

SC 327 at I-95

Interchange Study

Florence Couty, South Carolina

July 2026



Florence Area Transportation Study

FLATS

Metropolitan Planning Organization

518 S Irby Street | Florence, SC | 29501

Acknowledgements

Stakeholders

- Florence Area Transportation Study Metropolitan Planning Organization (FLATS MPO)
- Florence County
- South Carolina Department of Transportation (SCDOT)
- Florence County Economic Development Partnership (FCDEP)

Florence County Planning Department/FLATS MPO Staff

Shawn Brashear	Director
Ethan Brown	Deputy Director
Holly Smith	Senior Planner
Caroline Dunlap	Planner III

Consultant

Kimley-Horn

This report was funded in part through grants from the United States Department of Transportation, including the Federal Highway Administration and the Federal Transit Administration, as administered by the South Carolina Department of Transportation. The contents of this report are the responsibility of the Florence Area Transportation Study Metropolitan Planning Organization and do not necessarily reflect the official views, policies, or endorsement of the United States Department of Transportation, the Federal Highway Administration, the Federal Transit Administration, or the South Carolina Department of Transportation.

The Florence Area Transportation Study Metropolitan Planning Organization complies with applicable federal civil rights laws and does not discriminate on the basis of race, color, national origin, sex, age, disability, religion, income status, or limited English proficiency in its programs, services, activities, public involvement opportunities, or access to MPO documents.

Table of Contents

Executive Summary.....	2
Introduction.....	4
Existing Conditions.....	6
Public Engagement.....	18
Design Alternatives.....	20
Recommendations.....	33

Executive Summary

Purpose

The SC 327 at I-95 Interchange Study evaluates design and mobility options for the existing interchange at Exit 170 in Florence County, South Carolina. Located in the northeastern portion of the county, the interchange serves a growing area influenced by continued development in the surrounding unincorporated areas of Florence County and nearby incorporated areas, including the City of Florence and the Town of Quinby.

Existing geometric constraints and operational deficiencies at the SC 327/I-95 interchange and key locations along the SC 327 corridor are contributing to recurring congestion, queuing, safety concerns, and reduced travel reliability. These conditions affect access between I-95, nearby employment and commercial destinations, and areas planned for future development.

Additional development activity and regional travel demand are expected to place continued pressure on the interchange and surrounding roadway network, creating the need to evaluate improvements that enhance safety, operations, access, and local roadway network redundancy.

Enhancements to the SC 327 interchange would improve connectivity with I-95 to improve safety at the interchange and along the SC 327 corridor. An improved SC 327 interchange configuration would provide more efficient access between I-95 and key employment and commercial destinations, including Pee Dee Commerce City East and West, existing businesses near the interchange, and future development along the SC 327 corridor. An improved interchange would also improve operations on all the existing ramps and the mainline of I-95. Additional improvements are recommended to enhance local connectivity and improve network redundancy between the SC 327 interchange and the adjacent TV Road interchange by extending one or more existing frontage roads to provide parallel access along I-95.

Process

The study and recommendations for the SC 327/I-95 interchange, adjoining SC 327 corridor, and surrounding roadway network were developed through a four-step process:

1. **Existing Conditions Analysis** - Review of traffic, safety, land use, environmental, and multi-modal conditions within the study area.
2. **Alternatives Development** - Development of potential interchange and corridor improvement concepts based on existing conditions, identified constraints, public/stakeholder input, and study area needs.
3. **Alternatives Evaluation & Engagement** - Evaluation of improvement concepts using technical criteria, stakeholder coordination, and public input.
4. **Recommendation & Endorsement** - Selection of a preferred alternative based on technical analysis, stakeholder feedback, public input, and planning agency coordination.

Why Are We Considering New Alternatives Now?



Congestion is only continuing to grow around the interchange with current land uses and planned future developments.



The study area is continuing to change with new development, growing employment centers, and continued development pressure.

Preferred Alternative

Both the technical evaluation and public feedback favored the implementation of a diverging diamond interchange (DDI). This configuration would modify the existing interchange configuration, maintain all the current merge and diverge locations along I-95 except for the SB loop ramp.

Given the driver types using the SC 327 interchange, local and visitor, this alternative would be the most familiar to drivers using the current interchange with several DDI's in SC and surrounding states. The DDI would also accommodate high volumes of heavy vehicles which are present at the interchange due to the Pee Dee Commerce City presence.

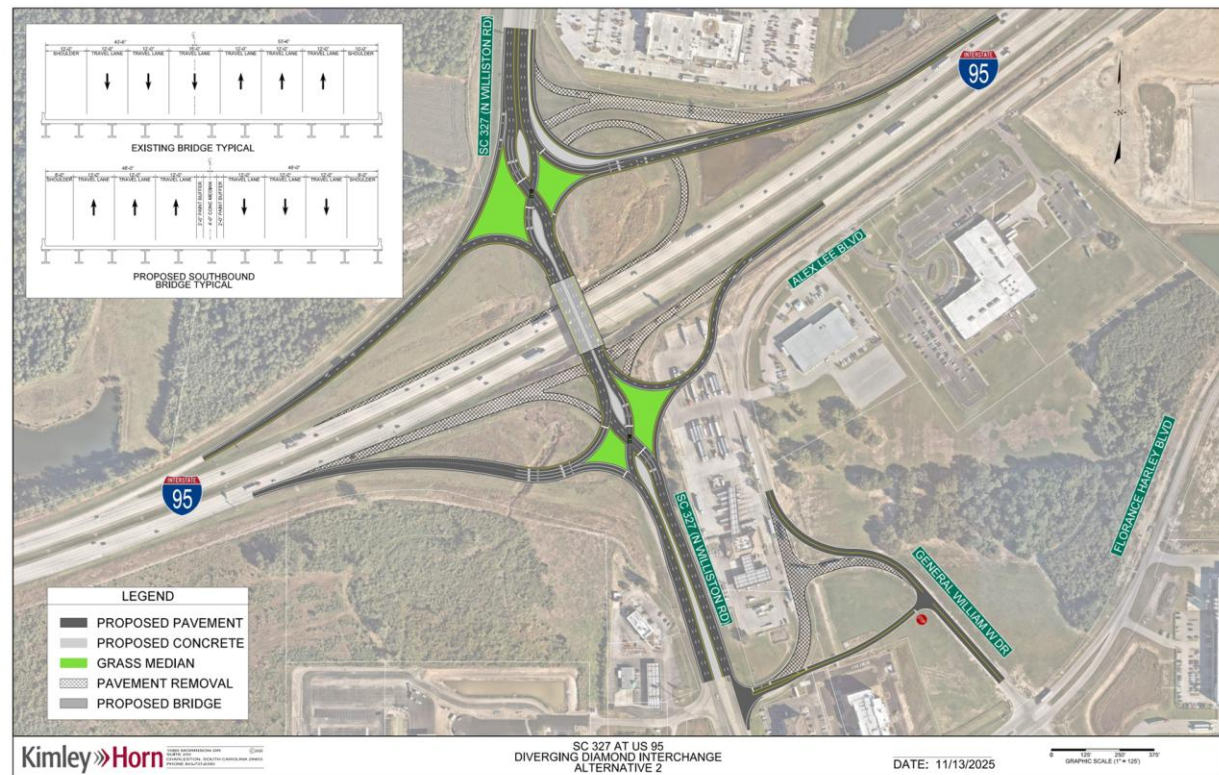
Open house attendees and members of the FLATS policy committee and technical committee appreciated the simplicity of the design and mentioned how the adjacent connections along Campground Road and E. Blanchard Road would provide additional connectivity and offer alternatives during peak travel seasons when congestion reaches peak levels.

This study recommends that a DDI configuration be implemented between SC 327 and I-95. This configuration will improve operations, enhance safety, and minimize current delay and operational issues present at the interchange.

FLATS, in partnership with Florence County should work with SCDOT and FHWA to program funding and prioritize enhancements to the interchange.

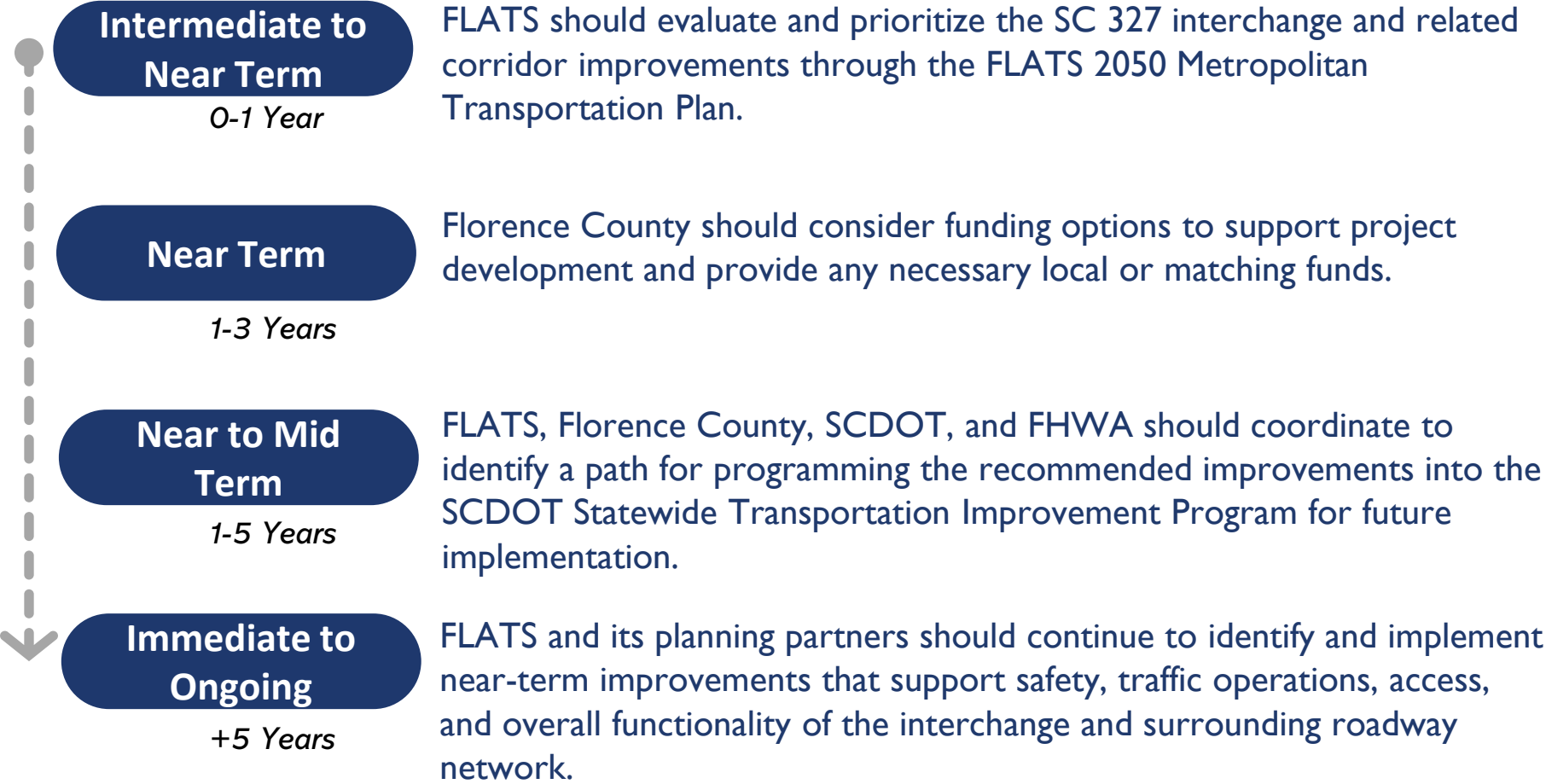
Next Steps

- FLATS evaluate and prioritize the improvement of SC 327 interchange in the forthcoming FLATS Long Range Transportation Plan
- Florence County to consider options for providing additional funding as necessary to ensure appropriate levels of funding can be provided.
- Partner with SCDOT and FHWA to program the intended improvements into the SCDOT STIP for future implementation.
- Work with partner agencies to implement near term improvements that support the overall operations of the interchange.

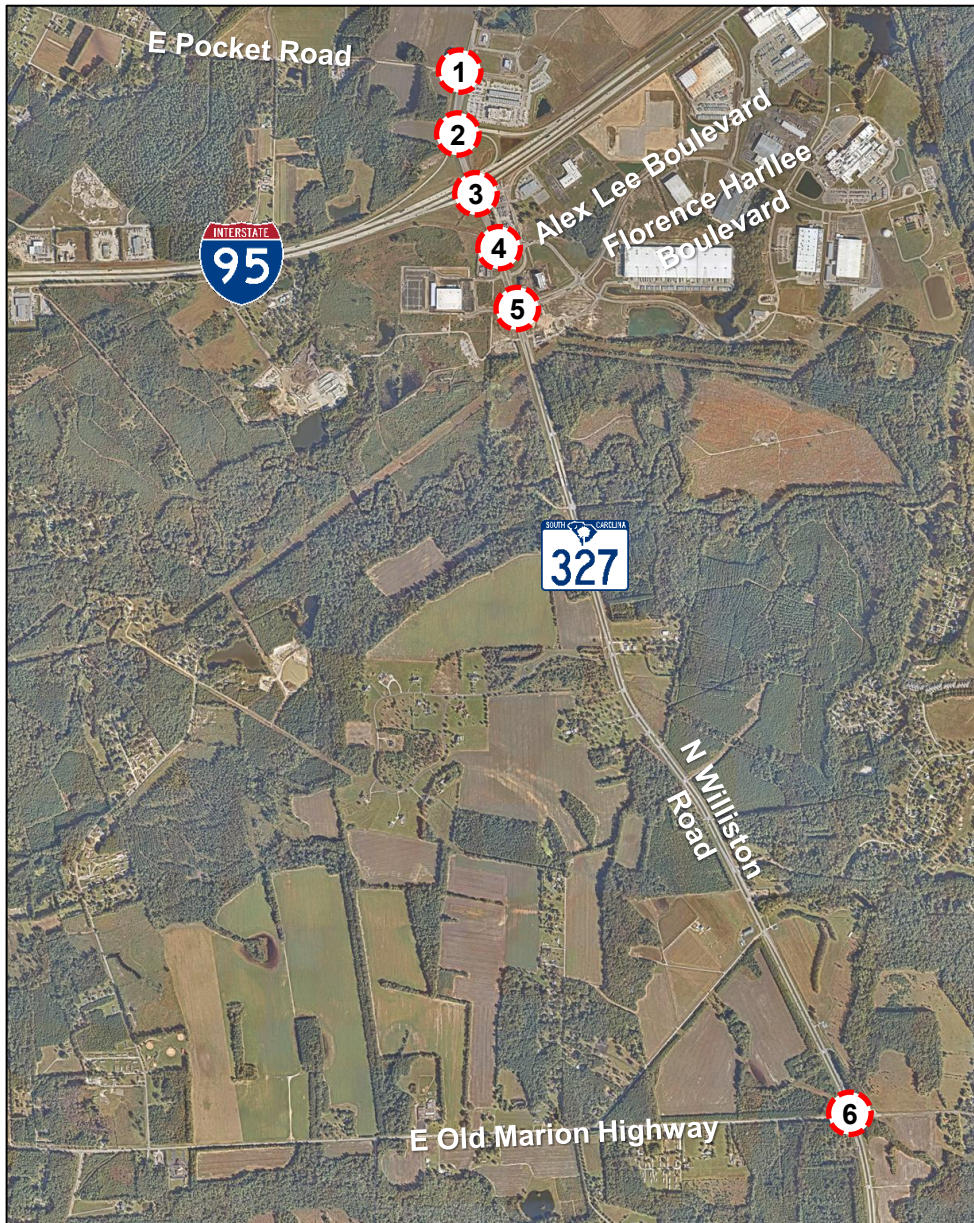


Next Steps

The next steps for the SC 327 at I-95 interchange are highlighted below, graphically and sequentially regarding the most immediate action to the elements that will be ongoing. This should serve as a guide for the FLATS MPO to begin implementation of each of the elements highlighted in this document, as prioritized by the FLATS MPO and their partner agencies.



