[1] National Highway Traffic Safety Administration press release, October 22, 2019 https://www.nhtsa.gov/press-releases/roadway-fatalities-2018-fars.

PURPOSE OF 2020–2024 SHSP

The purpose of the 2020–2024 SHSP is to lay out a strategic approach to further the state's goal of eliminating fatalities and reducing serious injuries on South Carolina roadways. The plan provides a comprehensive and coordinated framework for safety partners to unite around in reducing fatalities and serious injuries on **all public roads** in South Carolina.

HOW TO USE THIS PLAN

South Carolina's safety partners can use this plan to review key data trends impacting the state's transportation system, identify critical factors in collisions for each emphasis area, review a list of proven strategies to reduce fatalities and serious injuries in each emphasis area, and learn other information on the process used to update and evaluate the 2020–2024 SHSP.

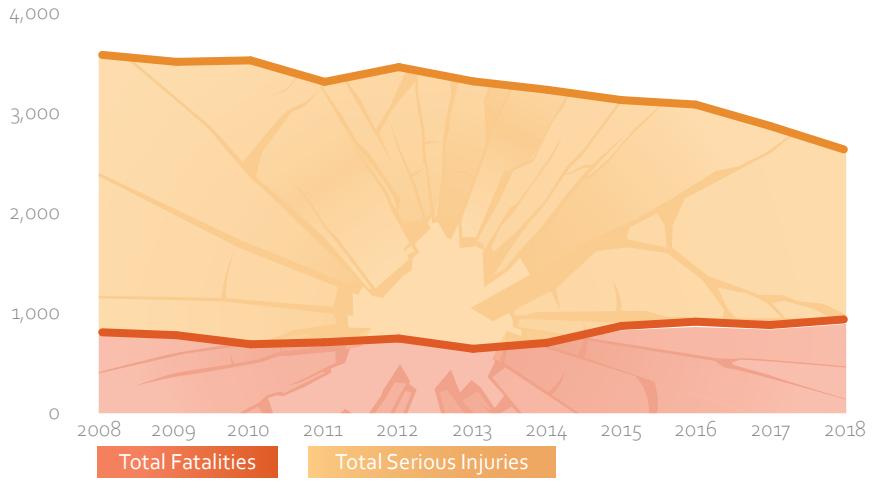
I-26 outside Columbia, SC.

INTRODUCTION TO SAFETY IN SOUTH CAROLINA

SETTING THE STAGE – COLLISIONS AND OTHER TRENDS

In South Carolina, fatalities increased 13% from 2008 to 2018. During this same time period, serious injuries declined 25%, as indicated in Figure 1. Fatalities increased more rapidly from 2014 to 2018, with a 26% rise. Serious injuries continued to decline from 2014 to 2018 at a slightly lower rate, with a 18% decrease.

Figure 1. Fatalities and Serious Injuries



South Carolina has a vast roadway network, with over 79,000 public road miles. Nearly 41,300 (52%) of those miles are state-maintained. South Carolina is ranked 4th in the nation for percentage of state-maintained miles, with a population and land mass much smaller than the top three states. From 2014–2018, 93% of the state's fatalities and serious injuries occurred on the state system (7% on non-state owned roadways).

A number of factors and key trends influence fatalities and serious injuries, including:

POPULATION

The number of people in the state influences traffic volumes on the roadway and potential exposures.

South Carolina's population increased **5%** from 2014–2018.

VEHICLE MILES TRAVELED (VMT)

As more people use the transportation system, more collisions are likely.

South Carolina's VMT increased **14%** from 2014–2018.

Figure 2 shows the state's annual average fatality rate by VMT from 2008-2018.

EMPLOYMENT

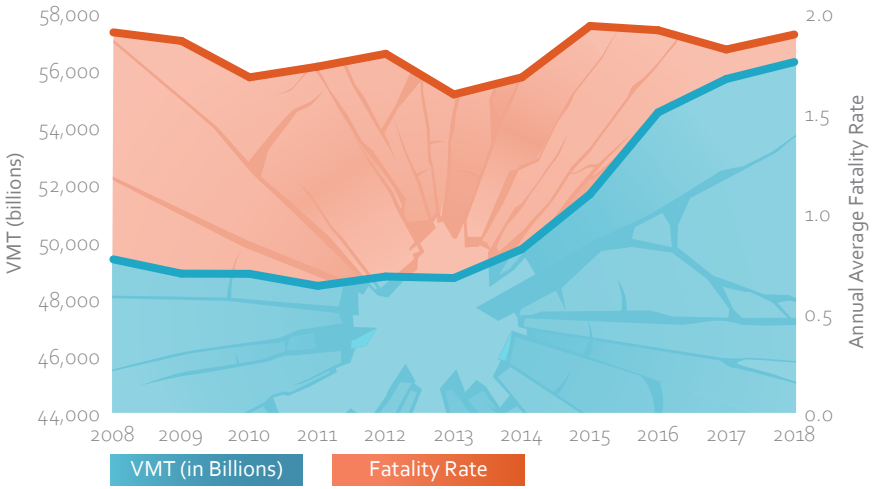
The number of jobs available in the state impacts the number of trips drivers take and the number of people on roads.

The number of jobs available in the state increased **11%** from 2014–2018.

LICENSED DRIVERS

The number of licensed drivers in South Carolina increased **6%** from 2014–2018.

Figure 2. Annual Average Fatality Rate by Vehicle Miles Traveled



SCDOT conducted an analysis to calculate how expected VMT forecasts might influence fatalities and serious injuries. The forecasts show South Carolina's VMT growing at an average annual rate of 3% between 2018 and 2024, which will result in an annual VMT increase from 57 billion to 67 billion over the same time period. This VMT growth rate is expected to produce an increase in total traffic fatalities. To better understand the potential effects of core safety programs on fatalities and injuries, SCDOT estimated the expected reductions. Two examples of such expected reductions include:

- The Rural Road Safety Program is expected to result in a **reduction of 26 fatalities and serious injuries annually.**
- The SC Highway Patrol Target Zero Team's focus on **reducing speeding, DUI, and unrestrained fatalities and serious injuries is expected** to result in further reductions in the associated areas by 2024.

Expected reductions were also estimated for the rumble strip program, intersection improvements, access management improvements, and pedestrian and bicycle improvements. These targeted programs will be vital to offset the rise in fatalities and serious injuries expected from increased VMT.

CONTINUED CHALLENGES AND ACCOMPLISHMENTS

Challenges

While South Carolina has successfully reduced serious injuries 18% from 2014 to 2018, fatalities have increased 26%. In addition to factors such as population, VMT, employment, and the number of licensed drivers influencing the traffic safety landscape, other challenges include high-risk driving behaviors, such as distracted and impaired driving. The following challenges were identified during the **Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis** conducted as part of the preplan development to gather input from state, regional, and local stakeholders:

- Safety is more integrated into all transportation projects, but improvements can be made in identifying and more fully exploring the safety needs associated with each project.
- Continued challenges with staff retention, manpower, and funding for state and local law enforcement strain the ability to adequately enforce current traffic safety laws. Lack of available manpower also impacts the extent to which law enforcement and regional and local transportation agencies coordinate safety initiatives.
- Crash data are available, but obtaining, utilizing, and sometimes having accurate data continues to be a challenge for SCDOT Districts and other agencies to proactively address safety needs and determine the most effective solutions. In particular, agencies want more comprehensive pedestrian data.
- A significant amount of tourist travel, as well as increases in bicycle and pedestrian travel in general, are creating safety challenges for urban areas and areas that attract tourists.
- More research is needed to study the impact of legislative changes to Driving Under the Influence (DUI), Graduated Drivers Licensing (GDL), and distracted driving laws. Consideration also should be given to seat belt and motorcycle helmet laws.

Accomplishments

SCDOT, SCDPS, National Highway Traffic Safety Administration (NHTSA), and the Federal Highway Administration (FHWA), along with other safety stakeholders, have a long history of working together to save lives and reduce serious injuries on South Carolina's public roadways. Recent and notable accomplishments include:

- SCDOT invests $70 million annually on roadway departure solutions for rural road safety, interstate safety, and upgrading facilities to include rumble strips on all eligible roads throughout the state.
- Rural Road Safety Program – SCDOT is tackling the "worst-of-the worst" roads by improving 100 miles of highways per year with a customized plan to make these roads safer in 10-mile segments. **In 2018, SCDOT received the American Association of State Highway and Transportation Officials (AASHTO) President's Transportation Award for the Rural Road Safety Program.**
- SCDOT prepares non-motorized collision lists for its Districts, Metropolitan Planning Organizations (MPO), Council of Governments (COG), and local agencies. These entities have found the non-motorized crash lists extremely useful for planning bicycle and pedestrian safety improvements and educating the public about the most problematic locations.
- Road Safety Audits have been a successful tool to identify unsafe roadway characteristics and resulted in a series of projects which could have a greater impact on safety over the long term.
- SCDOT has worked with the South Carolina Department of Health and Environmental Control (DHEC) to identify high collision locations and ensure faster Emergency Medical Services (EMS) response after a collision. This partnership has also helped DHEC identify roads with many crashes that have insufficient coverage by trauma centers, and allowed DHEC to recruit a trauma center for one of those areas.
- The SC Highway Patrol Target Zero Team's focus is on seat belt usage, speeding, and DUI. The team's enforcement activities have led to a 32% reduction in fatalities in the areas targeted for enforcement. This effort is a great example of proactive enforcement that should be expanded/replicated throughout the state.
- Local law enforcement agencies, with dedicated traffic units, have had success in addressing safety issues and needs from a data-informed perspective and through the implementation of regular education and enforcement efforts.
- SCDOT is leading the charge to update intersection-related policies and practices to include more consideration for roundabout installations, requiring backplates with retroreflective borders, and LED signal indications for all new or modernized traffic signals. These signal enhancements are expected to have an 8% reduction in total crashes and a 15% reduction in nighttime crashes.
- From 2013–2020, over $50 million in federal grant funds have been applied towards enforcement and educational countermeasures in South Carolina to reduce impaired driving.
- South Carolina's Impaired Driving Prevention Council (IDPC) has met regularly since 2004 and is vital to the development and implementation of an annual Impaired Driving Prevention Plan.
- South Carolina's 2019 seat belt usage rate was 90%, up from 70% since the passage and enactment of a primary enforcement safety belt law in 2005.
- The South Carolina Highway Patrol's Safety Improvement Team (SIT) is a group of Troopers who are stationed in major construction project areas to slow drivers down and enforce traffic laws in work zones.
- SCDOT invests $5 million annually for non-motorized safety projects to reduce fatal and serious collisions for pedestrians and bicyclists in South Carolina.

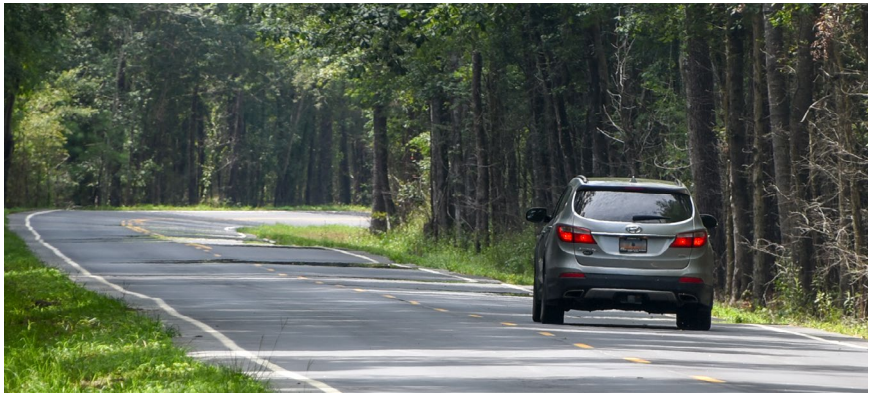
MAKING SOUTH CAROLINA SAFER IN THE FUTURE – SHSP UPDATE AND PLAN CONTENTS

The 2020–2024 SHSP was updated through collaboration with South Carolina's safety partners. The federal government requires states to update their SHSPs every five years. More information on the federal SHSP process requirements is in the Appendix. An update of the plan is an opportunity to reflect on the progress the state has made to date and what can be improved in the areas of data analysis, collaboration, stakeholder outreach, partner engagement, implementation, and evaluation.

A Steering Committee was convened to advise the SHSP update process. The committee was comprised of representatives from SCDOT, SCDPS, and FHWA. The SHSP update process included:

- **Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis** to review the state's process for completing the 2015–2018 SHSP. The SWOT analysis included a stakeholder survey (31 responses) and 18 phone interviews with key transportation and safety stakeholders. The results were intended to demonstrate: 1) what has been successful in South Carolina to drive down fatalities and serious injuries; 2) the challenges and opportunities to address safety; and 3) the elements of the previous plan that were useful and what could be improved. A side benefit of the SWOT was that it engaged transportation and safety stakeholders early in the update process, creating buy-ins, as well as awareness of statewide safety planning efforts.
- **Analysis of data** to identify trends in the number of traffic fatalities and serious injuries and develop multi-year objectives, identify emphasis areas, and develop emphasis area fact sheets. All data presented in the SHSP are from 2014 to 2018, unless otherwise noted. This plan was developed using the most recent data available at the time of submission to FHWA for approval of the SHSP process. Fact Sheets for each emphasis area are included in the Appendix.
- **A review of other transportation plans,** including the State and Community Highway Safety Grant Program *Highway Safety Plan (HSP)*, the *Highway Safety Improvement Program (HSIP)*, the *Commercial Vehicle Safety Plan (CVSP)*, and the *Long-Range Transportation Plan*.
- **Coordination with South Carolina's 11 MPOs and 1 federally recognized Tribe,** including review of safety-related goals, objectives, and strategies in the Metropolitan Planning Organization (MPO) and Tribal safety plans.
- **A thorough review of successful countermeasures** used to reduce traffic fatalities and serious injuries, using data analyses from the 2017 Clemson University research study: *Applying Successfully Proven Measures in Roadway Safety to Reduce Harmful Collisions in South Carolina* and other literature sources, such as the National Cooperative Research Program (NCHRP) Report 500 Series and the NHTSA Countermeasures That Work (9th edition) guide. Strategy sheets for each emphasis area are also included in the Appendix.
- **Review of the updated SHSP** with the SHSP Steering Committee.

Road identified for countermeasure implementation
(US 178 Lexington County, South Carolina)

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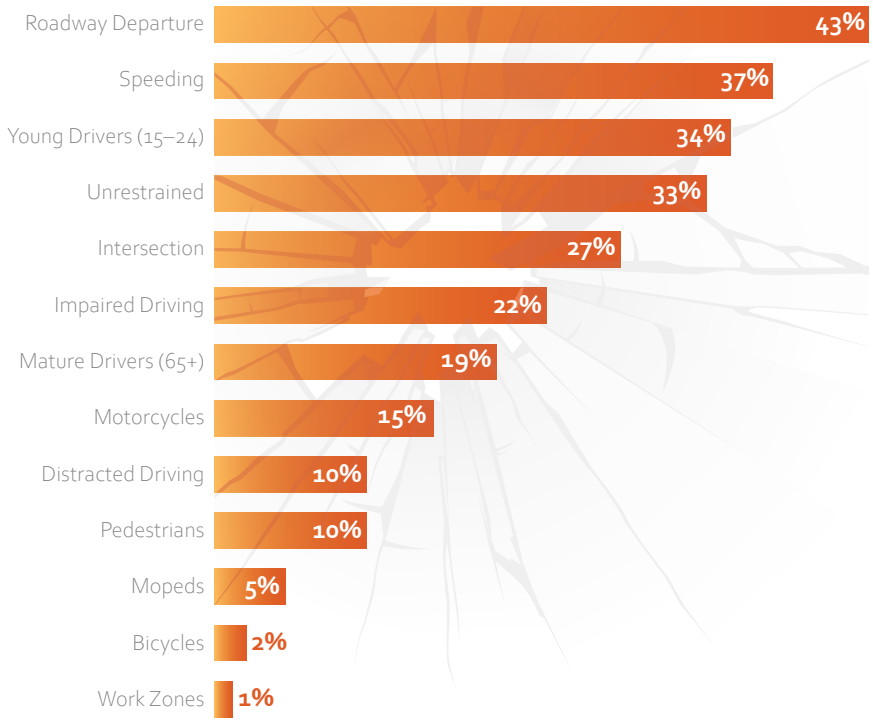
FRAMEWORK TO REDUCE FATALITIES AND SERIOUS INJURIES

EMPHASIS AREA OVERVIEW AND SELECTION PROCESS

The emphasis areas were selected using a collaborative process that included a review of 2014–2018 collision data, input from MPOs, cities, and counties during the SWOT analysis, and a review of the emphasis areas included in MPO Long-Range Transportation Plans. Figure 3 shows the percentage of fatal and serious injury collisions by emphasis area. Most collisions are the result of multiple factors (roadway, vehicle, and human). It is important to keep in mind, a collision could be counted in multiple emphasis areas. For example, if a young driver (age 15-24) is involved in a collision and is not wearing a seat belt, the collision is both a younger driver and an unrestrained collision.

Figure 3. Percent of Fatal and Serious Injury Collisions by Emphasis Area



SHSP VISION AND GOAL

The **vision** of the 2020–2024 SHSP is **Target Zero Deaths** on South Carolina's public roadways. All roadway users should arrive at their destinations safely. Target Zero Deaths was first announced in 2011 by the Director of the South Carolina Department of Public Safety (SCDPS), who also serves as the Governor's Representative for Highway Safety in South Carolina.

The **GOAL** of the 2020–2024 SHSP is to **reduce fatalities and serious injuries on all public roadways.**

States are required to set annual safety performance targets in the Highway Safety Improvement Program (HSIP) Report. The annual measures states set targets for (using five-year rolling averages) include:

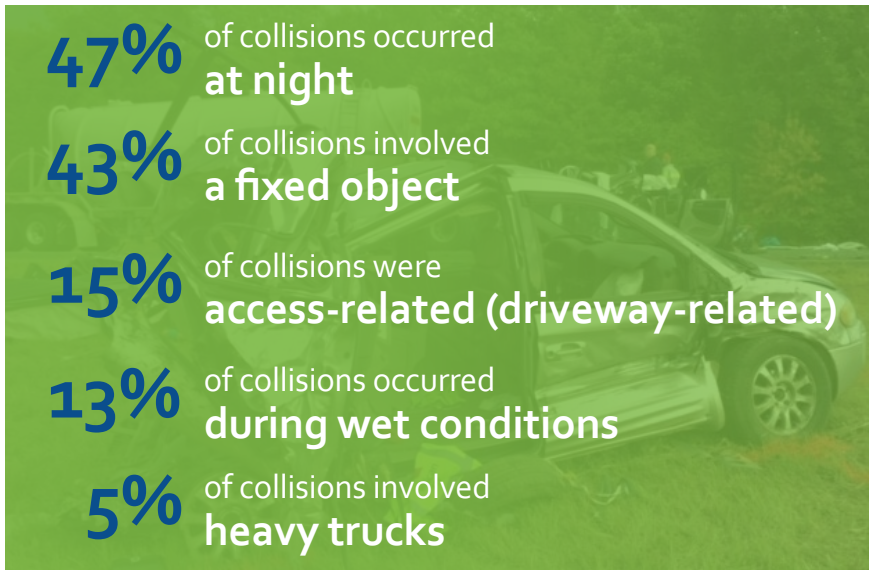
- Number of fatalities;
- Rate of fatalities per 100 million vehicle miles traveled (VMT);
- Number of serious injuries;
- Rate of serious injuries per 100 million VMT; and
- Number of non-motorized fatalities and serious injuries combined.

The first three measures (number of fatalities, rate of fatalities per VMT, and number of serious injuries) are also common to the measures states are required to set in the State and Community Highway Safety Grant Program Highway Safety Plan (HSP), administered by the National Highway Traffic Safety Administration. These three measures must be identical in the HSIP and HSP. This requirement allows states' safety partners to align their safety performance targets and work collaboratively to achieve them.

Factors considered in the selection process included:

- **Percentage of fatal and serious injury collisions by emphasis area –** overall, the factors most common in fatal and serious injury collisions were recommended for inclusion to offer the greatest opportunities to improve safety performance.
- **Emphasis areas from 2015–2018 Target Zero Plan –** existing emphasis areas that had increasing trends or large percentages of collisions were recommended to be a continued priority.
- **Emphasis areas with increasing trends,** even if the collision type accounted for smaller percentages.
- **Input from counties, cities, and MPOs** during the SWOT analysis and review of MPO Long-Range Transportation Plans to identify safety challenges.

In addition to the emphasis areas in Figure 3, the Steering Committee identified five other crash types of concern that will be addressed in the selected emphasis areas:



Heavy Trucks

Heavy trucks are involved in approximately 5% of total fatal and serious injury traffic collisions. For the purposes of this document, **heavy trucks are defined as vehicles with the unit classification of tractor trailer.** The SC Department of Public Safety's State Transport Police (STP) division is responsible for the development and implementation of the state's Commercial Vehicle Safety Plan (CVSP). The core mission of the STP is to protect and promote public safety on the state's roadways by ensuring the safe operation of motor carriers.

South Carolina has many education and enforcement programs addressing heavy truck involved traffic collisions. One program, *D.R.I.V.E.*, which stands for Distracted, Reckless, Impaired, and Visibility Enforcement, is a comprehensive high-visibility enforcement program designed to address driver behavior. The New Entrant Safety Assurance Program is designed to conduct safety audits on all new interstate carriers.

The State Transport Police uses a data-informed approach to identify top corridors in South Carolina for Commercial Motor Vehicle involved traffic collisions. In the most recent CVSP, almost 60% of fatal and serious injury collisions occurred on just 48 corridors. Nearly 90% of fatal and serious injury heavy truck collisions involved more than one vehicle and less than one third of those collisions indicated the truck driver as the sole contributor to the crash, making this an educational opportunity for all drivers.

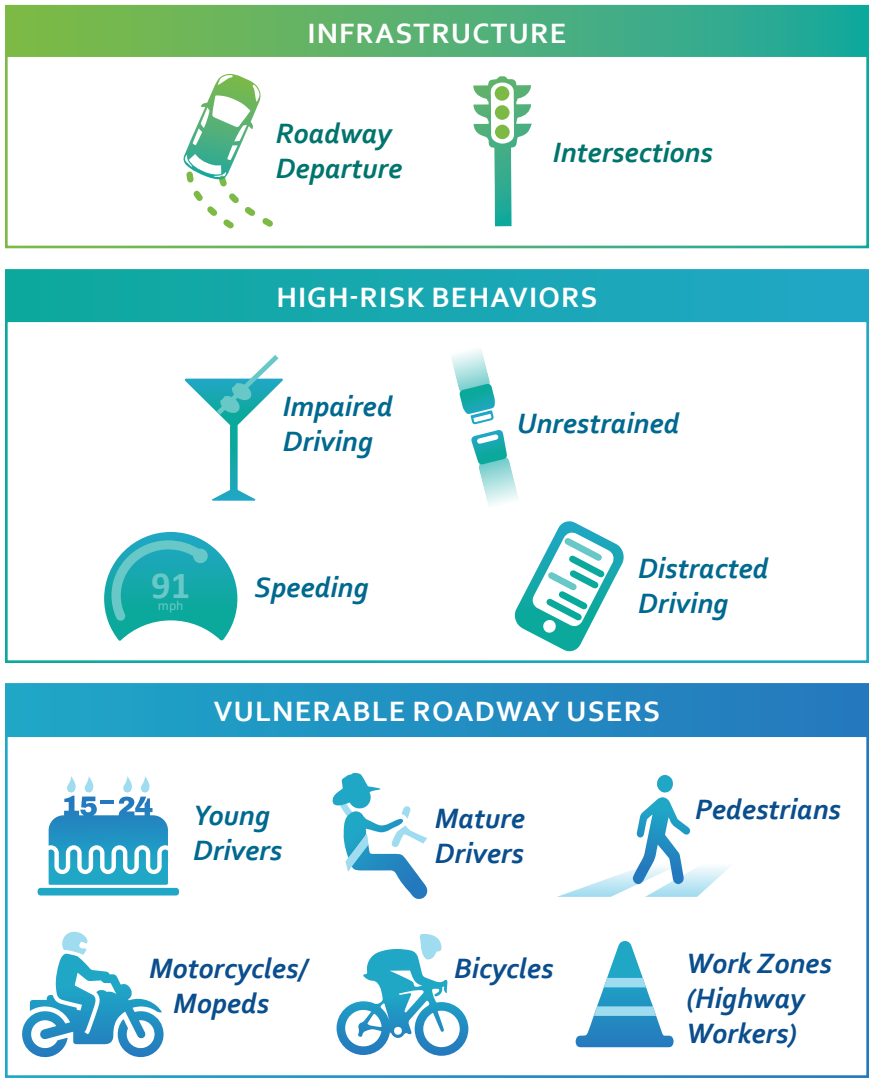
High Risk Rural Roads

High Risk Rural Roads are defined in 23 USC 148(a)(1) as **"any roadway functionally classified as a rural major or minor collector or a rural local road with significant safety risks, as defined by a state in accordance with an updated state strategic highway safety plan."** South Carolina's definition of significant safety risk is based on comparison of two (2) five-year rolling averages for the rural fatality rate.

FRAMEWORK

Figure 4 shows the 12 emphasis areas that are the primary focus of the 2020–2024 SHSP, arranged by infrastructure, high-risk behaviors, and vulnerable roadway users.

Figure 4. 2020–2024 SHSP Emphasis Area Structure



EMPHASIS AREA ORGANIZATION

The main body of the SHSP presents the 12 emphasis areas. The emphasis area sections focus on serious injury and fatality collision data from 2014 to 2018, unless otherwise noted. Each emphasis area narrative addresses:

CONTEXT

- Emphasis Area Definition
- Challenges

PERFORMANCE

- Trends in Fatality and Serious Injury Collisions 2014–2018
- Projected Fatality and Serious Injury Collisions
- Emphasis Area Fact Sheets included in the Appendix

NATIONAL SOLUTIONS

- Proven effective solutions encouraged by Federal Highway Administration (FHWA), National Highway Traffic Safety Administration (NHTSA), Governors Highway Safety Association (GHSA), etc.

SOUTH CAROLINA SUCCESSES

- Highlights recent and notable programs or initiatives South Carolina has successfully implemented

STRATEGIES

- Summarizes strategies that were identified to reduce fatal and serious injury collisions

EMPHASIS AREA BRIEFING

ROADWAY DEPARTURE EMPHASIS AREA

CONTEXT

A roadway departure collision involves a vehicle leaving the travel lane and encroaching into the opposite lanes or onto the shoulder and roadside environment. The end result is a vehicle striking another vehicle or an object. These types of crashes present a challenge in every state, causing an average of 53% of the fatalities in the United States. In South Carolina, the story is similar. **Roadway departures accounted for 43% of fatal and serious injury collisions between 2014 and 2018, killing 2,122 people and seriously injuring 5,987 more.**

The challenge is predominately on rural roads, with over 60% occurring in the less populated counties of the state. Characteristics of rural roads include limited lighting, forested areas, narrow shoulders, curves, and long stretches with fewer cars. Each of these presents a number of crash risks, but in South Carolina over 50% of roadway departures occur in nighttime conditions. Under these circumstances, drivers are likely to be distracted or fatigued or are challenged to stay on the road because of reduced visibility. Another major concern is speed. Oftentimes, motorists drive too fast, leave the road, and strike a fixed object, often a tree. The strong impact of these crashes lessens the survival rate.

From **2014–2018,**

roadway departure collisions

resulted in an annual average

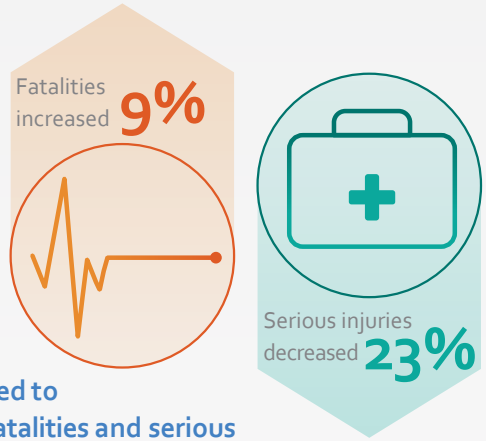
of **1,622**

people

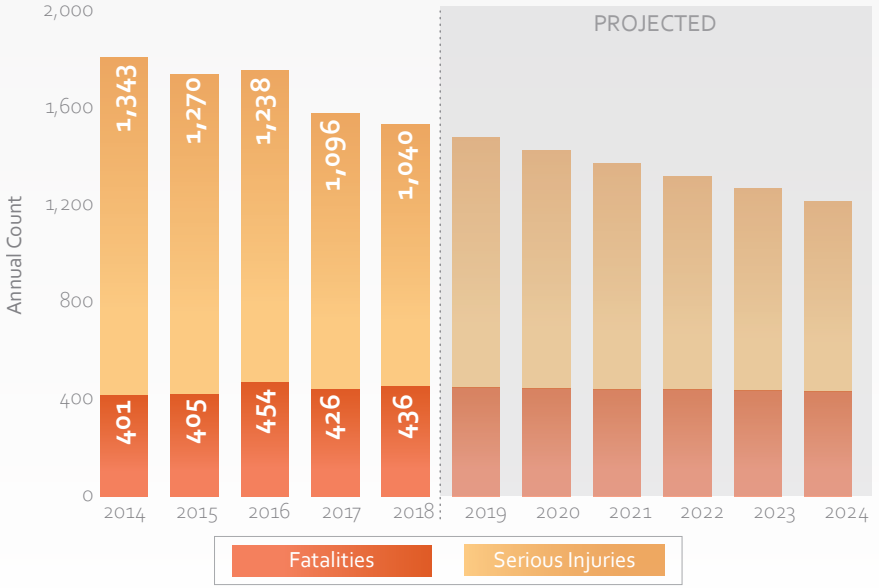
killed or seriously injured.

2014–2018 PERFORMANCE

Reviewing annual trends provides insight into roadway departure collision performance. The crash data show a need to continue putting resources toward proven solutions to reduce this collision type. At current funding and resource levels, reductions can be realized over the life of this plan. **South Carolina is committed to reducing roadway departure fatalities and serious injuries as measures of success.** The Strategies section provides existing and new actions to improve these trends even further.



Roadway Departure Fatalities and Serious Injuries



Source: South Carolina Crash File 2014–2018.

NATIONAL SOLUTIONS

An informed approach helps South Carolina's planners and engineers understand the challenges and focus efforts on segments and intersections where roadway departure crashes are occurring or have the potential to occur based on risk factors. **Nationally, solutions within three broad categories have been proven to reduce the severity of roadway departure collisions.** South Carolina's Rural Road Safety Program (RRSP) implements the national strategies of keeping a vehicle on the roadway, providing an appropriate clear zone for recovery, and reducing injury severity by treating approximately 100 miles of SC roadways annually.

Source: Federal Highway Administration, www.safety.fhwa.dot.gov/roadway_dept/.

SOUTH CAROLINA SUCCESSES

South Carolina tailors national roadway departure solutions to meet the unique safety challenges in the state. Treatments most often implemented include rumble strips, removal of fixed objects in clear zones, vegetation control, brighter pavement markings, guardrails, warning signs at curves, eliminating vertical drop-offs, and higher friction pavement.

SCDOT invests **$70 million** annually on roadway departure solutions for rural road safety, interstate safety, and the **deployment of rumble strips** on all eligible roads throughout the state.

STRATEGIES

KEEP vehicles on the roadway, provide for safe recovery, and reduce the severity of the crash.

KEEP vehicles from encroaching into the opposite lane.

REDUCE nighttime roadway departure collisions.

EDUCATE roadway users to understand the causes and implications of roadway departure crashes.

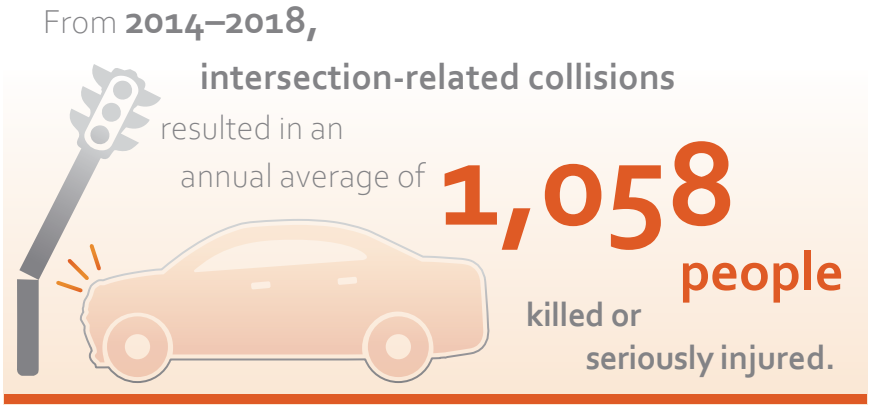
Since **2001, median cable barriers** have been installed throughout SC, which has reduced crossover fatalities by **66%**, from an average of **12** per year to **4.**

INTERSECTIONS EMPHASIS AREA

CONTEXT

Intersections are planned points of conflict in a roadway system which allow people to navigate state highways, rural roadways, and urban streets. Intersections provide crossing pathways for a wide range of transportation alternatives, including motor vehicle travel, walking, and biking. Intersections can often become very congested due to high traffic volumes, creating user delay and frustration that often leads to risky driving behavior. According to a Federal Highway Administration (FHWA) report, an average of one-quarter of traffic fatalities and approximately half of all traffic injuries nationwide resulted from intersection-related collisions.[2] **Intersection-related collisions are the second largest contributor to all collisions in South Carolina. From 2014 to 2018, an average of 203 people lost their lives each year in intersection-related collisions.**

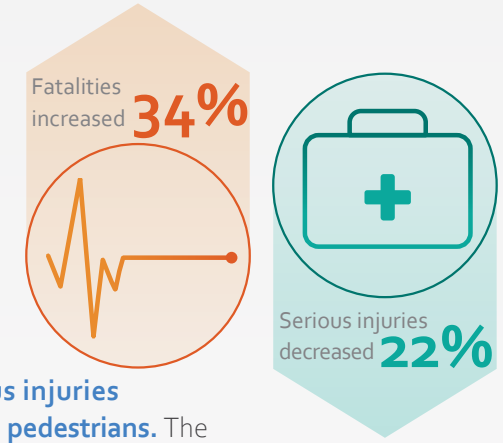
In regards to contributing factors, 40% of intersection-related fatal and serious injury collisions in South Carolina occurred at night. Additionally, 53% of intersection-related collisions occurred on rural roadways and 21% involved exceeding the posted speed limit or driving too fast for conditions.



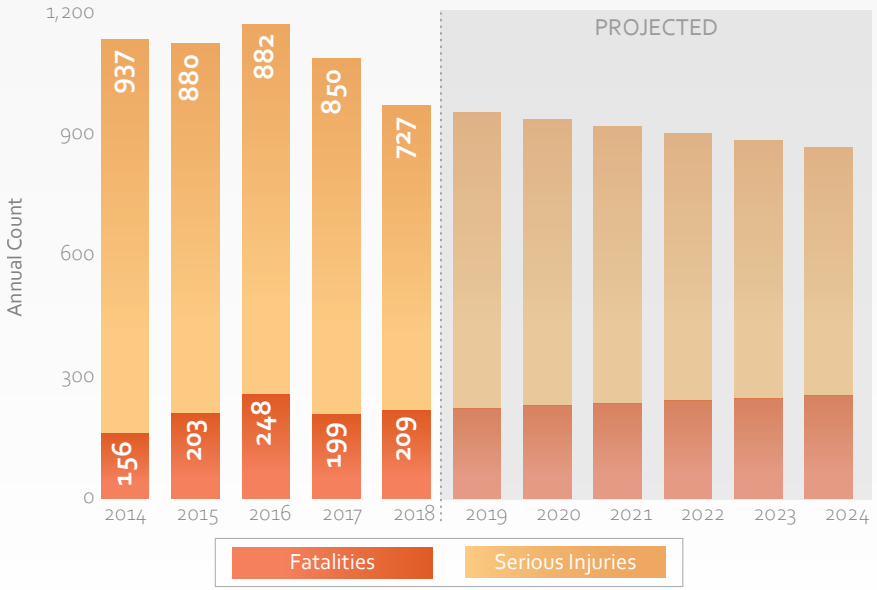
[2] Federal Highway Administration, USDOT. Intersection Safety: https://safety.fhwa.dot.gov/intersection/.

2014–2018 PERFORMANCE

Annual trends provide insight into intersection-related collision performance. The crash data show a need to continue prioritizing proven solutions to reduce this collision type. **South Carolina is committed to enhancing intersection safety and reducing intersection-related fatalities and serious injuries for motorists, bicyclists, and pedestrians.** The Strategies section provides existing and new actions to improve these trends even further.



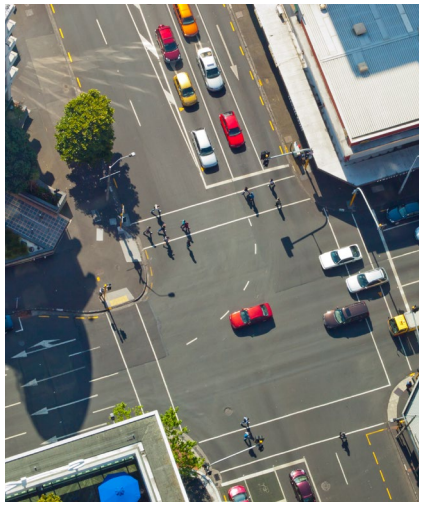
Intersection Fatalities and Serious Injuries



Source: South Carolina Crash File 2014–2018.