Introduction



Overview

The SC 327 Interchange Study analyzes design and mobility options for the existing interchange between I-95 and SC 327 in eastern Florence County, South Carolina. At this time, the current SC 327 interchange is currently a diamond interchange with a directional loop ramp between SC 327 and I-95 SB. Spacing between adjacent interchanges is 1.64 miles south to TV Road (S-21-26) and 11 miles to SC 38 in Dillon County.

Northeast Florence County and surrounding unincorporated areas are growing and developing rapidly, including new developments adjacent to the interchange and along SC 327. The interchange (Exit 170) provides access to the interstate for the Pee Dee Commerce City Industrial Park towards the southeast of the interchange, a Buc-ee's gas station towards the northeast of the interchange, and other restaurants, retail stores, and hotels nearby. The SC 327 at I-95 Interchange serves as a travel stop for drivers traveling along I-95 and to Myrtle Beach, SC while also serving as an end point for semi-truck deliveries to the industrial park.

The study area for the existing conditions analysis includes the following intersections:

1. SC 327 (N Williston Road) at E Pocket Road/Drs Bruce and Lee Foundation Boulevard
2. SC 327 (N Williston Road) at I-95 Southbound Ramps
3. SC 327 (N Williston Road) at I-95 Northbound Ramps
4. SC 327 (N Williston Road) at Alex Lee Boulevard
5. SC 327 (N Williston Road) at Florence Harlee Boulevard/Cooperative Parkway
6. SC 327 (N Williston Road) at E Old Marion Highway

The study area for this interchange study is illustrated in the graphic to the left.

Interchange Context

he I-95/SC 327 interchange consists of a hybrid geometric configuration. The northern quadrants operate as a ParClo-AI, with a single loop ramp in the northeast quadrant removing the northbound SC 327 to southbound I-95 left-turn movement and an adjacent commercial access connection serving the Buc-ee's site. A standard one-way diagonal entrance ramp in the northwest quadrant completes the northern ParClo function. The southern quadrants function as a partial compressed diamond, where the I-95 northbound entrance and exit ramps intersect directly with SC 327 at closely spaced ramp terminals. This arrangement reflects a composite interchange form tailored to the predominant traffic demands and site constraints.

SC 327 (N Williston Road) is a four-lane, undivided, rural minor arterial with a posted speed limit of 45 mph near the study interchange and a posted speed limit of 60 mph from the Florence Harlee Blvd/Cooperative Pkwy intersection towards the

E Old Marion Highway intersection. Based upon SCDOT traffic count station data, 9,900 vehicles per day traveled along SC 327 at a count station located south of the E Old Marion Highway intersection.

I-95 (Interstate 95) is a six-lane, divided, rural principal arterial with a posted speed limit of 70 mph near the SC 327 (N Williston Road) interchange. Based upon SCDOT traffic count station data, 55,800 vehicles per day traveled along I-95 at count station located south of the SC 327 interchange .

S-26 (E Pocket Road) is a two-lane, undivided, rural major collector with a posted speed limit of 45 mph. Based on SCDOT traffic count station data, an average of 3,400 vehicles per day traveled along this roadway segment between TV Road and SC 327.

S-1742 (Alex Lee Blvd) is a two-lane, undivided, rural local roadway with a posted speed limit of 45 mph. SCDOT traffic count data is unavailable for Alex Lee Blvd. Alex Lee Blvd. also is located within or around the perimeter of the Pee Dee Commerce City (East) Industrial Park and provides direct access into the industrial park and circulation throughout the park.

L-2503 (Florence Harlee Blvd) is a four-lane, divided, rural local roadway that becomes two-lane, divided further down the corridor. The posted speed limit along Florence Harlee Blvd is 35 mph and SCDOT traffic count data is unavailable.

S-24 (E Old Marion Hwy) is a two-lane, undivided, rural major collector with a posted speed limit of 55 mph. Based on SCDOT traffic count data, 9,600 vehicles traveled along E Old Marion Hwy at a count station located east of the SC 327 (N Williston Rd) intersection.

Cooperative Parkway is a two lane, local collector providing access into Pee Dee Commerce City (West).

Existing Conditions

The following pages include a series of maps capturing existing conditions and current plans for the area surrounding the existing SC 327 interchange. The maps cover topics such as:

Demographics and Income- *What types of people are living around the proposed interchange?*

Traffic and Crashes- *What areas currently have the most issues with congestion or safety?*

Current and Future Land Use- *How is the land currently being used? How is that expected to change in the future? What new developments have been approved?*

Property Ownership- *Who are the landowners and stakeholders that need to be included in the design process?*

Multimodal Facilities- *What facilities provide connections for people walking or biking? What facilities are planned?*

Context is key, and understanding a variety of issues and conditions of the area SC 327 currently serves can help highlight problem spots and other things to consider in the interchange design.

The proposal for enhancing SC 327 is not new, and this study builds upon work done across a variety of previous plans and enhancements to the interchange.



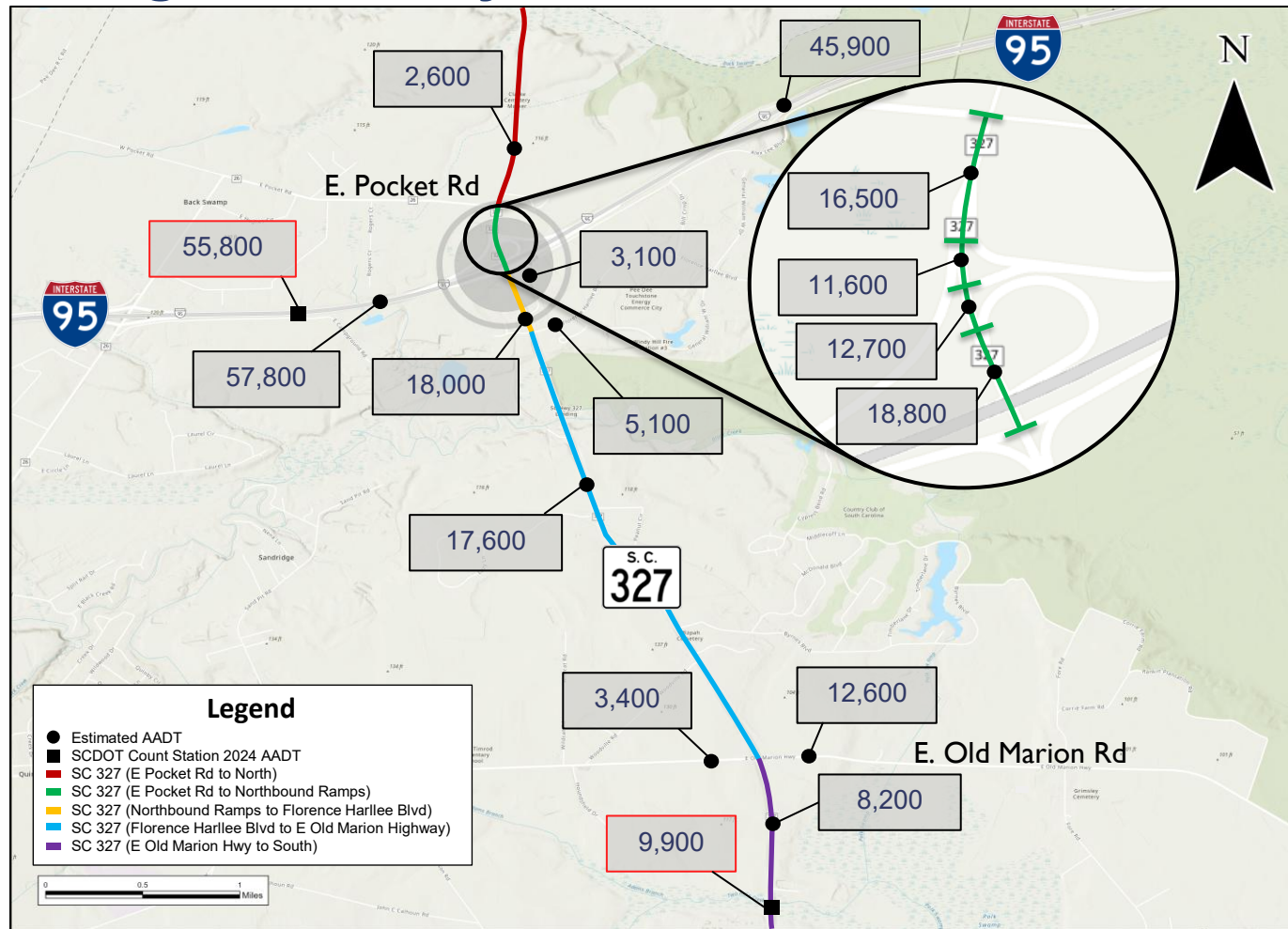
SC 327 (N. Williston Road) looking north showing the stacking of left-turning vehicles onto I-95 NB.

Images from Google Streetview



SC 327 (N. Williston Road) approaching the I-95 SB ramp. This area has had frequent crashes due to the lack of a traffic signal and drivers bypassing the loop ramp to turn onto the directional ramp. Bollards have been installed to prevent this action.

Average Annual Daily Traffic



Average Annual Daily Traffic (AADT) represents the estimated number of vehicles that travel on a roadway segment on any given day over the course of a full year. The data shown is maintained by SCDOT, which does not measure AADT on all roads, so some gaps in data exist.

The two points symbolized as black squares on the map to the right represent AADT count stations that are maintained by SCDOT. The corresponding labels for each of these stations (shown with red outlines) represent the reported 2024 AADT. All other points mapped have been interpolated.

Volumes along I-95 show the influence and attraction SC 327 has on regional mobility and connectivity.

Traffic volumes along SC 327 decrease north of E Pocket Rd, reflecting the area's rural character, limited roadway connectivity, and natural constraints associated with the Great Pee Dee River floodplain, Lowther's Lake, and surrounding low-lying areas.

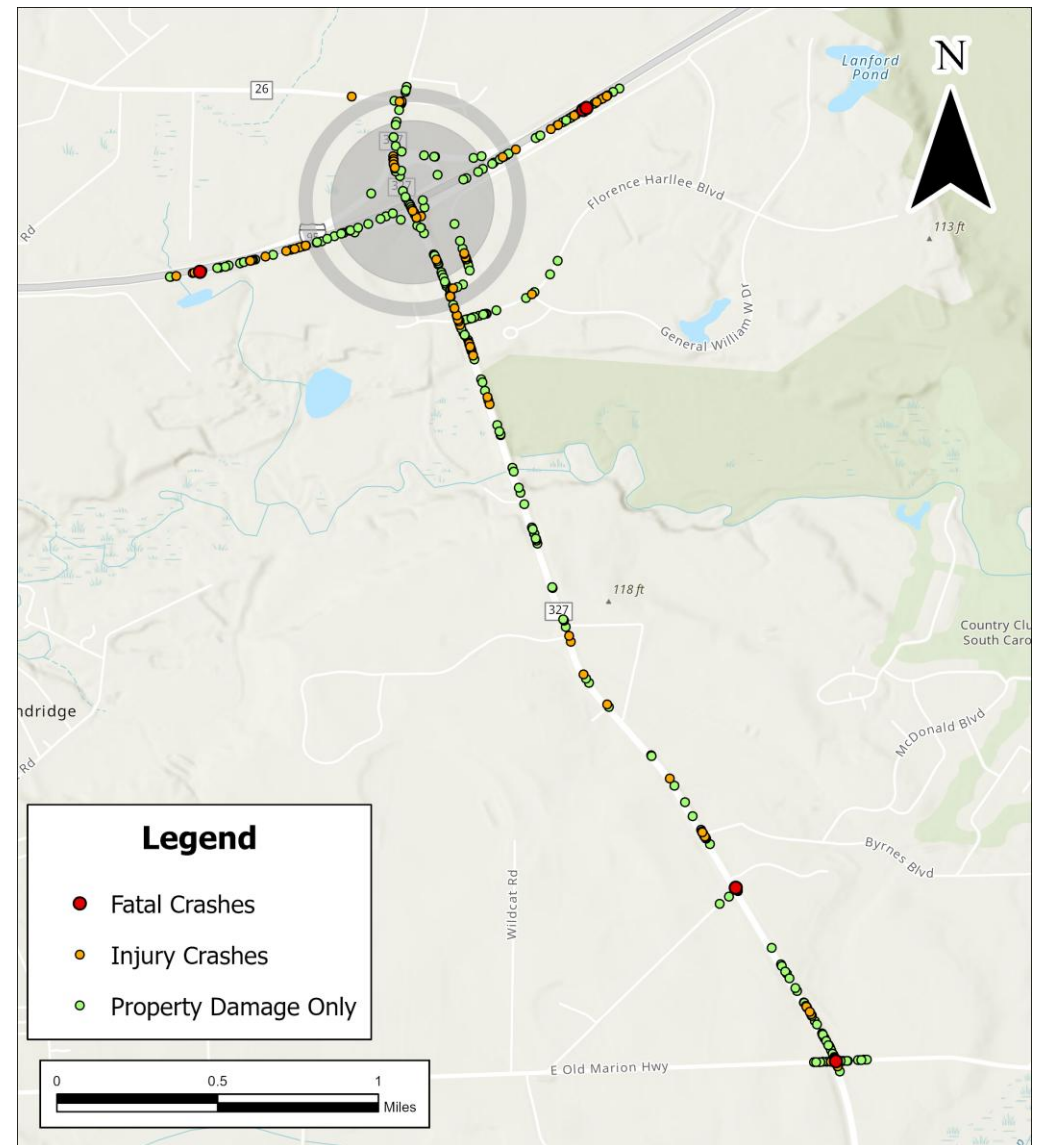
Further south on SC 327, E Old Marion Road serves as a parallel connection to US 76 facilitating high seasonal traffic to and from the Grand Strand coast.