NATIONAL SOLUTIONS

The Federal Highway Administration (FHWA) provides national leadership in planning and developing resources designed to help make intersections safer. An informed approach helps South Carolina's planners and engineers understand the challenges and focus efforts on roadway network segments where intersection collisions are occurring or have the potential to occur based on risk factors. Nationally, solutions to address intersection safety are diverse, but often include a combination of the following:



- Engineering practices that include geometric design and application of traffic control devices;
- Consideration of human factors, including driver behaviors and attitudes; and
- Implementation of safer, more balanced and cost-effective measures.

SOUTH CAROLINA SUCCESSES

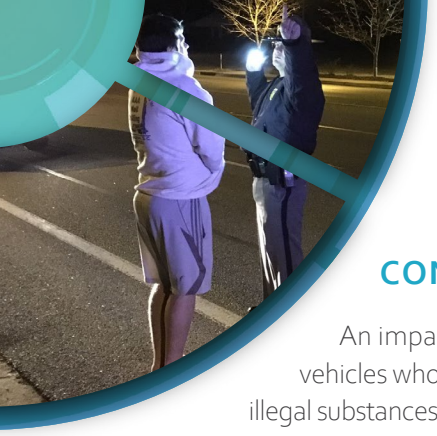
Intersection safety continues to be included as an emphasis area and top priority for South Carolina, which has adopted new policies and standards for all intersection projects. This includes the addition of more roundabouts as a measure of intersection control, and requiring backplates with retroreflective borders and LED signal indications for all new or modernized traffic signals. These signal enhancements are expected to have reductions of 8% in total crashes and 15% in nighttime crashes. Additionally, South Carolina has seen a 66% reduction in total collisions at locations identified through the HSIP where roundabouts have been installed.

SCDOT uses **access management** to address driveway-related collisions. Much of access management involves managing traffic movements into and out of driveways. Safety improvement projects, such as Reduced Conflict Intersections (RCI), eliminate potential conflict points associated with some turning movements. In addition, SCDOT utilizes Access and Roadside Management Standards when reviewing encroachment permits in an effort to achieve uniformity, efficiency, and safety. **South Carolina has seen a 55% reduction in total collisions at locations where access management projects have been completed.**

STRATEGIES

IMPROVE management of access.
REDUCE conflict through geometric design improvements.
IMPROVE sight distance and driver awareness.
IMPROVE availability of gaps and assist drivers in judging gaps.
REDUCE operating speeds.
EVALUATE locations for lighting improvements.

Through the **Highway Safety Improvement Program,** the SCDOT Traffic Safety Office initiates, on average, **16 intersection improvement projects** each year.



IMPAIRED DRIVING EMPHASIS AREA

CONTEXT

An impaired driving collision involves drivers of motor vehicles who are under the influence of alcohol and/or any legal/illegal substances, including marijuana, opioids, methamphetamines, or other potentially impairing prescription or over the counter drug. In the U.S., one person dies every 50 minutes in an alcohol-impaired driving motor vehicle collision.[3] Furthermore, 20% of nighttime weekend drivers tested positive for drugs in the 2013–2014 National Roadside Survey. **From 2014 to 2018, an average of 327 people, or one-third of all traffic fatalities in the state, lost their lives each year in impaired driving collisions in South Carolina.** Additionally, South Carolina's **alcohol only** impaired driving fatality rate is 55% higher than the national rate.[4]

Driving while impaired is extremely dangerous and puts a driver and others at risk. Law enforcement officers and those responsible for prosecuting DUI cases continue to be challenged with the state's complex impaired driving laws, which have proven to be difficult to enforce and process within the criminal justice system. For the period 2014 to 2018, impaired driving collisions in South Carolina have decreased by 18%, yet fatalities have increased by 3%.

The challenge is predominately related to nighttime driving and vehicles departing the roadway. Approximately 67% of impaired driving fatal and serious injury collisions occurred at night, and 63% were the result of a roadway departure. In 41% of impaired driving collisions, drivers were unrestrained, and 29% were driving too fast for conditions or exceeding the authorized speed limit.

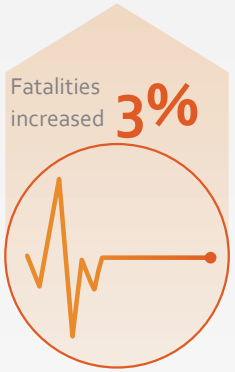
From **2014–2018,**
impaired driving collisions
resulted in an annual average of **911 people**
killed or seriously injured.

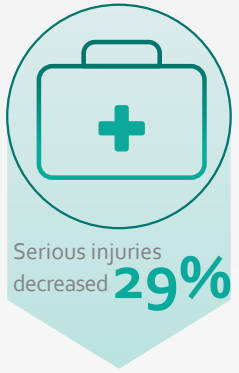
[3] National Highway Traffic Safety Administration, USDOT. Drunk Driving: https://www.nhtsa.gov/risky-driving/drunk-driving

[4] SC's rate of 0.51 deaths for every 100 million VMT compared to the national rate of 0.33.

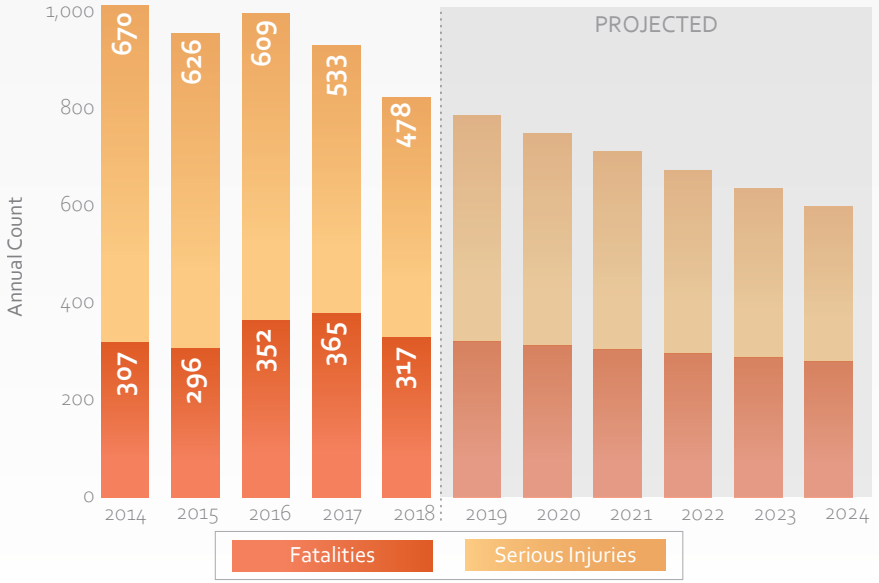
2014–2018 PERFORMANCE

Annual trends provide insight into impaired driving collision performance. The crash data show a need to continue putting resources toward proven solutions to reduce this collision type. **South Carolina is committed to reducing the number of impaired drivers on the roadways and decreasing serious injuries and fatalities.** The Strategies section provides existing and new actions to improve these trends even further.





Impaired Fatalities and Serious Injuries



Source: South Carolina Crash File 2014–2018.

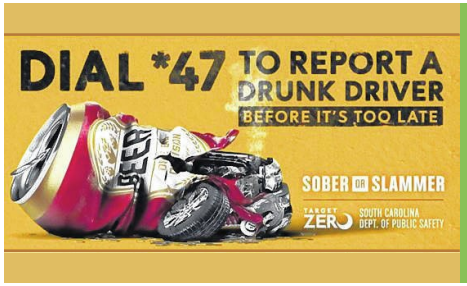
NATIONAL SOLUTIONS

The National Highway Traffic Safety Administration (NHTSA) provides national leadership in planning and developing traffic injury control safety programs in the areas of drunk driving, drug-impaired driving and drowsy driving. An informed approach helps South Carolina's planners and engineers understand the challenges and focus efforts on segments and intersections where impaired driving collisions are occurring or have the potential to occur based on risk factors. Nationally, NHTSA is dedicated to eliminating risky behaviors on our nation's roads by encouraging responsible behavior. There are many proactive steps to becoming a responsible driver, which include:

- Choose a non-drinking designated driver to ensure a safe ride home;
- Do not let anyone who has been drinking or has taken illegal substances to get behind the wheel;
- Call a ride-hailing or taxi service to pick you up; and
- Always wear your seat belt to protect yourself from other impaired drivers that could be on the roadways.

SOUTH CAROLINA SUCCESSES

South Carolina tailors national impaired driving collision solutions to meet safety challenges in the state. South Carolina's *Sober or Slammer* campaign targets drivers who are taking risks that lead to the loss of innocent lives nearly every day. The purpose of this campaign is to make motor vehicle drivers and occupants think about the choices they make before getting behind the wheel of a car. Each year since 2007, South Carolina has held a Law Enforcement DUI Challenge, with an average of 150 agencies participating annually. Participating law enforcement agencies are awarded plaques for lowering DUI collision statistics in their respective jurisdictions.



From 2013–2020, over **$50 million** in federal grant funds have been applied towards enforcement and educational countermeasures in South Carolina to reduce impaired driving.

STRATEGIES

INCREASE the number of high-visibility Driving Under the Influence (DUI) Programs.

CONDUCT prosecutor and judicial training programs.

REDUCE the number of repeat DUI offenders.

CONDUCT impaired driving education and outreach programs.

DISCOURAGE underage drinking.

REDUCE drugged driving.

CONTINUE to research the potential risks to highway safety associated with legalizing marijuana.

South Carolina has a state **Impaired Driving Prevention Council (IDPC)** that has been operational since 2004. The IDPC meets regularly and is **vital to the development and implementation of an annual Impaired Driving Prevention Plan.**

UNRESTRAINED EMPHASIS AREA

CONTEXT

An unrestrained collision involves occupants of motor vehicles who had access to a restraint, but were unbelted. These types of collisions present a challenge in every state, resulting in an average of 43% of the fatalities in the United States in 2017. In South Carolina, the story is similar. **Unrestrained collisions accounted for 33% of all collisions between 2014 and 2018, killing 1,580 people and seriously injuring 2,675 more.**

The safety benefits of seat belt use are significant and well documented. Seat belts help to keep occupants inside of vehicles and also prevent them from hurting others during a collision. South Carolina has a primary seat belt law and has made significant strides in improving safety belt usage rates since the passage and enactment of a primary enforcement safety belt law in 2005. At the time, the state's observed safety belt usage rate stood at 70% statewide. In 2019, the rate has climbed to 90%. The state remains committed to increasing restraint usage in an effort to reduce motor vehicle crash injuries and fatalities, particularly in light of the state's relatively high unbelted fatality rate.

The challenge is predominately on rural roads, with 59% occurring in the less populated counties of the state. Though unrestrained collisions are an issue in urban areas too, 68% of unrestrained collisions are also roadway departure collisions, which are more common on rural roadways. Additionally, 56% of unrestrained collisions occur at night and 49% involve a vehicle driving above the posted speed limit or driving to fast for conditions.

From **2014–2018,**

unrestrained collisions

resulted in an annual average of **851 people**

killed or seriously injured.

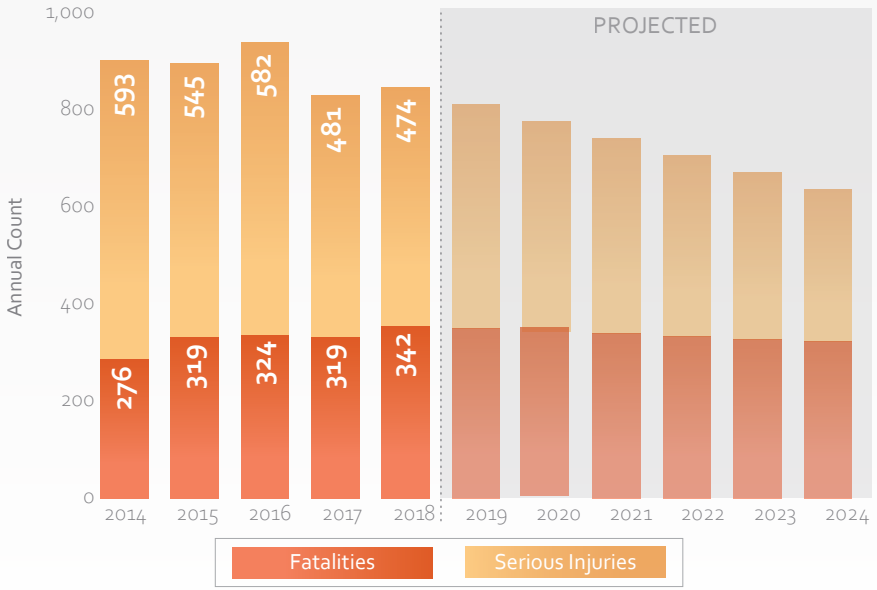
2014–2018 PERFORMANCE

Reviewing annual trends provides insight into unrestrained collision performance. The crash data show a need to continue putting resources toward proven solutions to reduce this collision type. At current funding and resource levels, reductions can be realized over the life of this plan. **South Carolina is committed to increasing the seat belt usage rate and reducing unrestrained fatalities and serious injuries as measures of success.** The Strategies section provides existing and new actions to improve these trends even further.

Fatalities increased **24%**

Serious injuries decreased **20%**

Unrestrained Fatalities and Serious Injuries



Source: South Carolina Crash File 2014–2018.

NATIONAL SOLUTIONS

The National Highway Traffic Safety Administration (NHTSA) provides national leadership in planning and developing traffic injury control safety programs in the areas of seat belts, child car seats, and automatic occupant protection systems. These programs primarily aim to educate motorist and change their behaviors. Nationally, solutions within three broad categories have proven to reduce unrestrained collisions:

- Initiate programs to maximize use of occupant restraints by all vehicle occupants;
- Insure that child and infant restraints are properly used; and
- Provide access to appropriate information, materials, and guidelines for those implementing programs to increase occupant restraint use.

SOUTH CAROLINA SUCCESSES

In addition to achieving a safety belt use rate of 90% in 2019, South Carolina tailors national unrestrained collision solutions to meet the unique safety challenges in the state. Safety belt compliance is one of the focus areas for South Carolina's *Target Zero Enforcement Team*, and the Team has been very successful in reducing the number of unrestrained fatalities in the areas where they work. Members of the South Carolina Highway Patrol work alongside law enforcement officers from local agencies across the state on mobilization efforts such as *Buckle Up, South Carolina*. The number of agencies conducting seat belt enforcement has increased as a result of grant funding to local law enforcement agencies by the South Carolina Department of Public Safety.

South Carolina's **high-visibility statewide enforcement and education campaign** during the Memorial Day holiday period, known as **Buckle Up, South Carolina** emphasizes the importance of using occupant restraints.

STRATEGIES

INCREASE enforcement of seat belt laws.

EDUCATE public about enforcement of seat belt laws.

EDUCATE public regarding children and youth restraint laws.

ENFORCE child restraint/booster seat law.

South Carolina's **Target Zero Enforcement Team's** focus on seat belt usage, speeding, and DUI has led to a **32%** reduction in fatalities in the areas covered by the Team.

SPEEDING EMPHASIS AREA

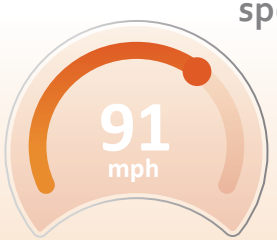
CONTEXT

Speeding is defined as the act of driving too fast for roadway conditions or exceeding the statutory speed limit. While driving too fast for conditions may refer to weather conditions, the term more commonly describes conditions where heavy traffic may lead to congestion, causing stop and go conditions. Speeding was a contributing factor in 26% of all traffic fatalities in 2017.[5] **From 2014 to 2018, an average of 391 people lost their lives each year in speed-related collisions in South Carolina.**

South Carolina has two types of speeding laws, including maximum speed limits or "absolute" limits, and a basic speeding law. Under the basic speeding law, speed greater than what is "reasonable and prudent under the conditions and having regard to the actual and potential hazards then existing" is not allowed. The maximum (absolute) speed limits law is more straightforward – if you exceed the posted speed limit, you will be ticketed for violating the law.[6]

In South Carolina, 63% of fatal and serious injury speed-related collisions occurred during roadway departures and 18% involved rear ending another motor vehicle. Although speed-related collisions have remained relatively unchanged in the past five years, South Carolina continues to reduce the number of drivers who are speeding through enforcement measures, traffic calming design, and public awareness.

From **2014–2018,**
speed-related collisions



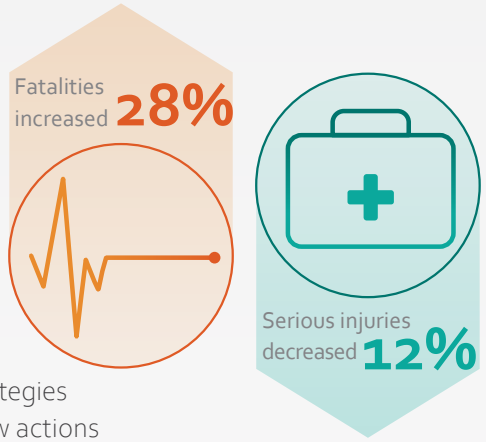
resulted in an annual average of **1,463 people killed or seriously injured.**

[5] National Highway Traffic Safety Administration, USDOT. Speeding: https://www.nhtsa.gov/risky-driving/speeding.

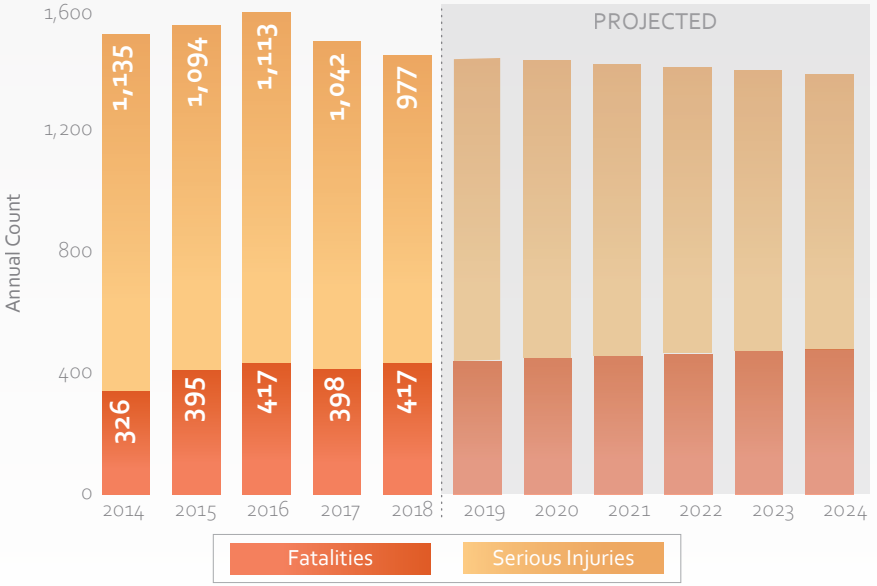
[6] Article 11 Section 56-5-1520: https://www.scstatehouse.gov/code/t56c005.php.

2014–2018 PERFORMANCE

The crash data show a need to continue putting resources toward proven solutions to reduce this collision type. **South Carolina is committed to reducing the number of drivers who partake in aggressive driving behavior and decrease the occurrence of speed-related serious injuries and fatalities.** The Strategies section provides existing and new actions to continue to improve these trends.



Speed-Related Fatalities and Serious Injuries



Source: South Carolina Crash File 2014–2018.

NATIONAL SOLUTIONS

The National Highway Traffic Safety Administration (NHTSA), the Federal Motor Carrier Safety Administration (FMCSA), and the Federal Highway Administration (FHWA) provide leadership in planning and developing effective speed management programs. Speed management is a complex issue that involves engineering, driver awareness, education and enforcement. Speed management includes:

Source: NHTSA.

- Defining the relationship between speed, speeding, and safety;
- Applying road design measures to obtain appropriate speeds;
- Setting speed limits that are safe and reasonable; and
- Effectively marketing communication messages that focus on high-risk drivers.

SOUTH CAROLINA SUCCESSES

A data-informed approach helps South Carolina's planners and engineers understand the challenges and focus efforts on segments and intersections where speed-related collisions are occurring or have the potential to occur based on risk factors. South Carolina is committed to funding *Target Zero Enforcement Teams* and other speed enforcement projects in counties with the highest percentage of speed-related crashes. South Carolina participates each summer in a multi-state, week-long, high-visibility speed enforcement and awareness campaign called Southern Shield.[7]

South Carolina brought together partners in highway safety to explore speed-related issues in the state and to **develop a speed management plan (2017).**

[7] The LEL: Law Enforcement Improving Traffic Safety: http://www.nlelp.org/wp-content/uploads/2017/10/The-LEL-Oct-2017-Final.pdf.

STRATEGIES

REDUCE speeding through enforcement activities.

EMPLOY engineering principles for speed management where practicable.

BUILD partnerships to increase support for speed-reducing measures.

OBTAIN and report accurate and complete speed data to inform and direct speed management activities.

INCREASE public awareness of driving risks at unsafe speeds.

26% percent of speed-related collisions involved **exceeding the posted speed limit** of **55** miles per hour.

DISTRACTED DRIVING EMPHASIS AREA

CONTEXT

Distracted driving refers to any activity that takes motorists' attention away from the safe operation of their vehicles. The most common form of distracted driving is texting, which also happens to be the highest crash risk of all forms of distraction. In 2018 alone, 2,841 people were killed in motor vehicle crashes involving distracted drivers in the United States.[9] **From 2014 to 2018, an average of 58 people lost their lives each year in distracted driving collisions in South Carolina.** While 58 fatalities may seem like a relatively small statistic considering the total number of traffic deaths, it is widely believed that the actual number of fatal and serious injury crashes related to distraction is much higher than is currently captured on the collision report.

Distracted driving is increasing, as drivers direct their attention from the road to other activities. Research has shown that because of the degree of cognitive distraction associated with the use of hand-held devices, the behavior of drivers using them may be equivalent to the behavior of drivers with a 0.08 blood alcohol concentration.[10] South Carolina law prohibits drivers from using a cell phone or other communication device to compose, send or read a text message. From 2014 to 2018, distracted driving collisions in South Carolina have decreased by 19%, yet fatalities have increased 32%.

The challenge in combating distracted driving-related collisions is identifying violators in a moving vehicle. Approximately 34% of distracted driving fatal and serious injury collisions occurred during a roadway departure, and 28% occurred at an intersection. In addition, 57% of distracted driving collisions occurred on urban roads.

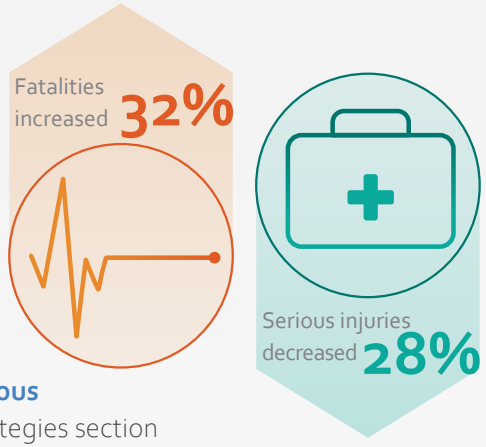
From **2014–2018,**
distracted driving collisions
resulted in an annual average of
395 people
killed or seriously injured.

[9] National Highway Traffic Safety Administration, USDOT. Distracted Driving: https://www.nhtsa.gov/risky-driving/distracted-driving.

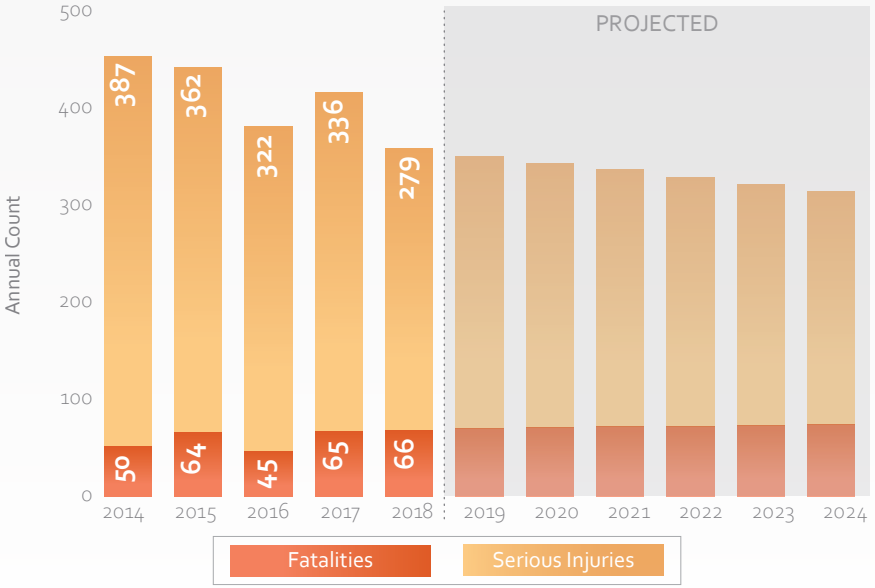
[10] Federal Highway Administration, USDOT. Talking on Distracted Driving https://www.fhwa.dot.gov/publications/publicroads/10septoct/01.cfm.

2014–2018 PERFORMANCE

Annual trends provide insight into distracted driving collision performance. The crash data show a need to continue putting resources toward proven solutions to reduce this collision type. **South Carolina is committed to reducing the number of distracted drivers on the roadways and decreasing serious injuries and fatalities.** The Strategies section provides existing and new actions to improve these trends even further.



Distracted Driving Fatalities and Serious Injuries



Source: South Carolina Crash File 2014–2018.

NATIONAL SOLUTIONS

The National Highway Traffic Safety Administration (NHTSA), Federal Highway Administration (FHWA), and Governors Highway Safety Association (GHSA) provide national leadership in planning and developing traffic injury control safety programs to reduce distracted driving on our roads. NHTSA and GHSA are dedicated to eliminating risky behavior on our Nation's roads by encouraging responsible behavior to stop the deadly distracted driving epidemic and supporting programs focused on high-visibility enforcement. FHWA provides leadership in the use of engineering countermeasures such as rumble strips (both on the shoulder and the centerline) that help prevent crashes associated with inattention.

SOUTH CAROLINA SUCCESSES

South Carolina tailors national distracted driving collision solutions to meet safety challenges in the state. The state is committed to better collecting collision data on distracted driving and analyzing the data to identify locations with higher rates or patterns of distracted driving collisions. Multiple agencies, including the South Carolina Department of Motor Vehicles (SCDMV) and South Carolina Department of Public Safety, are working in coordination to educate the public on the dangers of distracted driving and enhancing enforcement measures to reduce the number of serious injuries and fatalities.

South Carolina's Law Enforcement face challenges to determine distracted driving as a contributing factor in collisions, as investigating officers must rely on self-reporting or witness testimonies. **South Carolina is committed to improve the reporting of distracted driving in an effort to understand appropriate countermeasures.**

STRATEGIES

RESEARCH the distracted driving problem in the state.

IMPROVE the collection and reporting of distracted driving in collisions.

REDUCE the likelihood of vehicles leaving the travel lane(s) at high-crash risk locations by improving the roadway.

ENHANCE driver awareness of the risks of distracted driving.

ENFORCE distracted driving law.

5 seconds
is the average time your eyes are off the road while texting.

At **55** miles per hour.
that's
enough time to cover the length of a football field.

YOUNG DRIVERS EMPHASIS AREA

CONTEXT

According to the National Highway Traffic Safety Administration (NHTSA), young drivers are twice as likely as adult drivers to be involved in fatal collisions.[8] Young drivers, who are categorized as between the ages of 15 and 24 years old, often lack the experience and maturity needed to make safe driving decisions. **On average, six people are killed in young driver-related roadway collisions in South Carolina each week, and from 2014 to 2018, an average of 319 people lost their lives each year**

Many young drivers lack adequate driving skills and experience. Approximately 56% of young driver fatal and serious injury collisions occurred on urban roadways. This is often related to the increasing levels of congestion and number of vehicles operating on roadways in urban areas compared to rural areas. In regards to contributing factors, 48% of young driver fatal and serious injury collisions happened at night. In addition, 40% of those collisions involved speeding and 36% involved roadway departure.

From **2014–2018,**

young driver collisions

resulted in an annual average of

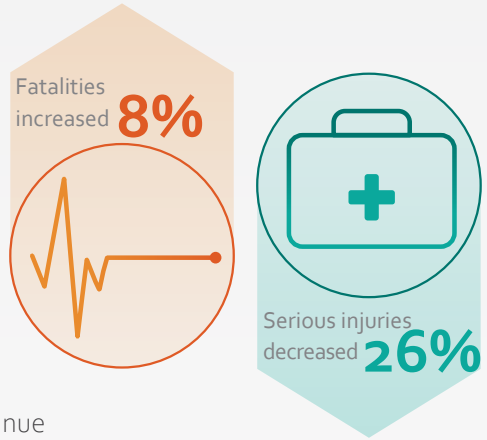
1,451 people

killed or seriously injured.

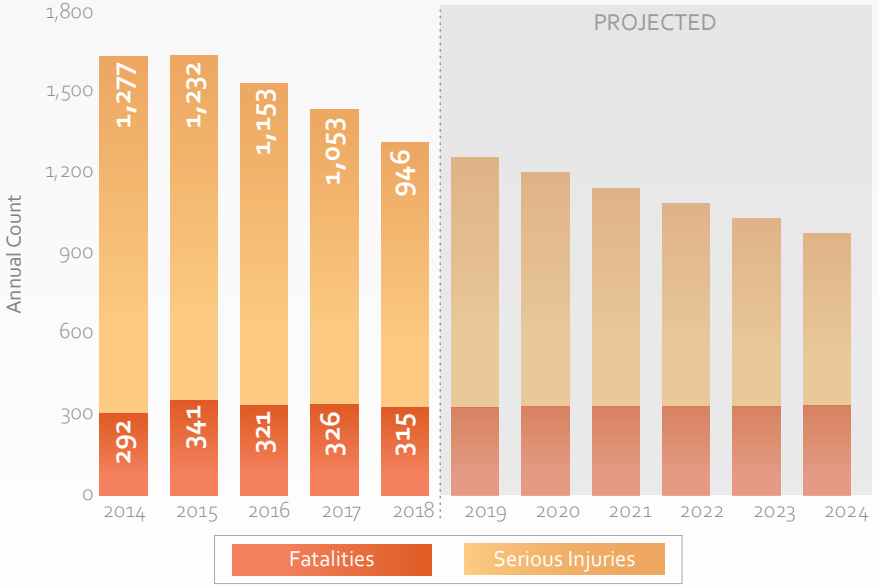
[8] National Highway Traffic Safety Administration, USDOT. Teen Driving: https://www.nhtsa.gov/road-safety/teen-driving.

2014–2018 PERFORMANCE

Annual trends provide insight into young driver collision performance. **The crash data show a need to continue committing resources toward proven solutions to reduce young driver collisions, given the behavioral aspects of these collisions.** The Strategies section provides existing and new actions to continue to see reductions.



Young Driver Fatalities and Serious Injuries



Source: South Carolina Crash File 2014–2018.

NATIONAL SOLUTIONS

Research related to the influence of roadway design and operations, driving performance, and behavior can provide guidance to creating successful countermeasures. The Federal Highway Administration (FHWA) completed a Young Drivers and Highway Design and Operations study, which highlighted the following aspects:

- Young drivers do not have the ability to effortlessly execute certain driving tasks that are gained with experience;
- Young drivers tend to perceive less risk associated with traffic hazards; and
- Young drivers may not understand the meaning of traffic control devices as much as experienced drivers.

The Graduated Driver Licensing (GDL) Program allows young drivers to gain safe and valuable, yet limited, driving experience before obtaining full driving privileges. This program has three levels: the learner stage, intermediate stage, and full privilege stage. A recent study conducted by Clemson University indicated that **South Carolina teen traffic fatalities could be decreased by as much as 45% if the GDL program raised the minimum permit age from 15 to 16 years of age, increased the number of practice hours from 40 to 70, and delayed the full license age from 15 and a half years to 17 years old.**

SOUTH CAROLINA SUCCESSES

South Carolina continues to invest in young driver education, enforcement measures, and policy changes to keep young drivers safe. The *Alive at 25* program is a four-and-a-half-hour course designed for young drivers ages 15–24, and taught by law enforcement officers and first responders. Instructors are carefully selected and trained by South Carolina National Safety Council staff. The program allows young drivers, in the age group most likely to be involved in a fatal collision, to understand the importance of safe driving behaviors.

Parents and guardians can educate young drivers by **talking to their teen about the rules and responsibilities of safe driving,** familiarizing them with statewide laws, and setting a good example of always keeping your eyes on the road.

STRATEGIES

IMPLEMENT and **ENFORCE** Graduated Drivers Licensing (GDL) Programs and laws.

EDUCATE roadway users and create awareness of young driver risks and consequences.

REDUCE crashes along routes used by young drivers to get to school.

Collisions are still the leading cause of teen deaths. However, South Carolina has taken significant measures to reduce the number of lives lost and continues to invest in programs, such as the *Alive at 25* course, that aim to keep young drivers safe.

MATURE DRIVERS EMPHASIS AREA

CONTEXT

As people age, their abilities change. Mature drivers (65 or older) are vulnerable roadway users who often experience decline of their sensory, cognitive, and motor skills that negatively impacts their driving abilities. As the aging population continues to grow, national, state and local governments are tasked with providing safe mobility alternatives that address mature driver needs. Although getting older does not necessarily mean that one can no longer drive, it does require mature drivers to assess their physical and mental health to ensure they can make adequate transportation decisions that consider the safety of all roadway users. According to the National Highway Traffic Safety Administration (NHTSA), 6,907 people over the age of 65 were killed in a traffic collision in the United States in 2018. **Mature drivers in South Carolina were involved in 11% of fatal collisions and 8% of severe injury collisions. From 2014 to 2018, an average of 204 people lost their lives each year in mature driver collisions in South Carolina.** According to South Carolina's Office of Aging, the state's senior population is expected to double by 2030.

Although mature drivers are less represented in the overall general driving population, they are more susceptible to suffer serious injury or death when involved in a traffic collision. In regards to contributing factors in South Carolina, 39% of mature driver fatal and serious injury collisions occurred at an intersection, 26% were related to speed, and 26% were related to driving at night. Furthermore, 60% of collisions occurred on rural roadways.

From **2014–2018,**

mature driver collisions

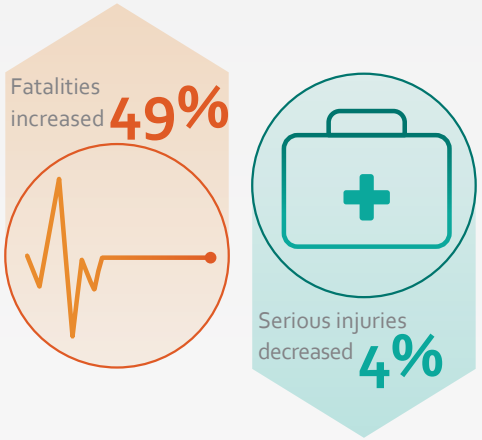
resulted in an annual average of

774 people

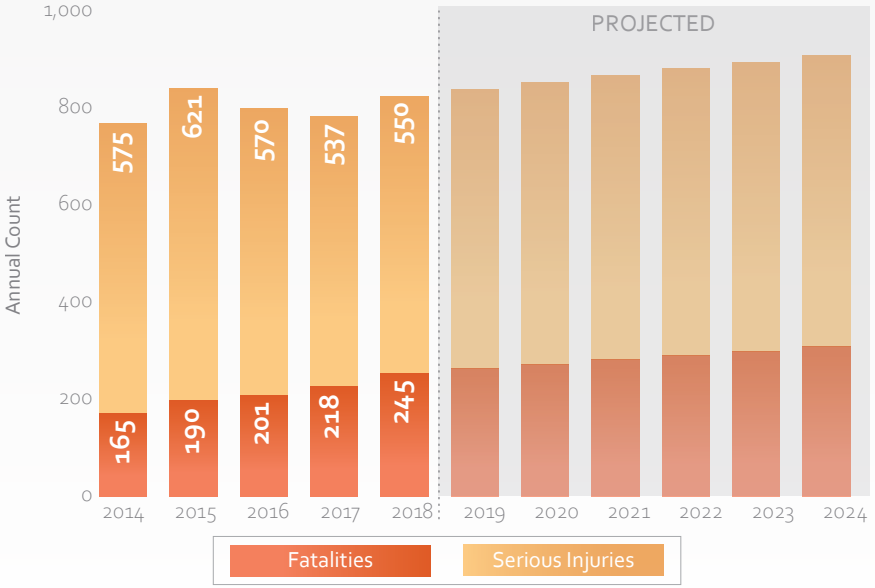
killed or seriously injured.