Crash Analysis

A crash analysis was conducted using SCDOT AASHTOWare Safety Software from January 2020 to December 2024. Data was collected near the SC 327 at I-95 Interchange and 3.5 miles along SC 327 (N Williston Rd) from the E Pocket Rd/Drs Bruce and Lee Foundation Blvd intersection to the E Old Marion Hwy intersection from January 2020 to December 2024.

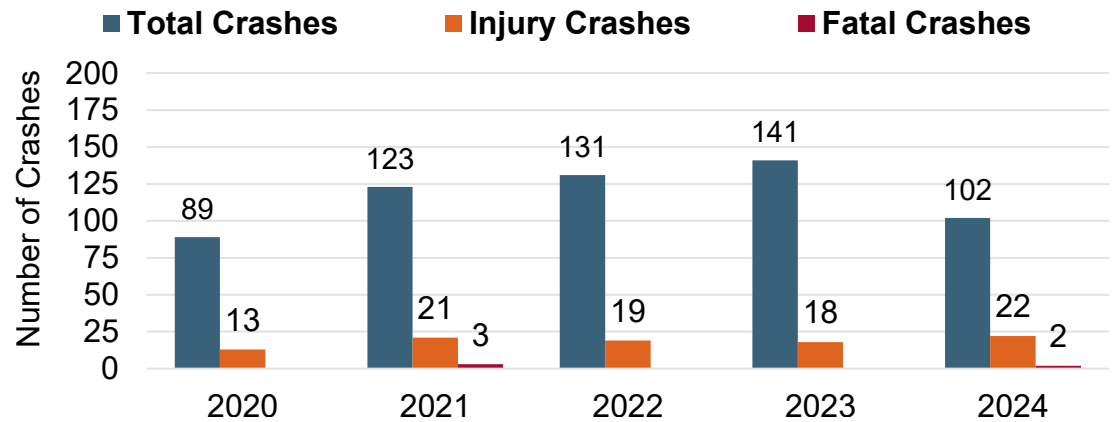
Crashes within the study area were analyzed based on crash severity, or the maximum injury code reported in each crash. For the approximate 5-year analysis period, 488 (83%) crashes resulted in property damage only, and 98 (17%) of crashes resulted in injury or fatality. Property damage only crashes were dispersed throughout the study area, with higher densities around the Alex Lee Blvd, Florence Harlee Blvd, and E Old Marion Hwy intersections. Five total fatal crashes were reported with three fatal crashes occurring along I-95.

Location	Manner of Collision	Crash Harmful Event	Probable Cause
SC 327 at Woodville Rd	Angle	Motor Unit (In Transport)	Under the Influence
SC 327 at E Old Marion Hwy	Angle	Ran Off Road Right	Disregarded Signs/Signals
South of SC 327 and I-95 Interchange	Non-Collision	Pedestrian	Not Visible (Dark Clothing)
North of SC 327 and I-95 Interchange	Rear End	Motor Unit (Stopped)	Driving Too Fast for Conditions
North of SC 327 and I-95 Interchange	Rear End	Embankment	Improper Lane Use/Change



Severity	# of Crashes
Fatal	5
Injury	93
Property Damage Only	488
Total	586

Crashes within the study area were analyzed on an annual basis. From January 2020 to December 2024, the SC 327 & I-95 interchange experienced 586 total crashes during the time period, which equates to an average of 117 crashes per year. The graphic to the right summarizes the total crashes per year. Total crashes gradually increased from 2020 to 2023 from 89 to 141 total crashes and decreased to 102 total crashes in 2024. Injury crashes stayed consistent throughout the study's time period with fatal crashes occurring in 2021 and 2024.



Primary Contributing Factor	# of Crashes
Driver Error	271
Driver Action	263
Animal/Object in Road	45
Road/Weather Condition	2
Unknown	5
Total	586

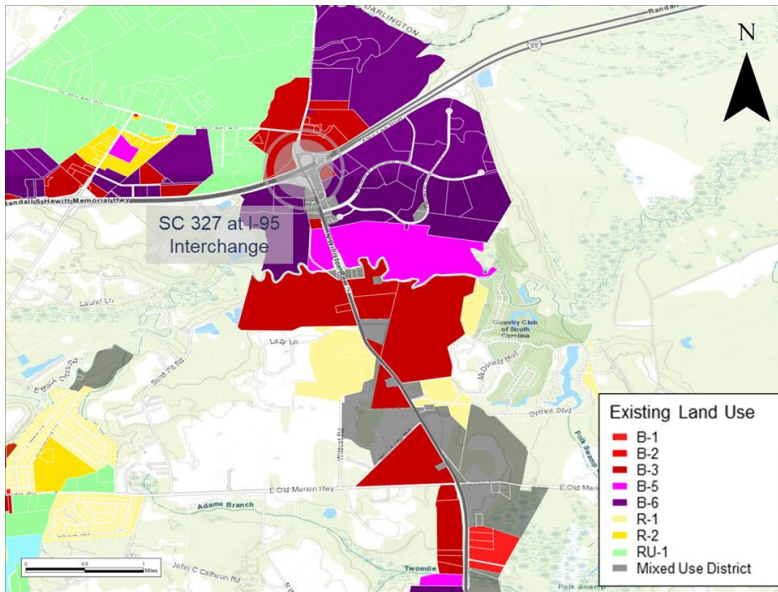
Throughout the study area, the most common primary contributing factor was attributed to driver error, which includes crashes involving distracted driving and following too closely to another vehicle. Based on the data, reported crashes were more frequently associated with driving too fast for conditions (35%).

Crashes within the study area were analyzed based on the manner of collision. The crash data revealed that the most prevalent manner of collisions were rear end crashes (36%), angle crashes (28%), and non-collision with motor vehicle crashes (21%). Angle crashes had the highest likelihood of involvement in an injury or fatal crash; accounting for 53% of crashes resulting in injury or fatality.

Manner of Collision	Fatal	Injury	Property Damage	Total
Angle	2	50	111	163
Backed Into	0	0	5	5
Head On	0	0	5	5
Non Collision with Motor Vehicle	1	22	99	122
Rear End	2	17	193	212
Rear to Rear	0	0	1	1
Sideswipe Opposite Direction	0	1	5	6
Sideswipe Same Direction	0	2	69	71
Unknown	0	1	0	1
Total	5	93	488	586

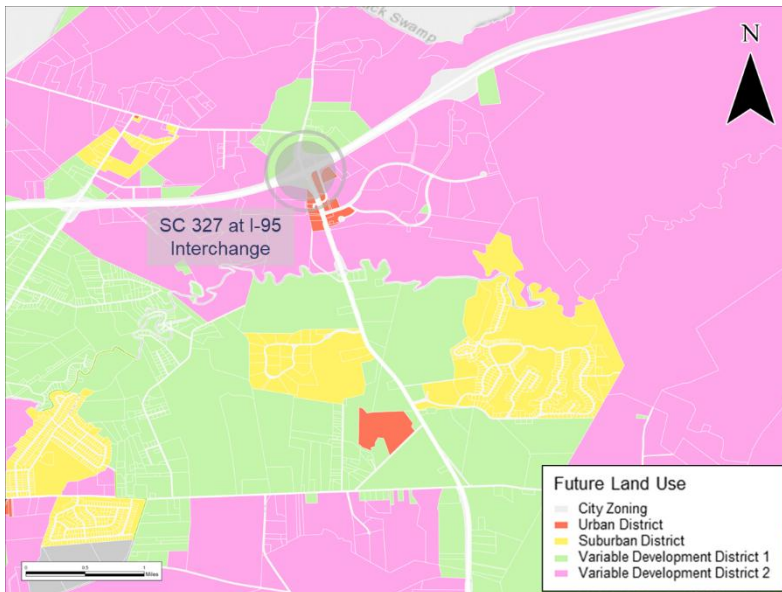
Existing Zoning

Identifying the current zoning around the study interchange is important in understanding how the roadway improvements for the exit may affect current uses and how traffic is projected to be generated. Parcel information and GIS data were provided by Florence County and revealed that a majority of the area surrounding the interchange is primarily business districts with a portion of mixed-use districts towards the south along SC 327 (N Williston Rd). The SC 327 corridor also includes the Corridor Overlay zoning district, which is a 500ft buffer from the edges of the ROW. Land uses and zoning become more varied further south of the interchange with business, mixed-use, and suburban districts along SC 327 (N Williston Rd) while northwest of the interchange is primarily rural and business districts. The graphic to the left illustrates the existing zoning designations around the study interchange and along SC 327.



Future Land Use

The future land uses for the area surrounding the study interchange was found utilizing Florence County GIS data. The data revealed that most of the area surrounding the SC 327 at I-95 Interchange is planned to be classified as Variable Development District 1 (green color) and Variable Development District 2 (pink color). The green FLU area (VDD1) signifies traditional residential, commercial, mixed-use, rural community, or planned development potential. Urban (red) areas are usually already commercially developed areas and will also allow mixed-use and high-density residential uses. The yellow areas represent existing traditional low/medium density residential subdivisions. The pink (VDD2) areas are primarily for more intense industrial uses or represent agricultural/rural preservation areas. Furthermore, there are planned urban districts along the south side of the interchange and further down SC 327 (N Williston Rd) near planned suburban districts. Much of the interchange area outside of the pink areas (VDD 2) of the industrial parks is either Urban or VDD1, meaning it is already developed or further commercial development is expected. The graphic to the left illustrates the future land uses near the study interchange.





Future Development

This map to the left includes developments planned for the area around Exit 170 (SC 327). Information about proposed developments near the study area was provided by Florence County. Looking at planned development can help us get an understanding of some planned growth centers and their potential effect on the interchange, traffic operations, and other roadway network needs. Additional smaller developments not requiring a traffic impact analysis (TIA) may be in the pipeline as well.

Drs Bruce and Lee Foundation Blvd Development

It should be noted that the parcel located northeast of the interchange along Drs Bruce and Lee Foundation Blvd is anticipated to receive future development. The parcel provides +/- 13 acres and has already received a fast-food restaurant and liquor store.

Parcels Northwest of the SC 327 at I-95 Interchange

It should be noted that Florence County Council reclassified the parcels located northwest of the interchange from a rural district to business district in August 2024. The parcels provide +/- 117 acres and are anticipated to bring in future development.

Pee Dee Commerce City West

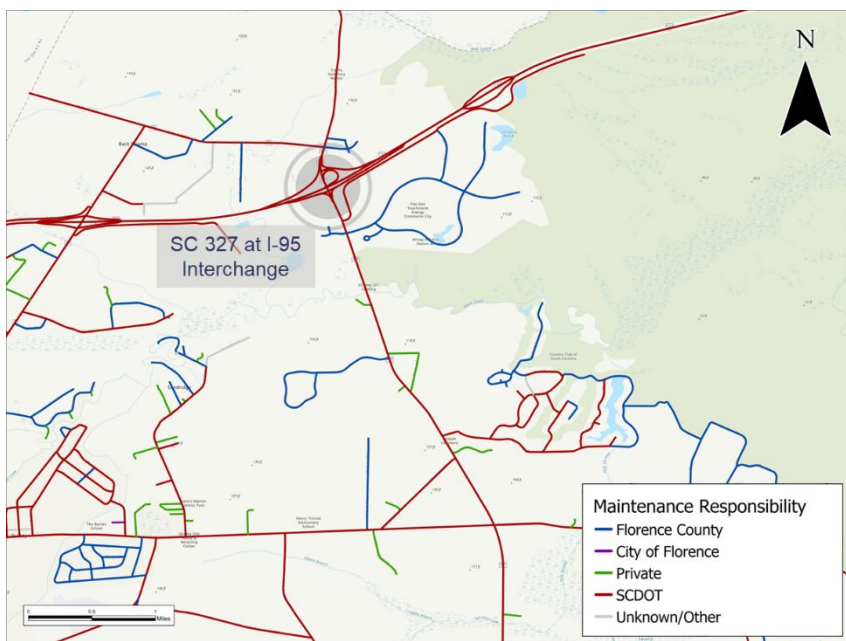
The Pee Dee Commerce City West is an expansion of the Pee Dee Commerce City industrial park with parcels located to the southwest of the SC 327 at I-95 interchange and southeast of the TV Rd at I-95 Interchange, which is the next exit heading south along I-95 (Interstate). As of writing this report, Amazon's first major logistics and delivery facility in Florence County has been completed and is operational at this site..

Florence Global Technology and Commerce Park

The Florence Global Technology and Commerce Park is a 1,000-acre industrial site west of SC 327 and accessible from E Old Marion Hwy. The park includes Automotive Energy Supply Corporation (AESC)'s multibillion-dollar EV battery manufacturing plant, which is currently under construction, in addition to a recently completed multimillion-dollar high-tech workforce training center fronting SC 327, just south of the E Old Marion Hwy intersection.

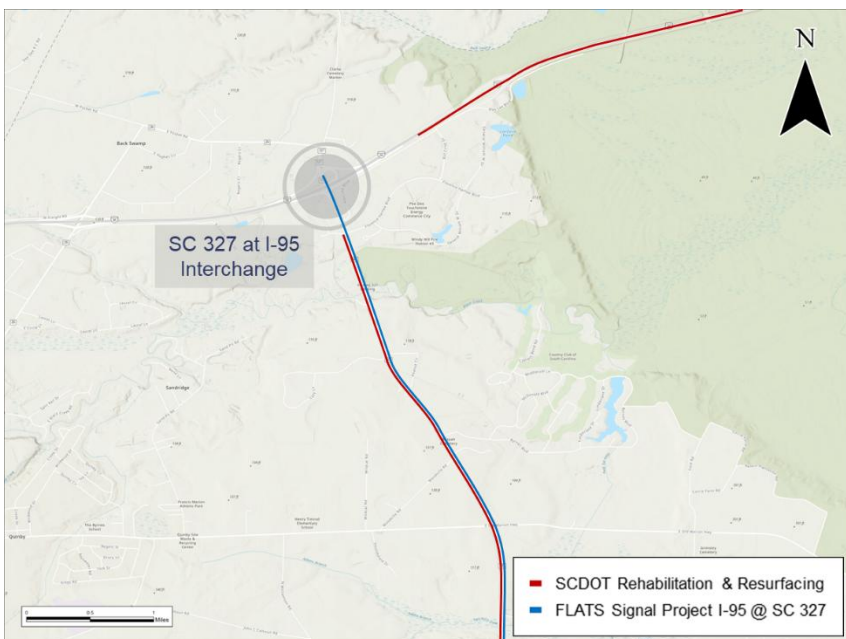
Southern Columns Subdivision

Southern Columns Subdivision is an approximate 700-unit residential subdivision under development east of SC 327 along E. Old Marion Hwy.



Maintenance Responsibility

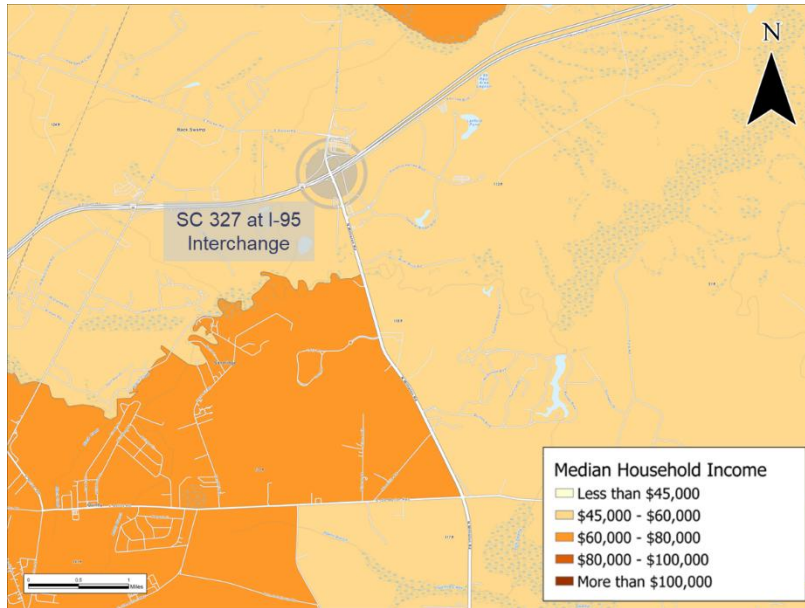
Maintenance responsibilities control how much freedom Florence County has to make improvements to roads through compliance with required design standards and to identify responsibility for roadway maintenance. Roadway ownership information was collected from City of Florence GIS data and revealed that a majority of roads around the proposed interchange are maintained by SCDOT while Drs Bruce and Lee Foundation Blvd, Florence Harllee Blvd, Cooperative Pkwy, and Lazy Ln are maintained by Florence County.



Planned Roadway Projects

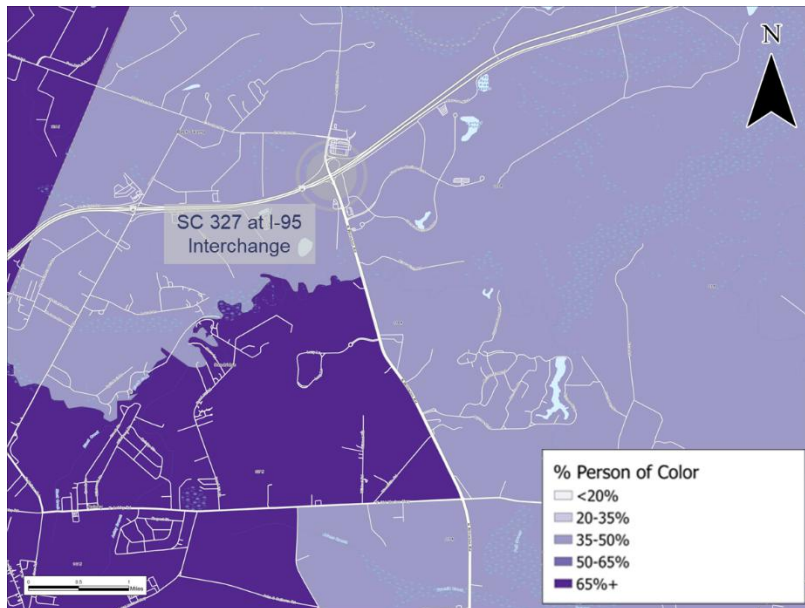
There are four nearby roadway projects that were identified from the SCDOT Project Viewer Application and the Florence County website:

- SC 327 (N Williston Rd) rehabilitation and pavement resurfacing from Florence Harllee Blvd to US 76 (E Palmetto St). Construction is to begin in 2025 and is anticipated for completion by April 2026.
- SC 327 (N Williston Rd) signal project from the I-95 interchange to US 76 (E Palmetto St). Construction and anticipated completion are currently undetermined
- I-95 (Interstate 95) rehabilitation and pavement resurfacing from MM 171 to MM 193. Construction began in 2021 and is anticipated for completion by October 2025.
- I-95 (Interstate 95) bridges over the Great Pee Dee River located north of the study interchange. Construction began in 2021 and the completion date is currently undetermined.



Income

Median household income is at its highest (\$60,000 or greater) directly south of the study interchange towards the Town of Quinby and the residential developments along the west side of SC 327 (N Williston Rd), likely reflecting a moderately wealthy population. Median incomes are at the lowest (less than \$60,000) along the east side of SC 327 (N Williston Rd) and surrounding the study interchange

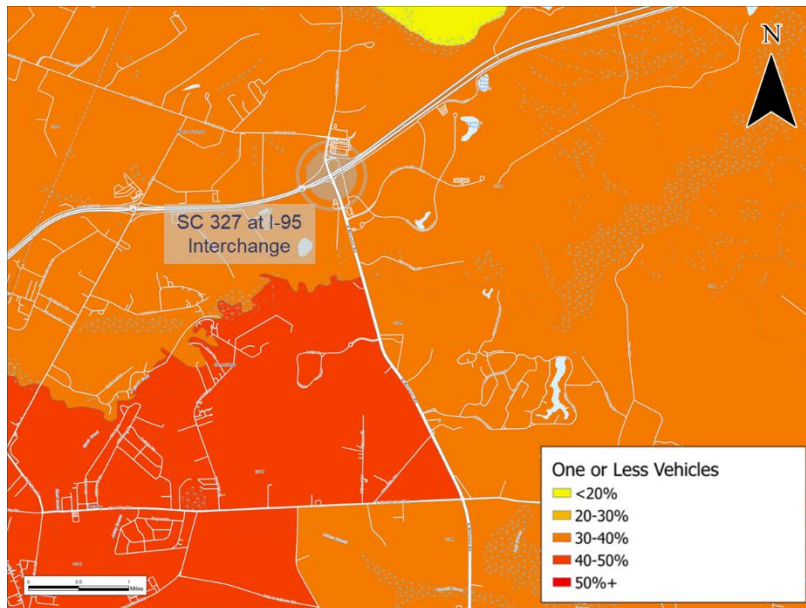


Diversity

The population near the SC 327 at I-95 interchange and along the east side of SC 327 (N Williston Rd) include 20% to 35% people of color. The southwest side of SC 327 (N Williston Rd) near the E Old Marion Hwy intersection towards the Town of Quinby has a higher population of color; making up 65% of the population.

Vehicular Access

Overall, communities immediately around the interchange have moderate vehicle access with 30% to 40% of households having one or fewer vehicles available. The areas with the most households that could only access one or no vehicles are located along the southwest side of SC 327 (N Williston Rd) near the E Old Marion Hwy intersection towards the Town of Quinby.



Existing Plan Review

Florence Area Transportation Study (FLATS) 2045 LRTP

The FLATS 2045 Long Range Transportation Plan is a guide for transportation planning activities by setting direction and strategies to help shape the region's transportation network through the year 2045. The plan considers all modes of transportation including driving, walking, bicycling, transit, and rail to help set priorities for the future. The FLATS 2045 Long Range Transportation Plan identified a segment of SC 327 (N Williston Rd) between the I-95 interchange and Alex Lee Blvd as a project for corridor improvements. Furthermore, the SC 327 at E Old Marion Hwy intersection was also identified as a project for intersection improvements.

Florence County 2032 Comprehensive Plan

The Florence County 2032 Comprehensive Plan is a long-range vision plan regarding the future growth and enhancement of Florence County. The plan considers areas where new development and redevelopment may occur, assesses the needs and desires of the community across a variety of topics, and serves as a guideline for measuring success. The Florence County 2032 Comprehensive Plan identified the Pee Dee Commerce City industrial park as a variable character business park and encourages continuing this characteristic into the future.

Natural and Cultural Resources

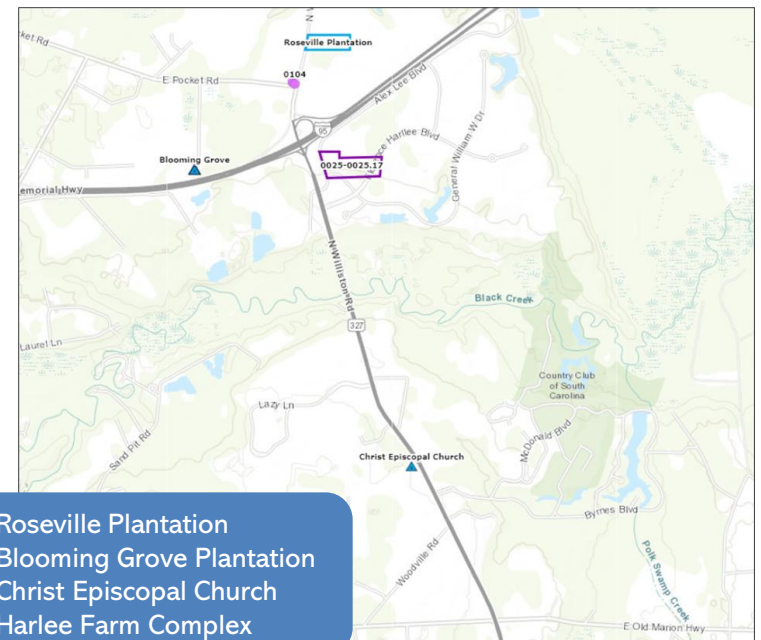
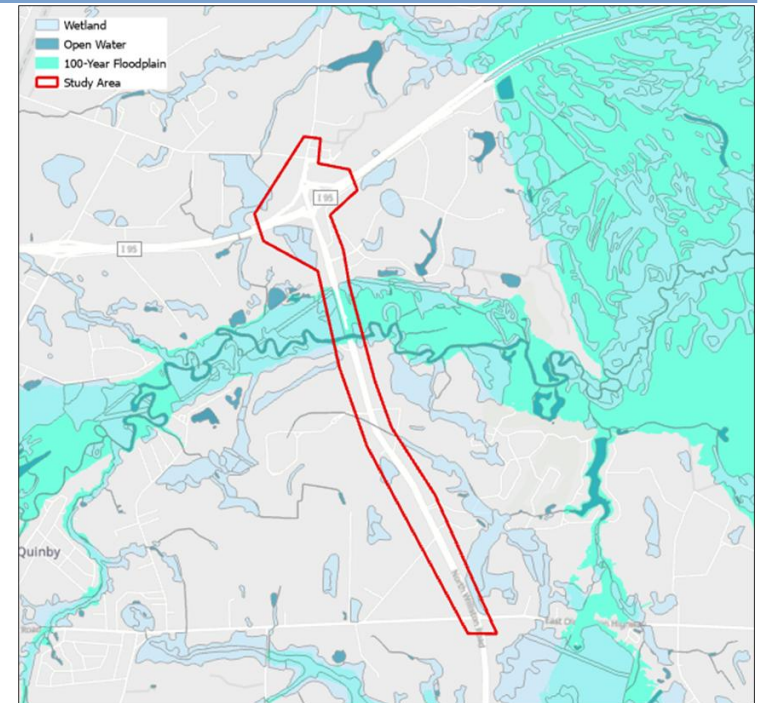
Both natural and built environmental and cultural resources are common throughout South Carolina given its rich history. Within the study area for this project, several of these resources are present. Regardless of the improvement to the interchange and supporting projects, a NEPA document will be required to understand the potential impact and mitigation required for the improvement to occur.

Environmental constraints, such as floodplain, wetlands, and bodies of water would need to be considered when refining the layout of the study interchange to minimize environmental impact. Cultural resources including those currently present and those from the past will need to be reviewed and categorized to understand the potential impact to from the project.

The National Wetland Index (NWI) identifies the area southwest of the interchange as wetlands. Furthermore, SC 327 crosses wetland systems 0.5 miles south of the interchange and 1.0 mile north of the interchange. LiDAR elevation mapping and aerial imagery add evidence for wetlands in the NWI marked locations. Wetland delineation should be performed to determine wetland extents.

The United States Fish and Wildlife Service (USFWS) lists several species potentially present within the study area, however South Carolina Department of Natural Resources (SCDNR) records do not indicate any observations or estimated locations of species of concern within 1.0 mile of the I-95 at SC 327 Interchange. Coordination with the USFWS may be required to confirm the potentially threatened or endangered species.

SCArchSite public viewer identifies the “Harlee Farm Complex” located southeast of the interchange as an eligible historic area. Additionally, two historic structures are present at the intersection of SC 327 (N Williston Rd) at E Pocket Rd as non-eligible. The National Register of Historic Places (NRHP) identifies the “Roseville Plantation” and the “Christ Episcopal Church” as registered historic places.