2014–2018 PERFORMANCE

Annual trends provide insight into mature driver collision performance. The crash data show a need to continue putting resources toward proven solutions to reduce this collision type. **South Carolina is committed to reducing the number of mature drivers involved in fatal and serious injury collisions.** The strategies section provides existing and new actions to continue to improve these trends.



Mature Driver Fatalities and Serious Injuries



Source: South Carolina Crash File 2014–2018.

NATIONAL SOLUTIONS

The National Highway Traffic Safety Administration (NHTSA) and the Federal Highway Administration (FHWA) recognize that mature drivers have an elevated risk of vulnerability. Transportation professionals need to consider the differences in vision, timeliness and reaction time when designing networks for older roadway users. As a large majority of mature drivers are reluctant to give up driving their motor vehicle, NHTSA has provided three steps you can take to understand and influence mature drivers to make safer driving decisions:

1. Collect information about a person's driving performance and ability to carefully operate a vehicle;
2. Make a plan to address a driver's limitations and capabilities; and
3. Ensure the driver is included in all steps of the plan, and follow through with actionable steps for making safe transportation decisions.

SOUTH CAROLINA SUCCESSES

The South Carolina Department of Transportation implemented a new statewide safety initiative that benefits all drivers, including those who may have more difficulty seeing at night. This new initiative involves upgrading many of the state's critical safety warning signs with brighter, more reflective sheeting. Some of the types of signs receiving the upgrade include advance curve and intersection warning signs, chevron curve signs, advisory speed plaque signs, and posted speed limit signs like the one shown here. These upgrades increase the visibility distance of signs by up to 50%.

STRATEGIES

IDENTIFY mature drivers at an elevated risk.

PLAN for an aging population.

IMPROVE roadway design and environment to better accommodate mature drivers' special needs.

IMPROVE the driving competency of mature adults in the general driving population.

South Carolina **does not accept reports regarding potentially unsafe drivers from the general population.**

South Carolina law only allows law enforcement officers and physicians to submit concerns to justify additional driver screening assessments.

PEDESTRIANS EMPHASIS AREA

CONTEXT

A pedestrian is defined as any person who is traveling by foot or is using other methods of transport, including skateboard, roller blades, wheel chair, etc. At some point in the day, everyone is a pedestrian, whether you are walking to your car, going to catch the bus, crossing the street at an intersection, or just going for a stroll around your neighborhood. States are experiencing increasing rates of pedestrian travel, while also seeing an increase in pedestrian fatalities. In the United States, there was a 3% increase in the number of pedestrians killed in traffic collisions in 2018, totaling 6,283 deaths – the most deaths since 1990. **In South Carolina, pedestrian fatalities account for, on average, 14% of all traffic-related deaths and have increased by 54% from 2014 to 2018.** SCDOT is committed to providing safer accommodations for people who walk or take non-motorized forms of transportation.

From 2014 to 2018, an average of 142 pedestrians lost their lives each year in collisions in South Carolina. On average, 12 pedestrians are killed in roadway collisions in South Carolina each month, and 46% of fatalities and serious injuries involving pedestrians occur on roadways with two lanes. According to state data analysis, motorists often encounter pedestrians at night when they are hard to see. Moreover, alcohol involvement is high among nighttime pedestrians, which exacerbates these circumstances. Furthermore, 18% of collisions involving a pedestrian occurred at an intersection and 14% were attributed to distracted driving or were speed-related.

From **2014–2018,**
pedestrian-related collisions
resulted in an annual average of
325 people
killed or seriously injured.

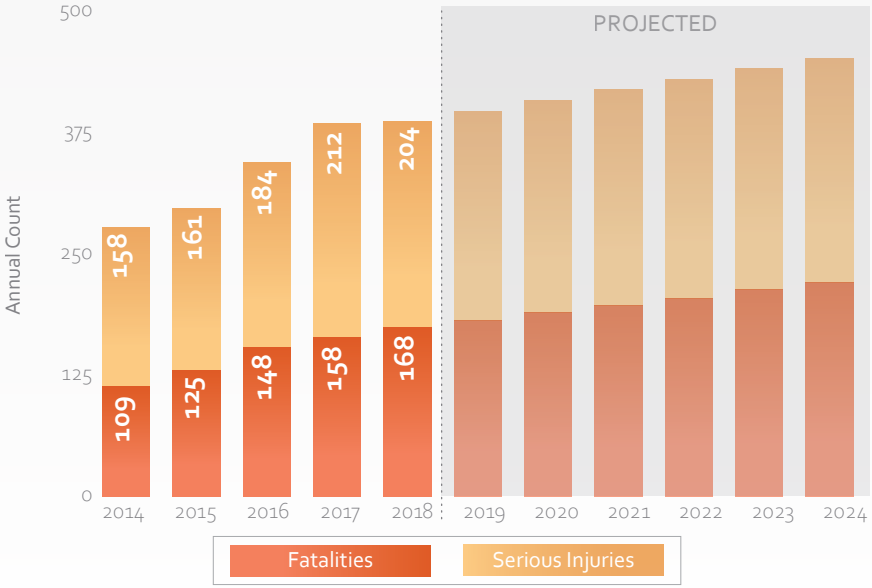
2014–2018 PERFORMANCE

Reviewing annual trends provides insight into pedestrian collision performance. The crash data show a need to continue putting resources toward proven solutions to reduce this collision type. **South Carolina is committed to increasing pedestrian safety and reducing fatalities and serious injuries as measures of success.** The Strategies section provides existing and new actions to improve these trends even further.

Fatalities increased **54%**

Serious injuries increased **29%**

Pedestrian Fatalities and Serious Injuries



Source: South Carolina Crash File 2014–2018.

NATIONAL SOLUTIONS

The National Highway Traffic Safety Administration (NHTSA) and the Federal Highway Administration (FHWA) provide national leadership in planning and developing traffic injury control safety programs to protect pedestrians. **A data-informed approach helps South Carolina's planners and engineers understand the challenges and focus efforts on segments and intersections where pedestrian collisions are occurring or have the potential to occur based on risk factors.** Through the *Every Day Counts STEP* initiative, FHWA promotes proven countermeasures focused on improving pedestrian crossing locations and reducing fatalities and serious injuries including:

- Road diets (which typically involve converting an existing four-lane undivided roadway to a three-lane roadway consisting of two through lanes and a center two-way left-turn lane) to reduce vehicle speeds and create space to add new pedestrian facilities;
- Pedestrian refuge islands, raised crosswalks and visibility enhancements; and
- Pedestrian hybrid beacons and rectangular rapid flashing beacons.

SOUTH CAROLINA SUCCESSES

In an effort to protect South Carolina's vulnerable roadway users, the state is continuing to integrate pedestrian accommodations into SCDOT projects in accordance with agency policies and procedures. The state continues to invest $5 million annually in pedestrian safety plans and other countermeasure solutions at locations with patterns of high pedestrian-related collisions, incorporating the findings from many of the state's pedestrian and bicycle focused Road Safety Audits.

The South Carolina Department of Public Safety's Be Safe. Be Seen. campaign reminds pedestrians to follow pedestrian safety guidelines.

STRATEGIES

CONTINUE the SCDOT Safety Office Investment Plan to perform Road Safety Audits.

DEVELOP a statewide Pedestrian and Bicycle Safety Action Plan.

CONSIDER pedestrian safety and mobility during the needs assessment.

ENCOURAGE age-friendly pedestrian design.

INCREASE pedestrian education efforts.

By **implementing proven pedestrian safety countermeasures,** and **targeting investment in areas that have a high number of collisions,** South Carolina can enhance the quality of life for pedestrians of all ages and abilities.

MOTORCYCLES EMPHASIS AREA

CONTEXT

In South Carolina, a **motorcycle** is defined as a vehicle that has no more than two permanent, functional wheels in contact with the ground and has a saddle for the rider.[11] According to the South Carolina Code of Laws, a **moped** is defined as a cycle with a motor of not more than fifty cubic centimeters which cannot exceed thirty miles an hour on level ground.[12] Unlike motor vehicle occupants, motorcyclists and moped users often face challenges related to visibility and are considered vulnerable roadway users due to their vehicle size, speed, and ability to weave through traffic.

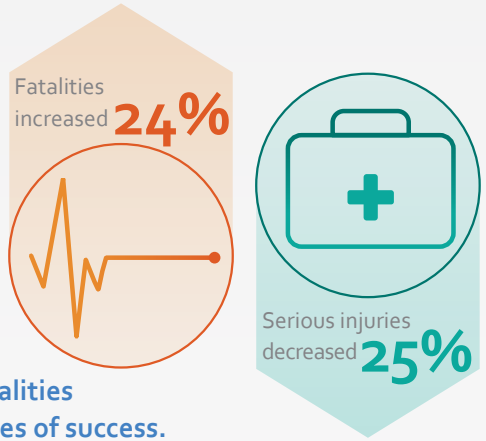
This emphasis area only addresses motorcycle collisions. **Data specific to moped collisions are available in the Moped Factsheet in the appendix.** From 2014 to 2018, motorcycle collisions in South Carolina increased by 19%, and an average of 10 motorcyclists are killed in roadway collisions each month. Approximately 41% of all serious injury and fatal motorcycle collisions are caused due to exceeding the speed limit or driving too fast for conditions. When observing trend data, 64% of motorcycle collisions occurred on urban roadways and 42% of collisions happened at nighttime. In 45% of motorcycle-involved collisions, motorcyclists were the only unit involved compared to non-motorcycle-involved collisions, where 36% were single unit collisions.

From **2014–2018,**
motorcycle-involved collisions
resulted in an annual average of
513 people
killed or seriously injured.

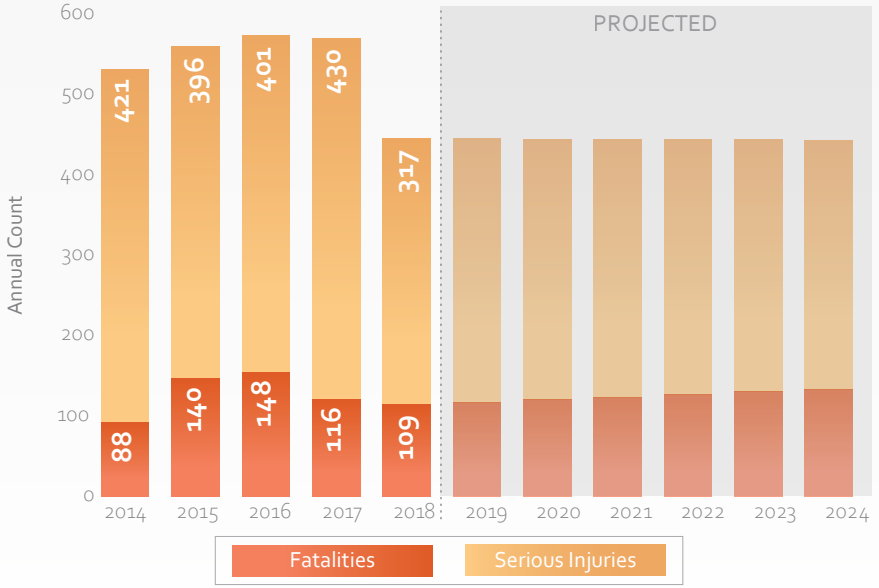
[11] http://scdmvonline.com/Vehicle-Owners/Types-Of-Vehicles/Motorcycle.
[12] https://www.scstatehouse.gov/code/t56c005.php.

2014–2018 PERFORMANCE

Reviewing annual trends provides insight into motorcycle collision performance. The crash data show a need to continue putting resources toward proven solutions to reduce collisions. **South Carolina is committed to increasing motorcycle safety awareness and reducing unrestrained fatalities and serious injuries as measures of success.** The Strategies section provides existing and new actions to improve these trends.



Motorcycle Fatalities and Serious Injuries



Source: South Carolina Crash File 2014–2018.

NATIONAL SOLUTIONS

The National Highway Traffic Safety Administration (NHTSA) provides leadership in planning and developing traffic injury control safety programs that urge drivers and motorcyclists to share the roadways, make themselves visible and to always ride protected and sober. Nationally, campaigns within three broad categories are proven to reduce motorcycle collisions:

1. Motorist awareness of motorcycles;
2. Share the road; and
3. Stop impaired riding.

NHTSA's *Motorcycle Safety 5-Year Plan*[13] addresses the safety of motorcyclists by identifying current data needs, strategies to support state activities, and opportunities to improve support for law enforcement agencies as it pertains to motorcycle safety.

[13] https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/13507-motorcycle_safety_plan_050919_v8-tag.pdf

STRATEGIES

DEVELOP enforcement strategies based on top contributing factors to motorcycle-involved collisions.

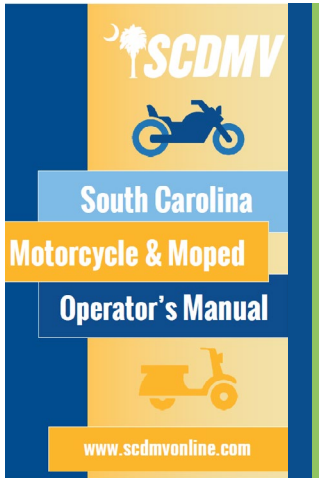
IDENTIFY opportunities to minimize the adverse consequences of leaving the roadway by improving the roadside.

EDUCATE riders and drivers on motorcycle safety and create awareness.

SOUTH CAROLINA SUCCESSES

Practicing safe motorcycling requires balance, coordination, and good judgment. In an effort to give motorcyclists proper training and education, South Carolina has invested in multiple programs that provide extensive opportunities to practice safe motorcycle operation. The South Carolina Rider Education Program provides four training classes for all skill levels, including Basic Motorcycle Course, Intermediate Motorcycle Course, Experienced Motorcycle Course, and Advanced Motorcycle Course. Furthermore, South Carolina's Title 56 Chapter 5 Article 29 addresses Motorcycle Laws that establish safe riding guidelines, including how motorcycles should be operated, lane safety and passing, footrests and rear view mirror placements, helmet design, and face wear.

The South Carolina Motorcycle Safety Task Force (MSTF) is comprised of members from state agencies, colleges, training schools, and advocacy groups. Its mission is to provide the South Carolina Departments of Public Safety, Motor Vehicles, and Transportation with objective and unbiased consultation regarding data-driven motorcycle safety and training programs. The MSTF's purpose is to form partnerships with various state, federal, and local agencies, as well as community groups, and to develop and implement strategies to reduce the number of motorcyclist crashes, fatalities, and injuries.



A legislative change in 2018 resulted in new requirements for moped operators. In South Carolina, **mopeds must now be registered, have a license plate, and operators must be 15 years of age** to obtain a moped license. South Carolina's Motorcycle and Moped Handbook provides additional information: http://scdmvonline.com/-/media/Forms/Motorcycle-Manual.ashx

BICYCLES *EMPHASIS AREA*

CONTEXT

Bicycling is becoming increasingly popular as a way to commute to work, exercise, or just have some fun. In 2018, 857 bicyclists were killed in traffic crashes in the United States.[14] A large percentage of bicyclist collisions can be avoided if motorists and cyclists follow the rules of the road and watch out for each other. **From 2014 to 2018, an average of 19 people lost their lives each year in bicycle collisions in South Carolina.**

Bicyclists are considered vulnerable roadway users due to their lack of protection while traveling on heavily-trafficked roadways. When a bicyclist is involved in a collision, s/he is more likely to be injured. The challenge is limiting contributing factors, such as failure to yield right-of way or disregard for signals, that result in serious injuries or fatalities. In South Carolina, 30% of bicyclist fatal and serious injury collisions happened at an intersection. Furthermore, 15% were speed-related. South Carolina is committed to reducing bicycle collisions by improving bicyclist facilities, street network design, and driver awareness.

From **2014–2018,**

bicycle-related collisions

resulted in an annual average of

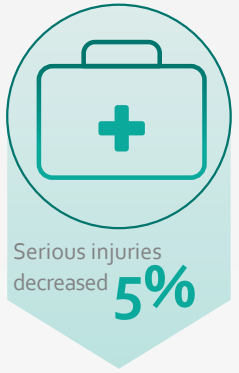
70 people

killed or seriously injured.

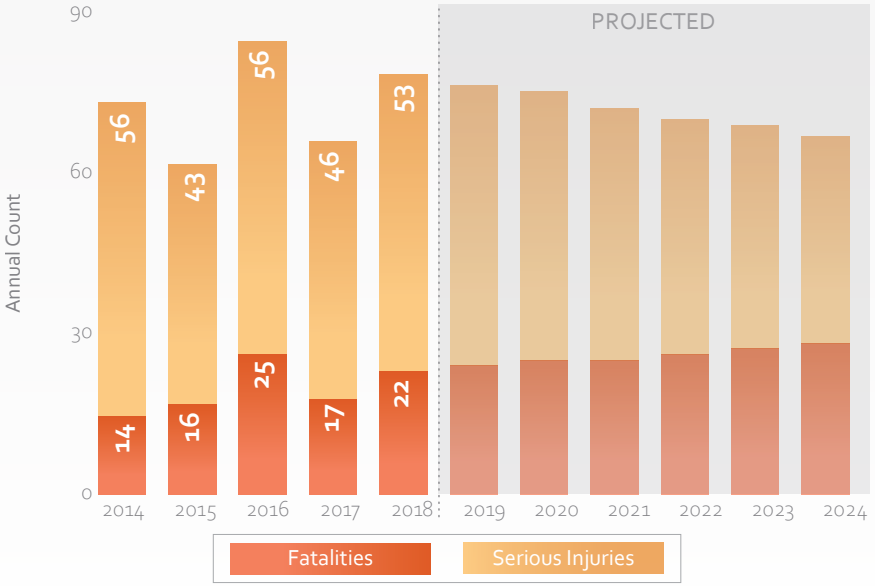
[14] National Highway Traffic Safety Administration, USDOT. Bicycle Safety: https://www.nhtsa.gov/road-safety/bicycle-safety.

2014–2018 PERFORMANCE

Reviewing annual trends provides insight into bicycle collision performance. The crash data show a need to continue putting resources toward proven solutions to reduce this collision type. **South Carolina is committed to increasing bicycle safety and reducing fatalities and serious injuries as measures of success.** The Strategies section provides existing and new actions to improve these trends even further.



Bicycle Fatalities and Serious Injuries



Source: South Carolina Crash File 2014–2018.

NATIONAL SOLUTIONS

The National Highway Traffic Safety Administration (NHTSA) provides national leadership in planning and developing traffic injury control safety programs to protect bicyclists. NHTSA's bicycle safety initiatives focus on encouraging safer bicyclist and driver choices to reduce deaths and injuries, including:

- Motorists should maintain proper travel distance between vehicles and bicyclists;
- Every bicyclist should have a clear understanding of bicyclists traffic safety guidelines; and
- Every bicyclist should ride predictably and follow the rules of the road.

The Federal Highway Administration's goal is to develop methods to make it easier to determine the true nature of bicyclist safety issues and to focus in on the most appropriate countermeasures. The *Bicycle Safety Guide and Countermeasure Selection System* (http://www.pedbikesafe.org/BIKESAFE/) is an online tool that provides the latest information available for improving bicycle safety and mobility.

SOUTH CAROLINA SUCCESSES

In an effort to protect South Carolina's vulnerable roadway users (bicyclists, pedestrians, and moped operators), the state is continuing to integrate bicycle accommodations into SCDOT projects in accordance with agency policies and procedures. **A data-informed approach helps South Carolina's planners and engineers understand the challenges and focus efforts on segments and intersections where bicycle collisions are occurring or have the potential to occur based on risk factors.**

SCDOT has conducted bicycle and pedestrian-focused Road Safety Audits (RSAs) at locations with patterns of bicycle and pedestrian-related collisions. The Department will continue to implement appropriate countermeasures at these locations to reduce collisions.

A Road Safety Audit Team reviews an intersection in Horry County, SC.

STRATEGIES

CONSIDER bicycle accommodations during project development process.

INCREASE bicyclist safety awareness and behavior.

DEVELOP a statewide Pedestrian and Bicycle Safety Action Plan.

COORDINATE with local stakeholders to reduce the number and severity of bicycle-involved collisions.

Bicycles on the roadway are, by law, vehicles with the **same rights and responsibilities as motorized vehicles.** Whether a person rides or drives, s/he should know about bicycle safety.

WORK ZONES EMPHASIS AREA

CONTEXT

From 2014 to 2018, an average of 16 people lost their lives each year in work zone-related collisions in South Carolina. Work Zones are areas where road construction, bridge construction, or maintenance takes place and may involve lane closures, detours, and moving equipment.[15] These areas create temporary roadway environments that are identified by signs that mark the beginning and end of the work area. Motorists should be cautious when driving through work zones, as traffic control devices are often controlled by unprotected construction workers in bright-colored vests. **It is important to identify that work zone-related collisions are not singularly identified based on whether workers are present at the time of the crash**. A collision may have occurred within a work zone area, but due to any number of other contributing factors such as driver distraction or other impairment.

The most frequently reported contributing factors in work zone-related fatal and serious injury collisions are driving too fast for conditions and failure to yield right of way. Approximately 39% of fatal and serious injury work zone collisions occurred on rural roadways. Furthermore, 60% of the collisions that occurred on rural roadways were on non-interstate roadways.

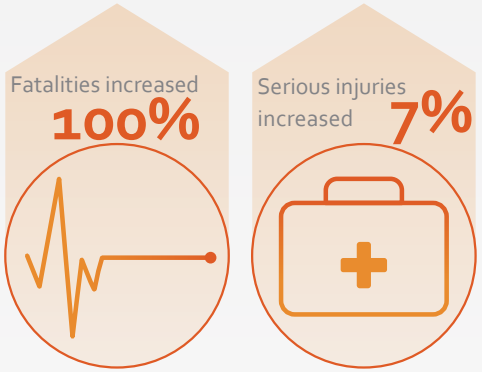
From **2014–2018,** **work zone-related collisions** resulted in an annual average of **45 people killed or seriously injured.**[16]

[15] https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/workzones.pdf.

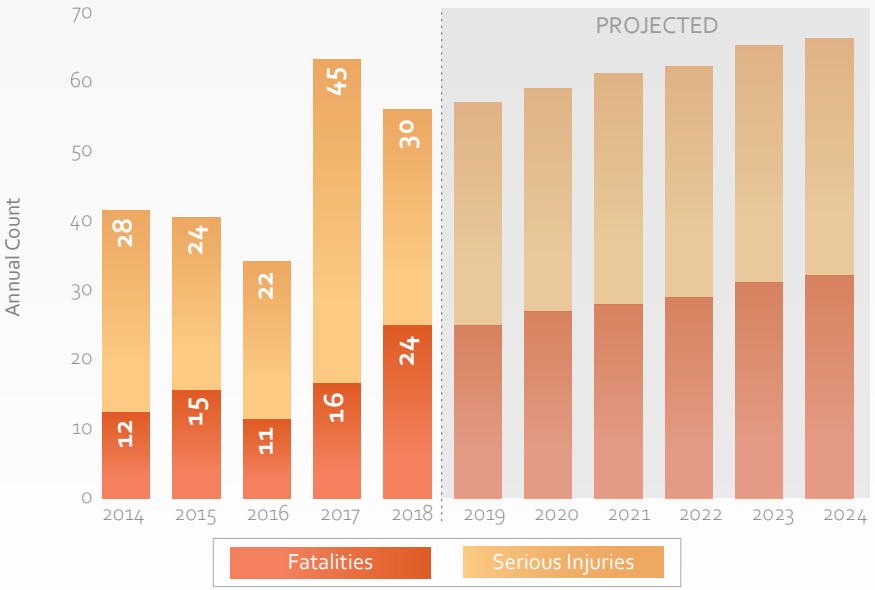
[16] The number of 45 people killed or seriously injured includes motorists and highway workers.

2014–2018 PERFORMANCE

Reviewing annual trends provides insight into work zone collision performance. The crash data show a need to continue prioritizing proven solutions to reduce this collision type. **With a 300% increase in active construction projects, South Carolina is committed to providing safer work zones and reducing driver and worker fatalities and serious injuries.** The Strategies section provides existing and new actions to reduce these trends.



Work Zone Fatalities and Serious Injuries



Source: South Carolina Crash File 2014–2018.

NATIONAL SOLUTIONS

As the nation continues to see an increase in funding for construction projects, work zones have become more prevalent, increasing the potential for both workers and motorists to be involved in a collision in a work zone. Agencies nationwide are working to improve safety in work zones by improving communication and shifting driver behaviors to reduce the number of fatal and serious injury collisions.

Each year in the spring, National Work Zone Awareness Week (NWZAW) is held to bring national attention to motorist and worker safety and mobility issues in work zones. Since 1999, FHWA has worked with the American Association of State Highway and Transportation Officials (AASHTO) and the American Traffic Safety Services Association (ATSSA) to coordinate and sponsor the event.

According to the National Highway Traffic Safety Administration (NHTSA), motorists should abide by the following safety tips while driving through a work zone:

- Watch the traffic around you and be prepared to reduce your speed;
- Adjust your lane position away from the side where workers and equipment are located;
- Expect and plan for delays and leave early to reach your destination on time.

SOUTH CAROLINA SUCCESSES

In 2006, the South Carolina Department of Transportation (SCDOT) and the South Carolina Department of Public Safety (SCDPS) agreed to work together in an effort to reduce collisions, fatalities and injuries in South Carolina within work zones. From this agreement, the Safety Improvement Team (SIT) was created, originally consisting of 24 highway patrol troopers who devoted their time to highway enforcement. The SIT has successfully reduced the number of work zone-related collisions each year since its inception.

In 2016, the South Carolina Department of Transportation (SCDOT) created Procedures and Guidelines for Work Zone Traffic Control Design. This document addresses specific guidelines for development, design, implementation, and/or maintenance of work zone traffic control installations and operations to reduce work zone collisions. Over half (56%) of all law enforcement, first responders, fire and incident responders, and work zone workers in South Carolina have completed the National Traffic Incident Management Responder Training Program, placing the state in the top 15th nationally.

SCDOT is committed to increase work zone safety and **continues to review the state's traffic collision report form** in order to better collect crash data on work zones and provide proper training to Law Enforcement so that the can properly identify high-risk work zone locations and activity areas.

STRATEGIES

REDUCE the duration and impact of work zones and improve work zone traffic control devices.

IMPROVE driver compliance with work zone traffic controls.

INCREASE knowledge and awareness of work zones.

IMPROVE data collection for work zone-related collisions.

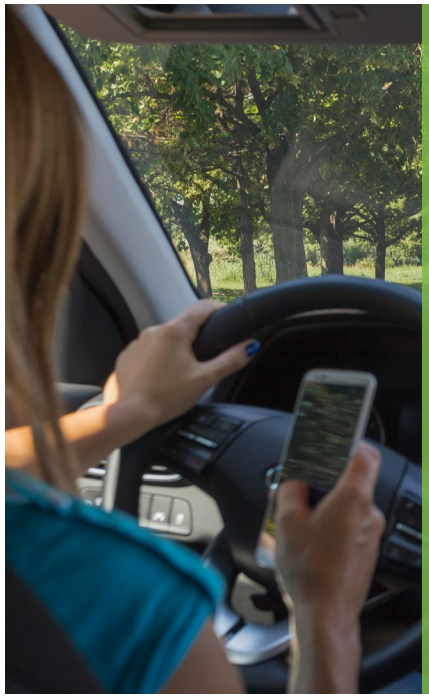
In 2018, SCDOT unveiled **a memorial to honor the men and women who have given their lives** in service to SCDOT and the State of South Carolina.

IMPLEMENTATION AND EVALUATION

SAFETY CULTURE AND LEADERSHIP

Leadership from SCDOT and SCDPS are committed to traffic safety as a top priority. These agencies are leading the charge to enhance safety efforts and reduce fatalities and serious injuries by fostering an organizational culture that prioritizes safety in its mission, vision, goals, and standard operating procedures and leverages resources to maximize investments in safety improvements.

The lack of a strong safety culture was cited in the SHSP SWOT analysis as one of the greatest barriers when it comes to making an impact on fatality and serious injury collisions in South Carolina. Traffic safety laws play a critical role in keeping transportation system users safe. Cultural changes are often brought about through strong safety legislation, a strong enforcement presence to back up those laws, and an organizational willingness to commit resources to programs and initiatives designed to change the public's attitudes and behaviors.



The AAA Foundation for Traffic Safety's 2017 Traffic Safety Culture Index identifies key indicators regarding the degree to which traffic safety is valued and pursued by U.S. drivers. Much like in previous years, the 2017 Traffic Safety Culture Index reveals motorists' discordance between traffic safety culture beliefs and actual driving behavior. The results continue to show an attitude of "do as I say and not as I do" among motorists.

IMPLEMENTATION

It would be beneficial to see the SHSP Implementation Plan widely disseminated and an accompanying presentation could be offered to educate partners on its contents.

– Recommendation from SWOT Analysis

Biannually, SCDOT and SCDPS will prepare an Implementation Plan designed to guide the SHSP process. The plan will be organized by emphasis area, with a budget that is fiscally constrained, and developed in coordination with other stakeholders. The Implementation Plan will be shared with stakeholders and used to help prioritize activities state and local agencies should engage in to support the SHSP. The plan will help various partners understand their role in the SHSP implementation process and highlight the strategies and activities prioritized as most important during any given year. The Implementation Plan will also include activities SCDOT and SCDPS will conduct to keep partners informed of the SHSP. A biannual Implementation Plan development process allows South Carolina's partners to re-evaluate the strategies that should be emphasized and call attention to those prioritized for short term implementation.

To successfully implement the 2020–2024 SHSP, all stakeholders should commit to:

- Update their plans, including other state, MPO, and local government plans, to align with the SHSP Target Zero vision.
- Demonstrate support and promote the SHSP Target Zero vision by implementing SHSP strategies.
- Promote initiatives that increase roadway users' understanding of the state's most significant traffic safety problems and their role in reducing fatalities and serious injuries.
- Support national, state, and local initiatives, policies, and safety projects that promote highway safety.

EVALUATION APPROACH

As our attention shifts to implementing the 2020–2024 SHSP, it is important to plan how we will measure future progress and performance. Conducting a thorough evaluation of the SHSP is critical to understanding what is working and what should, or should not, continue in the future.

The measurable objectives for the SHSP will remain the same throughout the five-year life of the plan, but will be reviewed annually to see if they align with the annual HSIP and HSP performance targets. Biannually, the Steering Committee will review the SHSP progress, objectives, and emphasis areas' performance before the Implementation Plan is developed. This approach will allow South Carolina's safety partners to adjust the strategies prioritized in the Implementation Plan in order to address any shifting needs and areas of focus.

South Carolina Highway Patrol leads vehicles in a crossover maneuver during lane reversal on I-26 in Columbia, SC.


ARRIVE ALIVE
DON'T SPEED
26
76
WEST
Spartanburg
Greystone Blvd.
Riverbanks Zoo
EXIT

APPENDIX

APPENDIX

GLOSSARY OF TERMS

Access Management – The proactive management of vehicular access points to land parcels adjacent to all manner of roadways.

Blood Alcohol Concentration (BAC) – The amount of alcohol that is present in a person's blood.

Bicyclist – Users who are riding a bicycle or other type of nonmotorized cycle.

Commercial Vehicle Safety Plan (CVSP) – Plan required by the Federal Motor Carrier Safety Administration that outlines strategies and countermeasures specifically targeting commercial vehicle safety.

Coordination – The comparison of plans, programs, and schedules of one agency with related plans, programs, and schedules of other agencies or entities with legal standing, and adjustment of plans, programs, and schedules to achieve general consistency.

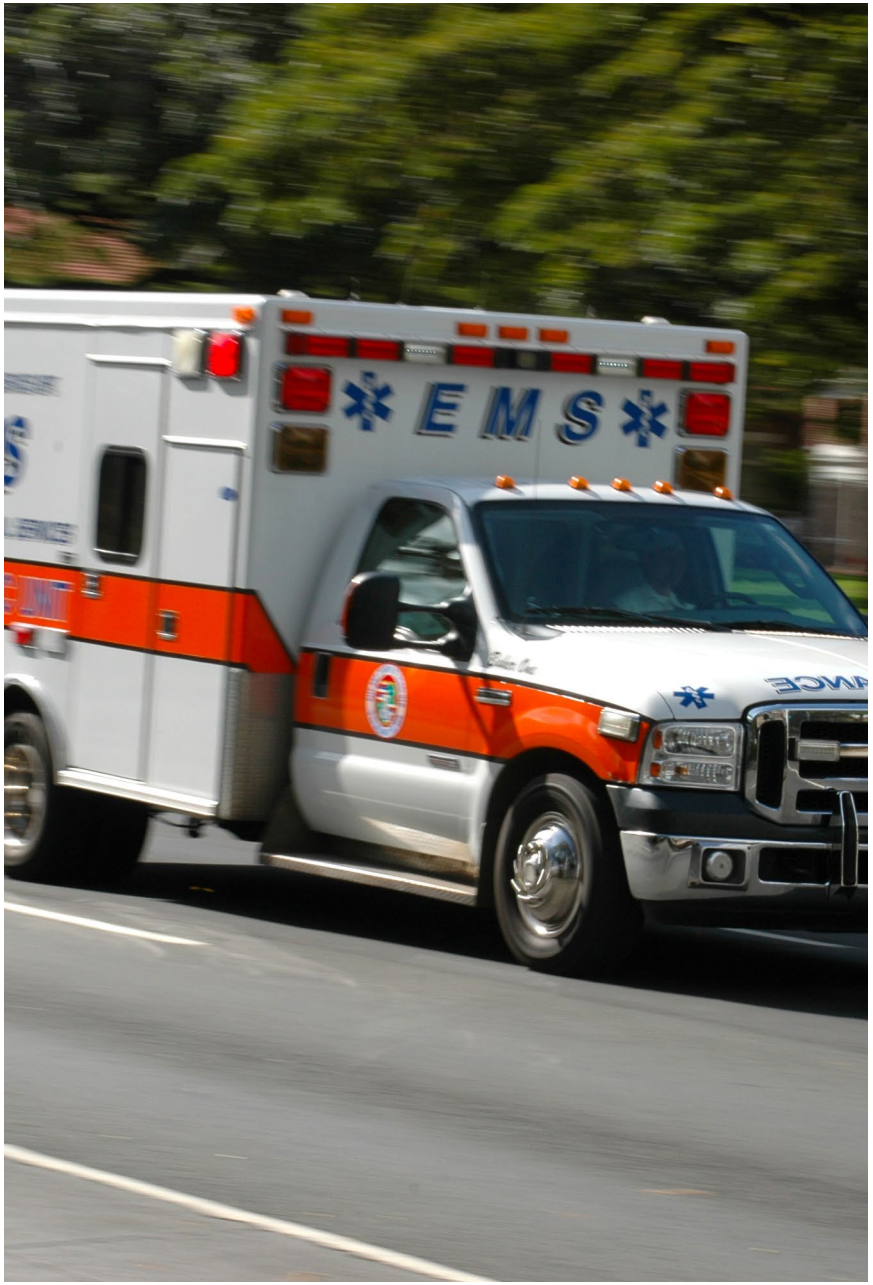
Distracted Driving Collisions – Includes any collision where the driver is distracted by an electronic communication device, such as a cell phone; other electronic devices, such as navigation or a DVD player, or other external distractions; passengers in the vehicle; texting; or where the driver is inattentive.

Engineering – One of the "4 Es" of traffic safety which includes highway design, traffic, maintenance, operations, and planning professionals.

Enforcement – One of the "4 Es" of traffic safety which supports efforts by state and local law enforcement agencies.

Education – One of the "4 Es" of traffic safety which includes safety solutions that support prevention specialists, communication professionals, educators, and citizen advocacy groups.

Emergency Medical Services – One of the "4 Es" of traffic safety which includes improving the response to crashes after they occur and safety solutions that support first responders, paramedics, fire, and rescue.



Emphasis Area – One of 12 areas of focus identified in the SHSP.

Evaluation – The systematic collection of information about the activities, characteristics, and outcomes of a program to make judgments about it, improve its effectiveness, and/or inform decisions about future programming.

Fatality Rate – The number of fatalities per 100 million vehicle miles traveled.

Fixing America's Surface Transportation (FAST) Act – Authorizes $305 billion over fiscal years 2016 through 2020 for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs.

Federal Highway Administration (FHWA) – The Federal agency within the U.S. Department of Transportation that supports state and local governments in the design, construction, and maintenance of the nation's highway system.

Federal Motor Carrier Safety Administration (FMCSA) – Federal government agency responsible for regulating and providing safety oversight of commercial motor vehicles.

Graduated Driver's License (GDL) – A multi-staged process for issuing driver's licenses to young, novice drivers to ensure that they gain valuable driving experience under controlled circumstances and demonstrate responsible driving behavior and proficiency.

Heavy Trucks – Vehicles with the unit classification of tractor trailer.

High-Risk Behavior Emphasis Areas – Impaired driving, unrestrained, speeding, and distracted driving.

Highway Safety Improvement Program (HSIP) – This is a core Federal-aid program designed to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on Tribal lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance.

Highway Safety Plan (HSP) – Plan required by NHTSA outlining the highway safety programs and projects that will be undertaken by a state's highway safety office to reduce traffic crashes and the resulting deaths, injuries, and property damage.

Impaired Driver – A person driving or in physical control of a vehicle when under the influence of alcoholic beverages or legal or illegal drugs.

Implementation – The process of putting a plan in place.