Roseville Plantation
Blooming Grove Plantation
Christ Episcopal Church
Harlee Farm Complex

Traffic Volume Trends

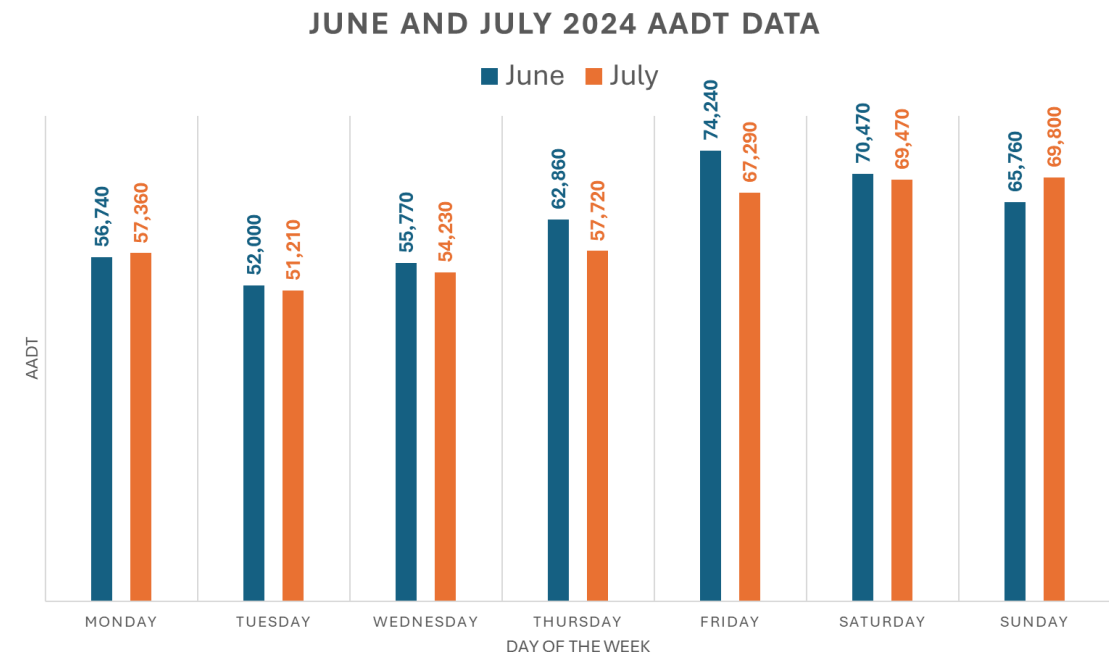
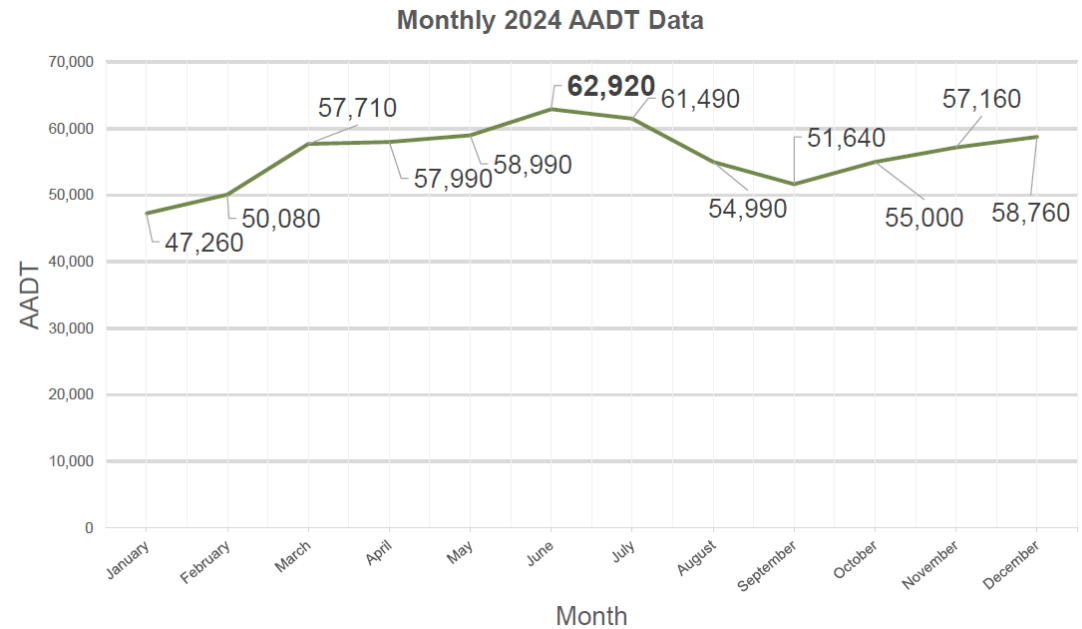
Regional Traffic Movements

SCDOT traffic count AADT data for 2024 was reviewed to determine the time period of peak season traffic at the SC 327 at I-95 Interchange at the count station located south of the interchange along I-95 (Interstate 95). The graphic to the right displays the 2024 AADT volumes by month.

The data revealed that the traffic volumes begin trending upward from March through July and peak towards the end of June, which is due to drivers traveling for the 4th of July holiday on the following week. Therefore, traffic volumes were collected during this week from Thursday, June 26 to Sunday, June 29 to capture a peak season weekday and weekend scenario. AADT traffic volumes were analyzed by hour for the four days to determine the peak 4-hour time periods. For the purposes of this analysis, Thursday and Sunday traffic volumes were utilized for the weekday and weekend peak hours, respectively.

SCDOT historic traffic data shows that traffic volumes along the I-95 corridor show the following:

- Highest volume is June (end of the month)
- Volumes begin trending upward from March through July
- Volumes decrease until November and then rebound to summer peaks
- Volumes follow holiday travel trends



2025 Existing Traffic

Peak hour intersection turning-movement counts were performed by All Traffic Data Services for the peak 4-hour traffic volumes from Thursday, June 26 to Sunday, June 29. The following times were collected:

- 7:00 AM to 9:00 AM, 4:00 PM to 6:00 PM on Thursday, June 26, 2025
- 1:00 PM to 5:00 PM on Friday, June 27, 2025
- 10:00 AM to 2:00 PM on Saturday, June 28, 2025
- 12:00 PM to 4:00 PM on Sunday, June 29, 2025

The peak hour turning-movement counts were collected at the following intersections:

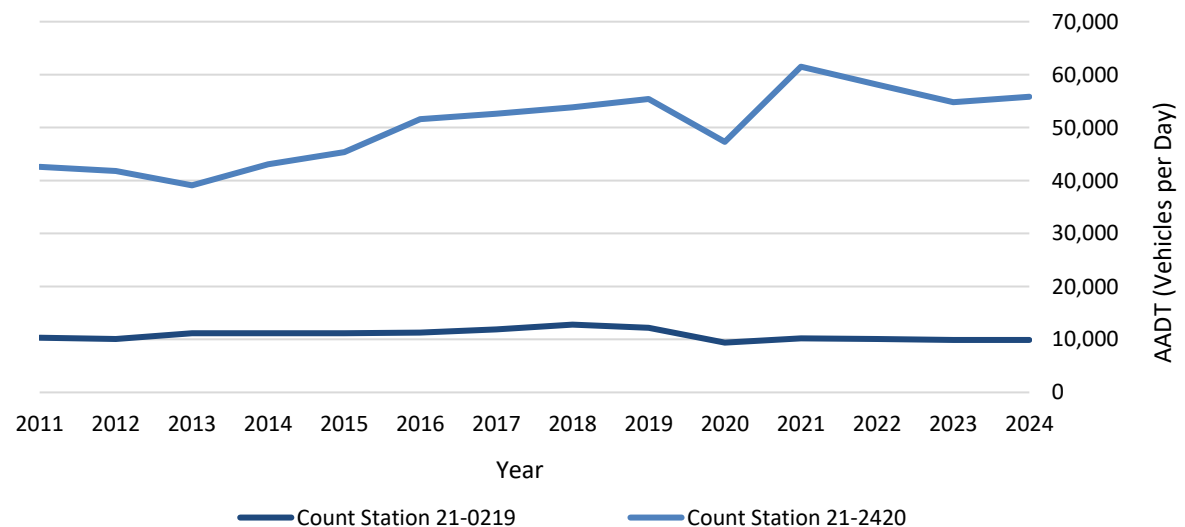
1. SC 327 (N Williston Road) at E Pocket Road/Drs Bruce and Lee Foundation Boulevard
2. SC 327 (N Williston Road) at I-95 Southbound Ramps
3. SC 327 (N Williston Road) at I-95 Northbound Ramps
4. SC 327 (N Williston Road) at Alex Lee Boulevard
5. SC 327 (N Williston Road) at Florence Harllee Boulevard/Cooperative Parkway
6. SC 327 (N Williston Road) at E Old Marion Highway

Additionally, directional 96-hour traffic count data was collected along I-95 from Thursday, June 26, 2025 to Sunday, June 29, 2025.

Future Background

For the purposes of this analysis, future traffic volumes were developed for the 2030 and 2050 background years. The future-year traffic volumes consist of the 2025 existing traffic volumes adjusted by a growth rate for the background scenarios.

The historical growth rate in the area was determined utilizing SCDOT count station 21-2420 along I-95 and count station 21-0219 along SC 327. Count data was available for both locations from 2011 to 2024. The graphic below displays the AADT volumes of the two count stations, which shows that traffic along I-95 has gradually increased while traffic along SC 327 has slightly decreased. After reviewing the count station data, an annual growth rate of 1.5% was calculated and utilized to develop the background traffic volumes for the 2030 and 2050 future years. A worksheet documenting the growth rate determination is included in Appendix.



Stakeholder Engagement

Two half-day project workshops were conducted with critical stakeholders to review initial project findings and preliminary alternatives. These were active work sessions, during which, the project team worked with local stakeholders and agency representatives to initiate the process of selecting design concepts to explore in more detail. During the workshop, participants reviewed existing conditions and went through a facilitated process to identify feasible options for the interchange design and study area multimodal transportation network.

Stakeholder engagement was initiated for this analysis to obtain feedback from local leaders near the study interchange. In total, three meetings were held through the process of this analysis. The first stakeholder engagement meeting was held on October 2, 2025 at The Florence County Museum in Florence, SC. The meeting displayed the existing conditions of the SC 327 at I-95 interchange and allowed stakeholders to share their comments and questions with their local knowledge. A second stakeholder meeting was held on January 26, 2026 at the Florence County Museum in Florence, SC. This meeting displayed the concepts created based on the analysis and the initial round of public engagement.

Stakeholder Meeting Outcomes

At the conclusion of each of the engagement meetings support for the need to improve the interchange between SC 327 and I-95 was the central theme. Stakeholders see the interchange as a vital conduit for regional and state commerce for Florence County. Maintaining the interchange's function at a high level is a core tenant of this study and the direction that FLATS and their partners will carry forward upon implementation to this study.

Workshop Format

- Review initial understanding of existing conditions
- Discuss key constraints
- Document local expectations
- Initiate the process of selecting design concepts

Workshop Objectives

- Determine three to four interchange alternatives to evaluate further
- Identify a set of evaluation metrics for selecting the preferred interchange design
- Discuss a conceptual multimodal transportation network

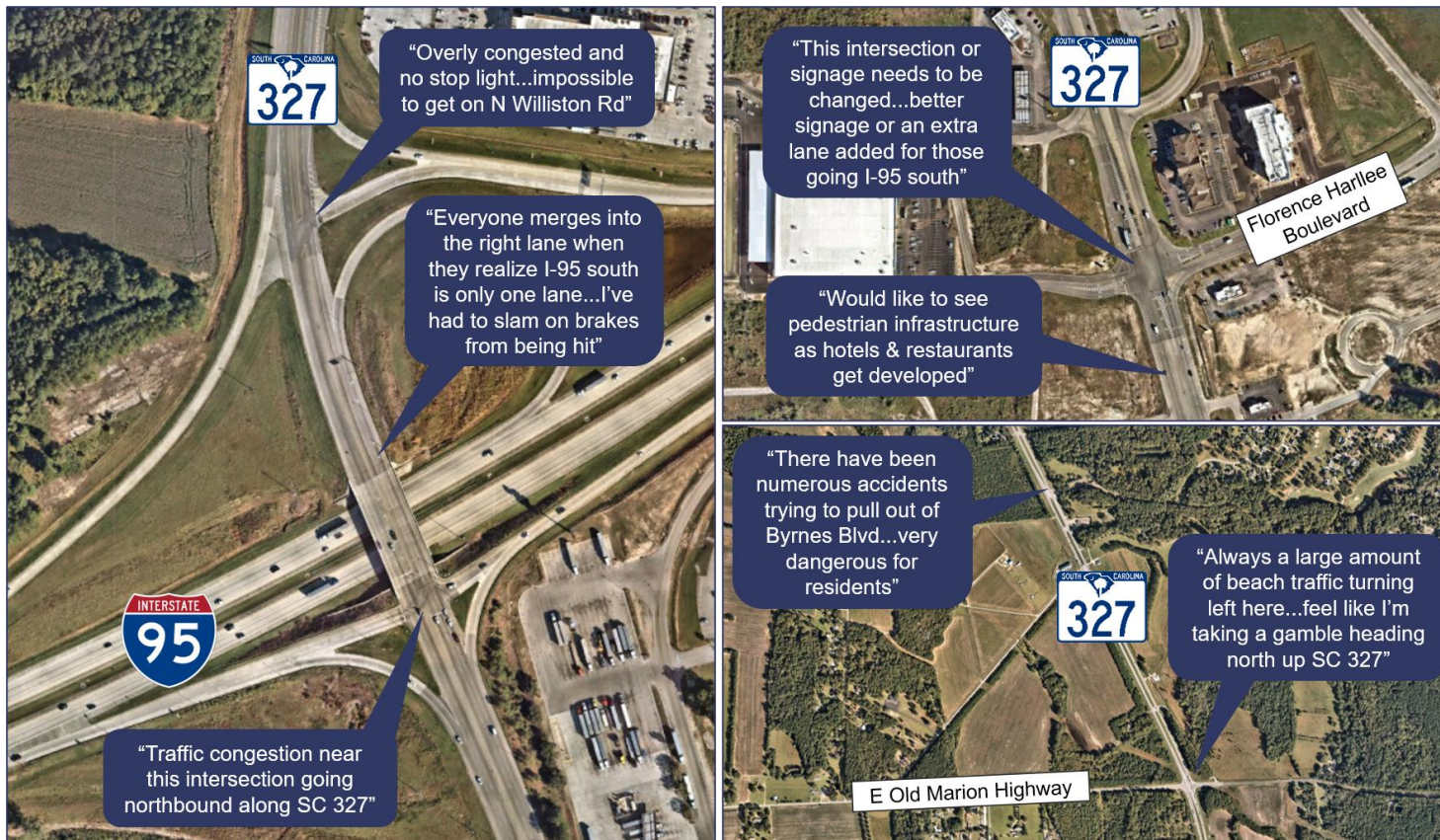
Workshop Participants

- Consultant team
- FLATS Staff
- Florence County Staff & Leadership
- Florence County Economic Development Partnership Staff
- Key Property Owners

Public Engagement

Public engagement was conducted to identify transportation issues, community concerns, and user experiences within the study area. Two public involvement meetings were held as part of the study process. These meetings provided opportunities for community members to review existing conditions, share input on current travel concerns, and provide feedback on proposed improvement alternatives.

Prior to the first public involvement meeting, the project team conducted outreach to encourage participation and gather input from the public. A flyer providing project information and a QR code linking to the online survey and interactive map was distributed through multiple channels. The flyer was shared on Florence County's social media platforms, posted in public locations including the first-floor lobby of the Planning and Building Department and the Florence County Complex main lobby, and displayed on signs placed at key locations throughout the study area. The information was also distributed to the FLATS MPO stakeholder mailing list to help reach interested agencies, organizations, and community members.



The graphic to the left highlights some of the feedback received through the engagement process for the project.

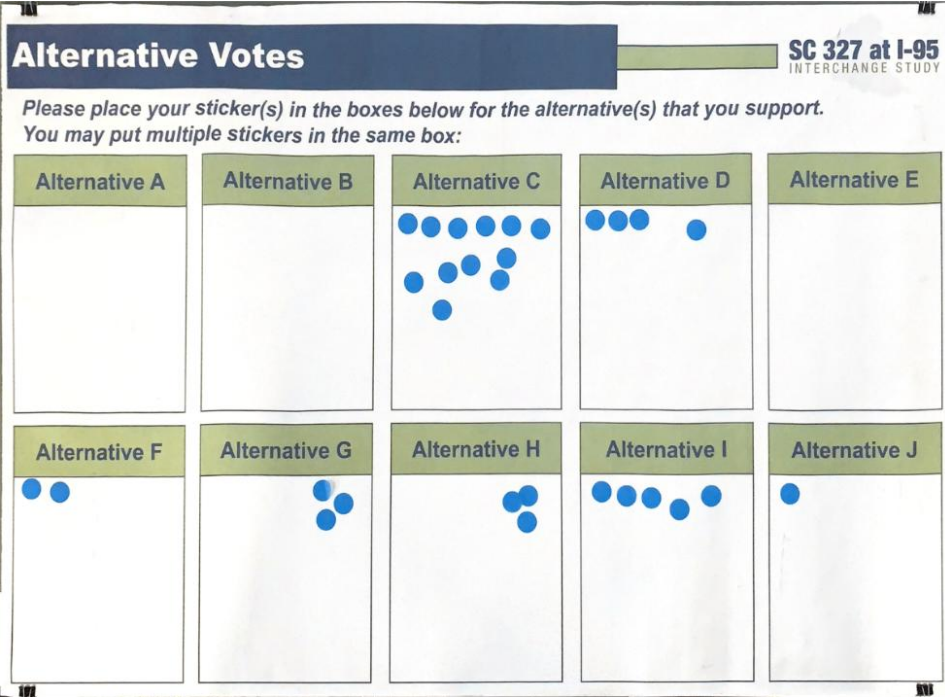
Public Meetings

MEETING 1

Meeting 1 was held on October 2, 2025, at The Country Club of South Carolina in Florence County, SC. The meeting displayed the existing conditions of the SC 327 at I-95 interchange and allowed the public to share their concerns and experiences during their daily commutes through the study interchange. Comments and responses from the public were collected through a survey and an online interactive map. In total, 30 individuals attended the public meeting with 45 submitted survey responses and 36 comments on the online interactive map.

MEETING 2

The second public involvement meeting was held on March 12, 2026, at The Country Club of South Carolina in Florence County, SC. The meeting displayed the concepts created for the project and allowed attendees to vote on which designs were the most impactful on improving the traffic conditions in the study area. Furthermore, the public had the option to leave a comment about the project and any of the information shown at the meeting. In total, 10 individuals attended the public meeting. Based on the voting results, the Diverging Diamond Interchange concept and Reduced Conflict Intersection at SC 327 at E Old Marion Hwy concept designs had the most votes out of all the concepts shown at the meeting.



The graphic to the left highlights the preference of attendees for Alternative C, the Diverging Diamond Interchange, as their preferred alternative for congestion and safety enhancements.

Design Alternatives

Alternative Evaluation Results

As part of the alternative development process, the project technical team evaluated each alternative on a series of criteria ranging from cost and ease of construction to active transportation benefits. For each criteria, each alternative received a score on a scale of one to five stars, with five stars representing the best possible score (ex. lowest cost, lowest impact, easiest to build, most flexibility, etc). These criteria were then used to compare the alternatives on their strengths and weaknesses in each category. The evaluation criteria are briefly explained below.

Evaluation Criteria



Constructability

(More Stars = More Constructible)

Is this design buildable? How easy is it to construct? Can it be built efficiently?



Geometric Complexity

(More Stars = Less Complexity)

How complicated is the design? Simpler designs tend to be easier to understand for users and can often be easier or cheaper to design and build.



Safety Enhancement

(More Stars = More Safety Enhancements)

How well does this design improve safety for all users?



Active Transportation Accommodation

(More Stars = Better Active Transportation Accommodation)

Is this design safe and efficient for people walking, rolling, or biking?



Interim Improvement Accommodation

(More Stars = Better Accommodation of Interim Improvements)

How easy does this design make it to incorporate short-term improvements sooner than construction of the complete interchange?



Improved Traffic Operations

(More Stars = More Traffic Operations Improvement)

How well does this design improve traffic flow and congestion?



Right of Way Impacts

(More Stars = Less Impacts to Rights of Way)

Can this design be built with minimal impact to properties on either side of the current right of way? Is additional right of way required, and if so, how much?



Land Use Impacts

(More Stars = Less Impacts on Land Use)

What impacts would this design have on current and planned land uses?



Utility Impacts

(More Stars = Less Impacts to Utilities)

What impact would this design have on area utilities?



Cost

(More Stars = Lower Cost)

How affordable is the design to construct?



Environmental Impacts

(More Stars = Less Environmental Impacts)

How would this design impact surrounding environmental features?



Flexibility to Accommodate Future Land Development

(More Stars = More Flexibility for Future Development)

How well does this design accommodate development adjacent to the interchange footprint?

Evaluation Matrix

This matrix compares the three final design alternatives across the criteria. This was used as a tool for the stakeholders and the public as they considered how the different alternatives best met their needs. A score of five stars is best; a score of one star is worst.

		 Constructibility	 Geometric Complexity	 Safety Enhancement	 Active Transport. Accommodation	 Interim Improvement Incorporation	 Improved Traffic Operations	 Right of Way Impacts	 Land Use Impacts	 Utility Impacts	 Cost	 Environmental Impacts	 Flexibility to Accommodate Future Land Dev.
	Alternative A: Contraflow Left Interchange	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★
	Alternative B: Displaced Left Interchange	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★
	Alternative C: Diverging Diamond Interchange	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★	★ ★ ★ ★ ★

Design Alternatives

Alternative A: Contraflow Left Interchange

The Contraflow Left Interchange concept signalizes the I-95 Southbound Ramp intersection and provides more storage for left-turning traffic along SC 327 at the I-95 Southbound and Northbound ramps through channelized lanes. In this concept, two southbound left-turn lanes and one northbound left-turn lane were designed along SC 327.

Traffic Analysis Results:

Traffic simulations showed that the Contraflow Left Interchange concept struggles to accommodate future traffic volumes at the study interchange with short to moderate delays occurring at the I-95 Southbound and I-95 Northbound Ramp intersections with 2030 traffic volumes and long delays under 2050 traffic volumes. Notably, traffic turning left onto the I-95 Southbound On Ramp exceed capacity of the left-turn lane and enter the mainline along SC 327 under 2050 traffic volumes. The table below shows the level of service (LOS) results for the contraflow left interchange concept.

Level of Service (LOS) Ratings				
Intersection	Weekday		Weekend	
	2030	2050	2030	2050
1. I-95 Interchange Southbound Ramps	C	D	D	D
2. I-95 Interchange Northbound Ramps	C	E	D	F



Potential Project Cost

\$35m - \$48m

Design Alternatives

Alternative B: Displaced Left-Turn Interchange

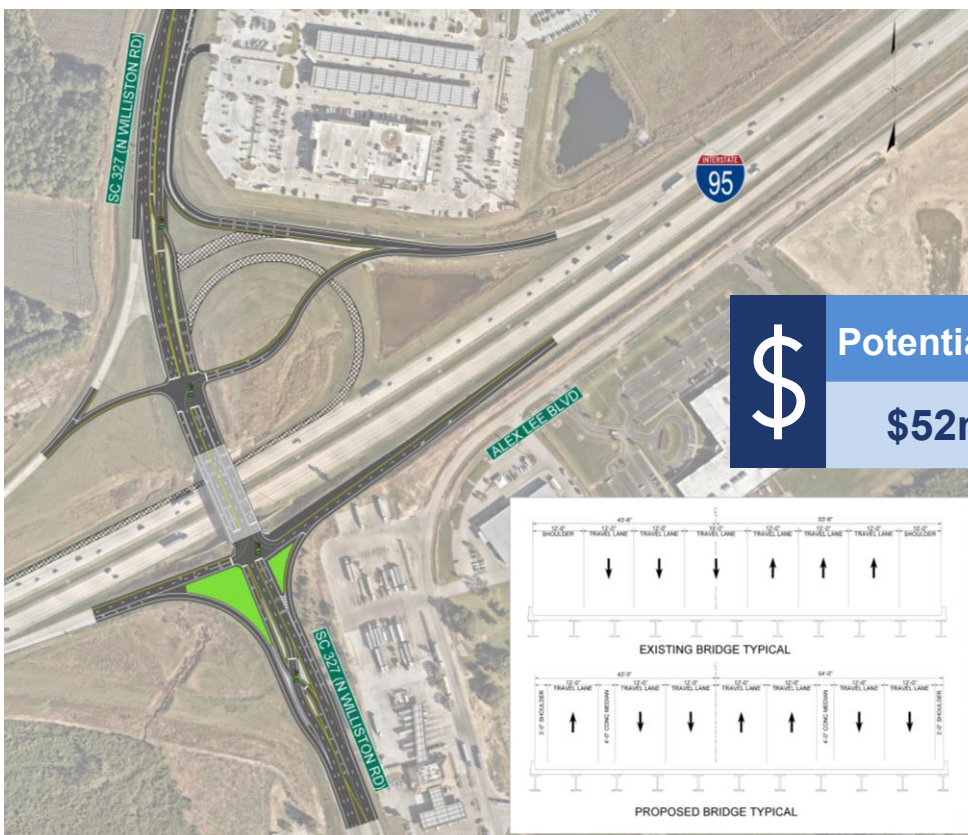
The Displaced Left Turn Interchange concept signals the I-95 Southbound Ramp intersection and installs a new signal on each side of the SC 327 at I-95 Interchange. At these newly built signals, traffic turning left along SC 327 and onto I-95 cross opposing through traffic in advance of the free way ramps through protected left-turn phasing. In this concept, two southbound left-turn lanes and one northbound left turn lane were designed along SC 327.

Traffic Analysis Results:

Traffic simulations showed that the Displaced Left Turn Interchange concept struggles to accommodate future traffic volumes at the two left-turn signals prior to the study interchange with short to moderate delays with 2030 traffic volumes and moderate to long delays under 2050 traffic volumes. Similarly to the Contraflow Left Interchange concept, traffic turning left onto the I-95 Southbound On Ramp notably exceed capacity of the left-turn lane and enter the mainline along SC 327 under 2050 traffic volumes. Table 18 shows the level of service results for the Displaced Left Turn Interchange concept.