Infrastructure Related Emphasis Areas – Roadway Departure and Intersections.

Intersection Collision – Crashes that occur at an intersection or are influenced by an intersection.

LED – Light-emitting diode, a semiconductor light source that emits light when current flows through it.

Long-Range Transportation Plan (LRTP) – South Carolina's most recent LRTP, the 2040 Statewide Multimodal Transportation Plan: Charting a Course is a 20-year planning horizon vision document that reflects the application of programmatic transportation goals to project prioritization.

Mature Driver – Drivers 65 year of age and older.

Moving Ahead for Progress in the 21st Century Act (MAP-21) – A funding and authorization bill to govern United States federal surface transportation spending. It was passed by Congress on June 29, 2012.

Metropolitan Planning Organization (MPO) – Transportation policy-making organization at a regional level that is made up of representatives from local government and governmental transportation authorities.

APPENDIX

National Highway Traffic Safety Administration (NHTSA) – Federal agency responsible for reducing deaths, injuries and economic losses resulting from motor vehicle crashes. This is accomplished by setting and enforcing safety performance standards for motor vehicles and motor vehicle equipment, and through grants to state and local governments to enable them to conduct effective local highway safety programs.

Pedestrian – Non-motorists who are walking, in a wheelchair, skating, using a pedestrian conveyance, etc.

Road Safety Audits – The formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team.

Roadway Departure Collision – A crash which occurs after a vehicle crosses an edge line or otherwise leaves the travel way.

Serious Injury Collision – Any non-fatal injury which prevents the victim from walking, driving or normally continuing the activities he was capable of performing before the injury occurred.

South Carolina Department of Motor Vehicles (SCDMV) – SCDMV administers the state's motor vehicle licensing and titling laws by maintaining strict controls to deliver secure and valid identification, licenses, and property records, while accurately accounting for the receipt and timely distribution of all revenue collected in order to best serve our citizens.

South Carolina Department of Public Safety (SCDPS) – As the largest law enforcement agency in the state, it is the mission of the SCDPS to protect and serve the public with the highest standard of conduct and professionalism; to save lives through educating the citizens of South Carolina on highway safety and diligent enforcement of laws governing traffic, motor vehicles, commercial carriers, and immigration; to provide protective services for government officials, state government properties, and the general public visiting these properties; and to ensure a safe, secure environment for the citizens of the state of South Carolina and its visitors. The SCDPS includes the Highway Patrol, State Transport Police, Bureau of Protective Services, Office of Highway Safety and Justice Programs, Immigration Enforcement Unit and the South Carolina Law Enforcement Officers Hall of Fame.

South Carolina Department of Transportation (SCDOT) – SCDOT connects communities and drives our economy through the systematic planning, construction, maintenance, and operation of the state highway system and the statewide intermodal transportation and freight system.

Speeding – Includes driving too fast for conditions and exceeding the posted speed limit.

Stakeholders – Individuals and groups with an interest in the outcomes of policy decisions and actions.

State Highway System – A network of 41,300 miles of highways owned and maintained by the State of South Carolina.

Strategic Highway Safety Plan (SHSP) – A Strategic Highway Safety Plan (SHSP) is a major component and requirement of the Highway Safety Improvement Program (HSIP) (23 U.S.C. § 148). It is a statewide-coordinated safety plan that provides a comprehensive framework for reducing highway fatalities and serious injuries on all public roads. An SHSP identifies a State's key safety needs and guides investment decisions towards strategies and countermeasure with the most potential to save lives and prevent injuries.

Strategy – A specific activity that is designed to help achieve an objective.

Unrestrained Motor Vehicle Occupant – Any motor vehicle occupant who had access to a restrain device (i.e., seat belt, child safety seat, or booster seat) but did not use it.

Vehicle Miles Traveled (VMT) – The total number of miles traveled by vehicles using a roadway system.

Vulnerable Road User Emphasis Areas – Motorcycles, Pedestrians, Bicycles, Young Drivers, Mature Drivers, and Work Zones.

Work Zone – Marked section of roadway for construction, maintenance or utility work.

Young Driver – Driver ages 15 to 24 years old.

APPENDIX

FEDERAL REQUIREMENTS

Two major federal laws influence the content and implementation of the 2020–2024 SHSP: Moving Ahead for Progress in the 21st Century (MAP-21) Act and the Fixing America's Surface Transportation (FAST) Act. Under these laws, the FHWA sets policy that guides the implementation and evaluation of the SHSP. FHWA published its HSIP Final Rules (Code of Federal Regulations – CFR) with an effective date of April 14, 2016. These regulations implement the HSIP requirements established in MAP-21 and the FAST Act, and establish clear requirements for updating the state's SHSP.

The HSIP is a core federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance. The HSIP regulation under 23 CFR 924 establishes the FHWA's HSIP policy, as well as program structure, planning, implementation, evaluation, and reporting requirements which states must follow to successfully administer the HSIP. In addition to clarifying other programs, the HSIP contains performance management requirements for SHSP updates.

The law requires all states to have an updated, approved SHSP which is consistent with specific requirements under 23 USC Section 148. The updated SHSP must be submitted to the FHWA Division Administrator, who will ensure that the state has followed a process that meets these requirements. The FHWA provides an SHSP Process Approval Checklist, which is a tool to help Division Offices assess the process and completeness of the SHSP update. The requirements outlined in the Process Approval Checklist include detailed indicators and considerations which must be met by the state. Specific elements of the checklist include the following:

- Consultation with appropriate stakeholders and traffic safety partners during the update process.
- Comprehensive use of data to develop plan emphasis areas and safety improvement strategies, including safety data from non-state-owned public roads and Tribal land.
- Performance management and adoption of performance-based goals which are consistent with established safety performance measures.
- Employing a multi-disciplinary approach which addresses engineering, education, enforcement, emergency medical services, and public policy elements of highway safety as key features when determining SHSP strategies.
- Coordination with other state, regional, local, and Tribal transportation and highway safety planning processes; a demonstration of consultation among partners in the development of transportation safety plans; and an SHSP which provides strategic direction for other transportation plans.
- An implementation focus which describes the process, actions, and potential resources for implementing the strategies in the emphasis areas.
- Requirements to evaluate the SHSP as part of the HSIP update process, including confirming the validity of the emphasis areas and strategies based on analysis of safety data, and identifying issues related to the SHSP's process, implementation, and progress.
- Special rules which require including the state's definition of High Risk Rural Roads (HRRR) and strategies to address the increases in older driver and pedestrian traffic fatalities and serious injuries, if applicable.
- A detailed description of the SHSP update process, included as a section, chapter, or appendix in the SHSP.
- A requirement to complete the SHSP update no later than five years from the date of the previous approved version.
- A requirement that the SHSP be approved and signed by the Governor of the state or a state official that is delegated by the Governor.
- Approval by the FHWA Division Administrator.

EMPHASIS AREA FACT SHEETS

ROADWAY DEPARTURE

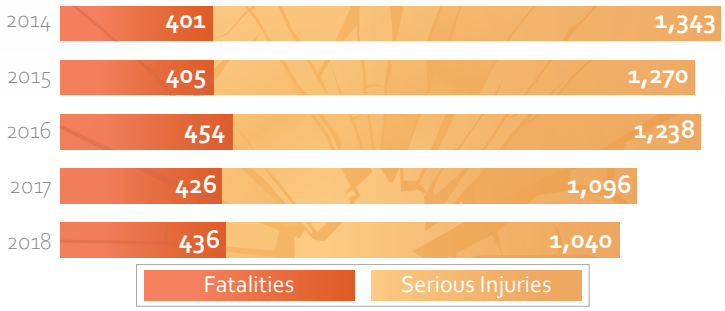
FACT SHEET 2020

OVERVIEW OF 2014–2018 ROADWAY DEPARTURE COLLISIONS

Between 2014 and 2018, 8,109 people died or were seriously injured in a total of 7,195 collisions that involved a roadway departure.

Over the past five years, an average of 424 people lost their lives in roadway departure collisions. Fatalities increased 9%, but serious injuries decreased 23%. Roadway departure is the largest contributor to all collisions in South Carolina. The state is investing in improvements to keep vehicles on the road and reducing the risks if they do depart the roadway.

Roadway Departure Fatalities and Serious Injuries



On average,

1 person

is **killed** in roadway departure collisions in South Carolina each day.

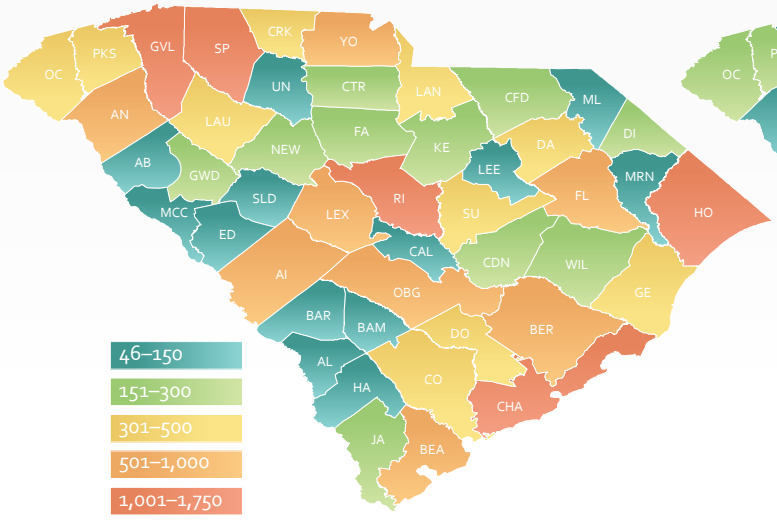
39%

of roadway departure fatal and serious injury collisions involve a **car hitting a tree.**

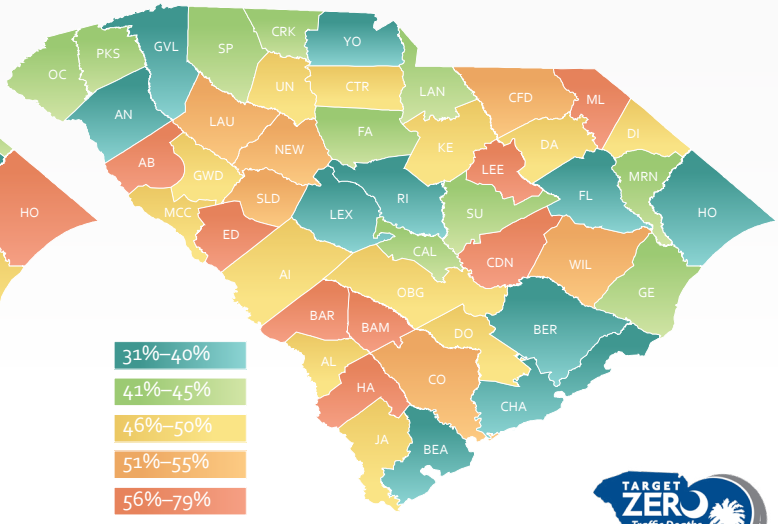
WHERE FATAL AND SERIOUS INJURY COLLISIONS OCCURRED

These maps show where roadway departure fatalities and serious injuries are occurring. The *County Total* map shows the counties with the highest numbers of fatal and serious injury collisions. The urbanized areas of the state, where there are more vehicles and naturally more collisions, show up as priority areas. The *Percentage of Total County Collisions* map tells a different story, showing locations with a higher percentage of roadway departure collisions when compared to the total number of collisions occurring within a county. The maps can help agencies better target safety programs and projects.

Fatal and Serious Injury Collisions by County Total

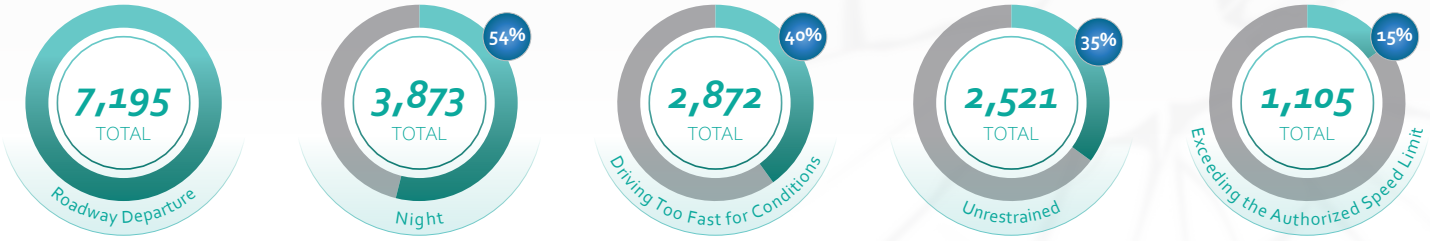


Fatal and Serious Injury Collisions by Percentage of Total County Collisions

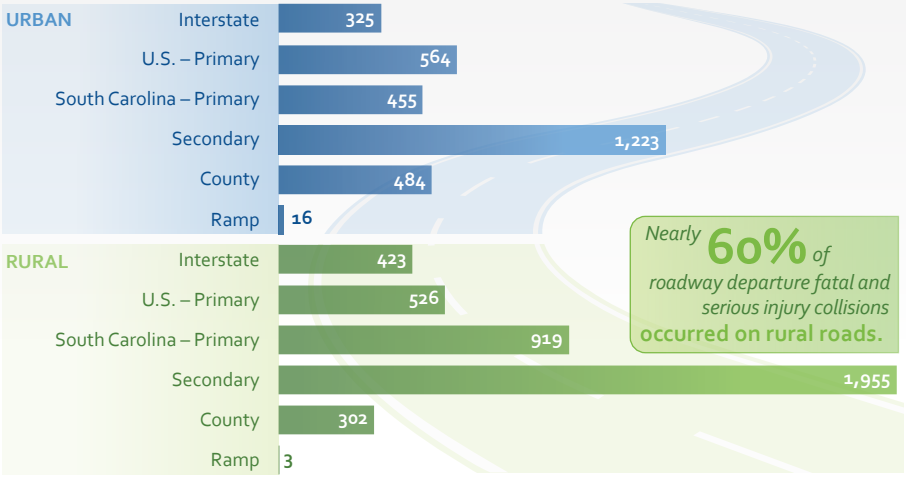


CONTRIBUTING FACTORS

54% of roadway departure fatal and serious injury collisions occurred at night and driving too fast for conditions was a factor in 40% of roadway departure fatal and serious injury collisions.

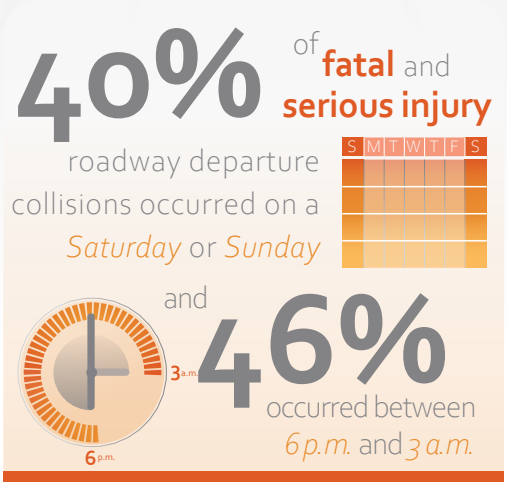


ROADWAY TYPE



Nearly **60%** of roadway departure fatal and serious injury collisions occurred on rural roads.

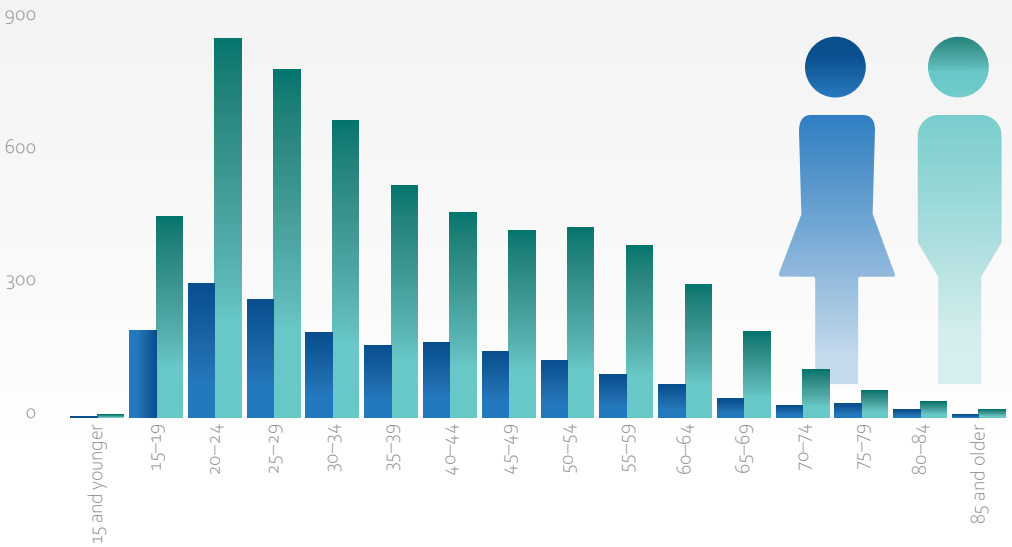
TIME OF DAY/DAY OF WEEK



AGE AND GENDER

Male drivers had a higher involvement in roadway departure collisions resulting in deaths or serious injuries.

Male drivers between the ages of 20–24, followed by 25–29, contributed to the highest number of serious injury collisions. Overall, male drivers were involved in 75% of all roadway departure fatal and serious injury collisions. However, males make up 48% of the licensed drivers in South Carolina.



For more information on South Carolina's Strategic Highway Safety plan, please visit *sctargetzeroplan.org*

INTERSECTIONS

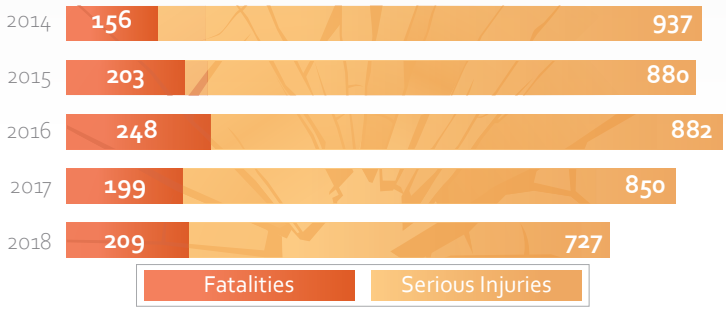
FACT SHEET 2020

OVERVIEW OF 2014–2018 INTERSECTION COLLISIONS

Between 2014 and 2018, 5,291 people died or were seriously injured in a total of 4,457 collisions at or near an intersection.

Over the past five years, an average of 203 people lost their lives in intersection collisions. Fatalities increased 34%, but serious injuries decreased 22%. Intersection collisions are the second largest contributor to all collisions in South Carolina. The state is investing in improvements to reduce risks at intersections.

Intersection Fatalities and Serious Injuries



On average, **4 people** are **killed** in intersection collisions in South Carolina each week.

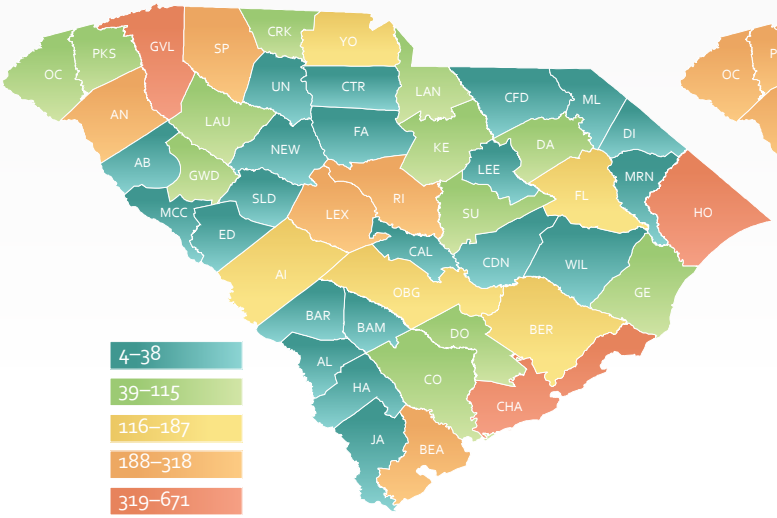
58% of intersection fatal and serious injury collisions **were right angle collisions.**

Only **12%** of the intersections in South Carolina **have fatal and/or serious injury collisions,** **88%** do not.

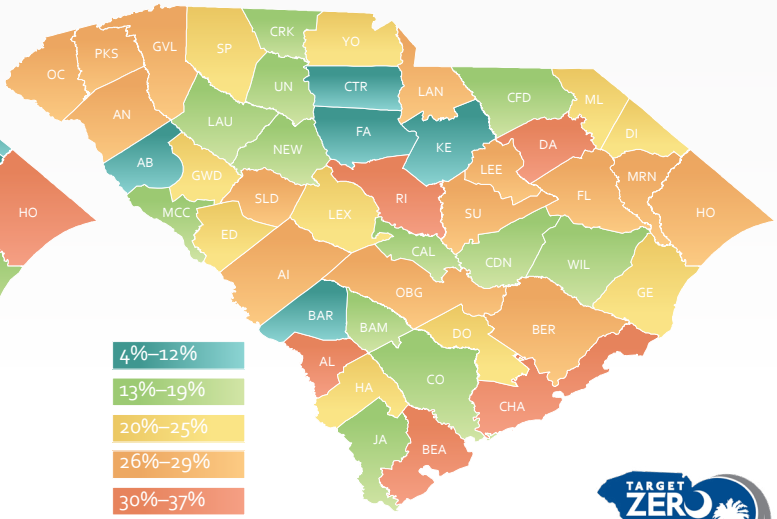
WHERE FATAL AND SERIOUS INJURY COLLISIONS OCCURRED

These maps show where intersection collision fatalities and serious injuries are occurring. The *County Total* map shows the counties with the highest numbers of fatal and serious injury collisions. The urbanized areas of the state, where there are more vehicles and naturally more crashes, show up as priority areas. The *Percentage of Total County Crashes* map tells a different story, showing locations with a higher percentage of intersection collisions when compared to the total number of collisions occurring within a county. Both maps help prioritize locations for safety improvements.

Fatal and Serious Injury Collisions by County Total

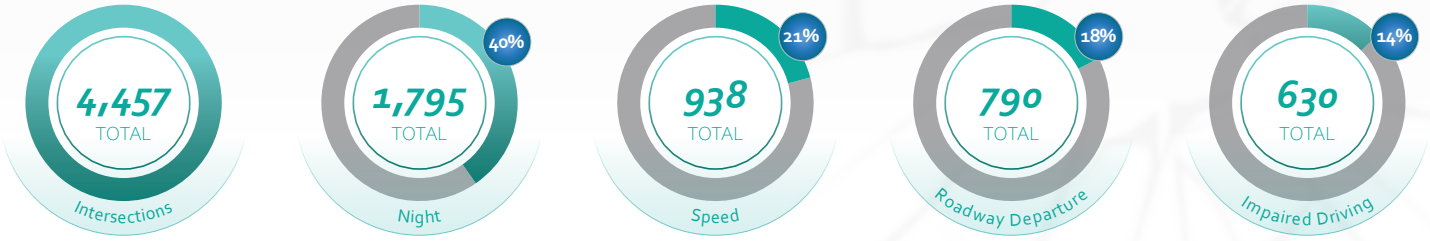


Fatal and Serious Injury Collisions by Percentage of Total County Collisions

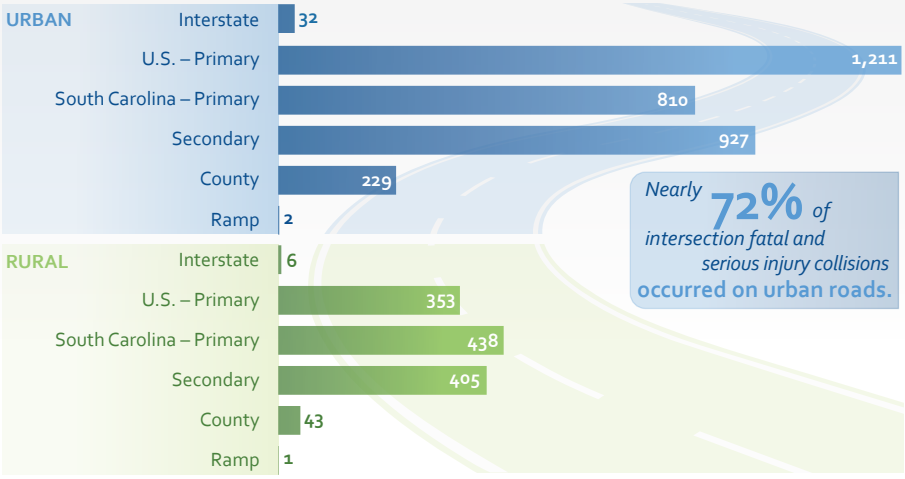


CONTRIBUTING FACTORS

40% of intersection fatal and serious injury collisions occurred at night and speeding was a factor in 21% of intersection fatal and serious injury collisions.

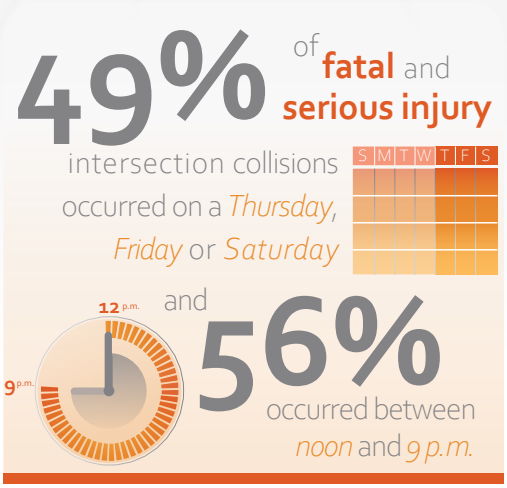


ROADWAY TYPE



Nearly **72%** *of intersection fatal and serious injury collisions* **occurred on urban roads.**

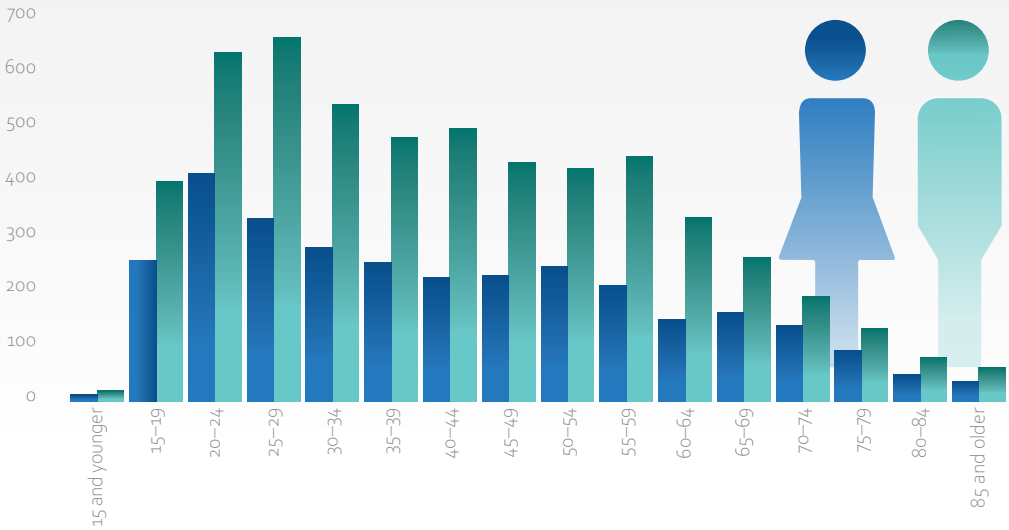
TIME OF DAY/DAY OF WEEK



AGE AND GENDER

Drivers age 20–24 had the highest involvement in intersection collisions. Male drivers had a higher involvement in intersection collisions resulting in deaths or serious injuries.

Overall, male drivers were involved in 65% of all intersection fatal and serious injury collisions. However, males make up 48% of the licensed drivers in South Carolina.



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IMPAIRED DRIVING

TARGET ZERO

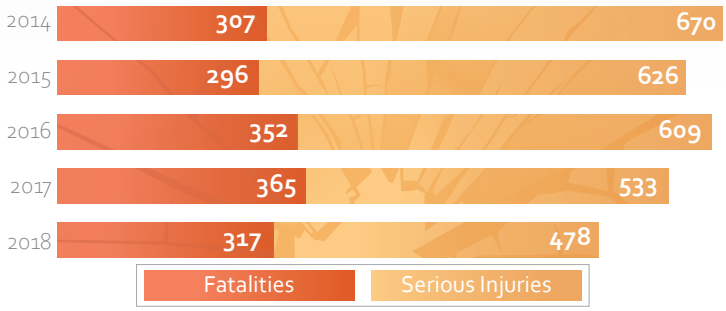
FACT SHEET 2020

OVERVIEW OF 2014–2018 IMPAIRED DRIVING COLLISIONS

Between 2014 and 2018, 4,553 people died or were seriously injured in a total of 3,671 collisions that involved impaired driving.

Over the past five years, an average of 327 people lost their lives in impaired driving collisions. Fatalities increased 3%, but serious injuries decreased 29%. Impaired driving collisions have decreased 18%. South Carolina continues to invest in programs and campaigns focused on reducing the occurrence of these collisions. Impaired driving collisions are defined as any collision where any level of alcohol was present in the driver or where there was a positive drug test result for the driver.

Impaired Driving Fatalities and Serious Injuries



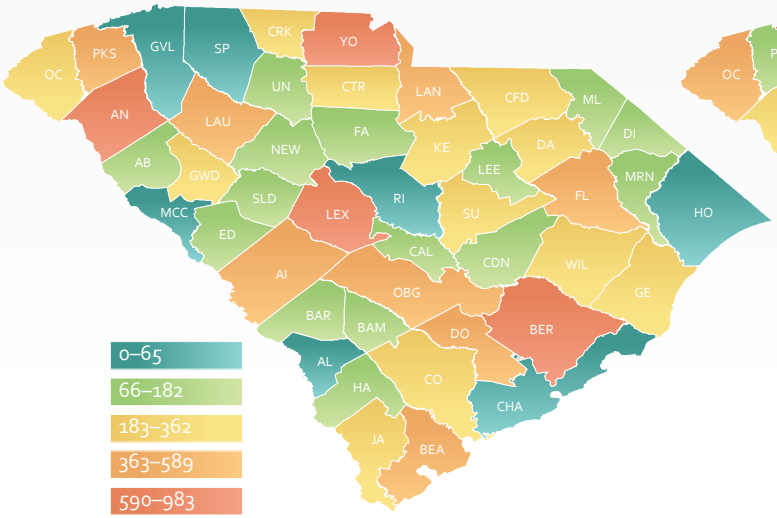
On average, **2 people** are **killed** or **seriously injured** in impaired driving collisions in South Carolina each day, and **8 people** are **killed** or **seriously injured** on average per holiday.

66% of impaired driving collisions **happen at night.**

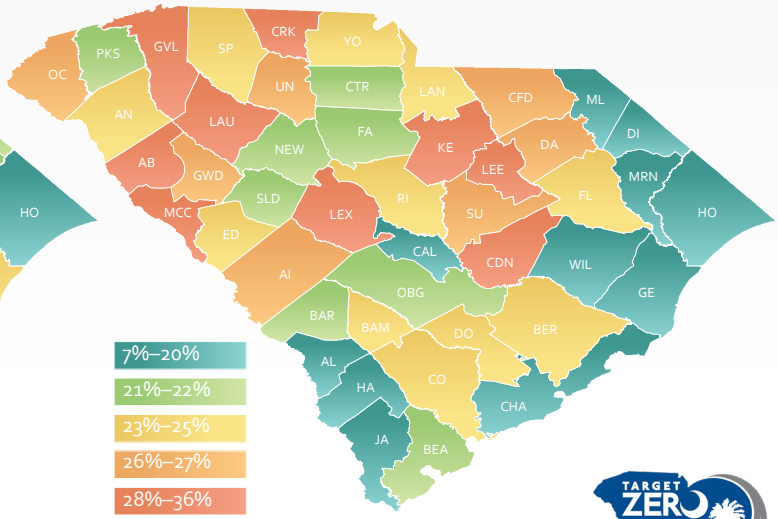
WHERE FATAL AND SERIOUS INJURY COLLISIONS OCCURRED

These maps show where impaired driving fatalities and serious injuries are occurring. The *County Total* map shows the counties with the highest numbers of fatal and serious injury collisions. The urbanized areas of the state, where there are more vehicles and naturally more crashes, show up as priority areas. The *Percentage of Total County Crashes* map tells a different story, showing locations with a higher percentage of impaired driving collisions when compared to the total number of collisions occurring within a county. The maps can help agencies better target safety programs and projects.

Fatal and Serious Injury Collisions by County Total

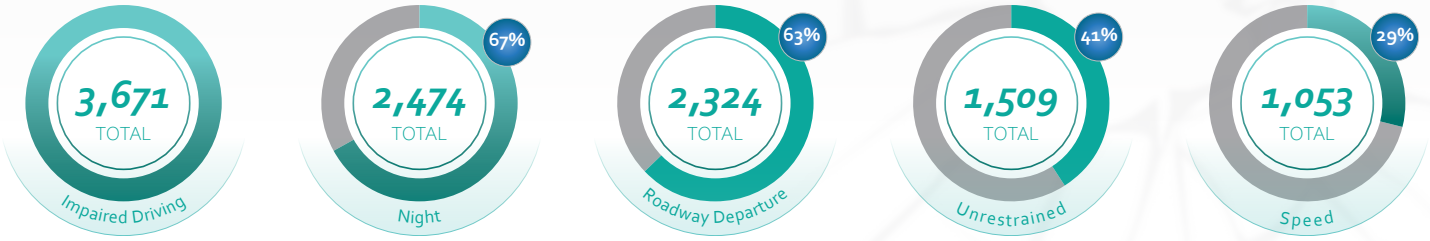


Fatal and Serious Injury Collisions by Percentage of Total County Collisions

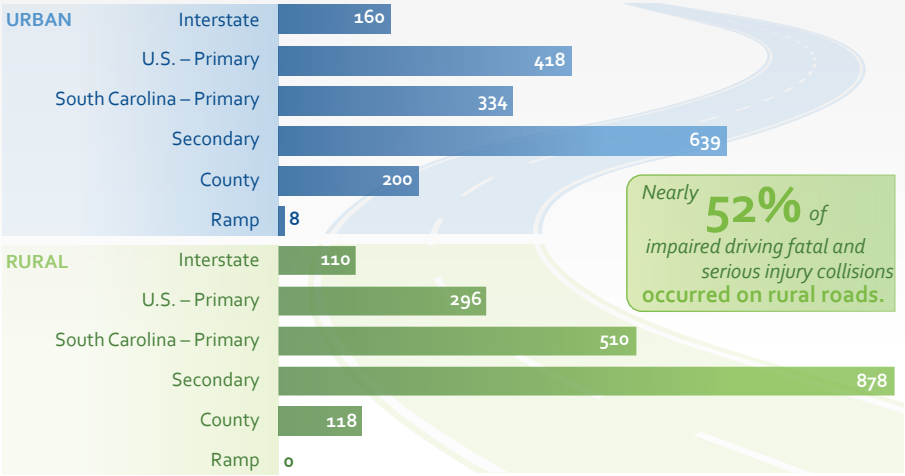


CONTRIBUTING FACTORS

67% of impaired driving fatal and serious injury collisions occurred at night, and 63% were roadway departure collisions. In 41% of impaired driving fatal and serious injury collisions, drivers were unrestrained, and 29% were driving too fast for conditions or exceeding the authorized speed limit.

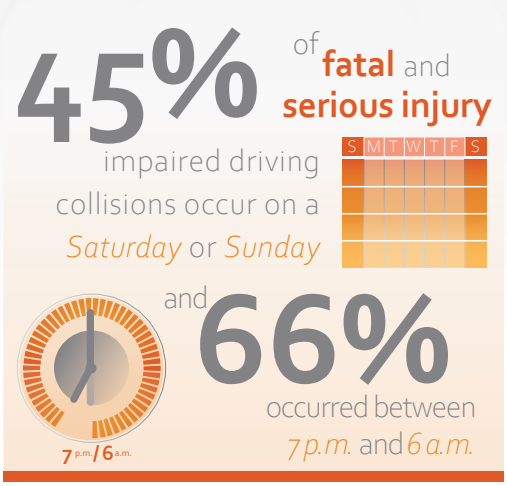


ROADWAY TYPE



Nearly **52%** of impaired driving fatal and serious injury collisions occurred on rural roads.