Level of Service (LOS) Ratings

Intersection	Weekday		Weekend	
	2030	2050	2030	2050
1. I-95 Interchange Northern Signal	C	E	C	D
2. I-95 Interchange Southbound Ramps	A	A	A	A
3. I-95 Interchange Northbound Ramps	B	B	A	B
4. I-95 Interchange Southern Signal	B	B	D	D



Potential Project Cost

\$52m - \$67m

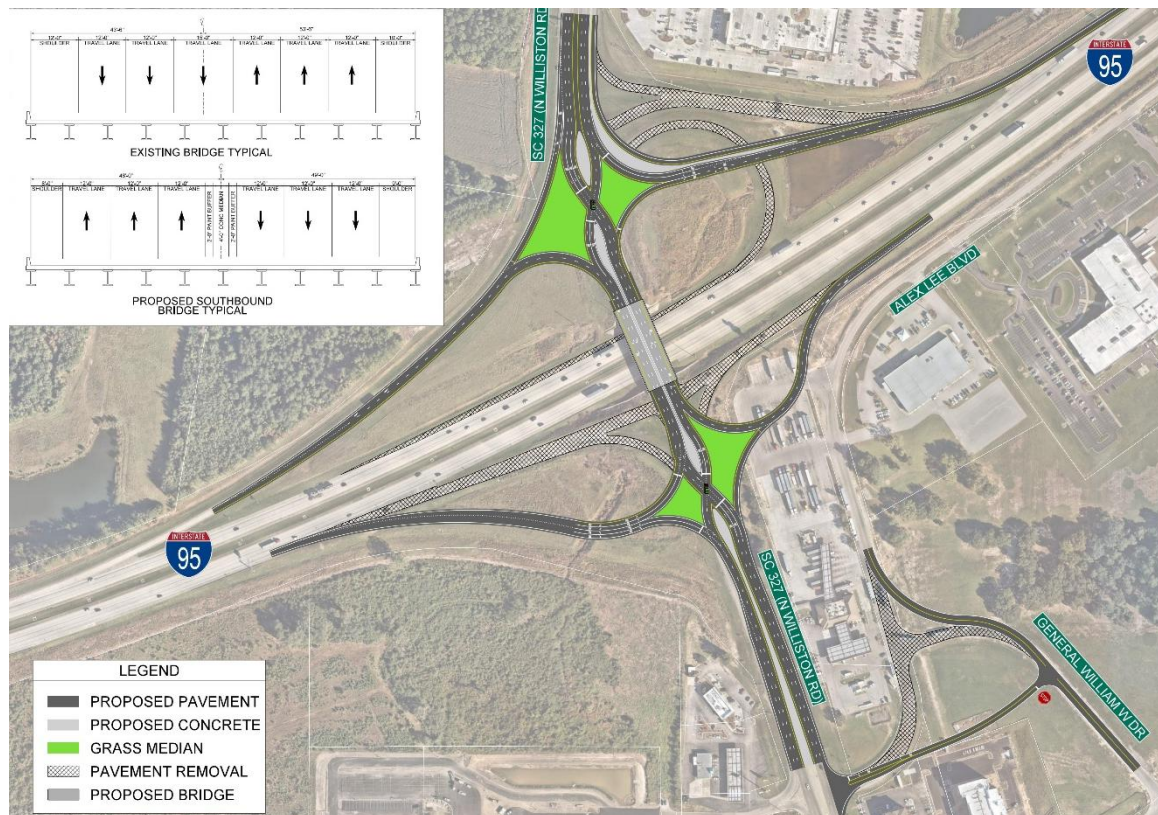
Design Alternatives

Alternative C: Diverging Diamond Interchange

The Diverging Diamond Interchange concept signalsizes the I-95 Southbound Ramps and allows traffic to cross the other side of the roadway between the freeway ramps, which allows traffic to enter and exit I-95 without waiting on oncoming traffic. In this concept, a combination of a left-turn and through-left lane provides two-lanes for traffic traveling north and south along SC 327 were designed. The SC 327 at Florence Harlee Blvd intersection was realigned to create a T-section by designing a new intersection connecting to General William W Dr.

Traffic Analysis Results:

Traffic simulations showed that the Diverging Diamond Interchange adequately handles the future traffic volumes with short delays under 2030 and 2050 traffic volumes. Traffic queues do not exceed capacity and do not conflict with other traffic movements occurring at the I-95 southbound and northbound ramp intersections. The table to the right shows the level of service (LOS) results for the Diverging Diamond Interchange concept.



Level of Service (LOS) Ratings

Intersection	Weekday		Weekend	
	2030	2050	2030	2050
1. I-95 Interchange Southbound Ramps	B	B	B	C
2. I-95 Interchange Northbound Ramps	B	B	B	B



Potential Project Cost

\$28m - \$41m

Design Alternatives

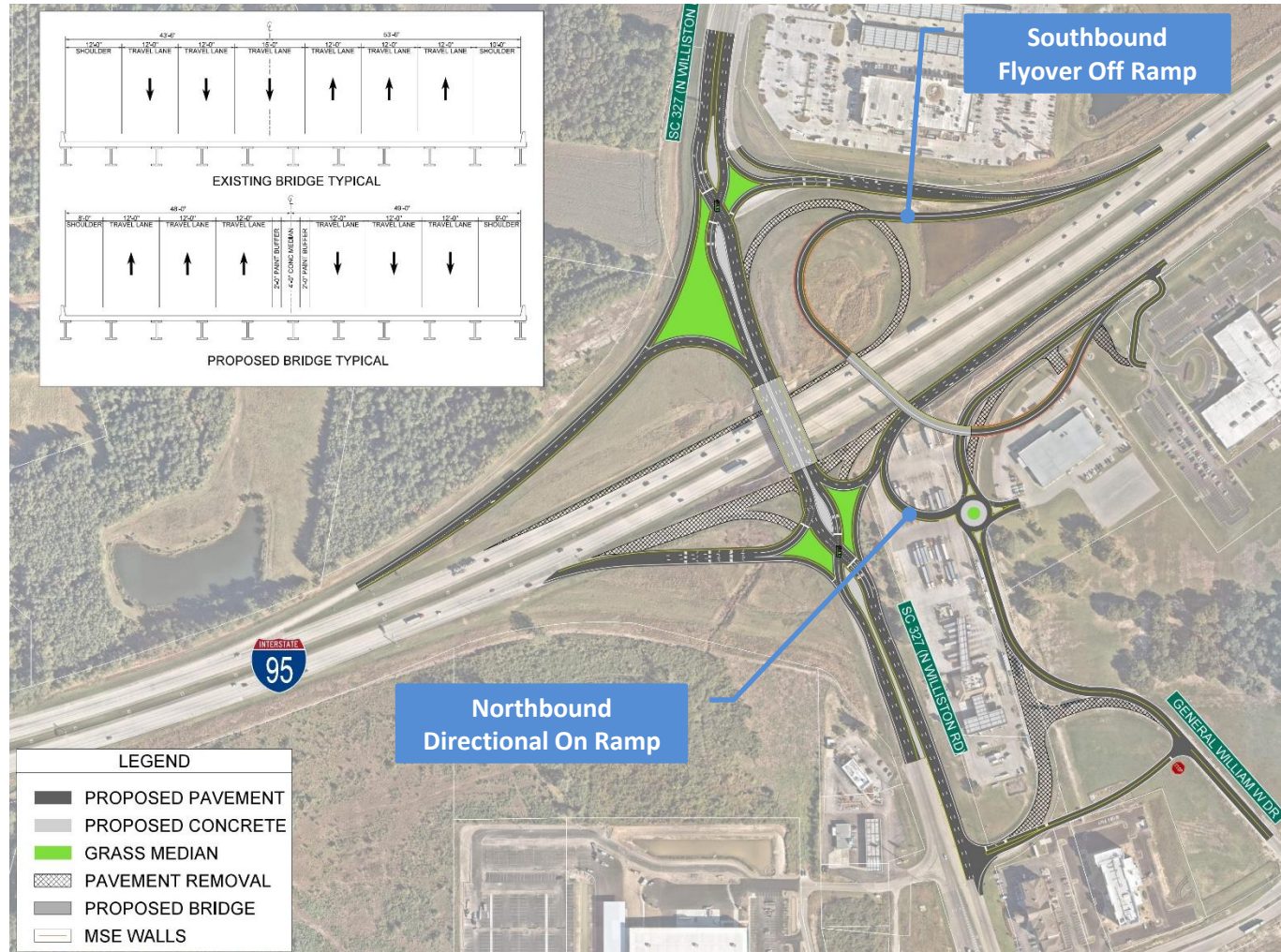
Direct Access

As land uses within the Palmetto Commerce Park East evolve over time and traffic generate from the park increases, there are supplemental enhancements to the SC 327 interchange that can be achieved to mitigate the interchange without a complete rebuild of the interchange configuration.

The supplemental movements would enhance mobility to and from I-95 North. This would occur through a direct flyover from the SB I-95 off ramp to Alex Lee Boulevard. This directional ramp does have an impact of existing properties along Alex Lee Boulevard as shown to the right.

The complementary movement back to I-95 is less impactful than the SB off movement. Through a roundabout, a connected supplemental ramp would be created between Alex Lee Boulevard and the existing NB on ramp at the interchange. This less invasive supplemental ramp would provide directional benefit for movements to I-95 NB from the industrial park. The movement would alleviate the long grade climb from Florence Harlee Boulevard to I-95 for laden trucks.

The graphic to the right depicts the configuration of the supplemental ramps to the interchange and the potential property impacts.



Southbound Flyover Off Ramp

\$	Potential Project Cost
	\$25m - \$30m

Northbound Directional On Ramp

\$	Potential Project Cost
	\$8m - \$19m

Design Alternatives

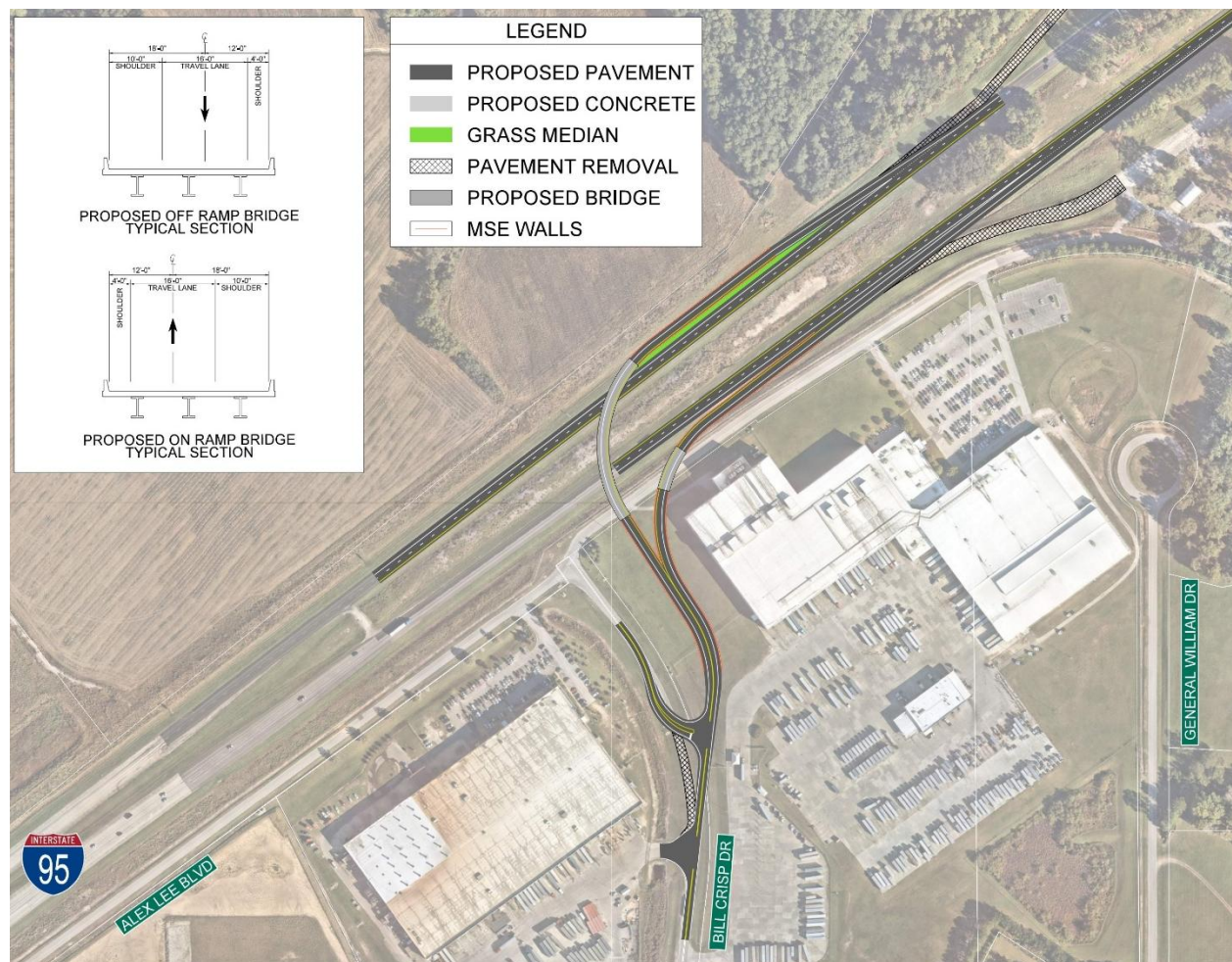
Direct Access

Similar to the supplemental improvements to the interchange at SC 327 and I-95, this option would provide direct ramp access into Palmetto Commerce Park between Bill Crisp Drive and I-95. The directional ramps would connect between I-95 and Bill Crisp Drive through and extension of the current SC 327 ramps (on and off). This approach would maintain the current number of conflict points on I-95.

The directional ramps would connect directly to Bill Crisp Drive and fly over Alex Lee Boulevard. This approach requires a significant restructuring of Bill Crisp Drive to construct the grade separations necessary to connect with I-95. The project also requires significant widening and lengthening of the existing ramps for SC 327.

An outcome of the installation could be increased cut through traffic between I-95 and SC 327 through the industrial park by drivers looking to avoid the interchange at SC 327. While not a significant travel time savings, most drivers would choose to take this route of simplicity than travel time savings.

The graphic to the right depicts the configuration of the supplemental ramps to the interchange and the potential property impacts.



Potential Project Cost

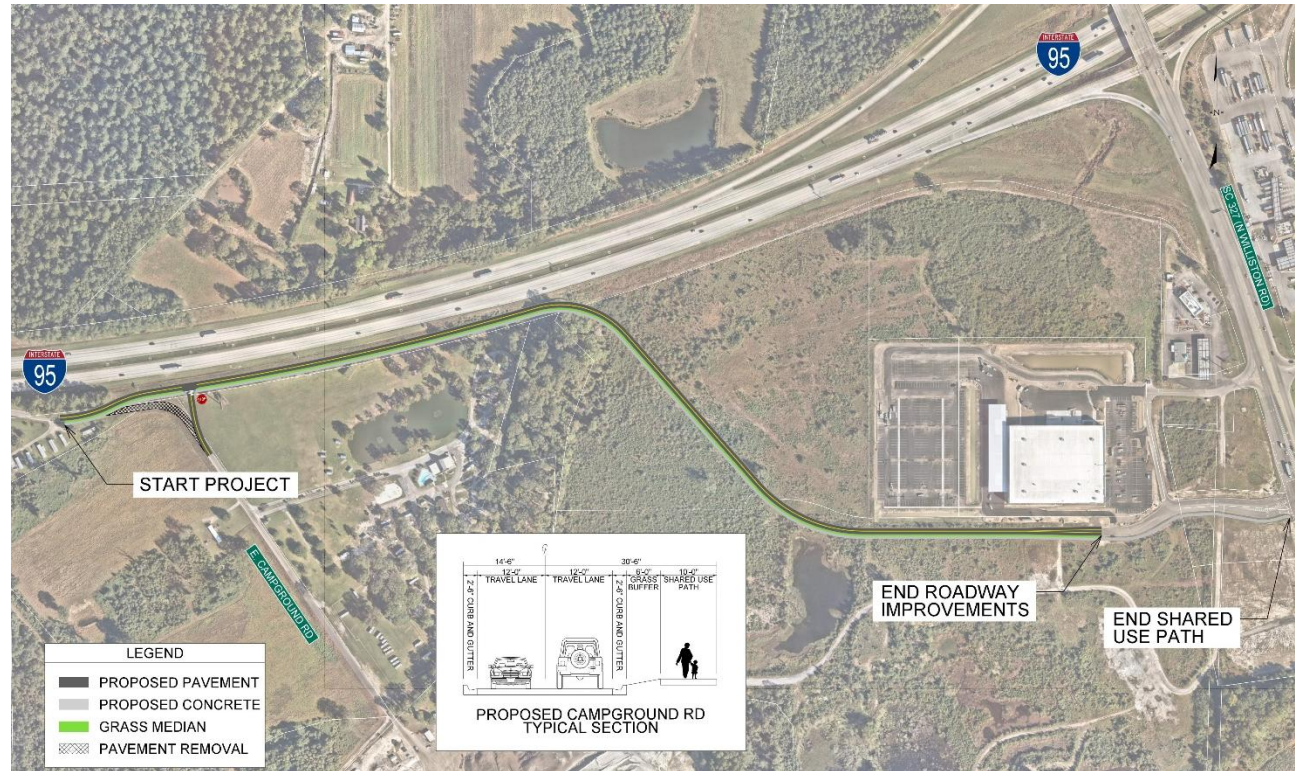
\$32m - \$45m

Design Alternatives

East Campground Road

East Campground Road currently ends prior to connecting with SC 327. Pee Dee Commerce City West Industrial Park is the adjacent property to SC 327. To support additional connectivity, mobility, and develop further parallel route to I-95 for local traffic, it is suggested that an extension of East Campground Road occur in order to connect to the existing fourth leg of the signalized intersection between SC 327 and Florence Harlee Boulevard/Cooperative Parkway.