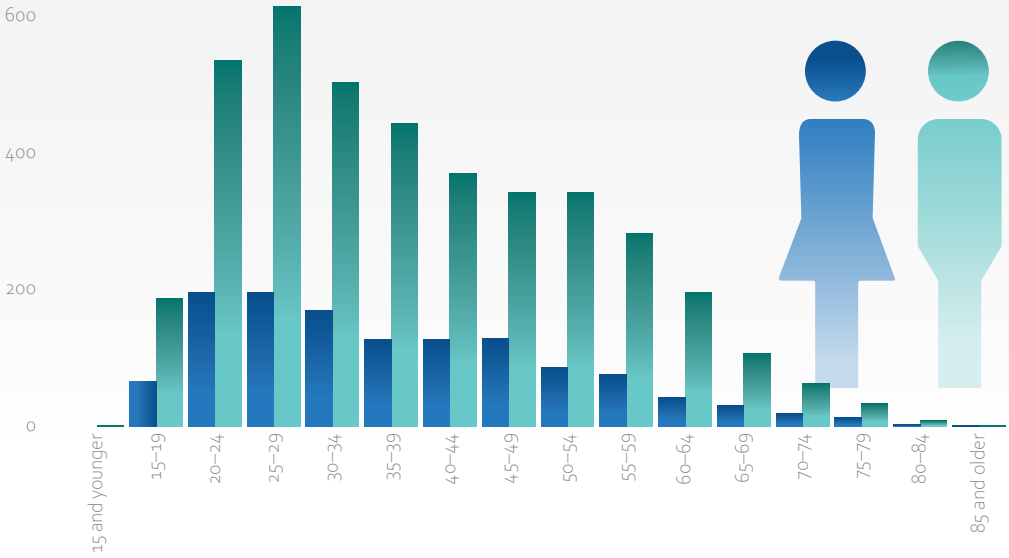
TIME OF DAY/DAY OF WEEK



AGE AND GENDER

Men are most likely to be involved in impaired driving collisions, with three male impaired drivers for every one female impaired driver.

Male and female drivers between the ages of 20–24 and 25–29 had the highest involvement in impaired driving fatal and serious injury collisions. Overall, 75% of drivers in impaired driving collisions were male. However, males make up 48% of licensed drivers in South Carolina.



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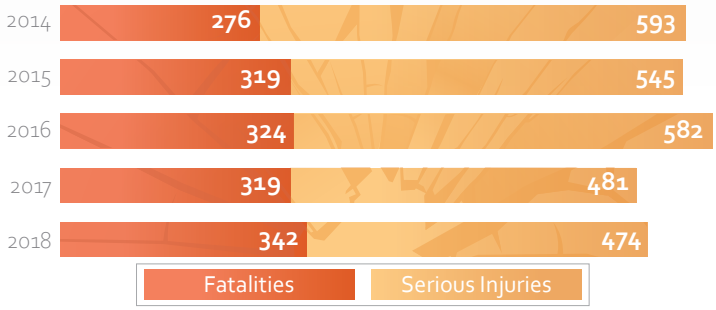
OVERVIEW OF 2014–2018 UNRESTRAINED COLLISIONS

Between 2014 and 2018, 4,255 people died or were seriously injured in a total of 3,708 collisions that involved unrestrained motor vehicle occupants.

Over the past five years, an average of 316 people lost their lives in unrestrained motor vehicle collisions. Fatalities increased 24%, but serious injuries decreased 20%. Unrestrained collisions have decreased by 1%. South Carolina continues to invest in programs and campaigns focused on reducing the number of unrestrained motor vehicle (MV) occupants on the roadways. Unrestrained collisions include those where occupants had access to restraints, but were unbelted.

Unrestrained Fatalities and Serious Injuries



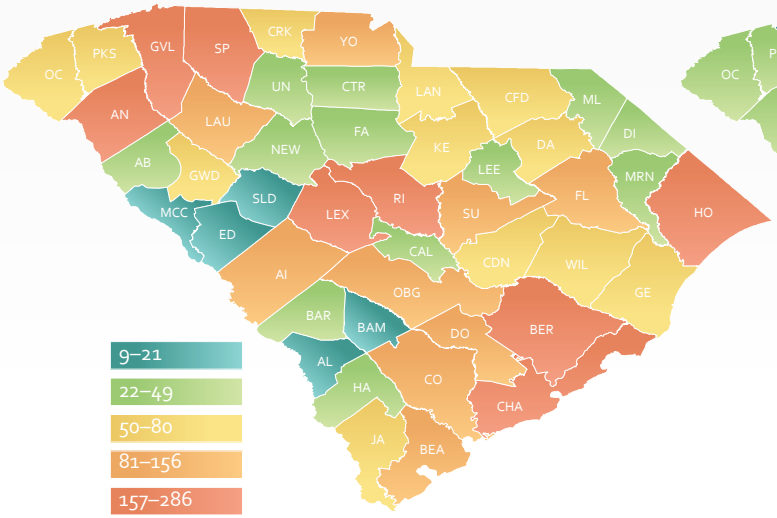
An estimated **30%** of unrestrained motor vehicle occupants were **ejected from the vehicle.**

Rear seat passengers are **3 times** more likely to die in a crash if they are **unbelted.**

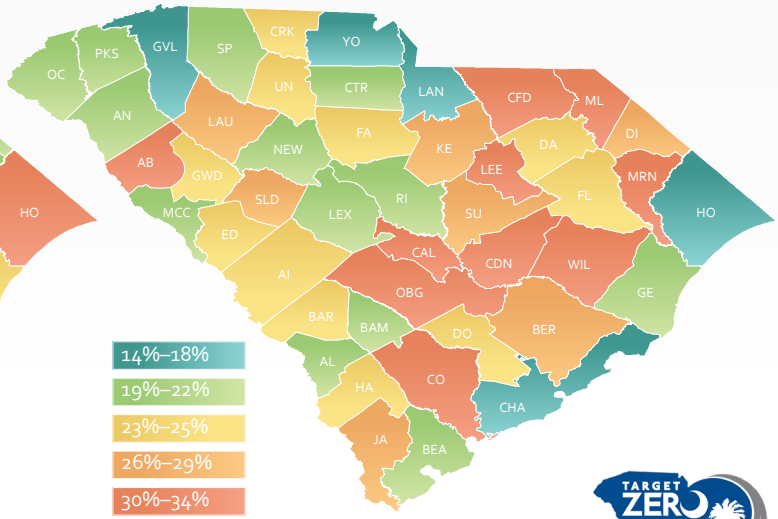
WHERE FATAL AND SERIOUS INJURY COLLISIONS OCCURRED

These maps show where unrestrained MV occupant fatalities and serious injuries are occurring. The *County Total* map shows the counties with the highest numbers of fatal and serious injury collisions. The urbanized areas of the state, where there are more vehicles and naturally more crashes, show up as priority areas. The *Percentage of Total County Collisions* map tells a different story, showing locations with a higher percentage of unrestrained MV occupant collisions when compared to the total number of collisions occurring within a county. The maps can help agencies better target safety programs and projects.

Fatal and Serious Injury Collisions by County Total



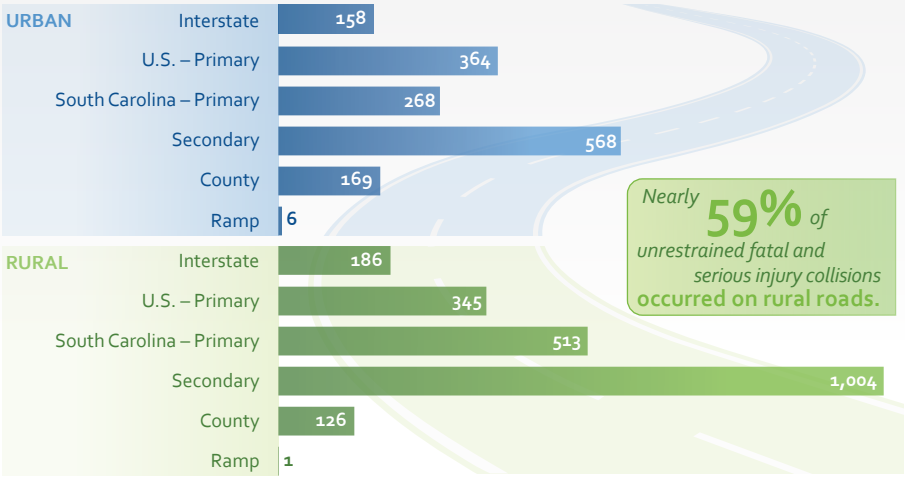
Fatal and Serious Injury Collisions by Percentage of Total County Collisions



CONTRIBUTING FACTORS

68% of unrestrained collisions resulted in roadway departures, and 56% of these collisions occurred at night. When considering the 49% of unrestrained collisions due to speed, the highest number of fatal and serious injuries occurred when vehicles were traveling at an estimated 50–59 miles per hour.

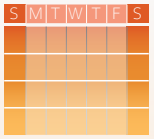
ROADWAY TYPE



Nearly **59%** *of unrestrained fatal and serious injury collisions* **occurred on rural roads.**

TIME OF DAY/DAY OF WEEK

37% of **fatal** and **serious injury** unrestrained collisions occurred on a *Saturday* or *Sunday*

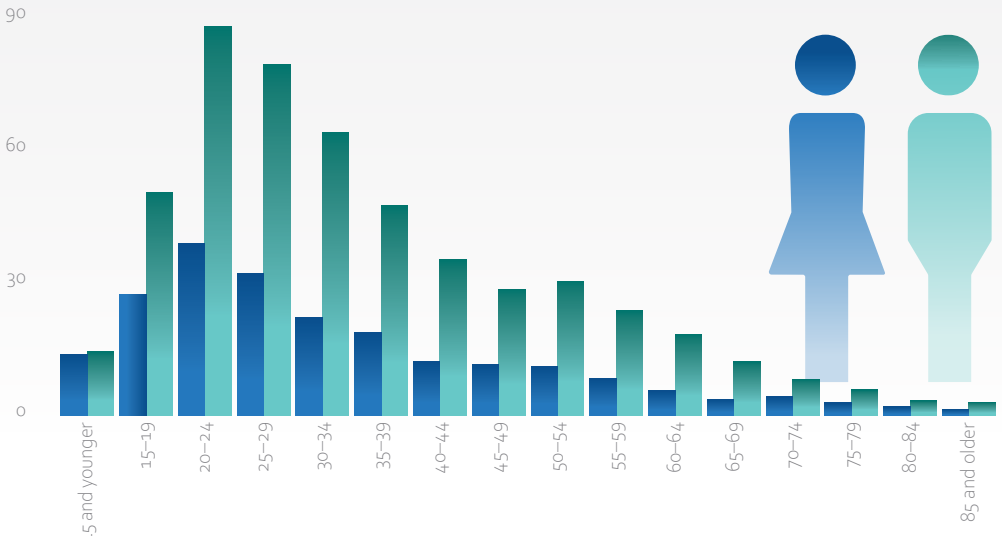


and over **50%** occurred at *night.*

AGE AND GENDER

70% of unrestrained fatal and serious injury collisions involved a male driver.

Male and female drivers between the ages of 15 to 24 contributed to 28% of fatal and serious injury collisions. However, drivers age 15 to 24 are 13% of licensed drivers in South Carolina.



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SPEEDING

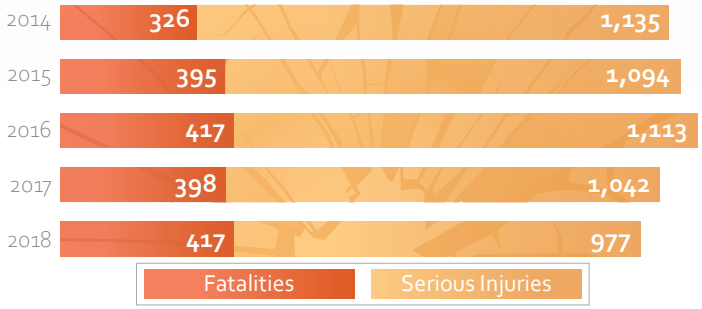
FACT SHEET 2020

OVERVIEW OF 2014–2018 SPEED-RELATED COLLISIONS

Between 2014 and 2018, 7,314 people died or were seriously injured in a total of 6,103 collisions that involved drivers exceeding the posted speed limit or driving too fast for conditions.

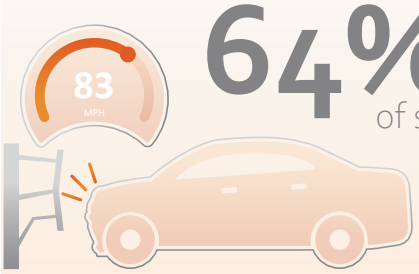
Over the past five years, an average of 391 people lost their lives in speed-related collisions. Fatalities increased 28%, but serious injuries decreased 14%. Speed-related collisions have decreased by 1%. South Carolina is committed to reducing the number of drivers who are speeding through enforcement measures, traffic calming design and public awareness.

Speed-Related Fatalities and Serious Injuries



On average,

1 person is **killed** in speed-related collisions in South Carolina each day.



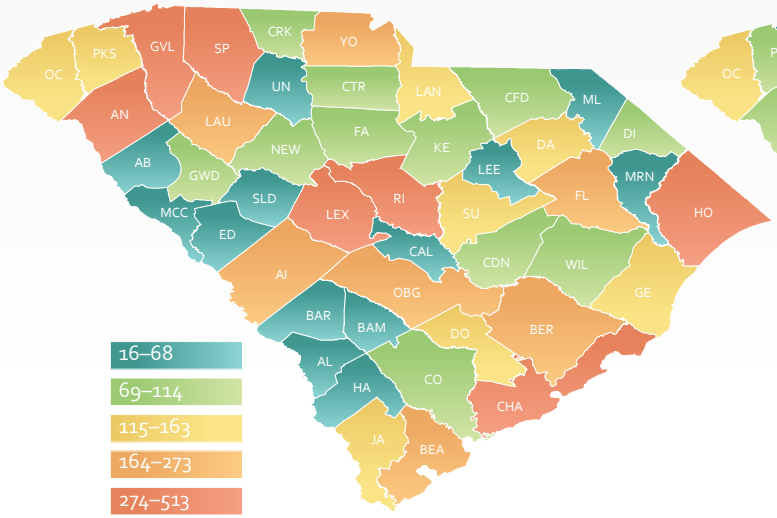
64% of speed-related collisions were **single-vehicle collisions.**

Speed-related collisions are defined as **driving too fast for conditions** and/or **exceeding the authorized speed limit.**

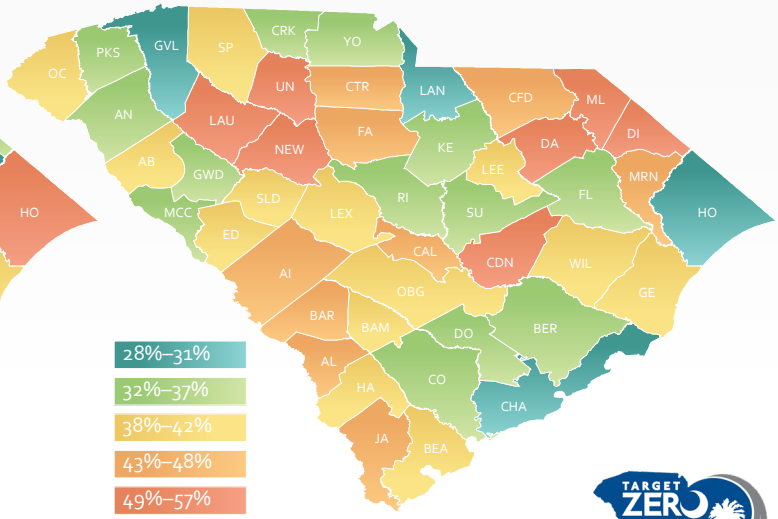
WHERE FATAL AND SERIOUS INJURY COLLISIONS OCCURRED

These maps show where speed-related fatalities and serious injuries are occurring. The *County Total* map shows the counties with the highest numbers of fatal and serious injury collisions. The urbanized areas of the state, where there are more vehicles and naturally more crashes, show up as priority areas. The *Percentage of Total County Collisions* map tells a different story, showing locations with a higher percentage of speed-related collisions when compared to the total number of collisions occurring within a county. The maps can help agencies better target safety programs and projects.

Fatal and Serious Injury Collisions by County Total



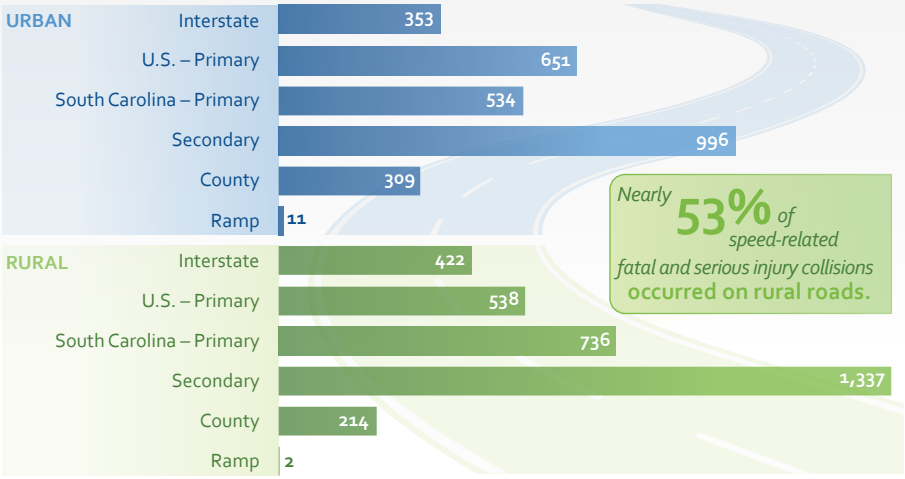
Fatal and Serious Injury Collisions by Percentage of Total County Collisions



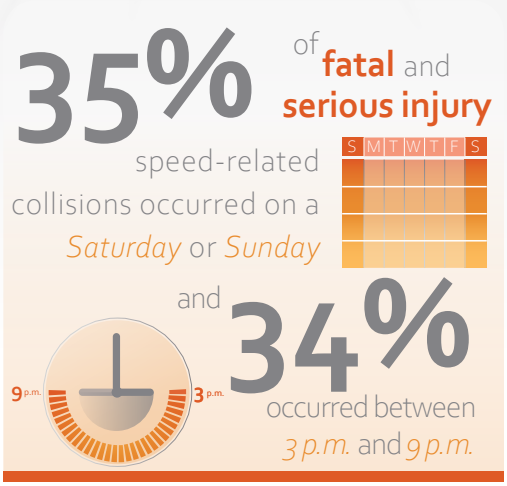
CONTRIBUTING FACTORS

63% of speed-related fatal and serious injury collisions resulted in roadway departures and 47% occurred at night. 30% of speed-related fatal and serious injury collisions involved unrestrained drivers or passengers, and 17% involved an impaired driver.

ROADWAY TYPE



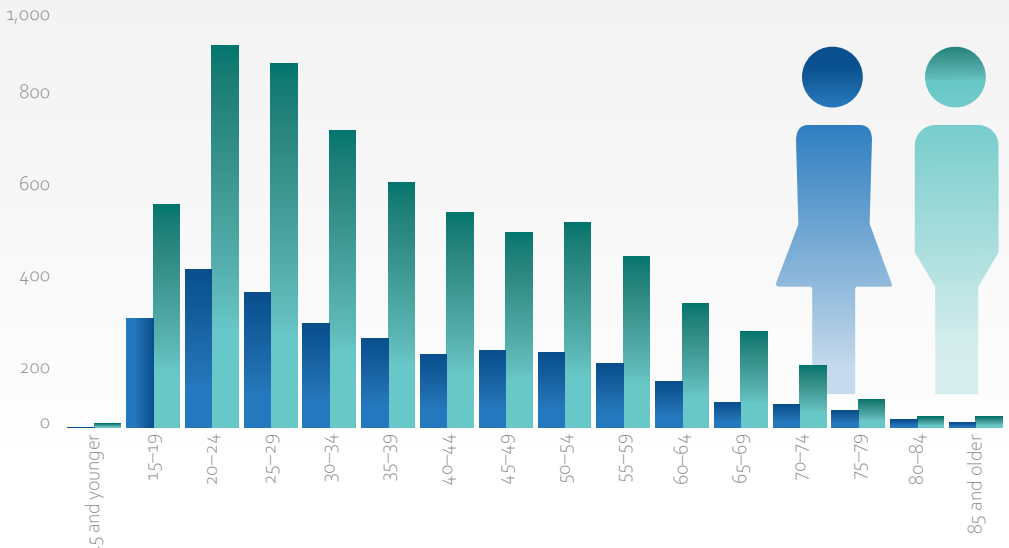
TIME OF DAY/DAY OF WEEK



AGE AND GENDER

Male and female drivers between the ages of 20 to 29 contributed to 28% of all speed-related collisions resulting in deaths or serious injuries.

Male drivers contributed to 72% of total speed-related fatal and serious injury collisions that involved exceeding the posted speed limit or driving too fast for conditions. However, males make up 48% of licensed drivers in South Carolina.



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DISTRACTED DRIVING

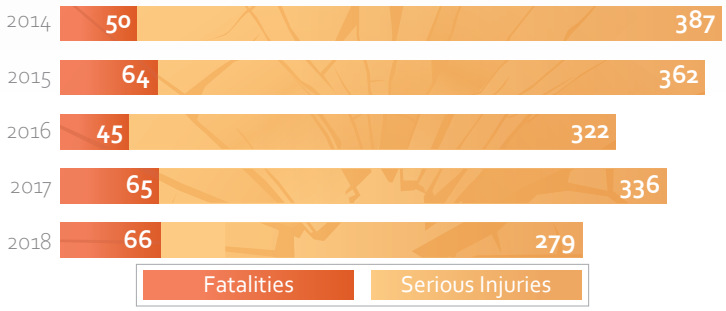
FACT SHEET 2020

OVERVIEW OF 2014–2018 DISTRACTED DRIVING COLLISIONS

Between 2014 and 2018, 1,976 people died or were seriously injured in a total of 1,670 distracted driving collisions.

Over the past five years, an average of 58 people lost their lives in distracted driving collisions. Fatalities increased 32%, but serious injuries decreased 28%. For current legislation regarding distracted driving visit: https://www.ghsa.org/state-laws/issues/distracted%20driving. South Carolina continues to invest in programs to reduce driver distractions.

Distracted Driving Fatalities and Serious Injuries



On average,

1 person

is **killed** in a distracted driving collision in South Carolina each week.

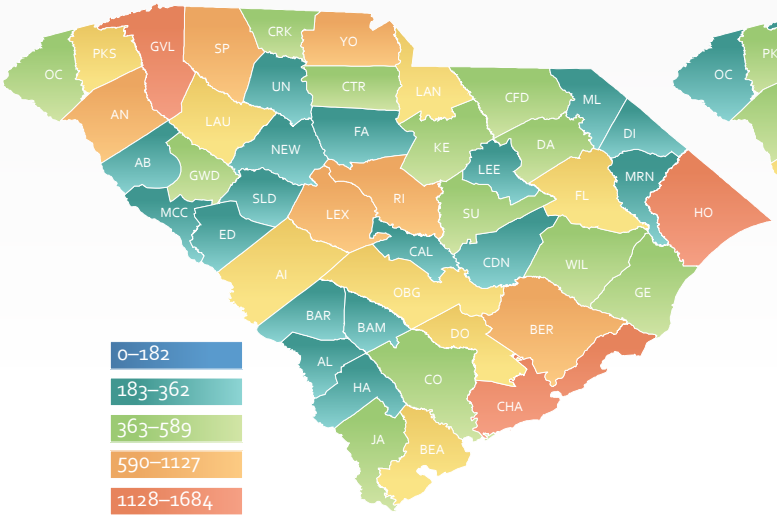
Driving distracted puts **everyone in danger!**

73% of distracted driving fatal and serious injury collisions involved a **car hitting another moving vehicle or person,** as opposed to a fixed object.

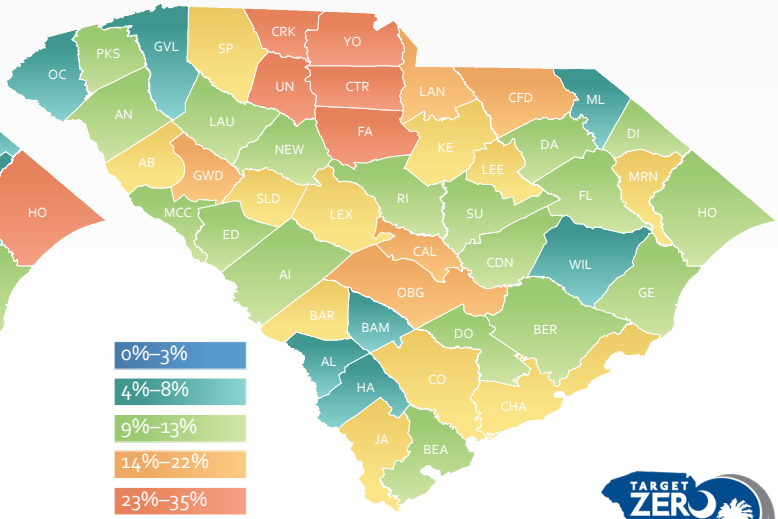
WHERE FATAL AND SERIOUS INJURY COLLISIONS OCCURRED

These maps show where distracted driving fatalities and serious injuries are occurring. The *County Total* map shows the counties with the highest numbers of fatal and serious injury collisions. The urbanized areas of the state, where there are more vehicles and naturally more crashes, show up as priority areas. The *Percentage of Total County Crashes* map tells a different story, showing locations with a higher percentage of distracted driving collisions when compared to the total number of collisions occurring within a county. Both maps help prioritize locations for safety improvements and targeted behavioral programs.

Fatal and Serious Injury Collisions by County Total



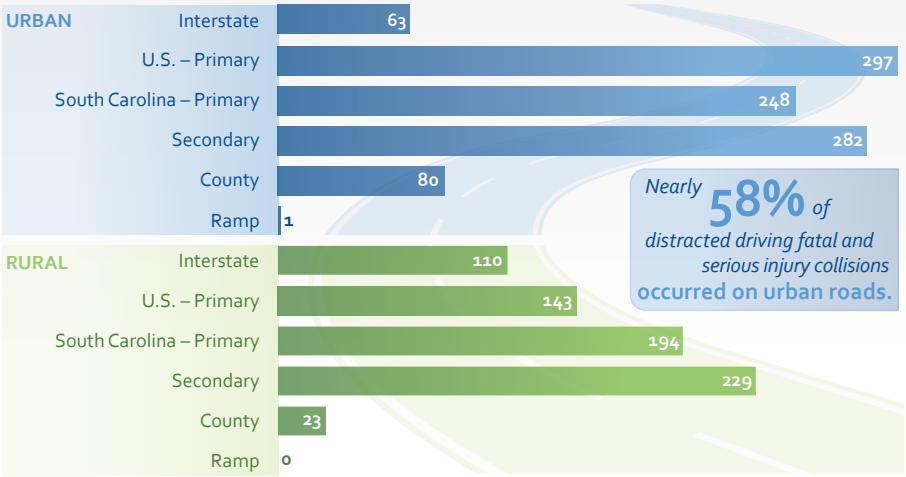
Fatal and Serious Injury Collisions by Percentage of Total County Collisions



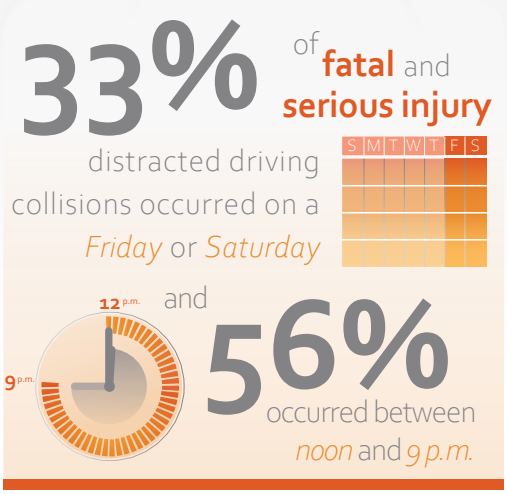
CONTRIBUTING FACTORS

49% of distracted driving fatal and serious injury collisions were related to speed and 34% were also roadway departure collisions. 28% of distracted driving fatal and serious injury collisions occurred at or near an intersection.

ROADWAY TYPE



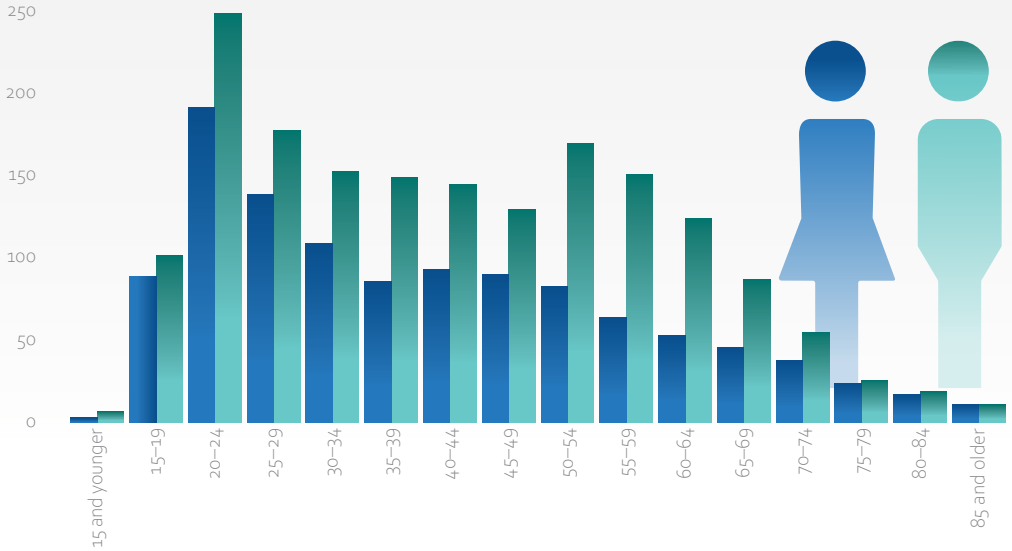
TIME OF DAY/DAY OF WEEK



AGE AND GENDER

Drivers age 20–24 had the highest involvement in distracted driving fatal and serious injury collisions. **Male drivers had a higher involvement in distracted driving collisions** resulting in deaths or serious injuries.

Overall, male drivers were involved in 61% of all distracted driving fatal and serious injury collisions. However, males make up only 48% of the licensed drivers in South Carolina.



For more information on South Carolina's Strategic Highway Safety plan, please visit *sctargetzeroplan.org*

YOUNG DRIVERS

TARGET ZERO

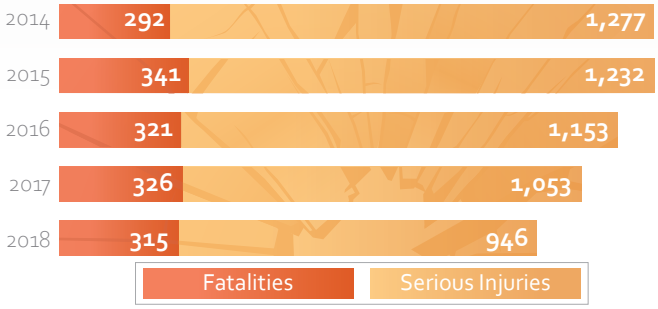
FACT SHEET 2020

OVERVIEW OF 2014–2018 YOUNG DRIVER COLLISIONS

Between 2014 and 2018, 7,256 people died or were seriously injured in a total of 5,676 collisions that involved young drivers.

Over the past five years, an average of 319 people lost their lives in young driver collisions. Fatalities increased 8%, but serious injuries decreased 26%. Young driver collisions have decreased 13%. However, motor vehicle collisions continues to be a leading cause of death for young people in South Carolina. The state is investing in young driver education, enforcement measures and policy changes to keep young drivers safe.

Young Driver Fatalities and Serious Injuries



Young drivers are defined as people **ages 15–24.**

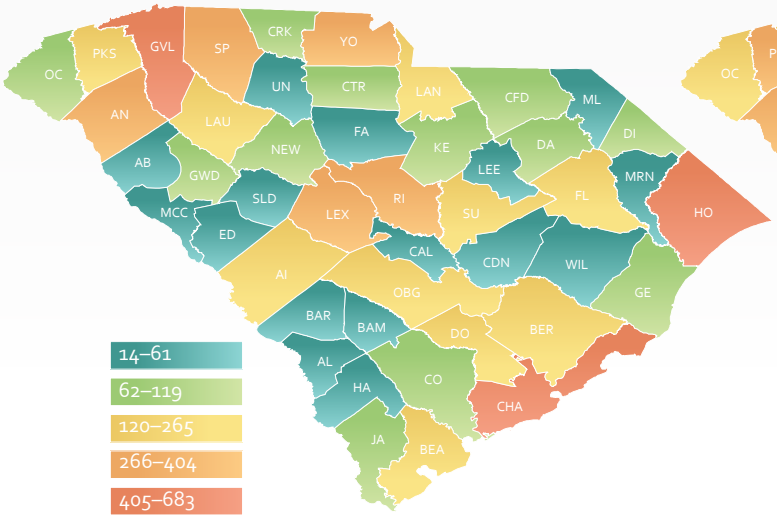
On average, **6 people** are **killed** on South Carolina roadways in young driver collisions each week.

A **teen driver's risk** of being killed in a collision **increases by 44%** **when carrying another teen passenger** and doubles when carrying two.

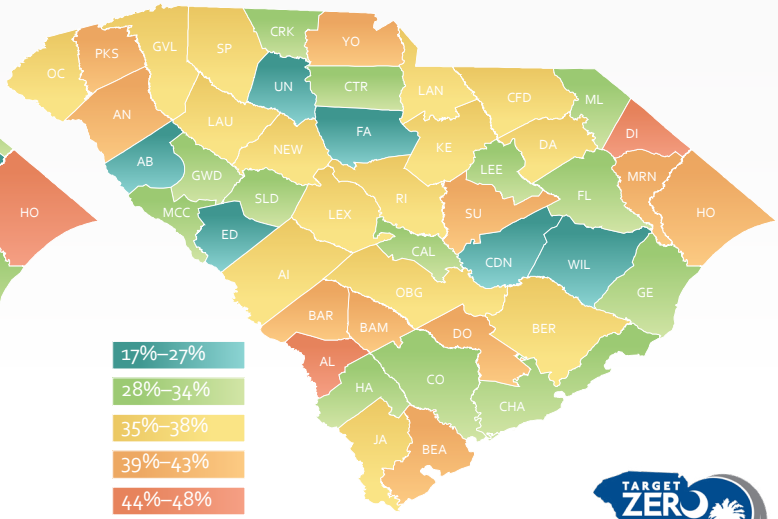
WHERE FATAL AND SERIOUS INJURY COLLISIONS OCCURRED

These maps show where young driver fatalities and serious injuries are occurring. The *County Total* map shows the counties with the highest numbers of fatal and serious injury collisions. The urbanized areas of the state, where there are more vehicles and naturally more crashes, show up as priority areas. The *Percentage of Total County Collisions* map tells a different story, showing locations with a higher percentage of young driver collisions when compared to the total number of collisions occurring within a county. The maps can help agencies better target safety programs and projects.

Fatal and Serious Injury Collisions by County Total

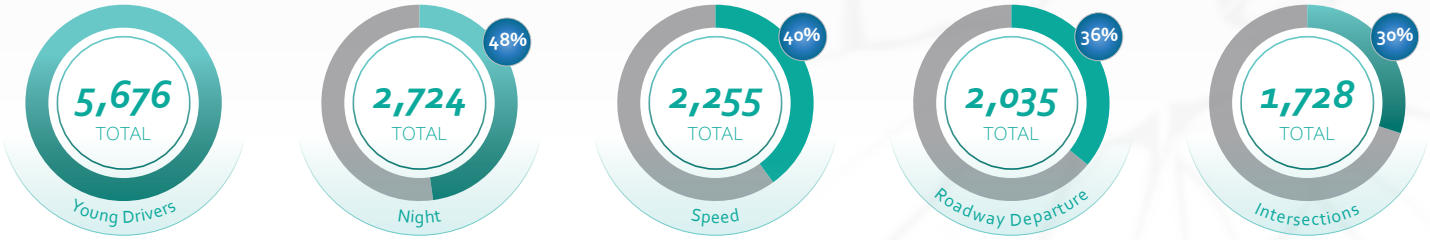


Fatal and Serious Injury Collisions by Percentage of Total County Collisions

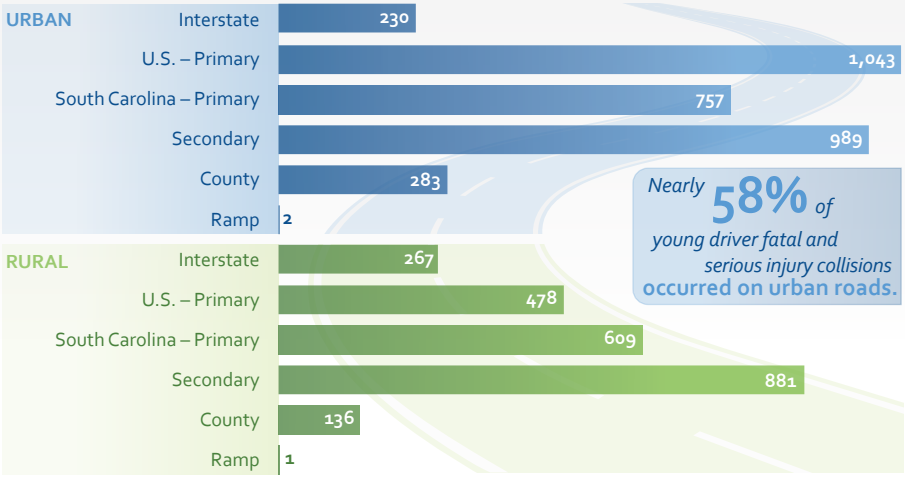


CONTRIBUTING FACTORS

48% of total young driver fatal and serious injury collisions happened at night, and 40% were related to speed. Furthermore, 66% of collisions occurred during roadway departure or at an intersection.



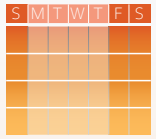
ROADWAY TYPE



Nearly **58%** of young driver fatal and serious injury collisions occurred on urban roads.

TIME OF DAY/DAY OF WEEK

49% of **fatal** and **serious injury** young driver collisions occurred on a *Friday, Saturday* or *Sunday* and



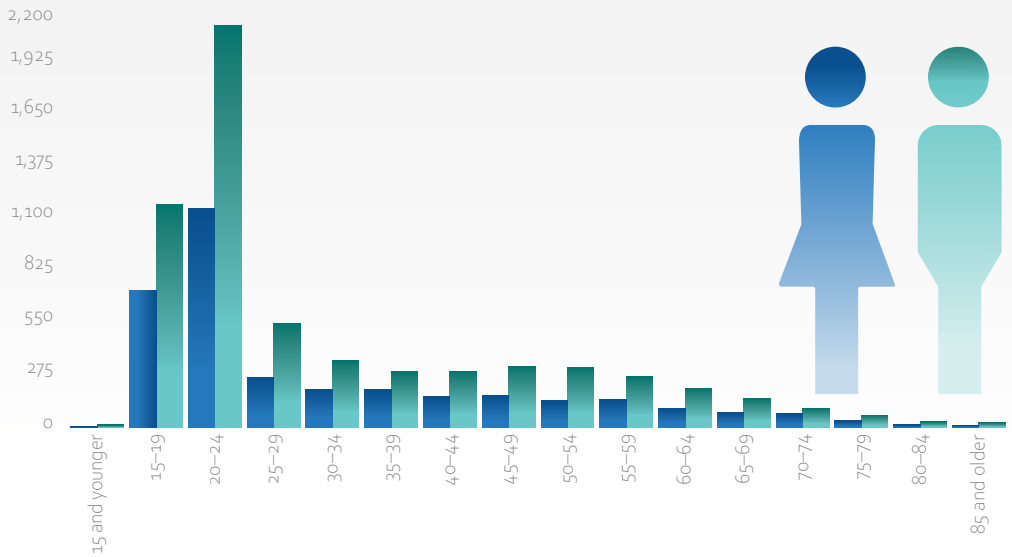
32% occurred between *6 p.m.* and *midnight.*

To reduce the number of young driver collisions, SC has implemented *time and passenger driving restrictions.*

AGE AND GENDER

60% of young drivers were determined to be at fault in fatal and serious injury collisions.

64% of young drivers involved in fatal and serious injury collisions were male. However, males make up 48% of licensed drivers in South Carolina.



For more information on South Carolina's Strategic Highway Safety plan, please visit *sctargetzeroplan.org*

MATURE DRIVERS

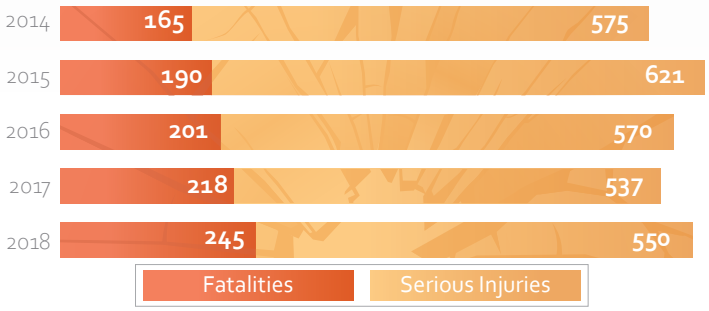
FACT SHEET 2020

OVERVIEW OF 2014–2018 MATURE DRIVER COLLISIONS

Between 2014 and 2018, 3,872 people died or were seriously injured in a total of 3,094 collisions that involved mature drivers.

Over the past five years, an average of 204 people lost their lives in mature driver collisions. Fatalities increased 49%, but serious injuries decreased 4%. Mature driver collisions have increased 10%. Mature drivers are often susceptible to declines in sensory, cognitive and physical functioning, which increases their risk of fatal and serious injury collisions. South Carolina continues to invest in programs that keep mature drivers safe.

Mature Driver Fatalities and Serious Injuries



Mature drivers are defined as **65 or more** years of age.

On average,

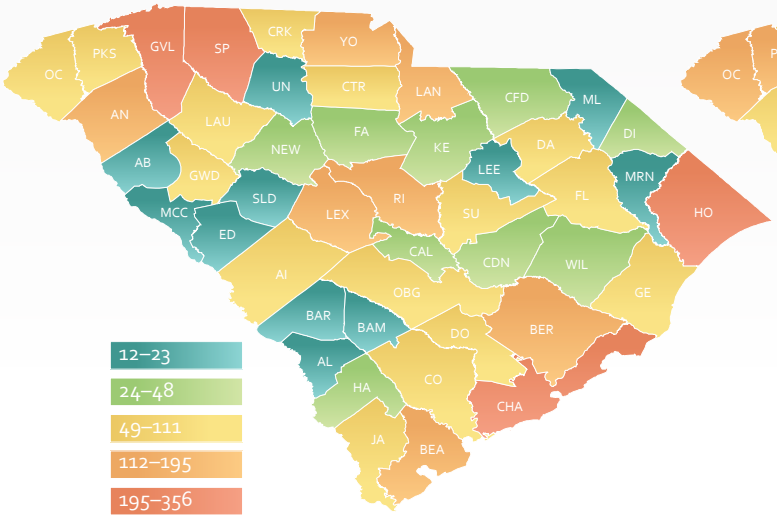
4 people

are **killed** or **seriously injured** in mature driver collisions in South Carolina each week.

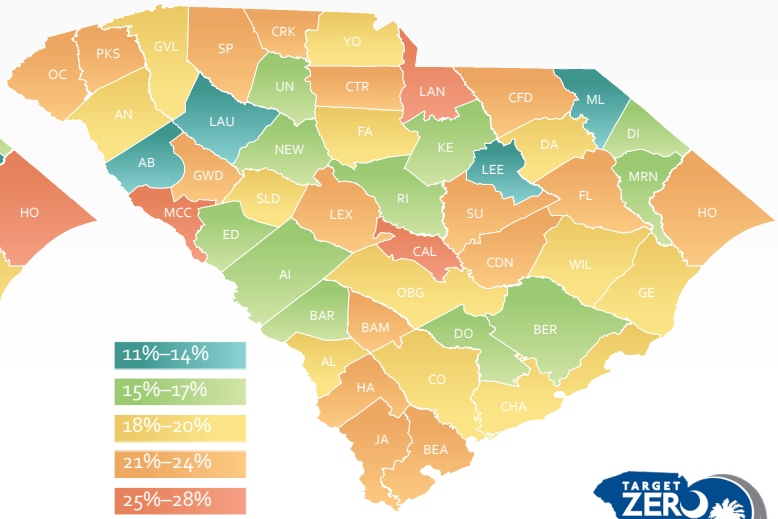
WHERE FATAL AND SERIOUS INJURY COLLISIONS OCCURRED

These maps show where mature driver fatalities and serious injuries are occurring. The *County Total* shows the counties with the highest numbers of fatal and serious injury collisions. The urbanized areas of the state, where there are more vehicles and naturally more crashes, show up as priority areas. The *Percentage of Total County Crashes* map tells a different story, showing locations with a higher percentage of mature driver collisions when compared to the total number of collisions occurring within a county. The maps can help agencies better target safety programs and projects.

Fatal and Serious Injury Collisions by County Total

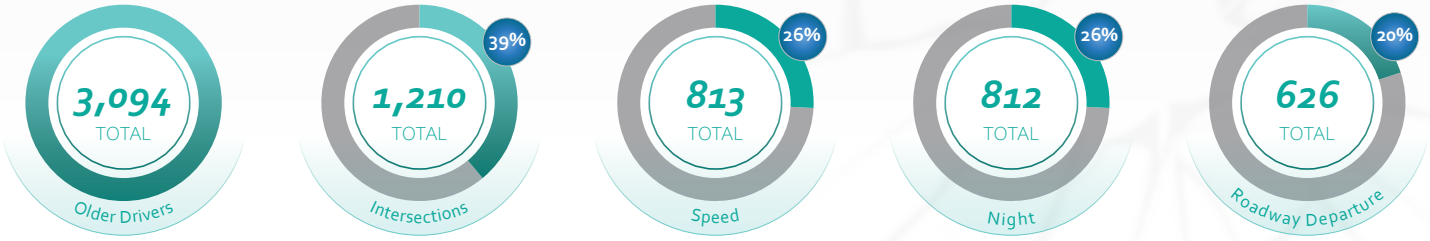


Fatal and Serious Injury Collisions by Percentage of Total County Collisions

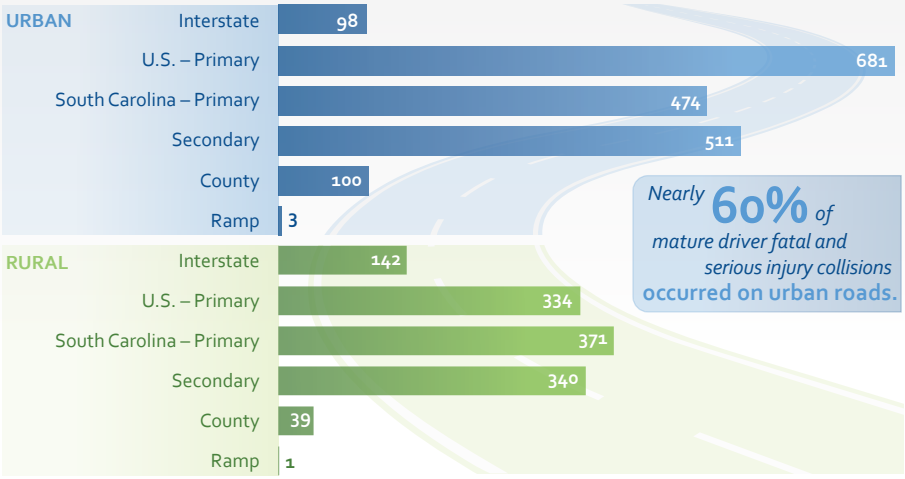


CONTRIBUTING FACTORS

39% of mature driver fatal and serious injury collisions occurred at an intersection, 26% were related to speed, and 26% were related to driving at night with low levels of visibility.



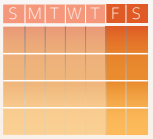
ROADWAY TYPE



Nearly **60%** *of mature driver fatal and serious injury collisions* **occurred on urban roads.**

TIME OF DAY/DAY OF WEEK

34% of **fatal** and **serious injury** mature driver collisions occurred on a *Friday* or *Saturday*

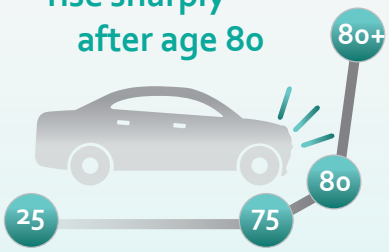


and **47%** occurred between *noon* and *3 p.m.*

AGE AND GENDER

Male drivers had a higher involvement in mature driver collisions resulting in deaths or serious injuries. 65% of drivers over the age of 65 involved in collisions were male.

Per mile traveled, fatal collision rates increase beginning at age 75 and **rise sharply after age 80**



This is mainly due to **increased risk of injury** and medical complications, rather than an increased tendency to be involved in collisions.

Since mature drivers are more fragile, their **fatality rates** are **17 times higher** than those of 25- to 64-year-olds.

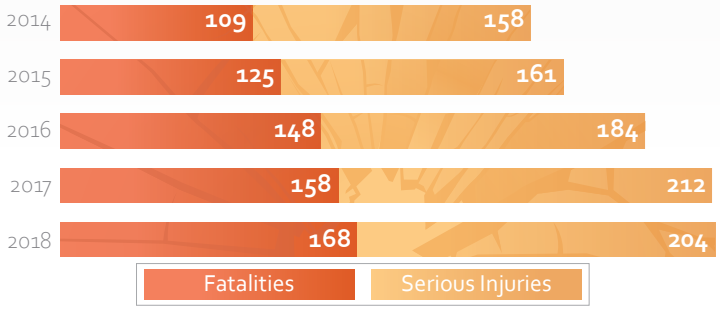
For more information: https://seniordriving.aaa.com/

OVERVIEW OF 2014–2018 PEDESTRIAN COLLISIONS

Between 2014 and 2018, 1,627 people died or were seriously injured in a total of 1,579 pedestrian collisions.

Over the past five years, an average of 142 pedestrians lost their lives in collisions. Fatalities increased 54%, and serious injuries have increased 29%. Pedestrian collisions have increased 38%. In South Carolina, pedestrians contributed to fatal and serious injury collisions 72% of the time.

Pedestrian Fatalities and Serious Injuries



On average,

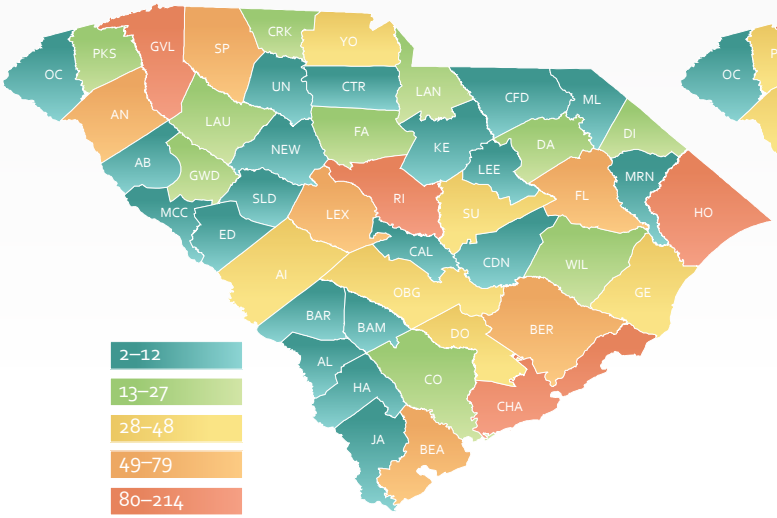
3 pedestrians are **killed** in roadway collisions in South Carolina each week.

32% of pedestrian fatal and serious injury collisions occur on **secondary roadways** and **46%** occur on roadways with **two lanes.**

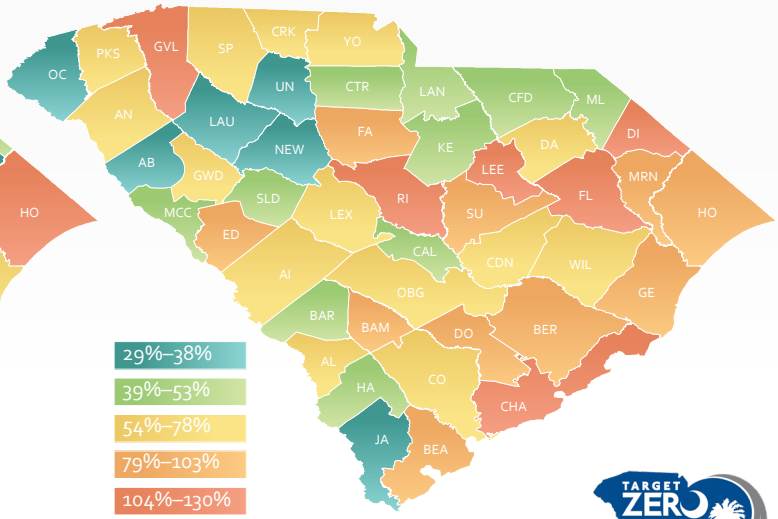
WHERE FATAL AND SERIOUS INJURY COLLISIONS OCCURRED

These maps show where pedestrian fatalities and serious injuries are occurring. The *County Total* map shows the counties with the highest numbers of fatal and serious injury collisions. The urbanized areas of the state, where there are more vehicles and naturally more crashes, show up as priority areas. The *Percentage of Total County Collisions* map tells a different story, showing locations with a higher percentage of pedestrian collisions when compared to the total number of collisions occurring within a county. The maps can help agencies better target safety programs and projects.

Fatal and Serious Injury Collisions by County Total

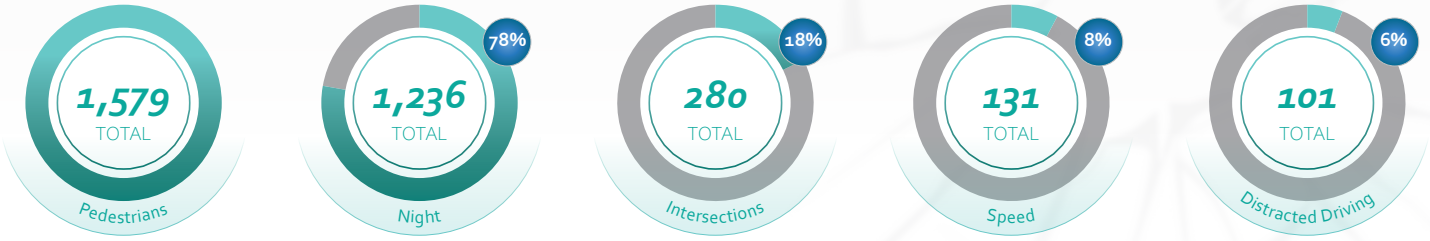


Fatal and Serious Injury Collisions by Percentage of Total County Collisions

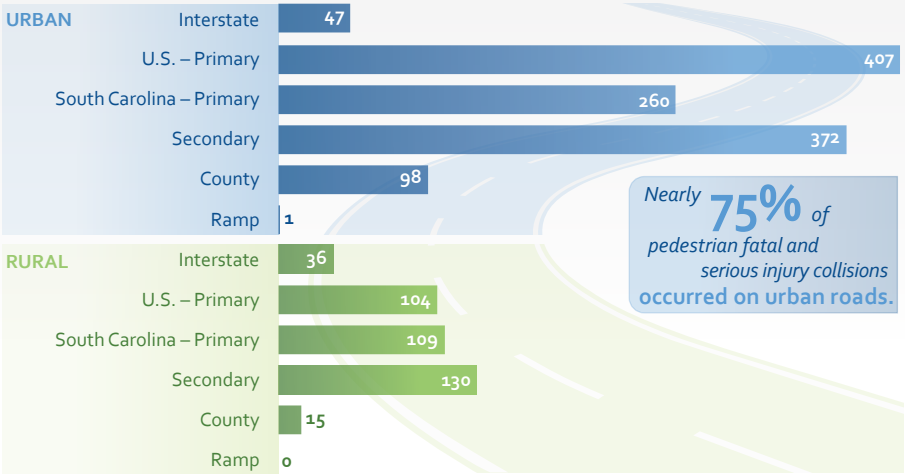


CONTRIBUTING FACTORS

78% of pedestrian fatal and serious injury collisions occurred at night and 18% occurred at an intersection. 14% of pedestrian collisions were caused by distracted driving, exceeding the speed limit, or driving too fast for conditions.



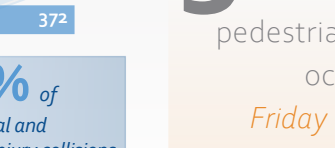
ROADWAY TYPE



Nearly **75%** *of pedestrian fatal and serious injury collisions* **occurred on urban roads.**

TIME OF DAY/DAY OF WEEK

36% of **fatal** and **serious injury** pedestrian collisions occurred on a *Friday* or *Saturday*

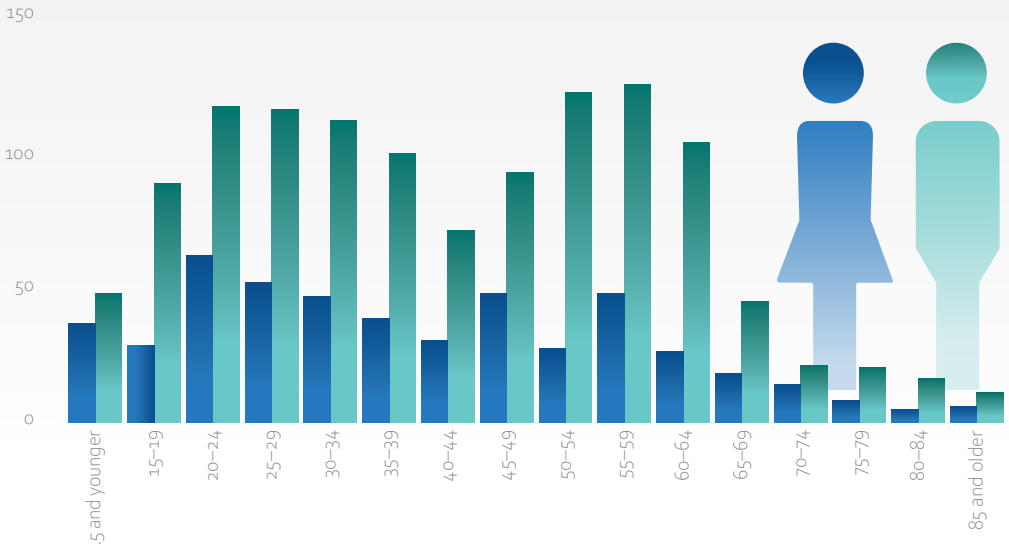


and **52%** occurred between *6 p.m.* and *midnight.*

AGE AND GENDER

20% of pedestrians involved in fatal and serious injury collisions were between the ages of 20–29 and 19% were between the ages of 50–59.

71% of pedestrians involved in fatal and serious injury collisions were male.



For more information on South Carolina's Strategic Highway Safety plan, please visit *sctargetzeroplan.org*

MOTORCYCLES

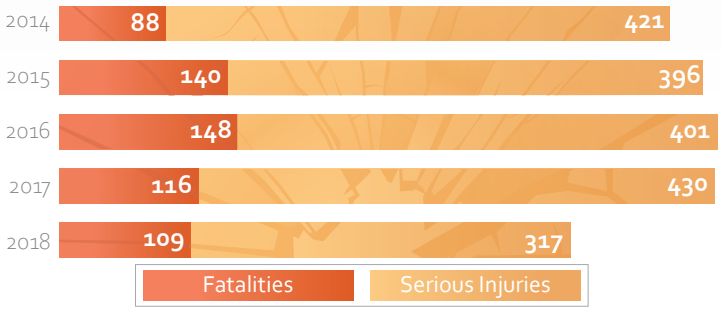
FACT SHEET 2020

OVERVIEW OF 2014–2018 MOTORCYCLE COLLISIONS

Between 2014 and 2018, 2,566 people died or were seriously injured in a total of 2,406 collisions that involved motorcycles.

Over the past five years, an average of 120 people lost their lives in motorcycle collisions. Fatalities increased 24%, and serious injuries have decreased 25%. Motorcycle collisions have increased 19%. South Carolina is committed to motorcycle safety and reducing the number of fatalities and serious injuries on the roadways.

Motorcycle Fatalities and Serious Injuries



On average,

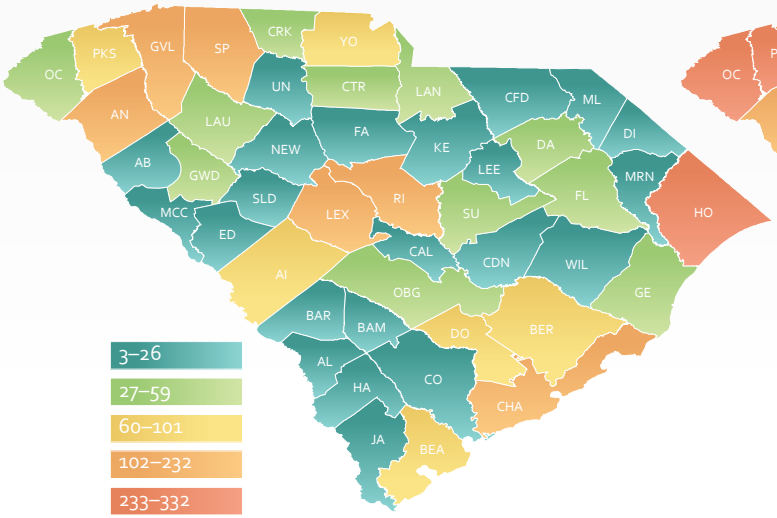
2 motorcyclists are **killed** in roadway collisions in South Carolina each week.

65% of motorcyclists **ages 21 and over** involved in fatal and serious injury collisions were **not using any safety gear.**

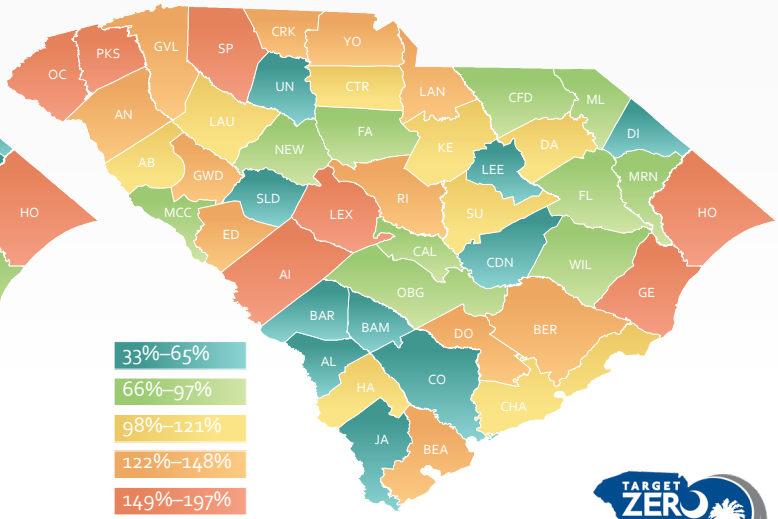
WHERE FATAL AND SERIOUS INJURY COLLISIONS OCCURRED

These maps show where motorcycle fatalities and serious injuries are occurring. The *County Total* map shows the counties with the highest numbers of fatal and serious injury collisions. The urbanized areas of the state, where there are more vehicles and naturally more crashes, show up as priority areas. The *Percentage of Total County Collisions* map tells a different story, showing locations with a higher percentage of motorcycle collisions when compared to the total number of collisions occurring within a county. The maps can help agencies better target safety programs and projects.

Fatal and Serious Injury Collisions by County Total



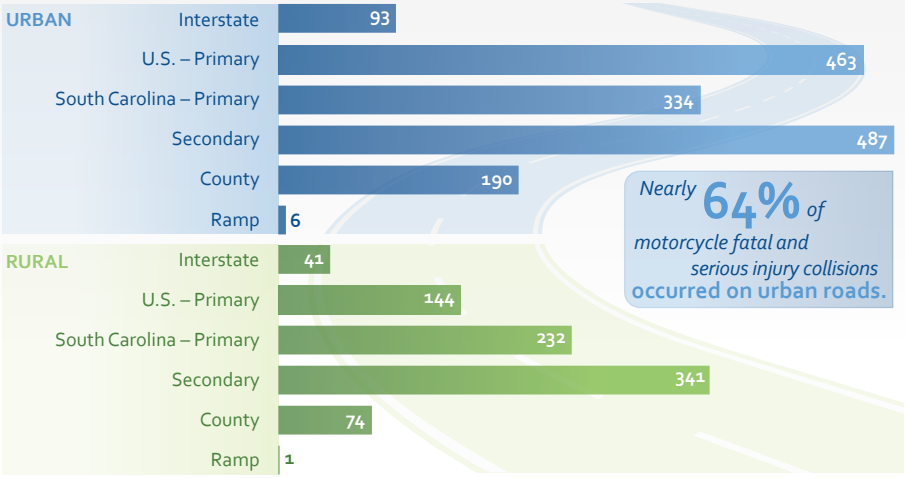
Fatal and Serious Injury Collisions by Percentage of Total County Collisions



CONTRIBUTING FACTORS

81% of fatal and serious injury collisions occurred during roadway departures or at intersections. 42% of motorcycle fatal and serious injury collisions happened at night, and 41% of collisions were caused due to exceeding the speed limit or driving too fast for conditions.

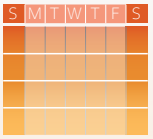
ROADWAY TYPE



Nearly **64%** of motorcycle fatal and serious injury collisions occurred on urban roads.

TIME OF DAY/DAY OF WEEK

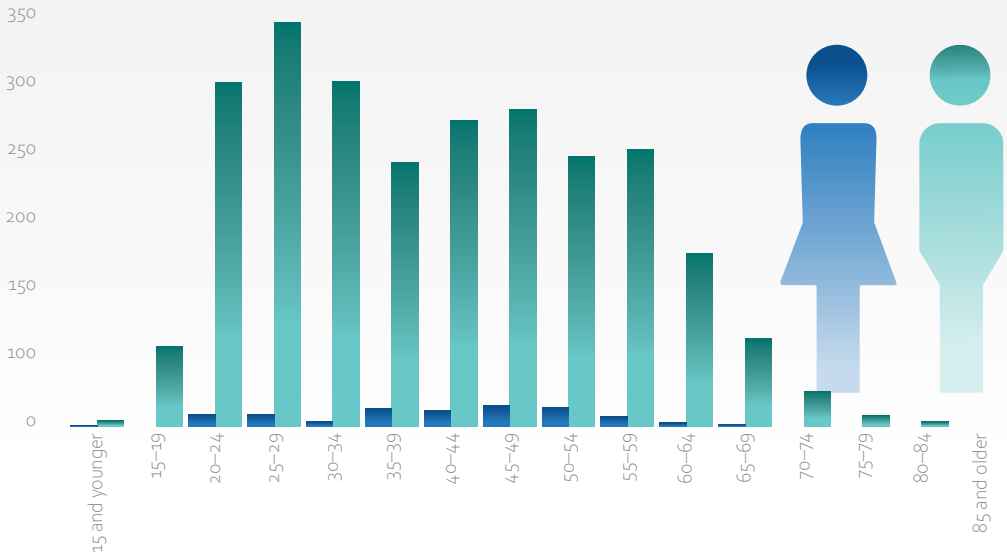
43% of **fatal** and **serious injury** motorcycle collisions occurred on a *Saturday* or *Sunday*



and **45%** occurred between *3 p.m.* and *9 p.m.*

AGE AND GENDER

25% of motorcyclists involved in fatal and serious injury collisions were between the ages of 20–29. 96% of motorcyclists involved in fatal and serious injury collisions were male.



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MOPEDS

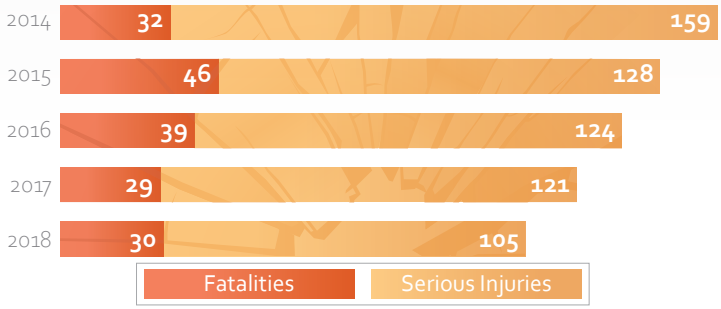
FACT SHEET 2020

OVERVIEW OF 2014–2018 MOPED COLLISIONS

Between 2014 and 2018, 813 people died or were seriously injured in a total of 782 collisions that involved mopeds.

Over the past five years, an average of 35 people lost their lives in moped collisions. Fatalities decreased 6%, and serious injuries have decreased 34%. Moped collisions have decreased 30%. In South Carolina, a moped is defined as a cycle with or without pedals that is not capable of propelling the vehicle at a speed exceeding thirty miles an hour.

Moped Fatalities and Serious Injuries



On average,

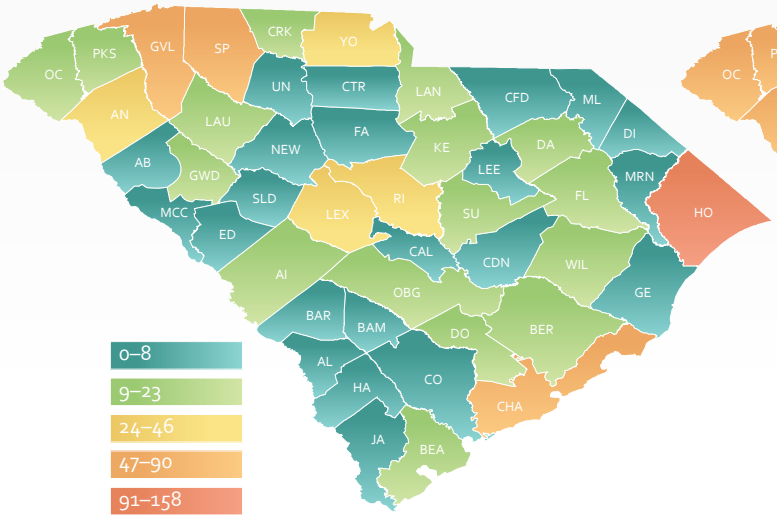
3 people are **killed** in moped collisions in South Carolina each month.

98% of moped fatal and serious injury collisions happen on **secondary roadways.**

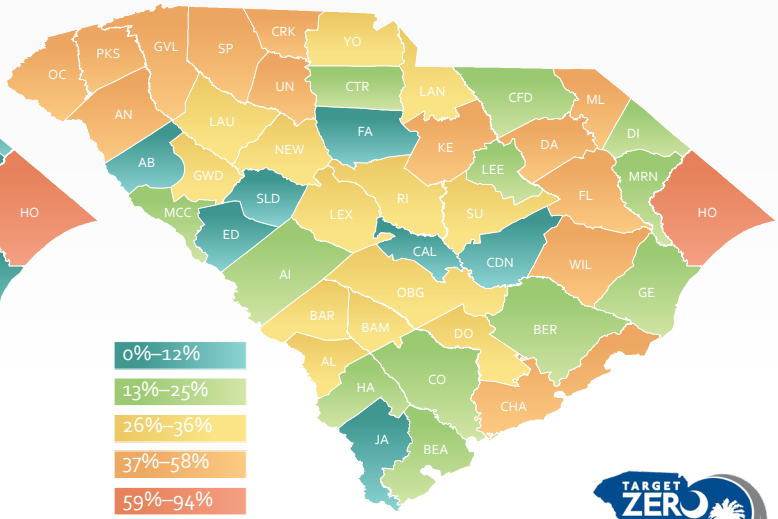
WHERE FATAL AND SERIOUS INJURY COLLISIONS OCCURRED

These maps show where moped fatalities and serious injuries are occurring. The *County Total* map shows the counties with the highest numbers of fatal and serious injury collisions. The urbanized areas of the state, where there are more vehicles and naturally more crashes, show up as priority areas. The *Percentage of Total County Collisions* map tells a different story, showing locations with a higher percentage of moped collisions when compared to the total number of collisions occurring within a county. The maps can help agencies better target safety programs and projects.

Fatal and Serious Injury Collisions by County Total



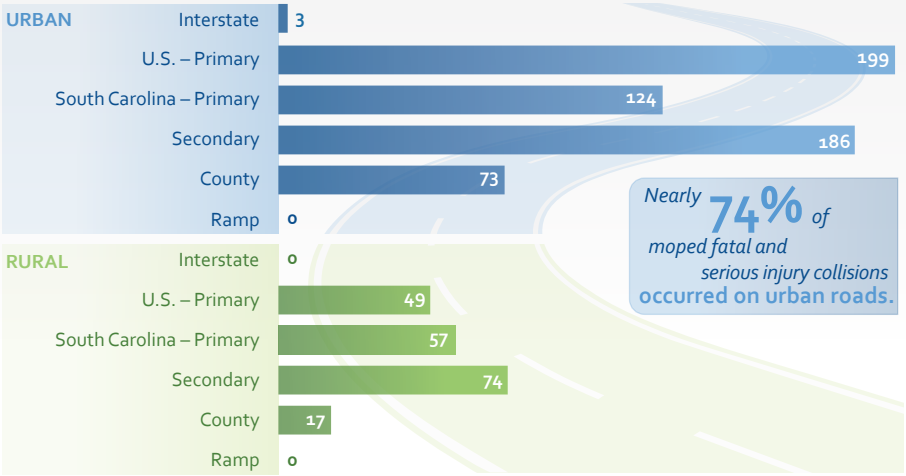
Fatal and Serious Injury Collisions by Percentage of Total County Collisions



CONTRIBUTING FACTORS

66% of moped fatal and serious injury collisions happened at an intersection or during roadway departure. Furthermore, 32% of fatal and serious injury collisions were related to motor vehicles either driving too fast for conditions or exceeding the speed limit and colliding with mopeds.