The extension would create a new commercial corridor with two travel lanes and a parallel, shared-use path along the south side of the new corridor. The alignment as shown to the right is a depiction of a potential routing of the corridor from the current terminus of East Campground Road to SC 327. The actual connection between the current terminus of East Campground Road and Cooperative Parkway does not matter, only that a connection is established. This flexibility will allow for future development to occur and not be hindered by a precise alignment.



Potential Project Cost

\$4.2m - \$8.7m

Design Alternatives

East Blanchard Road Extension

Similar to East Campground Road, an extension of East Blanchard Road would create an additional parallel route to I-95 on the northside of I-95 to enhance local traffic connectivity and mobility. Given the more commercial and industrial uses along East Blanchard Road a two-lane shoulder and ditch section is envisioned for the East Blanchard Road extension. This typical section would fit the more agrarian nature of the northside of I-95 parallel to Pocket Road and minimize impacts to adjacent properties.

The proposed extension is recommended to tie into East Pocket Road with a roundabout. This intersection control was chosen for specific reasons. One, it serves as a traffic control device to maintain connectivity and allow for the connection to East Pocket Road to occur in a closer proximity to SC 327 than other intersection devices. Two, it helps to control speeds along East Pocket Road which will enhance safety. Three, it helps to maintain the rural nature along East Pocket Road west of the intersection should the front parcel along SC 327 develop.



Potential Project Cost

\$6.2m - \$9.3m

Design Alternatives

E. Old Marion Highway

E. Old Marion Highway serves as a “short-cut” for many traveling to the Grand Strand of South Carolina. The highway follows the former main alignment prior to the construction of US 76. The highway has narrow shoulders and lanes, numerous driveways, and limited sight distance at intersections and curves. Even so, nearly 7,500 cars per day (on an average day) choose this route. The high volumes and high travel speeds combined with roadway deficiencies create congestion bottlenecks and safety concerns for residents who live along the corridor. To aid in directing traffic to maintain direction of SC 327 to US 76, two intersection concepts have been developed. Option I, shown below, creates a Reduced Conflict Intersection (RCI). Under this option left-turns to and from the side street, except for the western leg of E. Old Marion Hwy would be restricted. Left-turns from other movements would U-turn along SC 327.



Potential Project Cost

\$3.2m - \$5.6m

Reduced Conflict Intersection (RCI) Benefits

- **Fewer Severe Crashes:** RCIs eliminate dangerous T-bone (right-angle) collisions, dropping fatal and injury crashes by 50% to 70%.
- **Fewer Conflict Points:** Traditional four-leg intersections have up to 42 conflict points, whereas RCIs reduce this by more than half, to just 14-18.
- **Easier Decision Making:** Drivers only need to look for traffic in one direction at a time, simplifying the merging process.
- **Less Congestion:** Traffic signals are often eliminated or reduced, allowing for a better flow and reduced overall delay compared to traditional stop signs.
- **Cost-Effective:** They are significantly cheaper and quicker to build than constructing large overpasses or highway interchanges.

Design Alternatives

E. Old Marion Highway

Option 2, shown below, also creates a Reduced Conflict Intersection between E. Old Marion Highway and SC 327. Under this option left-turns from Old Marion Highway would be allowed. Mainline lefts, from SC 327, would be restricted and required to U-turn and turn right onto E. Old Marion Highway. The intersection would remain signalized and the supporting U-turn bulbs on either end of the intersection would be signalized as needed. Like Option 1 for the intersection, improvements to overall safety would be achieved through a reduction of crashes, but at a lower percentage than Option 1. This is due to the allowance of side street lefts, which could conflict with mainline lefts for drivers who ignore the traffic control of signal, directly or indirectly. Other benefits regarding driver familiarity, reduction of cut through traffic, and project cost would be similar between options 1 and 2.



Potential Project Cost

\$5.2m - \$8.8m

Design Alternatives

New Interchange

Should development south of I-95 reach a significant volume in the future and the Drs Bruce and Lee foundation property on the north side of I-95 achieve significant levels, an additional interchange could be added along I-95, east of the SC 327 interchange in the general proximity of the former rest area. FHWA guides requires a minimum of 1 mile spacing between interchanges in urbanized areas. Given the study area falls within the FLATS MPO Study Area, this spacing criteria would be required for a new interchange. The interchange configuration would be defined once further knowledge of the demand at the time of need. As conceptually envisioned below a diamond interchange would minimize impacts to adjacent properties and environmentally sensitive areas. In addition to the spacing criteria, the influence of the environmentally sensitive area of the Great Pee Dee flood plain would also direct the ability for the interchange to be constructed. Furthermore, the future plans to improve the crossing of the Great Pee Dee River by the SCDOT and its consideration for additional travel lanes, vertical and horizontal alignment would also impact the applicability and design of a new interchange.



Potential Project Cost

\$65 m - \$87m

Recommendations

Preferred Alternative: Alternative C

Diverging Diamond Interchange – (DDI)

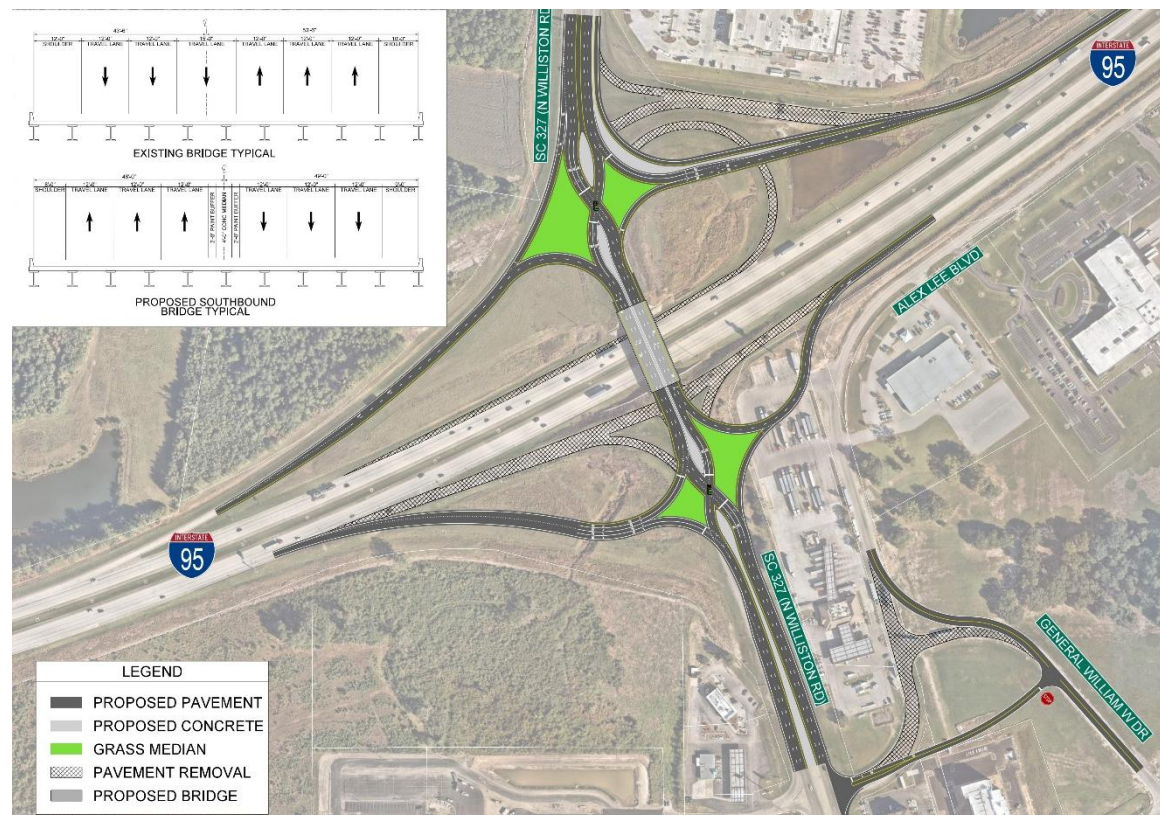
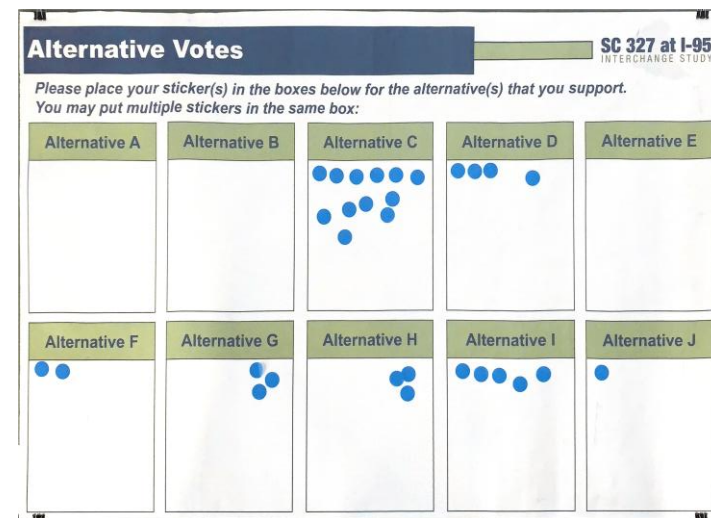
For the interchange design itself (separate from any supplemental future connections), **both the technical evaluation and public feedback favored alternative C**, which would construct a diverging diamond interchange between SC 327 and I-95

Why Technical Evaluation Favors Alternative C

In the alternatives evaluation results, alternative C won on almost every technical metric. It would be the simplest to construct, have a lower cost than Alternatives A and B, and have the biggest improvement of safety and traffic operations. Alternative C would also have the lowest impact on the environment, current land use, and rights-of-way, and leaves more of the land around the interchange open for future development than other alternatives. Alternative C is also well-designed to accommodate interim improvements and provides superior operational performance and safety enhancements for the interchange.

Why Public Input Favors Alternative C

Open house attendees appreciated the simplicity of the design, enhanced safety benefits, and the familiarity of the interchange design. Attendees mentioned how the interchange configuration would likely help truck traffic from the industrial parks to and from I-95 while minimizing impacts to car traffic.



Call to Action

The SC 327 Interchange Design Study began with the intent to collect, refine, and communicate an interchange enhancement strategy for the study area around the SC 327 interchange between I-95. The plan represents the contribution of the greater Florence County community, FLATS, Florence County, and other local and regional stakeholders. For successful implementation it will require partnerships among governmental entities, stakeholders, public and private investment and the residents in the community surrounding the study area.

Given the critical role the study area streets play in the overall transportation network supporting the SC 327 interchange, there is a sense of urgency to expedite implementation of this study. This project complements the overall development strategies set forth by the community and represents an investment in this interchange and corridor that will help promote economic vitality of the region.

The SC 327 Interchange Design Study began with the intent to alleviate congestion associated with the existing SC 327 corridor and interchange with Interstate 95. The magnitude of some of the identified feasible alternatives suggest that local community funding is not the primary source for implementation. Many of the concepts developed within this study were developed to work in conjunction with the future focused investments between public and private resources.

Identifying the most appropriate outcome represents a major milestone in the process; however, several work tasks remain. To realize the vision established during this planning process the following tasks will require follow-through by FLATS and Florence County and their partner public and private agencies:

Study Endorsement: The results of the SC 327 Interchange Design Study should be carefully considered and endorsed by FLATS and Florence County. This endorsement will memorialize the agreements established during the planning process and reduce the risk of having to revisit some of the issues contemplated during the study. Endorsement should happen both as individual entities as well as collectively.

Inclusion in the LRTP: The FLATS LRTP should be amended to reflect the recommendations of this study when updated in 2027.

Establish Design Themes: The design of any new infrastructure should be done with the recognition of area context. New infrastructure has an opportunity to establish a recognized identity for the area. Florence County should develop an approach to design including signing so that a sense of arrival is clearly established when passing through and accessing the study area. Recommendations include comprehensive wayfinding and signing, materials and lighting details and landscaping.

Financing Partnership: The expense associated with implementation suggests that an exclusive local funding source is not likely. In addition, the traditional process for funding via the Regional Mobility Program may not yield a desired project schedule. If the parties involved are interested in improving their chance of reduced implementation duration creativity, initiative, and partnerships may prove beneficial.

The next steps for the project are highlighted graphically and sequentially regarding the most immediate action to the elements that will be ongoing.

Recommended Next Steps

The next steps for the SC 327 at I-95 interchange are highlighted below, graphically and sequentially regarding the most immediate action to the elements that will be ongoing. This should serve as a guide for the FLATS MPO to begin implementation of each of the elements highlighted in this document, as prioritized by the FLATS MPO and their partner agencies.