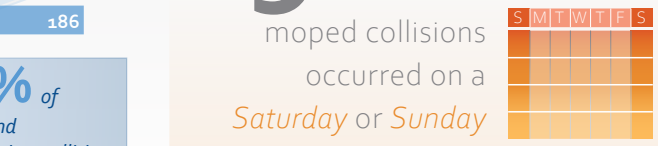
ROADWAY TYPE



Nearly **74%** *of moped fatal and serious injury collisions* **occurred on urban roads.**

TIME OF DAY/DAY OF WEEK

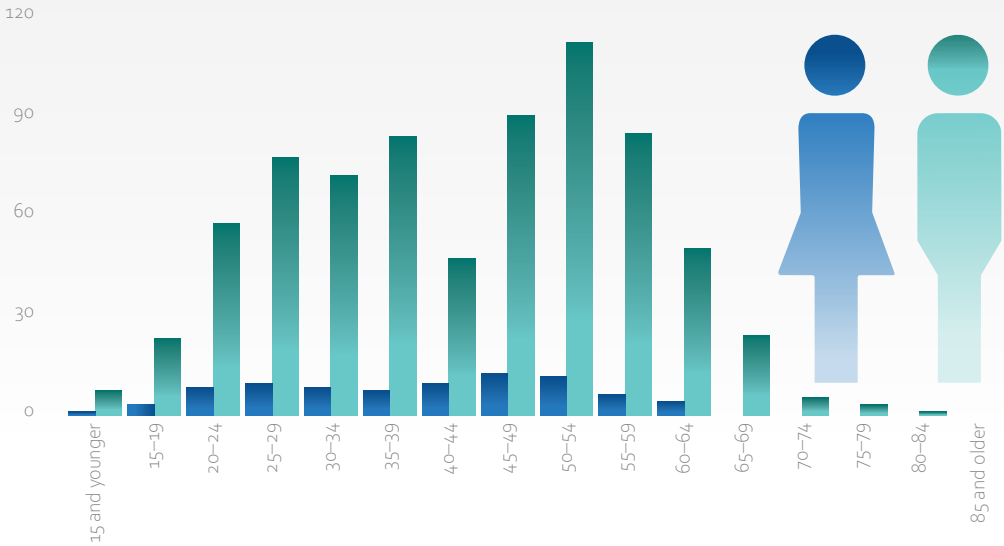
29% of **fatal** and **serious injury** moped collisions occurred on a *Saturday* or *Sunday*



and **44%** occurred between *6 p.m.* and *midnight.*

AGE AND GENDER

28% of moped operators involved in fatal and serious injury collisions were between the ages of 45–54. 90% of moped operators involved in fatal and serious injury collisions were male.



For more information on South Carolina's Strategic Highway Safety plan, please visit *sctargetzeroplan.org*

BICYCLES

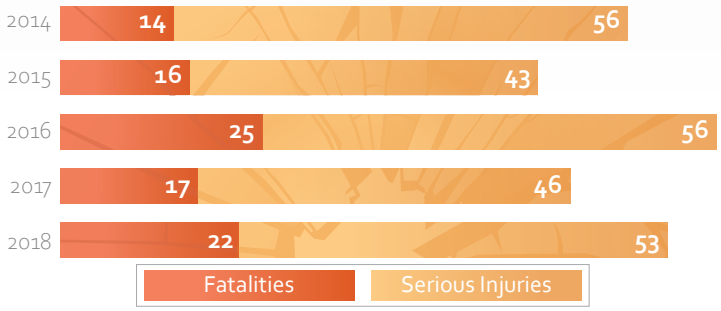
FACT SHEET 2020

OVERVIEW OF 2014–2018 BICYCLE COLLISIONS

Between 2014 and 2018, 348 people died or were seriously injured in a total of 345 collisions that involved bicycles.

Over the past five years, an average of 19 people lost their lives in bicycle collisions. Fatalities increased 57%, but serious injuries decreased 5%. Bicycle collisions have increased 9%. South Carolina is committed to reducing bicycle collisions by improving bicyclist facilities, street network design, and driver awareness.

Bicycle Fatalities and Serious Injuries



On average,

2 bicyclists

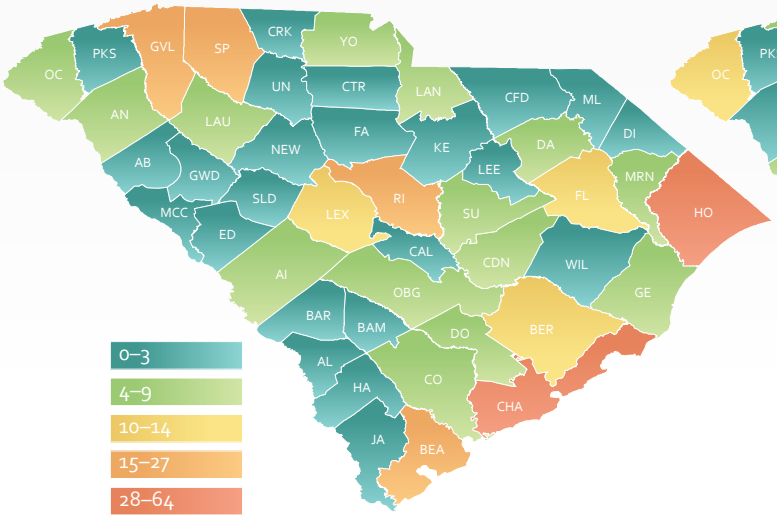
are **killed** in roadway collisions in South Carolina each month.

Bicyclists are considered vulnerable roadway users, as they have less protection and **often collide due to improper bicyclist actions,** including failure to yield, inattention, and disregarding traffic signals.

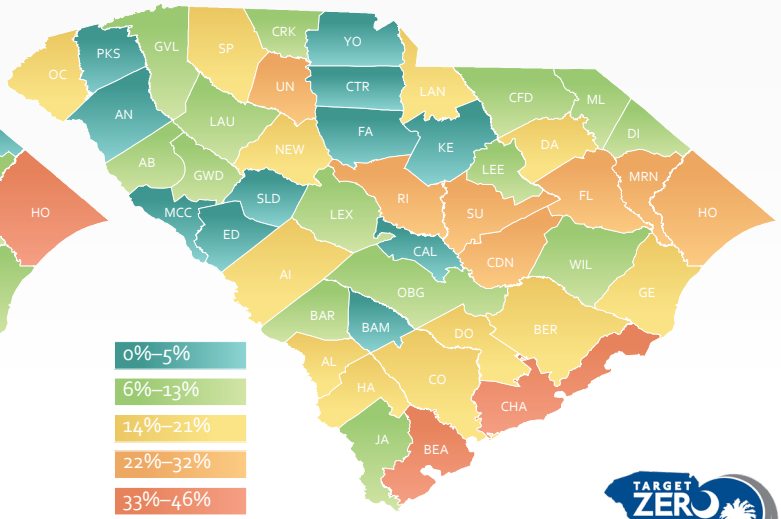
WHERE FATAL AND SERIOUS INJURY COLLISIONS OCCURRED

These maps show where bicycle fatalities and serious injuries are occurring. The *County Total* map shows the counties with the highest numbers of fatal and serious injury collisions. The urbanized areas of the state, where there are more vehicles and naturally more crashes, show up as priority areas. The *Percentage of Total County Collisions* map tells a different story, showing locations with a higher percentage of bicycle collisions when compared to the total number of collisions occurring within a county. The maps can help agencies better target safety programs and projects.

Fatal and Serious Injury Collisions by County Total

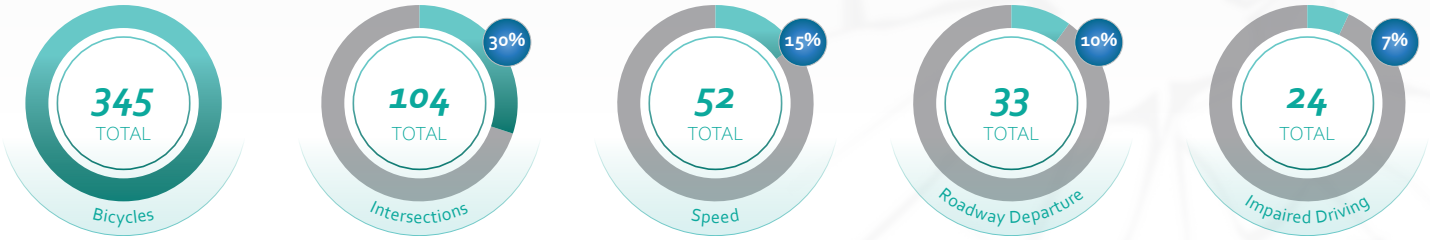


Fatal and Serious Injury Collisions by Percentage of Total County Collisions

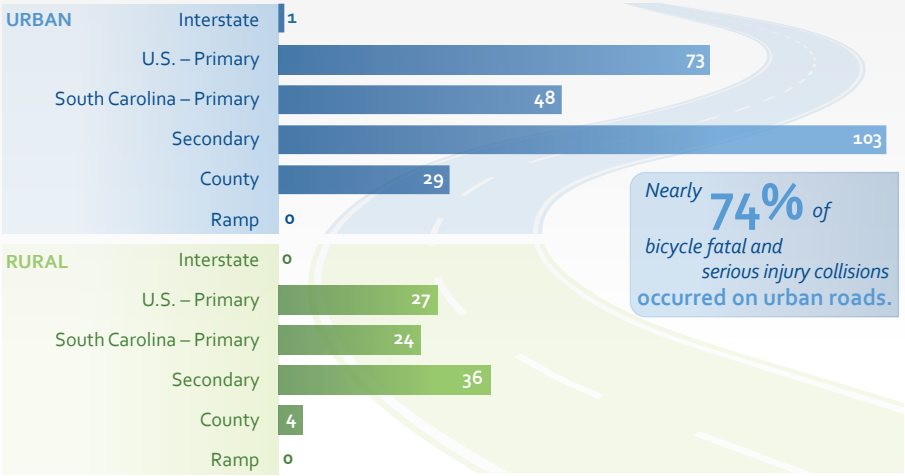


CONTRIBUTING FACTORS

40% of bicycle fatal and serious injury collisions happened at an intersection or during roadway departure. Furthermore, 15% of fatal and serious injury collisions were related to motor vehicles either driving too fast for conditions or exceeding the speed limit and colliding with bicyclists.



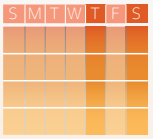
ROADWAY TYPE



Nearly **74%** *of bicycle fatal and serious injury collisions* **occurred on urban roads.**

TIME OF DAY/DAY OF WEEK

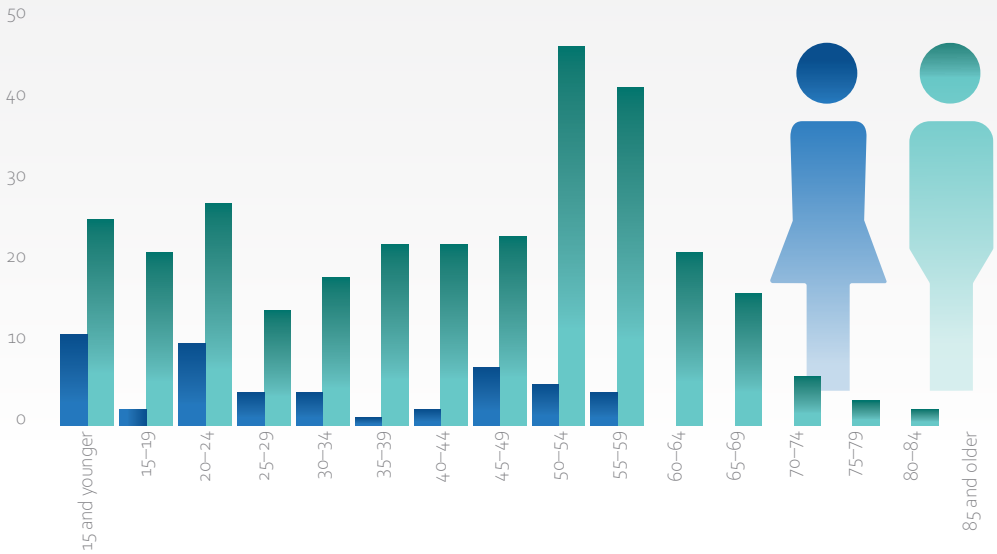
36% of **fatal** and **serious injury** bicycle collisions occurred on a *Thursday* or *Saturday*,



and **46%** occurred between *3 p.m.* and *9 p.m.*

AGE AND GENDER

27% of bicyclists involved in fatal and serious injury collisions were between the ages of 50–59. 86% of bicyclists involved in fatal and serious injury collisions were male.



For more information on South Carolina's Strategic Highway Safety plan, please visit *sctargetzeroplan.org*

South Carolina Strategic Highway Safety Plan

WORK ZONES

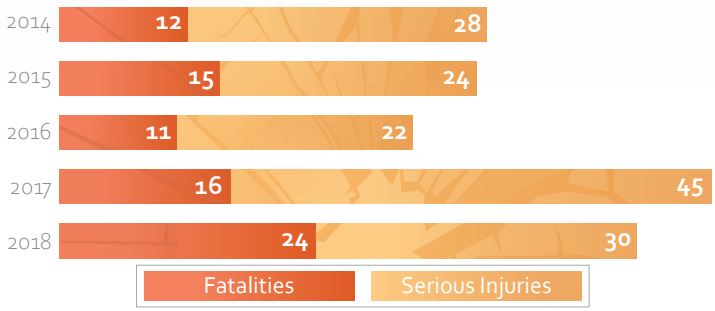
FACT SHEET 2020

OVERVIEW OF 2014–2018 WORK ZONE-RELATED COLLISIONS

Between 2014 and 2018, 227 people died or were seriously injured in a total of 195 collisions that occurred in work zones.

Over the past five years, an average of 15 people lost their lives in work zone-related collisions. Fatalities increased by 100%, but serious injuries decreased by 7%. In general, work zone-related collisions in South Carolina have been trending upward and have seen a 22% increase in fatal and serious injury collisions. The state is committed to implementing strategies that focus on reducing the number and severity of work zone-related collisions and improve public education efforts that aim to enhance safety for all workers and travelers.

Work Zone Fatalities and Serious Injuries



On average,

1 person

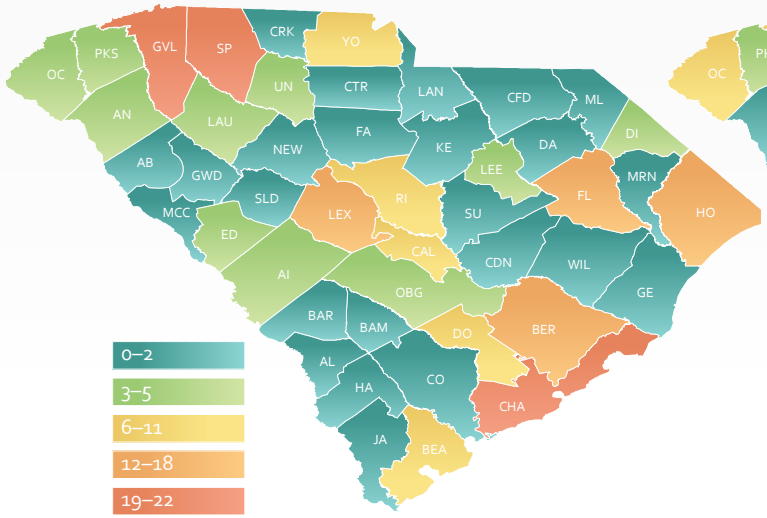
is **killed** in work zone-related collisions in South Carolina each month.

A **work zone-related collision** is one that occurs in a temporary environment, such as a section of roadway on which repairs are being performed. **Work zones pose a risk to maintenance and construction workers**, as well as drivers.

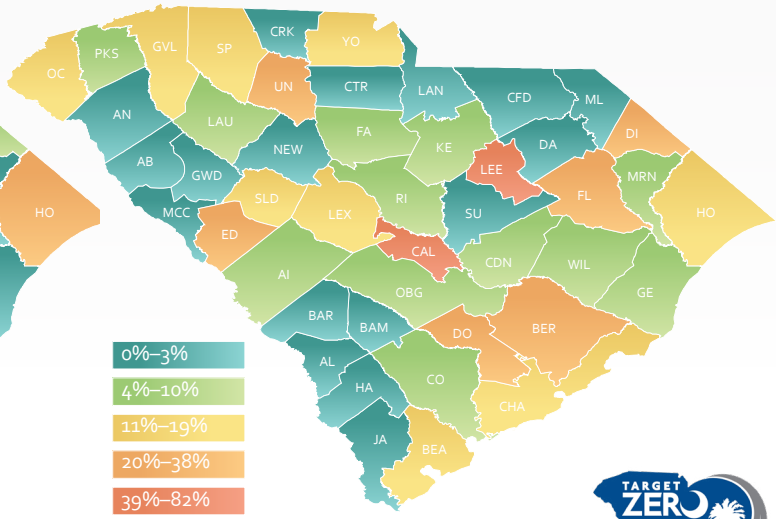
WHERE FATAL AND SERIOUS INJURY COLLISIONS OCCURRED

These maps show where work zone collision fatalities and serious injuries are occurring. The *County Total* map shows the counties with the highest numbers of fatal and serious injury collisions. The urbanized areas of the state, where there are more vehicles and naturally more crashes, show up as priority areas. The *Percentage of Total County Collisions* map tells a different story, showing locations with a higher percentage of work zone-related collisions when compared to the total number of collisions occurring within a county. The maps can help agencies better target safety programs and projects.

Fatal and Serious Injury Collisions by County Total

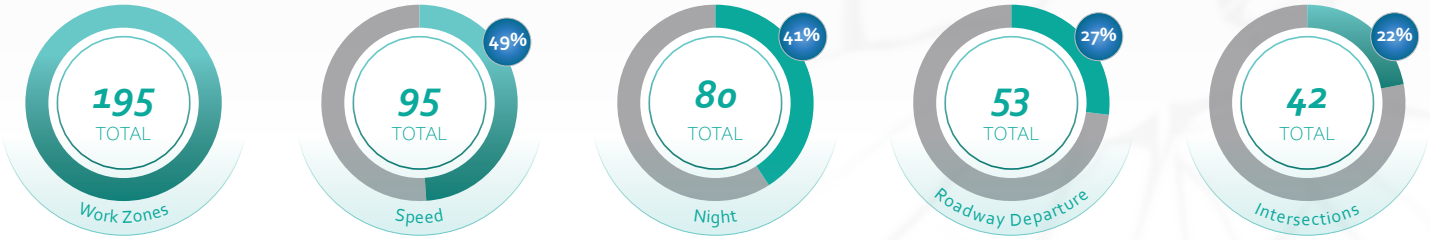


Fatal and Serious Injury Collisions by Percentage of Total County Collisions

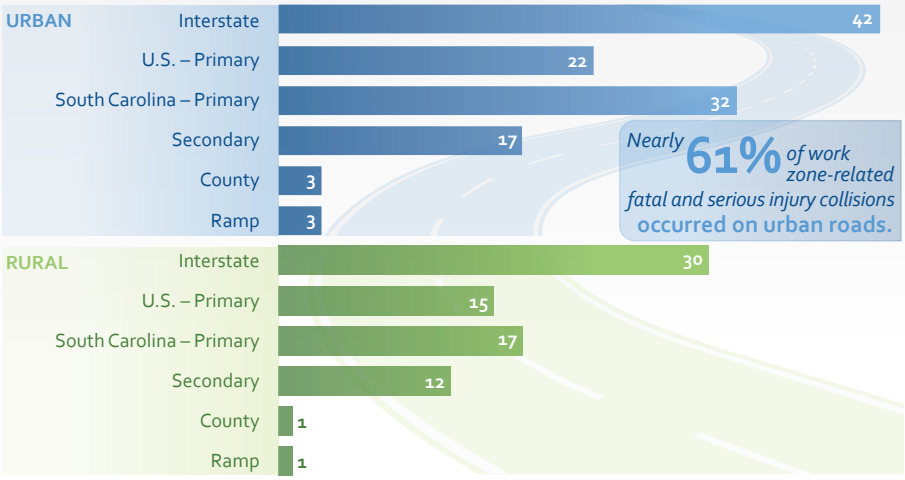


CONTRIBUTING FACTORS

Work zone locations often reduce motor vehicle speeds to enhance the safety of all roadway users (motorists, workers, bicyclists, and pedestrians). However, 49% of work zone fatal and serious injury collisions involved speeding. Furthermore, 41% of collisions occurred at night.

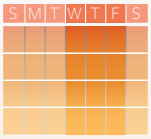


ROADWAY TYPE



TIME OF DAY/DAY OF WEEK

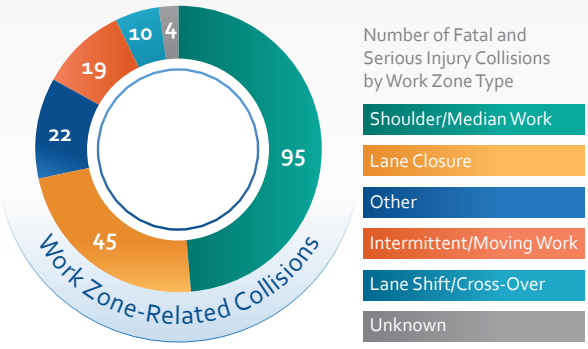
49% of **fatal** and **serious injury** work zone-related collisions occurred on a *Wednesday, Thursday,* or *Friday*



and **30%** occurred between *6 p.m.* and *midnight.*

WORK ZONE TYPE

49% of work zone-related fatal and serious injury collisions occurred during shoulder/median work and 23% were related to lane closures.



IDENTIFYING WORK ZONE CRASHES

Workers were present in 46% of collisions that ended in fatal or serious injuries. It is important to note that work zone-related collisions are not singularly identified based on whether workers are present at the time of the crash. A collision may have occurred within a work zone, but the cause of the collision may be unrelated to any work zone activity. South Carolina is committed to improving their data collection process to ensure work zone crashes are properly identified, and enhancing incident management training for first responders and South Carolina Department of Transportation personnel on traffic control in work zones.

For more information on South Carolina's Strategic Highway Safety plan, please visit *sctargetzeroplan.org*

EMPHASIS AREA STRATEGY SHEETS

Strategies presented in this document are the result of a comprehensive literature review of existing South Carolina practices and national solutions. A thorough review of successful countermeasures used to reduce traffic fatalities and serious injuries, using data analyses from the 2017 Clemson University research study: *Applying Successfully Proven Measures in Roadway Safety to Reduce Harmful Collisions in South Carolina* and other literature sources, such as the National Cooperative Research Program (NCHRP) Report 500 Series and the NHTSA Countermeasures That Work (9th edition) guide was used to inform the strategy sheets. Key objectives and strategies are organized by emphasis area. For each strategy, a level of effectiveness, estimated cost, timeframe for implementation, and implementation area(s) is provided based on the literature review. This document should serve as a resource to all highway safety partners and does not obligate any one partner to develop or implement a strategy.

South Carolina 2020-2024 Strategic Highway Safety Plan Strategies

Strategies presented in this document are the result of a comprehensive literature review of existing South Carolina practices and national solutions. This document should serve as a resource to all highway safety partners and does not obligate any one partner to develop or implement a strategy.

ROADWAY DEPARTURE

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
A – Rural Road Safety Program	A1 – Continue implementation of South Carolina's Rural Road Safety Program aimed at reducing roadway departure collisions and/or reducing the severity of those collisions by targeting the top roadways in the state with the highest occurrences of roadway departure collisions.[e]	High	$$$	Medium	Engineering
B – Keep Vehicles on the Roadway	B1 – Deploy centerline and edge line rumble strips in accordance with SCDOT policy.[e]	High	$	Short	Engineering
	B2 – While developing roadway departure mitigation traffic safety projects or other projects through the Feasibility Report process, install enhanced pavement markings, six-inch edge line, or embedded wet-reflective wider pavement markings on sections with narrow or no paved shoulders.[f]	Undetermined	$	Short	Engineering
	B3 – While developing roadway departure mitigation traffic safety projects or other projects through the Feasibility Report process, maintain shoulders to reduce debris and edge drop-offs; use safety edge (i.e., pavement edge taper); identify opportunities to upgrade or improve shoulders to provide additional recovery area for vehicles that leave the roadway.[f]	Medium	$$	Medium	Engineering
	B4 – While developing roadway departure mitigation traffic safety projects or other projects through the Feasibility Report process, and where crash data dictates, increase road surface skid resistance using high friction surface treatments.[f]	High	$$	Medium	Engineering
	B5 – While developing roadway departure mitigation traffic safety projects or other projects through the Feasibility Report process, improve safety through signing at horizontal curves through inventory and assessment of curves to comply with MUTCD requirements.[e]	High	$$	Medium	Engineering
	B6 – While developing roadway departure mitigation traffic safety projects or other projects through the Feasibility Report process, install delineation on fixed objects that cannot be removed from the clear zone.[f]	Undetermined	$	Medium	Engineering

ROADWAY DEPARTURE

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
C – Provide for Safe Recovery	C1 – While developing roadway departure mitigation traffic safety projects or other projects through the Feasibility Report process, in a context sensitive manner, study the need for Clear Zone Reclamation by removing trees and brush.[a]	High	$$	Short	Engineering
	C2 – While developing roadway departure mitigation traffic safety projects or other projects through the Feasibility Report process, in a context sensitive manner, study the need to remove/relocate objects located in Clear Zone such as trees, utility poles or other high risk items.[a, f]	High	$$	Medium	Engineering
	C3 – Continue to maintain roadside safety hardware, and include installation of new hardware as deemed necessary when developing roadway departure mitigation safety projects.[f]	High	$$	Medium	Engineering
	C4 – Remove or replace existing barriers that are damaged or non-functional.[a, f]	Medium	$	Short	Engineering
	C5 – Install systemic application of guardrail on interstate system.[e]	High	$$$	Medium	Engineering
D – Keep Vehicles from Encroaching into Opposite Lane	D1 – While developing roadway departure mitigation traffic safety projects or other projects through the Feasibility Report process, study the need to add raised medians or other access control measures on multilane arterials.[g]	High	$	Short	Engineering
E – Conduct Targeted Enforcement to Reduce Frequency and Severity of Roadway Departure Collisions	E1 – Perform targeted enforcement with an emphasis on speed and DUI on roads with a high percentage of roadway departure collisions.[e]	High	$	Short	Enforcement
	E2 – Utilize Law Enforcement Networks to conduct briefings with local law enforcement agencies on contributing factors and locations within their jurisdictions that may present a high number of collisions that result in roadway departure.[e]	High	$	Short	Enforcement
F – Educate Roadway Users to Understand the Contributing Factors in Roadway Departure Collisions	F1 – Use media, community resource officers, website, etc. to increase awareness of the dynamics of roadway departure collisions to the public.[e]	Medium	$$	Medium	Education
	F2 – Work with partner agencies to integrate new content into the driver education curriculum and the driver manual.[e]	Low	$$	Medium	Education
	F3 – Raise awareness about the dynamics of texting and other distractions by sharing effective messages with all safety partners.[f]	Low	$$	Short	Education

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
G – Improve Emergency Response	G1 – Improve emergency response time to rural locations.[e]	Medium	$$	Medium	Emergency Response
	G2 – Work with state and local fire, EMS, law enforcement, and incident response personnel to identify opportunities for reducing secondary collisions through coordinated incident response.[e]	Low	$$	Short	Education/ Engineering/ Emergency Response

[a] Applying Successfully Proven Measures in Roadway Safety to Reduce Harmful Collisions in South Carolina.

[b] SC SHSP Update – Strengths Weaknesses Opportunities Threats Analysis Memorandum.

[c] NHTSA Countermeasures That Work – 9th Edition.

[d] SC SHSP Update – Literature Review Memorandum.

[e] 2015-2018 South Carolina SHSP.

[f] NCHRP Project 20-68A, Scan 90-03 Best Practices in Lane-Departure Avoidance and Traffic Calming.

[g] FHWA's Crash Modification Factor (CMF) Clearinghouse.

EFFECTIVENESS

High	Determined to be Effective Through Research
Medium	Considered Promising
Low	Not Determined Effective
Undetermined	No known Research on Countermeasure

COST

$	Can be Implemented with Current or Limited Resources
$$	Requires Some Additional Resources
$$$	Heavy Demand on Resources

TIMEFRAME

Short	Less than 1 year
Medium	1 – 2 years
Long	3 or more years

South Carolina 2020-2024 Strategic Highway Safety Plan Strategies

Strategies presented in this document are the result of a comprehensive literature review of existing South Carolina practices and national solutions. This document should serve as a resource to all highway safety partners and does not obligate any one partner to develop or implement a strategy.

INTERSECTIONS

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
Unsignalized Intersections					
A – Improve Management of Access	A1 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to implement driveway closures, relocations, or turn restrictions at unsignalized intersections with high angle collision frequencies related to driveways.[a]	Medium	$$	Short/Medium	Engineering
B – Reduce Conflict through Geometric Design Improvement	B1 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to provide left-turn lanes at unsignalized intersections with a high frequency of rear-end collisions resulting from the conflict between vehicles turning left and following vehicles and vehicles turning left and opposing through vehicles.[a]	High	$$	Medium	Engineering
	B2 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to provide longer left-turn lane storage at intersections where existing left-turn lanes that are not long enough to store all left-turning vehicles and have a high frequency of rear-end collisions resulting from the conflict between vehicles waiting to turn left and following vehicles.[a]	Medium	$$	Medium	Engineering
	B3 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to provide offset left-turn lanes at intersections where possible.[a]	Medium	$$	Medium	Engineering
	B4 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to use signing to restrict or eliminate turning maneuvers at unsignalized intersections with patterns of collisions related to turning maneuvers where it is impractical to reduce that pattern of collisions by improving sight distance or providing a left-turn or shoulder bypass lane.[a]	Medium	$	Short	Engineering

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
B – Reduce Conflict through Geometric Design Improvement (continued)	B5 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to provide channelization or close median openings to restrict or eliminate turning maneuvers at unsignalized intersections with patterns of collisions related to turning maneuvers where sight distance cannot be improved.[a]	Medium	$	Short	Engineering
	B6 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to realign intersection approaches to reduce or eliminate intersection skew at unsignalized intersections with a high frequency of collisions resulting from insufficient intersection sight distance and awkward sight lines at a skewed intersection.[a]	High	$$$	Medium	Engineering
	B7 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to improve pedestrian and bicycle facilities to reduce conflicts between motorists and non-motorists.[a]	Medium	$$	Medium	Engineering
	B8 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, utilize innovative design techniques, such as roundabouts or reduced conflict intersections, in targeted areas.[a]	High	$$$	Medium	Engineering
C – Improve Sight Distance	C1 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to clear sight triangles on stop- or yield-controlled approaches to intersections where feasible.[a]	Medium	$	Short	Engineering
	C2 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to clear sight triangles in the medians of divided highways near intersections, where feasible.[a]	Medium	$	Short	Engineering
	C3 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to change horizontal and/or vertical alignment of approaches to provide more sight distance, where feasible.[a]	Medium	$$	Long	Engineering
	C4 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to eliminate parking that restricts sight distance, where feasible.[a]	Medium	$	Short	Engineering

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
D – Improve Driver Awareness	D1 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to improve visibility of intersections by providing enhanced signing and delineation at unsignalized intersections that are not clearly visible to approaching motorists, particularly approaching motorists on the major road, where feasible.[f]	Medium	$	Short	Engineering
	D2 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to install larger regulatory signs and warning signs at intersections with patterns of rear-end, angle, or turning collisions related to lack of driver awareness, where feasible.[f]	Medium	$	Short	Engineering
	D3 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, study the need to install flashing beacons at stop-controlled intersection or unsignalized intersections with patterns of high angle collisions related to lack of driver awareness, where feasible.[f]	Medium	$	Short	Engineering
E – Choose Appropriate Intersection Traffic Control	E1 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, consider all-way stop-control at appropriate intersections with patterns of right-angle and turning collisions and moderate and relatively balanced volumes on the intersection approaches.[f]	High	$	Short	Engineering
	E2 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, consider roundabouts at appropriate locations, such as unsignalized intersections that are experiencing right-angle, rear-end, and turning collisions.[f]	High	$$$	Long	Engineering
F – Improve Compliance with Traffic Control Devices and Traffic Laws	F1 – Provide targeted enforcement to reduce stop sign and signal violations.[f]	Medium	$$	Short	Enforcement
	F2 – Provide targeted public information and education on safety problems at specific intersections.[f]	Medium	$	Short	Education
G – Reduce Operating Speeds	G1 – Provide targeted speed enforcement at high-speed locations.[f]	High	$$	Short	Enforcement
	G2 – While developing intersection safety projects or other projects through the Feasibility Report process, consider inclusion of traffic calming measures based on study of crash data, posted speed limit, and existing geometry.[f]	High	$$	Medium	Engineering
H – Guide Motorists More Effectively	H1 – Educate roadway users on the contributing factors associated with intersection collisions, complying with traffic control devices, and providing proper right-of-way to all road users.[e]	Medium	$	Short	Education

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
H – Guide Motorists More Effectively (continued)	H2 – Provide education on benefits of and instructions on traversing alternative intersection types.[e]	Medium	$	Short	Education
	H3 – While developing intersection safety projects or other projects through the Feasibility Report process, consider turn path markings at complex unsignalized intersections with a high frequency of collisions related to turning vehicle positioning (e.g., sideswipe collisions).[f]	Medium	$	Short	Engineering
	H4 – While developing intersection safety projects or other projects through the Feasibility Report process, consider a double yellow centerline on the median opening of a divided highway at intersections experiencing a high number of side-by-side queuing and angle stopping with median area.[f]	Medium	$	Short	Engineering
	H5 – While developing intersection safety projects or other projects through the Feasibility Report process, consider lane assignment signing or marking at complex, unsignalized intersections with a high frequency of collisions caused by driver indecision in lane assignment.[f]	Medium	$	Short	Engineering
Signalized Intersections					
I – Reduce Frequency and Severity of Intersection Conflicts Through Traffic Control and Operational Improvements	I1 – While developing intersection safety projects or other projects through the Feasibility Report process, consider employing multiphase signal operation at signalized intersections with a high frequency of angle collisions involving left turning and opposing through vehicles.[f]	High	$	Short	Engineering
	I2 – While developing intersection safety projects or other projects through the Feasibility Report process, consider optimizing change intervals at signalized intersections with a high frequency of collisions related to change interval lengths that are possibly too short.[f]	High	$	Short	Engineering
	I3 – While developing intersection safety projects or other projects through the Feasibility Report process, consider restricting or eliminating turning maneuvers (including right turns on red).[f]	Medium	$	Short	Engineering
	I4 – While developing intersection safety projects or other projects through the Feasibility Report process, consider employing signal coordination for signalized intersections with a high frequency of collisions related to turning maneuvers.[f]	High	$$	Medium	Engineering
	I5 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, consider removal of unwarranted signals where traffic volumes and safety records do not warrant signalization.[f]	High	$	Short	Engineering

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
J – Reduce Intersection Conflicts Through Geometric Improvements	J1 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, consider providing or improving left-turn channelization at signalized intersections where collisions related to left-turn movements are an issue.[f]	High	$$	Medium	Engineering
	J2 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, consider providing or improving right-turn channelization at signalized intersections with a high frequency of rear-end collisions resulting from conflicts between: 1) vehicles turning right and following vehicles; and 2) vehicles turning right and through vehicles coming from the left on the cross street.[f]	High	$$	Medium	Engineering
	J3 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, consider improving geometry of pedestrian and bicycle facilities at signalized intersections with high frequencies of pedestrian and/or bicycle collisions and on routes serving schools or other generators of pedestrian and bicycle traffic.[f]	High	$	Short	Engineering
	J4 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, consider revising geometry of complex signalized intersections with high levels of collisions on a leg where other low-cost strategies have not been successful or are not considered appropriate.[f]	High	$$$	Long	Engineering
K – Improve Driver Awareness of Intersections and Signal Control	K1 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, consider improving visibility of traffic control devices at intersections on approaches by using additional heads or overhead signs with flashing signals at locations where a high frequency of right-angle and rear-end collisions occur because drivers are unable to see traffic signals and signs sufficiently in advance to safely negotiate the intersection being approached.[f]	Medium	$	Short	Engineering
	K2 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, consider installing LED heads and reflective backplates.[f]	Medium	$	Short	Engineering
L – Improve Driver Compliance with Traffic Control Devices	L1 – Provide targeted conventional enforcement of traffic laws at signalized intersections with a high frequency of collisions related to drivers either being unaware of (or refusing to obey) traffic laws and regulations that impact traffic safety.[f]	Medium	$$	Short	Enforcement

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
L – Improve Driver Compliance with Traffic Control Devices (continued)	L2 – Research the benefits and challenges of automated enforcement at signalized intersections, allowing for red-light-running cameras. Present findings to leadership for their consideration.[e]	High	$	Short	Research
M – Improve Safety Through Other Infrastructure Treatments	M1 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, consider providing skid resistance at intersections and on approaches where skidding is determined to be a problem, especially in wet conditions.[f]	Medium	$$	Medium	Engineering
	M2 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, consider coordinating closely spaced signals near at-grade railroad crossings with a high frequency of collisions.[f]	Medium	$$	Medium	Engineering
	M3 – While developing intersection traffic safety projects or other projects through the Feasibility Report process, consider restricting or eliminating existing parking on intersection approaches.[f]	High	$	Short	Engineering

[a] Applying Successfully Proven Measures in Roadway Safety to Reduce Harmful Collisions in South Carolina *(did not address intersection countermeasures)*.

[b] SC SHSP Update – Strengths Weaknesses Opportunities Threats Analysis Memorandum *(not referenced in intersection strategies)*.

[c] NHTSA Countermeasures That Work – 9th Edition *(not referenced in intersection strategies)*.

[d] SC SHSP Update – Literature Review Memorandum *(not referenced in intersection strategies)*.

[e] 2015-2018 South Carolina SHSP.

[f] FHWA Intersection Strategies 2nd Edition.

EFFECTIVENESS

High	Determined to be Effective Through Research
Medium	Considered Promising
Low	Not Determined Effective
Undetermined	No known Research on Countermeasure

COST

$	Can be Implemented with Current or Limited Resources
$$	Requires Some Additional Resources
$$$	Heavy Demand on Resources

TIMEFRAME

Short	Less than 1 year
Medium	1 – 2 years
Long	3 or more years

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IMPAIRED DRIVING

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
A – Enforce or research additional laws that prohibit or greatly penalize driving while impaired offenses	A1 – Continue administration of license suspension laws that allow driver's license authorities to suspend a driver's license if the driver fails or refuses to take a BAC test.[c]	High	$$$	Short	Research
	A2 – Enforce open container laws that prohibit the possession of any open alcoholic beverage container and the consumption of any alcoholic beverage in a motor vehicle.[c]	Medium	$	Short	Enforcement
	A3 – Study neighboring states successes in addressing with impaired drivers.	Medium	$$	Medium	Research
	A4 – Research the benefits from neighboring states that have lower BAC limits for repeat offenders.[c]	High	$	Short	Research
	A5 – Research the use of portable breath test devices to help establish probable cause for DUI arrest.[c]	High	$$	Short	Research
B – Increase the number of high visibility Driving Under the Influence (DUI) Programs	B1 – Implement public safety checkpoints at predetermined locations to check whether a driver is impaired and publicize the results (e.g., social media, press releases, etc.).[a, c]	High	$	Medium	Enforcement
	B2 – Continue the use of the Target Zero Enforcement Team to focus on locations where data suggest a high rate of impaired driver-related fatal or serious injury collisions.[e]	High	$$	Short	Enforcement
	B3 – Deploy a large number of law enforcement officers to patrol a specific area for impaired drivers.[c]	High	$$	Short	Enforcement
	B4 – Conduct Standardized Field Sobriety Test (SFST) and Drug Recognition Expert (DRE) testing and evaluation through regular traffic enforcement and crash investigations or at public safety checkpoints, in particular at night.[c, e]	High	$	Short	Enforcement

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
C – Minimize the risks of fatalities and serious injuries related to impaired driver collisions	C1 – While developing roadway departure mitigation traffic safety projects or other projects through the Feasibility Report process, consider implementing roadway departure countermeasures.[e]	High	$$	Medium	Engineering
D – Maintain the existence of the Impaired Driving Prevention Council (IDPC)	D1 – Continue active participation in the Impaired Driving Prevention Council (IDPC).[e, f]	Medium	$	Short	Public Policy
	D2 – Review and implement, when possible, the recommendations from the most recent Impaired Driving Assessment and refer to the National Highway Traffic Safety Administration's Countermeasures That Work document for policy related strategies.[e, f]	High	$$	Medium	Public Policy
	D3 – Implement the most recent Impaired Driving Prevention Council (IDPC)-approved State Impaired Driving Plan.[e, f]	High	$$	Medium	Public Policy
E – Enhance prosecutor, judicial, and law enforcement training programs	E1 – Continue supporting the Traffic Resource Prosecutor Program.[e, f]	Medium	$	Short	Education
	E2 – Support the state's Judicial Outreach Liaison Program.[e]	Medium	$	Short	Public Policy
	E3 – Enact court monitoring programs where citizens observe, track, and report on DUI court or administrative hearing activities to compare how results differ from judges and courts.[a, c]	Medium	$	Short	Education
	E4 – Educate officers to recognize drivers who are required to have an Ignition Interlock Device and verify device and license compliance.[e]	Medium	$	Medium	Enforcement/ Education
	E5 – Train law enforcement in the following programs: Drug Recognition Expert and Standardized Field Sobriety Tests (SFST).[e, f]	High	$	Short	Enforcement/ Education
F – Conduct impaired driving education and community outreach programs	F1 – Conduct alcohol screenings or brief interventions at emergency rooms, college campuses, or in social service settings to estimate the level and severity of alcohol use and to determine whether a person may be at risk.[c]	High	$$	Medium	Education/ Emergency Services
	F2 – Continue to support national, regional, and state DUI public information educational campaigns such as Sober or Slammer.[e]	Medium	$$$	Medium	Education/ Enforcement
	F3– Encourage alternative transportation in addition to normal public transportation during short periods of the year such as Christmas and New Year's holidays.[c]	Low	$$	Short	Education

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
G – Discourage Underage Drinking	G1 – Continue to support the Alcohol Enforcement Teams (AET).[e]	High	$	Short	Enforcement/ Education
	G2 – Implement youth drinking-and-driving programs to motivate youth not to drink, not to drink and drive, and not to ride with a driver who has been drinking. One example is the Alive @25 program.[c, e]	Low	Varies	Medium	Education
H – Reduce drugged driving	H1 – Support the Drug Recognition Expert (DRE) program.[e, f]	High	$	Short	Enforcement/ Education
	H2 – Enforce laws that include all forms of driver impairment (e.g., alcohol, illegal and prescription drugs).[c]	Undetermined	Unknown	Short	Enforcement
	H3 – Educate physicians, pharmacists, and patients about the potential risk of motor vehicle collisions associated with prescription medications.[c]	Undetermined	Unknown	Medium	Education
	H4 – Continue to educate the Legislature on the risks to highway safety associated with legalizing marijuana in the state.[b]	Undetermined	$	Short	Education

[a] Applying Successfully Proven Measures in Roadway Safety to Reduce Harmful Collisions in South Carolina.

[b] SC SHSP Update – Strengths Weaknesses Opportunities Threats Analysis Memorandum.

[c] NHTSA Countermeasures That Work – 9th Edition.

[d] SC SHSP Update – Literature Review Memorandum *(not referenced in impaired driving strategies)*.

[e] 2015-2018 South Carolina SHSP.

[f] South Carolina's Impaired Driving Program Assessment, 2019 Report.

EFFECTIVENESS

High	Determined to be Effective Through Research
Medium	Considered Promising
Low	Not Determined Effective
Undetermined	No known Research on Countermeasure

COST

$	Can be Implemented with Current or Limited Resources
$$	Requires Some Additional Resources
$$$	Heavy Demand on Resources

TIMEFRAME

Short	Less than 1 year
Medium	1 – 2 years
Long	3 or more years

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UNRESTRAINED

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
A – Increase Seat Belt Law Enforcement	A1 – Use checkpoints and saturation patrols to conduct intense high visibility enforcement over a period of time.[c]	High	$$	Short	Enforcement
	A2 – Conduct short-term high visibility seat belt law enforcement during the nighttime.[a, c]	High	$$	Short	Enforcement
	A3 – Enforce seat belt law as part of customary traffic enforcement activities.[c]	Medium	$	Short	Enforcement
	A4 – Continue the use of the Target Zero Enforcement Team to focus on locations where data suggest a high rate of unbelted-related fatal or serious injury collisions.[e]	High	$	Short	Enforcement
B – Educate Public Regarding Seat Belt Law Enforcement	B1 – Use variable message boards and signs during stepped-up occupant protection enforcement campaigns (e.g., Buckle Up South Carolina).[e]	High	$	Short	Education
	B2 – Use paid advertising to continue high-visibility seat belt enforcement campaigns, such as Buckle Up South Carolina.[c, e]	High	$$	Medium	Education
	B3 – Identify high-risk population groups or vehicle types to develop an educational campaign about the risks of not wearing safety belts.[c, e]	High	$	Medium	Education
C – Improve child occupant protection through education, outreach, and enforcement	C1 – Continue to provide community locations for instruction in proper child restraint use, including both public safety agencies and health care providers.[e]	High	$	Short	Education
	C2 – Increase the number of child passenger safety fitting stations and certified technicians. Publicize child restraint inspection events statewide.[e]	High	$$	Medium	Education
	C3 – Continue to enforce child restraint laws and publicize during statewide occupant protection campaigns, such as Buckle Up South Carolina and Child Passenger Safety Week.[c, e]	High	$$	Medium	Enforcement
	C4 – Conduct educational activities in support of Child Passenger Safety Week and at other times during the year when there is an increased emphasis on the importance of child restraint systems.[c, e]	Medium	$$	Short	Education

[a] Applying Successfully Proven Measures in Roadway Safety to Reduce Harmful Collisions in South Carolina.

[b] SC SHSP Update – Strengths Weaknesses Opportunities Threats Analysis Memorandum.

[c] NHTSA Countermeasures That Work – 9th Edition.

[d] SC SHSP Update – Literature Review Memorandum *(not referenced in unrestrained strategies)*.

[e] 2015 – 2018 South Carolina SHSP.

EFFECTIVENESS

High	Determined to be Effective Through Research
Medium	Considered Promising
Low	Not Determined Effective
Undetermined	No known Research on Countermeasure

COST

$	Can be Implemented with Current or Limited Resources
$$	Requires Some Additional Resources
$$$	Heavy Demand on Resources

TIMEFRAME

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Medium	1 – 2 years
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SPEEDING

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
A – Reduce speeding through enforcement activities	A1 – Conduct high-visibility speed enforcement efforts at locations where speed-related collisions are over-represented.[b, f]	High	$	Short	Enforcement
	A2 – Research the benefits and challenges of automated speed enforcement as an effective countermeasure, and present findings to leadership for their consideration.[a, b, c, d]	High	$	Long	Research
	A3 – Ensure that law enforcement officers have appropriate equipment for conducting speed enforcement.[e]	High	$$	Short	Enforcement
	A4 – Continue participation in the annual NHTSA Region 4 speeding campaign, *Southern Shield*.	High	$	Short	Enforcement
B – Use engineering measures to effectively manage speed	B1 – Set speed limits which account for roadway design, traffic, and environment, including traffic volume, modal mixed-use, and local and regional function.[e]	High	$	Short/Medium	Engineering
	B2 – While developing traffic safety projects or other projects through the Feasibility Report process, consider inclusion of traffic calming measures based on study of crash data, posted speed limit, and existing geometry to influence driver speed.[e]	Medium	$$	Medium/High	Engineering
	B3 – Design and maintain speed limit signs and ensure that warning signs are installed at appropriate intervals with adequate sight distance.[e]	High	$	Short	Engineering
	B4 – Implement timed and coordinated traffic signals with adequate clearance intervals to improve traffic flow, reduce red-light running, and manage speeds.[e]	High	$$	Medium	Engineering
	B5 – Set consistent speed limits based on existing operation, considering road design, traffic flows, traffic mix, and other environmental factors.[e]	High	$$	Medium	Engineering
	B6 – While developing traffic safety projects or other projects through the Feasibility Report process, consider combination of geometric elements to control speed at horizontal curves (high friction surface treatment), enhance delineation (chevron sign) of curve alerts, and include roadside design improvements (guardrail, cable/concrete barrier).[f]	High	$$$	Long	Engineering

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
C – Increase public awareness of risk of driving at unsafe speeds	C1 – Increase awareness through extensive communication campaign (using various forms of media strategies) and driver education programs concerning risks of driving at unsafe speeds.[b, f]	Undetermined	$$	Medium	Education
	C2 – Increase public awareness of potential penalties for speeding.[f]	Undetermined	$	Short	Education
D – Build partnerships to increase support for speed-reducing measures	D1 – Continue the use of the Target Zero Enforcement Team to focus on locations where data suggest a high rate of speed-related fatal or serious injury collisions.[e]	High	$$	Medium/Long	Enforcement
	D2 – Conduct Road Safety Audits to identify roadway characteristics and roadways designs for speed-related safety improvements.[b, d]	Undetermined	$$	Medium	Engineering
E – Obtain and report uniform, timely, consistent, integrated, accurate, and complete speed data for the purposes of informing and directing speed management activities	E1 – Create an inventory of existing speed data and identify data gaps to obtain a complete dataset.[e]	Medium	$$	Medium	Research
	E2 – Provide clear, instructive training to law enforcement on identifying speed-related collision and recording them appropriately on the state's crash report.[e]	Medium	$$	Medium	Education
	E3 – Ensure that transportation and safety partners have access to the data to help determine data-driven solutions.[b]	Undetermined	$	Short/Medium	Education
	E4 – Present the visual statistics to public and elected officials to gain support in prioritizing safety improvement funding.[b]	Undetermined	$	Short	Education

[a] Applying Successfully Proven Measures in Roadway Safety to Reduce Harmful Collisions in South Carolina.

[b] SC SHSP Update – Strengths Weaknesses Opportunities Threats Analysis Memorandum.

[c] NHTSA Countermeasures That Work – 9th Edition.

[d] SC SHSP Update – Literature Review Memorandum.

[e] 2015 – 2018 South Carolina SHSP.

[f] NCHRP Report 500: A Guide for Reducing Speed-Related Crashes.

SPEEDING

EFFECTIVENESS

High	Determined to be Effective Through Research
Medium	Considered Promising
Low	Not Determined Effective
Undetermined	No known Research on Countermeasure

COST

$	Can be Implemented with Current or Limited Resources
$$	Requires Some Additional Resources
$$$	Heavy Demand on Resources

TIMEFRAME

Short	Less than 1 year
Medium	1 – 2 years
Long	3 or more years

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DISTRACTED DRIVING

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
A – Research the distracted driving problem in the state	A1 – To ensure effective law enforcement, explore options/methods to assess cell phone and texting offenses while driving.[b]	Undetermined	$	Short	Research
B – Improve the collection and reporting of distracted driving in collisions	B1 – Provide training to officers to classify distracted driving collisions.[b, e]	Undetermined	$$	Medium	Education
C – Reduce the likelihood of vehicles leaving the travel lane(s) at high-collision/ risk locations by improving the roadway	C1 – While developing traffic safety projects or other projects through the Feasibility Report process, consider deployment of centerline and edge line rumble strips based on Roadway Design Manual (RDM) and engineering directives.[e, f]	High	$$	Medium	Engineering
	C2 – While developing traffic safety projects or other projects through the Feasibility Report process, consider use of safety edge (i.e., pavement edge taper) as well as opportunities to provide additional recovery area for vehicles that leave the roadway.[e, f]	High	$$	Long	Engineering
	C3 – While developing traffic safety projects or other projects through the Feasibility Report process, review crash data to consider expansion of existing roadway delineation and visibility features, which include geometric alignment, pavement markings, raised markers, signs, and other devices.[e]	Medium	$$	Long	Engineering
D – Enhance driver awareness of the risks of distracted driving	D1 – Conduct extensive education and enforcement campaign focused on distracted driving.[b, f]	Medium	$$	Long	Education/ Enforcement
	D2 – Promote in-vehicle technologies such as lane departure warning, collision-imminent braking, forward collision warning, etc. to deter driver distraction or drowsiness.[c]	Medium	$$	Medium/Long	Education/ Enforcement

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
D – Enhance driver awareness of the risks of distracted driving (continued)	D3 – Encourage employers to develop education program or fatigue management programs for employees working nighttime or rotating shifts.[c, f]	Medium	$$	Medium	Education
E – Strengthen enforcement	E1 – Expand high-visibility text messaging enforcement.[c]	High	$	Short	Enforcement
	E2 – Enhance enforcement of commercial motor vehicle hours of service regulation provided by FMCSA, to identify high-risk carriers and drivers.[f]	High	$$	Medium	Enforcement

[a] Applying Successfully Proven Measures in Roadway Safety to Reduce Harmful Collisions in South Carolina *(did not address distracted driving countermeasures)*.

[b] SC SHSP Update – Strengths Weaknesses Opportunities Threats Analysis Memorandum.

[c] NHTSA Countermeasures That Work – 9th Edition.

[d] SC SHSP Update – Literature Review Memorandum *(not referenced in distracted driving strategies)*.

[e] 2015 – 2018 South Carolina SHSP.

[f] NCHRP Report 500: A Guide for Reducing Crashes Involving Drowsy and Distracted Drivers.

EFFECTIVENESS

High	Determined to be Effective Through Research
Medium	Considered Promising
Low	Not Determined Effective
Undetermined	No known Research on Countermeasure

COST

$	Can be Implemented with Current or Limited Resources
$$	Requires Some Additional Resources
$$$	Heavy Demand on Resources

TIMEFRAME

Short	Less than 1 year
Medium	1 – 2 years
Long	3 or more years

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YOUNG DRIVERS

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
A – Implement and enforce Graduated Drivers Licensing (GDL) Programs and Laws	A1 – Enforce and implement programs that help identify teen drivers operating outside of the night curfew and increase effectiveness of the current nighttime restriction rules.[a, c]	High	$$$	Medium	Enforcement
	A2 – Enforce GDL and Zero tolerance laws.[c]	Medium	$	Short	Enforcement
B – Continue to educate roadway users and create awareness of young driver risks and consequences	B1 – Continue to support young driver safety initiatives such as the Alive @ 25 safety driver program.[e]	High	$	Short/Medium	Education
	B2 – Increase young driver education in rural areas through school and church outreach campaigns.[b]	Undetermined	$$	Medium	Education
	B3 – Educate parents and young drivers on the impact of risky driver behaviors, including driving under the influence and using a cell phone while operating a vehicle.[c]	Low	$$	Medium	Education
	B4 – Educate and enforce laws pertaining to underage drinking and driving.[f]	High	$$	Short	Education/ Enforcement
	B5 – Facilitate partnerships between law enforcement and middle and high schools statewide to create awareness events regarding young driver risk behavior and consequences.[b]	Undetermined	$$	Medium	Education/ Enforcement
	B6 – Encourage all public high schools to support the Alive @ 25 initiative.[e]	High	$$$	Medium	Education
	B7 – Support/create young driver social media campaigns regarding risky behavior on platforms such as Instagram, Facebook, Twitter, and Snapchat to engage the younger populations.[d]	Undetermined	$	Short	Education
	B8 – Display statistics and young driver collision data along highway signs and billboards to promote awareness.[d]	Undetermined	$$	Short	Education

YOUNG DRIVERS

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
C – Reduce collisions along routes used by young drivers to get to school	C1 – Continue to implement a program to reduce roadway departure and intersection collisions along identified corridors.[e]	Undetermined	$$	Long	Engineering

[a] Applying Successfully Proven Measures in Roadway Safety to Reduce Harmful Collisions in South Carolina.

[b] SC SHSP Update – Strengths Weaknesses Opportunities Threats Analysis Memorandum.

[c] NHTSA Countermeasures That Work – 9th Edition.

[d] SC SHSP Update – Literature Review Memorandum.

[e] 2015 – 2018 South Carolina SHSP.

[f] NCHRP Report 500: A Guide for Reducing Collisions Involving Young Drivers.

EFFECTIVENESS

High	Determined to be Effective Through Research
Medium	Considered Promising
Low	Not Determined Effective
Undetermined	No known Research on Countermeasure

COST

$	Can be Implemented with Current or Limited Resources
$$	Requires Some Additional Resources
$$$	Heavy Demand on Resources

TIMEFRAME

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MATURE DRIVERS

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
A – Identify mature drivers at an elevated risk	A1 – Implement *Model Driver Screening and Evaluation Program Guidelines for Motor Vehicle Administrators* for screening and testing mature drivers' license.[c]	High	$	Medium	Public Policy/ Enforcement
	A2 – Establish effective referral of mature drivers to licensing agencies by providing appropriate educational materials to law enforcement agencies and physicians.[c]	High	$$	Medium	Enforcement/ Public Policy/ Education
B – Improve the roadway and driving environment to better accommodate mature drivers' special needs	B1 – While developing traffic safety projects or other projects through the Feasibility Report process, or conducting traffic safety audits, review crash data to consider need for increasing size and letter height on roadway signs.[e]	Medium	$	Short	Engineering
	B2 – While developing traffic safety projects or other projects through the Feasibility Report process, or signal retiming studies, consider providing more protected left-turn signal phases at high-volume intersections, where supported by collision data.[e]	Medium	$	Short	Engineering
	B3 – While developing traffic safety projects or other projects through the Feasibility Report process, consider lighting and other engineering countermeasures at intersections, horizontal curves, and railroad grade crossings where supported by collision data and feasible.[e]	High	$$$	Medium/Long	Engineering
	B4 – Implement systemic upgrades to reflectivity of sign sheeting for all critical roadway safety signs, such as chevrons and curve warning signs.[e]	High	$$	Medium/Long	Engineering
	B5 – While developing traffic safety projects or other projects through the Feasibility Report process, consider replacing painted channelization with raised channelization where feasible.[f]	High	$$	Medium	Engineering

MATURE DRIVERS

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
C – Improve the driving competency of mature adults in the general driving population and reduce the risk of injury and death	C1 – Increase awareness of safety belt use for mature drivers and passengers and strictly enforce safety belt use law.[c,f]	Medium	$	Short/Medium	Enforcement

[a] Applying Successfully Proven Measures in Roadway Safety to Reduce Harmful Collisions in South Carolina *(did not address mature driver countermeasures)*.

[b] SC SHSP Update – Strengths Weaknesses Opportunities Threats Analysis Memorandum *(not referenced in mature driver strategies)*.

[c] NHTSA Countermeasures That Work – 9th Edition.

[d] SC SHSP Update – Literature Review Memorandum *(not referenced in mature driver strategies)*.

[e] 2015 – 2018 South Carolina SHSP.

[f] NCHRP Report 500: A Guide for Reducing Collisions Involving Older Drivers.

EFFECTIVENESS

High	Determined to be Effective Through Research
Medium	Considered Promising
Low	Not Determined Effective
Undetermined	No known Research on Countermeasure

COST

$	Can be Implemented with Current or Limited Resources
$$	Requires Some Additional Resources
$$$	Heavy Demand on Resources

TIMEFRAME

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PEDESTRIANS

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
A – Develop a statewide Pedestrian and Bicycle Safety Action Plan	A1 – Educate planners, engineers, and law enforcement on the development of the state's first Pedestrian and Bicycle Safety Action Plan and the strategies and countermeasures contained therein.[b]	High	$	Short	Education/ Enforcement/ Engineering
	A2 – Use the Pedestrian and Bicycle Safety Action Plan to create awareness of increasing pedestrian-involved fatalities and injuries and the importance of pedestrian safety on the transportation network.[e]	High	$$	Long	Education
B – Support the SCDOT Safety Office Investment Plan to perform Road Safety Audits at locations identified as having a high occurrence of pedestrian fatalities and injuries	B1 – Explore and implement pedestrian safety countermeasures identified as part of Road Safety Audits and other systemic strategies.[e]	High	$$	Long	Engineering
	B2 – Improve data collection methods and continue to track pedestrian crash safety data.[b]	High	$	Long	Education
C – Consider pedestrian facilities	C1 – While developing traffic safety projects or other projects through the Feasibility Report process, consider installation of separated paths/sidewalks and other pedestrian-friendly road features along corridors and at intersections where supported by crash analysis and where feasible.[e]	High	$	Short	Engineering
	C2 – While developing traffic safety projects or other projects through the Feasibility Report process, consider pedestrian safety and mobility during the needs assessment in conjunction with Department Directives, Engineering Directives, the Roadway Design Manual (RDM), and where feasible.[e]	Medium	$	Short	Engineering

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
D – Encourage age-friendly pedestrian design	D1 – Ensure pedestrian facilities located near schools have adequate pedestrian crossing opportunities, flashing beacons, and reduced speed limits for passing vehicles; consult School Safety Audits performed by SCDHEC when available.[d]	Medium	$	Short	Engineering
	D2 – While developing traffic safety projects or other projects through the Feasibility Report process, consider adequate pedestrian design that can accommodate the aging and disabled populations (including wide sidewalks and ADA accessible infrastructure) where feasible.[f]	High	$	Short	Engineering
	D3 – Implement leading pedestrian interval (LPI) at intersections with high turning vehicle volumes to reduce pedestrian-vehicle crashes.[f]	Medium	$$	Medium	Engineering
E – Increase pedestrian education efforts	E1 – Implement an awareness campaign emphasizing the risks to pedestrians on high-volume/speed roadways resulting from disabled vehicles, motorist assistance, crossing multilane roads, etc.[e]	High	$	Short	Education
	E2 – Continue pedestrian safety campaigns, which promote the use of reflective apparel among pedestrians (conspicuity enhancement).[e]	High	$	Short	Education
	E3 – Distribute educational brochures and maps with identified safe routes to schools.[g]	Medium	$	Short	Education
	E4 – Encourage the continuation of School Audits performed by South Carolina's Department of Health and Environmental Control and other community stakeholders to develop and implement elementary school pedestrian training programs.[c]	Medium	$	Short	Education
F – Increase enforcement of laws pertaining to pedestrians	F1 – Implement targeted enforcement campaigns for pedestrians and motorists. Coordinate special enforcement efforts on a local and district level.[e]	High	$	Short	Enforcement
	F2 – Educate officers on pedestrian-related laws.[e]	High	$	Short	Enforcement

[a] Applying Successfully Proven Measures in Roadway Safety to Reduce Harmful Collisions in South Carolina *(did not address pedestrian countermeasures)*.

[b] SC SHSP Update – Strengths Weaknesses Opportunities Threats Analysis Memorandum.

[c] NHTSA Countermeasures That Work – 9th Edition.

[d] SC SHSP Update – Literature Review Memorandum.

[e] 2015 – 2018 South Carolina SHSP.

[f] FHWA Proven Safety Countermeasures: Leading Pedestrian Intervals and ARTS.

[g] NCHRP Report 500: A Guide for Reducing Collisions Involving Pedestrians.

EFFECTIVENESS

High	Determined to be Effective Through Research
Medium	Considered Promising
Low	Not Determined Effective
Undetermined	No known Research on Countermeasure

COST

$	Can be Implemented with Current or Limited Resources
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$$$	Heavy Demand on Resources

TIMEFRAME

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MOTORCYCLES

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
A – Develop education and enforcement strategies based on top contributing factors to motorcycle-involved collisions	A1 – Expand impaired driving prevention programs (high-visibility and public safety check points, saturation patrols) to detect impaired motorcyclists.[c, f]	Medium	Varies	Varies	Enforcement
	A2 – Maintain regular meetings of the Motorcycle Safety Task Force (MSTF) to review and implement the most current SHSP strategies and other initiatives as deemed necessary by the MSTF.[e]	High	$	Short/Medium	Public Policy/ Education
	A3 – Identify and promote methods of motorcycle rider conspicuity such as daytime headlights.[c, f]	Undetermined	$	Short	Education
B – Minimize the adverse consequences of leaving the roadway by improving the roadside	B1 – While developing traffic safety projects or other projects through the Feasibility Report process, in a context-sensitive manner, consider including clear zones in conjunction with the SCDOT Roadside Design Manual (RDM) which may include removing, relocating, shielding, or delineating trees or other fixed objects when feasible.[e]	Undetermined	$$	Medium	Engineering
	B2 – While developing traffic safety projects or other projects through the Feasibility Report process, consider providing full paved shoulders where limited recovery area currently exists and when there is a history of motorcycle crashes and where feasible.[e, f]	Medium	$$	Medium/Long	Engineering
	B3 – While developing traffic management plans for construction projects, consider providing advance warning signs to alert drivers of traffic congestion and irregular roadway surfaces.[e, f]	Medium	$$	Medium/Long	Engineering
	B4 – Maintain roadway surfaces through work zones to facilitate safe passage of all motorists to include motorcycles.[f]	Medium	$	Short	Engineering
C – Educate riders and drivers on motorcycle safety and create awareness	C1 – Expand Motorcycle Rider Education program to ensure riders have adequate training courses and licenses to operate a motorcycle safely on road.[b, c, f]	Undetermined	$	Short/Medium	Education
	C2 – Expand educational campaign to promote helmet use and motorcycle safety.[c, d]	Undetermined	$	Short	Education

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
C – Educate riders and drivers on motorcycle safety and create awareness (continued)	C3 – Raise motorcycle safety awareness by sharing safety messages utilizing digital message signs, social media, posters, flyers at transportation events, etc.[b]	Undetermined	$	Short/Medium	Education
	C4 – Enhance awareness of the consequences of aggressive riding, riding while fatigued or impaired, unsafe riding, and poor traffic strategies.[f]	Medium	$	Short	Education

[a] Applying Successfully Proven Measures in Roadway Safety to Reduce Harmful Collisions in South Carolina *(did not address motorcycle countermeasures)*.

[b] SC SHSP Update – Strengths Weaknesses Opportunities Threats Analysis Memorandum.

[c] NHTSA Countermeasures That Work – 9th Edition.

[d] SC SHSP Update – Literature Review Memorandum.

[e] 2015 – 2018 South Carolina SHSP.

[f] NCHRP Report 500: A Guide for Addressing Collisions Involving Motorcycles.

EFFECTIVENESS

High	Determined to be Effective Through Research
Medium	Considered Promising
Low	Not Determined Effective
Undetermined	No known Research on Countermeasure

COST

$	Can be Implemented with Current or Limited Resources
$$	Requires Some Additional Resources
$$$	Heavy Demand on Resources

TIMEFRAME

Short	Less than 1 year
Medium	1 – 2 years
Long	3 or more years

South Carolina 2020-2024 Strategic Highway Safety Plan Strategies

Strategies presented in this document are the result of a comprehensive literature review of existing South Carolina practices and national solutions. This document should serve as a resource to all highway safety partners and does not obligate any one partner to develop or implement a strategy.

BICYCLES

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
A – Develop a statewide Pedestrian and Bicycle Safety Action Plan	A1 – Educate planners, engineers, and law enforcement on the development of the state's first Pedestrian and Bicycle Safety Action Plan and the strategies and countermeasures contained therein.[b]	High	$	Short	Education/ Enforcement/ Engineering
	A2 – Use the Pedestrian and Bicycle Safety Action Plan to create awareness of increasing bicyclist-involved fatalities and injuries and the importance of pedestrian safety on the transportation network.[e]	High	$	Short	Education
B – Consider bicyclist facilities	B1 – While developing traffic safety projects or other projects through the Feasibility Report process, consider inclusion of bicycle accommodations during the project development process based on safety and mobility.[e]	Undetermined	$$	Medium	Engineering
	B2 – Utilize SCDOT traffic calming guideline as requests are received by local governments to study requests to reduce motor vehicle speeds on low volume routes.[f]	High	$$	Medium/Long	Engineering
	B3 – While developing traffic safety projects specific to non-motorized safety, study the need to improve pavement markings, driveway access, or other access management strategies, based on collision analysis, to improve bicycle safety.[d, f]	Medium	$$$	Long	Engineering
C – Improve bicyclist safety awareness and behavior	C1 – Increase bicycle and rider conspicuity through active lights, reflectors, and retroreflective clothing.[c, f]	High	$	Medium	Education/ Enforcement
	C2 – Expand bicycle safety education for children and adults and promote Safe Route to School programs.[c, b]	Medium	$	Short	Education
	C3 – Expand educational campaign focusing on bicyclist skill education, safety-related training, helmet use, etc.[d, f]	Medium	$	Medium	Education

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
D – Coordinate with local stakeholders to reduce the number and severity of bicycle-involved collisions	D1 – Provide statistical analysis and assistance to MPO's/COG's that request it with the goal of improving non-motorized safety.[e]	Undetermined	$	Short	Education/ Engineering
	D2 – Encourage the continued use of School Audits performed by DHEC and other community stakeholders.[e]	High	$	Short	Education
E – Increase enforcement of laws pertaining to bicyclists	E1 – Educate officers on bicycle-related traffic laws.[e]	High	$	Short	Enforcement

[a] Applying Successfully Proven Measures in Roadway Safety to Reduce Harmful Collisions in South Carolina *(did not address bicycle countermeasures)*.

[b] SC SHSP Update – Strengths Weaknesses Opportunities Threats Analysis Memorandum.

[c] NHTSA Countermeasures That Work – 9th Edition.

[d] SC SHSP Update – Literature Review Memorandum.

[e] 2015 – 2018 South Carolina SHSP.

[f] NCHRP Report 500: A Guide for Reducing Collisions Involving Bicycles.

EFFECTIVENESS

High	Determined to be Effective Through Research
Medium	Considered Promising
Low	Not Determined Effective
Undetermined	No known Research on Countermeasure

COST

$	Can be Implemented with Current or Limited Resources
$$	Requires Some Additional Resources
$$$	Heavy Demand on Resources

TIMEFRAME

Short	Less than 1 year
Medium	1 – 2 years
Long	3 or more years

South Carolina 2020-2024 Strategic Highway Safety Plan Strategies

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WORK ZONES

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
A – Reduce the severity of work zone-related collisions	A1 – Review work zone fatal and serious injury collisions to identify areas for engineering improvements.[e]	High	$$	Short/Medium	Engineering
	A2 – Continue the Safety Improvement Team (SIT) program.[e]	Medium	$	Short/Medium	Enforcement, Engineering
B – Improve data collection quality and perform possible revisions to the collision report form	B1 – Provide training to Law Enforcement on work zone safety and laws.[e]	High	$	Short	Education
	B2 – Provide training to Law Enforcement on completing the collision report form (TR-310), properly identifying work zone locations and activity areas.[e]	High	$	Short	Education
C – Reduce the duration and impact of work zones	C1 – During project development, study opportunities to accelerate construction and maintenance activities where possible, schedule highway work to avoid periods of high traffic volumes, and provide adequate space for future road work in new project development.[f]	High	$$$	Medium	Engineering
	C2 – During project development, consider full-time roadway closures for construction operations to separate motoring public from work zones.[f]	Medium	$	Medium	Engineering
	C3 – During project development, consider including contract provisions such as no excuse incentives as a method of expediting construction.[f]	High	$$	Medium	Engineering
	C4 – Use agency prescribed engineering directives to guide decisions of whether construction work should be performed at night due to traffic volumes.[f]	High	$	Medium	Engineering
D – Improve work zone traffic control devices	D1 – Implement Intelligent Transportation Systems (ITS) strategies to improve safety.[f]	Medium	$$	Medium	Engineering
	D2 – Continue to perform routine work zone night reviews, continue to improve visibility of SCDOT work zone personnel and equipment, and study neighboring states successes in improving visibility of work zone personnel and vehicles.[f]	Medium	$	Short	Engineering

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
D – Improve work zone traffic control devices (continued)	D3 – Increase driver awareness of flagger presence by use of advanced warning signs, flashing stop/slow paddles, and high visibility apparel to reduce flaggers' exposure to traffic.[f]	Medium	$	Short	Engineering
E – Improve work zone design practices	E1 – Utilize work zone design guidance to improve work zone safety on a project by project basis.[f]	Medium	$	Medium	Engineering
	E2 – When developing staging plans for projects, consider measures to reduce work space intrusions (and limit consequences of intrusions) such as physical barriers or positive protection (devices that contain and redirect vehicles preventing them from intruding into the work space).[f]	Medium	$$$	Short	Engineering
	E3 – Consider all modes of travel (including pedestrians, bicyclists, motorcyclists, and heavy-truck drivers) when establishing work zone design plans; perform routine inspection of conditions to ensure safe accommodations.[f]	Medium	$$$	Medium	Engineering
F – Improve driver compliance with work zone traffic controls	F1 – Enhance enforcement of traffic laws in work zones.[f]	Medium	$$	Short	Enforcement
	F2 – Improve application of increased driver penalties in work zones.[f]	Medium	$	Medium	Enforcement
G – Provide public education and information on work zone safety to increase knowledge and awareness of work zones	G1 – Develop and implement public information campaigns for work zone safety, to include honoring those workers who have lost their lives in work zone-related collisions.[e]	High	$	Short/Medium	Education
	G2 – Disseminate work zone safety information to road users.[f]	Medium	$$	Short	Education
	G3 – Provide work zone training programs and manuals for designers and field staff.[f]	Medium	$	Short	Education
H – Develop procedures to effectively manage work zones	H1 – Develop or enhance agency-level work zone collision data systems.[f]	Medium	$$	Medium	Engineering
	H2 – When practicable, coordinate schedules of multiple projects on the same section of roadway to minimize impacts; coordination among different DOT divisions (maintenance, construction, design, traffic, safety) and emergency responders.[f]	Medium	$$	Medium	Engineering
	H3 – Research the use of incentives or awareness programs to encourage work zone personnel to strive for safe work zones.[f]	Medium	$$	Short	Research

OBJECTIVE	STRATEGIES	EFFECTIVENESS	COST	TIME FRAME FOR IMPLEMENTATION	IMPLEMENTATION AREAS
I – Increase likelihood of survival	I1 – Continue Traffic Incident Management Training for first responders and SCDOT personnel on traffic control in work zones.[e]	High	$	Short/Medium	Engineering/ Enforcement/ Emergency Medical Services
	I2 – Ensure that all workers are outfitted with appropriate personal protection equipment (PPE).[e]	High	$	Short/Medium	Engineering/ Enforcement/ Emergency Medical Services

[a] Applying Successfully Proven Measures in Roadway Safety to Reduce Harmful Collisions in South Carolina *(did not address work zone collisions)*.

[b] SC SHSP Update – Strengths Weaknesses Opportunities Threats Analysis Memorandum (*not referenced in work zone strategies)*.

[c] NHTSA Countermeasures That Work – 9th Edition (*not referenced in work zone strategies)*.

[d] SC SHSP Update – Literature Review Memorandum (*not referenced in work zone strategies)*.

[e] 2015 – 2018 South Carolina SHSP.

[f] NCHRP Report 500: A Guide for Reducing Work Zone Collisions.

EFFECTIVENESS

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TARGET ZERO

South Carolina

STRATEGIC HIGHWAY **SAFETY PLAN**